

Oracle® Order Management

Implementation Manual

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Preface

Intended Audience

Welcome to Release 12 of the *Oracle Order Management Implementation Manual*.

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

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Related Information Sources

Integration Repository

The Oracle Integration Repository is a compilation of information about the service endpoints exposed by the Oracle E-Business Suite of applications. It provides a complete catalog of Oracle E-Business Suite's business service interfaces. The tool lets users easily discover and deploy the appropriate business service interface for integration with any system, application, or business partner.

The Oracle Integration Repository is shipped as part of the E-Business Suite. As your

instance is patched, the repository is automatically updated with content appropriate for the precise revisions of interfaces in your environment.

Related User's and Implementation Guides

Oracle Applications User's Guide

Oracle Alert User's Guide

Oracle Applications Flexfields Guide

Oracle e-Commerce Gateway User's Guide

Oracle Workflow User's Guide

Oracle Advanced Pricing User's Guide

Oracle Configurator Developer User's Guide

Oracle iStore Implementation and Administration Guide

Oracle Order Management User's Guide

Oracle Release Management User's Guide

Oracle Shipping Execution User's Guide

Oracle Payables User Guide

Oracle Receivables User Guide

Oracle Receivables Tax Manual

Oracle HRMS Documentation Set

Oracle Inventory User's Guide

Oracle Transportation Execution User's Guide

Oracle Bills of Material User's Guide

Oracle Purchasing User's Guide

Oracle Order Management Open Interfaces, API, & Electronic Messaging Guide

Oracle Advanced Planning Implementation and User's Guide

Oracle Global Order Promising Implementation and User's Guide

Oracle Cost Management User's Guide

Oracle Project Manufacturing User's Guide

Oracle Quality User's Guide

Oracle Work in Process User's Guide

Oracle Incentive Compensation User Guide

Oracle TeleSales User Guide

Oracle Install Base User Guide

Do Not Use Database Tools to Modify Oracle Applications Data

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

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

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

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

Introduction to Order Management Implementation

This chapter covers the following topics:

- Overview of Oracle Order Management

Overview of Oracle Order Management

Oracle Order Management enables you to capture orders from multiple channels, price orders, check product availability, schedule fulfillment, plan shipments, ship deliveries, and track shipments.

Oracle Order Management consists of:

- Oracle Order Management
- Oracle Shipping Execution
- Basic Pricing

Additional products are available which are also integrated with Oracle Order Management, and these include:

Applications Core Technology Family

- AK - Common Modules
- AOL
- eCommerce Gateway
- iSetup
- Trading Community Architecture

- Workflow
- XML Gateway

Order Management Family

- Quoting / Negotiation
- Advanced Pricing
- Configurator
- iStore
- Release Management
- Shipping Execution

Business Intelligence Products

- Business Intelligence
- Daily Business Intelligence

Financials Product Family

- Oracle Payments
- iReceivables
- Oracle Payables
- Oracle Receivables

Human Resources Product Family

- Training Administration

Logistics Product Family

- Inventory Management
- Transportation Execution

Procurement Family

- Purchasing

Supply Chain Planning Family

- Advanced Supply Chain Planning
- Global Order Promising

Manufacturing Product Family

- Cost Management
- Configure to Order
- Process Manufacturing
- Project Manufacturing
- Quality
- Work in Process
- Bill of Material

Marketing and Sales Family

- Incentive Compensation
- Order Capture
- Partners Online
- Telesales
- Trade Management
- Quoting

Service Family

- Depot Repair

- [Field Service](#)
- [Install Base](#)
- [Service Contracts](#)
- [Service Fulfillment Manager](#)
- [Spares Management](#)

Related Topics

[Order Management Integration, page 20-1](#)

[Oracle Order Management User's Guide](#)

[Oracle Shipping Execution User's Guide](#)

Oracle Order Management Setup

This chapter covers the following topics:

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- Setting Parameter Values
- Seeded System Parameters
- Accessing the Installation Details form
- Define Tax Features
- Define QuickCodes
- Viewing Notifications
- Define Document Sequences for Order Numbering
- Define Order Management Transaction Types
- Define Order Import Sources
- Defining Processing Constraints
- Defining Validation Templates

- Defining Record Sets
- Define Defaulting Rules
- Define Credit Checking Rules
- Defining Credit Check Rules
- Deactivating Credit Checking
- Oracle Payments Processing
- Define Automatic Holds
- Define Attachments
- Defining Documents in Advance
- Defining Attachment Addition Rules
- Defining Document Categories
- Define Freight and Special Charge Types
- Setup for Integration with Transportation Execution for Freight Rating
- Overview of Shipping Tolerances
- Defining Shipping Tolerances
- Release Management Integration Setup for Sales Agreements
- Scheduling Across Orders Setup
- Gross Margin
- User Item Description
- Setup for Related Items
- Setup of Recurring Charges
- Trading Community Usage Within Order Management

Overview of Setup

This chapter explains how to set up and implement Oracle Order Management. The Oracle Order Management Application provides many flexible features enabling you to set up your system to begin processing order information. You must define your business order policies, such as how you classify your orders, as well as various control features prior to processing orders within the application.

Please refer to the *Oracle Applications Multiple Organizations Implementation Guide* for more information on setting up multi-org access control.

In addition to reading this chapter, please refer to the Using Oracle Workflow in Oracle Order Management manual for setup and implementation details for Order Management workflows.

Setup Steps

- Oracle Order Management Recommended Implementation
- Order Management Setup Steps
- Setup Steps Defined in Detail
- Profile Options

Oracle Order Management Recommended Implementation

Implementation involves several phases, including setting up other integrated applications, which include Multi-Org Access Control (MOAC), Oracle General Ledger, Oracle Receivables, and Oracle Inventory. Some setup steps are optional, depending on whether you have the integrating applications installed and whether you use the associated feature. For example, if your business supports drop shipments, you should also set up Oracle Purchasing. If you sell models and kits, set up Oracle Bills of Material and Oracle Configurator.

If you are using a multiple organization structure, your system administrator must set the parameter *OM: Item Validation Organization*. This enables Order Management to default code and revenue account information accurately.

Set Up Oracle Applications Technology

The setup steps in this chapter tell you how to implement the parts of Oracle Applications specific to Oracle Order Management. This includes:

- Performing system-wide setup tasks, such as configuring concurrent managers and printers
- Managing data security, which includes setting up responsibilities to enable access to a specific set of business data and transactions, and assigning individual users to one or more of these responsibilities

Also, if your product uses Oracle Workflow, for example, to manage the approval of business documents or derive Accounting flexfield values via the Account Generator, you need to set up Oracle Workflow.

Order Management Setup Steps

The following table displays a list of all the implementation steps for Oracle Order Management and a reference to documentation that can help to accomplish the steps.

Step	Document	Optional or Required
1. Define multiple organizations in Oracle Inventory	Oracle Inventory User's Guide	required
2. Setup Multi-Org (Multiple Organization) Access Control	Oracle Applications Multiple Organizations Implementation Guide	optional
3. Define key and descriptive flexfields	Oracle Order Management Implementation Manual	required under certain conditions
4. Define inventory organizations (warehouses), parameters, subinventories, and picking rules in Oracle Inventory	Oracle Inventory User's Guide	required
5. Define Profiles, page 2-14	Oracle Order Management Implementation Manual	required
6. Setting OM System Parameters, page 2-74	Oracle Order Management Implementation Manual	required
7. Define invoicing information	Oracle Order Management UserGuide	required under certain conditions
8. Define your sales representatives	Oracle Receivables Implementation Guide	optional
9. Define Tax Features, page 2-85	Current, Oracle Receivable's User's Guide	required
10. Define Quickcodes, page 2-89	Oracle Order Management Implementation Manual	required under certain conditions
11. Define header and line processing flows	Oracle Order Management	required
12. Define Document Sequences for Order Numbering, page 2-93	Oracle Order Management Implementation Manual	required

Step	Document	Optional or Required
13. Define Order Import Sources, page 2-106	Oracle Order Management Implementation Manual	required under certain conditions
14. Define the units of measure	Oracle Inventory User's Guide	required
15. Define item information	Oracle Inventory User's Guide	required
16. Define the items that you sell	Oracle Inventory User's Guide	required
17. Define the configurations that you sell	Oracle Bills of Material User's Guide	required under certain conditions
18. Define price lists	Oracle Advanced Pricing Implementation Manual	required
19. Define customer profile classes	Oracle Receivables Implementation Guide	required under certain conditions
20. Define information on your customers	Oracle Receivables Implementation Guide	required
21. Define item cross references	current, Oracle Inventory User's Guide	required under certain conditions
22. Define your sourcing rules	Oracle Advanced Planning and Scheduling User's Guide	optional
23. Define Order Management Transaction Types, page 2-95	Oracle Order Management Implementation Manual	required
24. Set up Cost of Goods Sold Accounting flexfield combination	Order Inventory User's Guide	required under certain conditions
25. Define Processing Constraints, page 2-107	Oracle Order Management Implementation Manual	optional
26. Define Defaulting Rules, page 2-117	Oracle Order Management Implementation Manual	optional

Step	Document	Optional or Required
27. Define Credit Checking Rules, page 2-127	Oracle Order Management Implementation Manual	required under certain conditions
28. Define Automatic Holds, page 2-147	Oracle Order Management Implementation Manual	required under certain conditions
29. Define Attachments, page 2-152	Oracle Order Management Implementation Manual	optional
30. Define Freight and Special Charge Types, page 2-159	Oracle Order Management Implementation Manual	optional
31. Define shipping parameters	Oracle Shipping Execution User's Guide	required

Setup Steps Defined in Detail

The following is a list of each setup step defined in detail.

Step 1: Multiple Organizations

Define multiple organizations in Oracle Inventory. This step is required.

Step 2: Multi-Org Access Control

The Multi-Org Access Control (MOAC) feature enables users to access to one or more Operating Units within one user responsibility. Please refer to the *Oracle Applications Multiple Organizations Implementation Guide* for more information.

Step 3: Flexfields

Define key and descriptive flexfields to capture additional information about orders and transactions.

This step is required for Key Flexfields, and optional if you plan on using the functionality surrounding Descriptive Flexfields. Several defaulting values are provided.

Step 4: Inventory Organizations

Define inventory organizations (warehouses), parameters, subinventories, and picking

rules in Oracle Inventory.

You must define at least one item validation organization and at least one organization that acts as an inventory source for orders fulfilled internally. If you plan to drop ship some orders, you must also define at least one logical organization for receiving purposes. Your item validation organization can be the same as your inventory source or your logical receiving organization, but you cannot use one organization for all three purposes. See Step 5 for setting your item validation organization.

This step is required.

Step 5: Profile Options

Define profile options to specify certain implementation parameters, processing options, and system options.

This step is required.

Step 6: Parameters

Set your Order Management System Parameters to validate items, enable customer relationships, and operating unit defaults.

This step is required.

Step 7: Invoicing

Define invoicing information, including payment terms, invoicing and accounting rules, Autoaccounting parameters, territories, and invoice sources.

This step is required if you plan on transferring invoicing information to Oracle Receivables. Several defaulting values are provided.

Step 8: Salespersons

Define information on your sales representatives.

This step is optional.

Step 9: Tax

Define tax features, such as codes, rates, exceptions, and exemptions.

This step is required.

Step 10: QuickCodes

Define QuickCodes that provide custom values for many lists of values throughout Order Management.

This step is required if you plan on creating user defined Quickcodes for utilization within Order Management. Defaulting values are provided.

Step 11: Workflow

Define header and line processing flows to meet different header and line type requirements.

This step is required.

Step 12: Document Sequences (Order Numbering)

Define Document Sequences for automatic or manual numbering of orders.

This step is required.

Step 13: Order Import Sources

Define sources for importing orders into Order Management.

This step is required if you plan on importing orders or returns into Order Management.

Step 14: Units of Measure

Define the units of measure in which you supply items.

This step is required.

Step 15: Item Information

Define item information, including item attribute controls, categories, and statuses.

This step is required.

Step 16: Items

Define the items that you sell, as well as container items.

This step is required.

Step 17: Configurations

Define the configurations that you sell.

This step is required if you plan on generating orders or returns for configured items. Several defaulting values are provided.

Step 18: Pricing

Define price lists for each combination of item and unit of measure that you sell. Optionally, you can define pricing rules and parameters to add flexibility.

For more information about pricing setup and implementation, refer to the *Oracle Advanced Pricing Implementation Manual*.

This step is required.

Step 19: Customer Classes

Define customer profile classes.

This step is required if you plan on using the functionality surrounding Customer Profiles. Several defaulting values are provided.

Step 20: Customers

Define information on your customers.

This step is required.

Step 21: Item Cross References

Define item cross references for ordering by customer part number, UPC, or any generic item number.

This step is required if you plan on using the functionality surrounding item cross referencing. Several defaulting values have been provided.

Step 22: Sourcing

Define your sourcing rules for scheduling supply chain ATP functions.

This step is optional.

Step 23: Order Management Transaction Types (Sales Documents)

Define Order Management transaction types to classify sales documents. For each order type, you can assign a default price list, defaulting rules, order lines, return lines, line types, workflow assignments, payment terms, and freight terms.

Note: Order Management provides *NO* seeded OM transaction types. For existing Oracle Order Entry customers, Order Management will update existing *Order Types* to OM transaction type during the upgrade process.

This step is required.

Step 24: Cost of Goods Sold (COGS)

Set up your Cost of Goods Sold Accounting Flexfield combination (COGS Account) in Oracle Inventory.

This step is required if you plan on utilizing the functionality surrounding COGS.

Step 25: Processing Constraints

Define processing constraints to prevent users from adding updating, deleting, splitting lines, and cancelling sales documents information beyond certain points in your business flows. Use the constraints Order Management provides, which prevent data integrity violations, or create your own.

This step is optional. Several default values for processing constraints have been defined.

Step 26: Defaulting Rules

Define defaulting rules to determine the source and prioritization for defaulting order information to reduce the amount of information you must enter manually in the Sales Orders window.

This step is optional. Several Defaulting rules and corresponding values for have been defined.

Step 27: Credit Checking

Define your credit checking rules.

This step is required if you plan on performing any type of order credit checking.

Step 28: Holds

Define automatic holds to apply to orders and returns.

This step is required if you plan on performing automatic hold for orders or returns.

Step 29: Attachments

Define standard documents to attach automatically to sales documents.

This step is optional.

Step 30: Freight Charges and Carriers

Define freight charges and freight carriers to specify on orders.

This step is required if you plan on charging customers for freight or additional order charges.

Step 31: Shipping

Define shipping parameters in Oracle Shipping Execution.

This step is required.

Oracle Training Administration Users

Please refer to the Oracle Training Administration User's Guide for additional Order Management Setup Steps.

Oracle Process Manufacturing Users

Please refer to the Oracle Process Manufacturing guides for additional Order Management Setup Steps.

Related Documents

1. *Oracle Shipping Execution User's Guide*
2. *Oracle Inventory User's Guide*
3. *Oracle Receivables User Guide*
4. *Oracle Receivables Implementation Guide*
5. *Oracle Receivables Reference Guide*
6. *Oracle Bills of Material User's Guide*
7. *Oracle Order Management User's Guide*
8. *Oracle Applications Multiple Organizations Implementation Guide*
9. *Using Oracle Training Administration*

Related Topics

Holds and Releases

Profile Options

Setting OM System Parameters

Define Credit Checking Rules

Credit Checking
Define Defaulting Rules
Defaulting Rules
Define Processing Constraints
Processing Constraints
Define Order Management Transaction Types
Transaction Types
Setting up the Supply Chain
Setting Up Basic Pricing
Order Import
Define Document Sequences for Order Numbering
Using Workflow in Order Management
Define QuickCodes

Multi-Org Access Control

Please refer to the *Oracle Applications Multiple Organizations Implementation Guide* for general MOAC setup details.

To support Multi-Org Access Control the Operating Unit has been added to many of the Order Management windows. If you are enabling MOAC functionality for your implementation and you want to give your users the ability to enter and search sales order documents across Operating Units then you need to enable (make the field visible) the Operating Unit field in the various Order Management forms that are folder enabled.

It is recommended that the Operating Unit field should be the first visible field on a form, or the first field before an Operating Unit sensitive field. To make the hidden Operating Unit field visible in OA Framework (HTML) pages, you need to use the OA Framework Personalization feature.

The windows / OA pages where the Operating Unit is seeded as hidden:

- Order Information Portal:
 - Sales Order Advanced Search and Results page
 - Order Status page
 - Deliveries Advanced Search
 - Delivery page

- Sales Orders windows:
 - Sales Order window
 - Order Organizer Find window (All tabs)
 - Order Summary
 - Quick Sales Order window
 - Quick Sales Order Organizer
 - Quick Order Summary
 - Quote window
 - Quote Organizer
 - Quote Summary
 - Find Customer window
- Sales Agreements windows:
 - Sales Agreements window
 - Sales Agreements Organizer
 - Sales Agreements Summary
- Other windows:
 - Scheduling Organizer window
 - Pricing and Availability window
 - Order Import Corrections window
 - Open Interface Tracking window
 - Retrobill Organizer window, Retrobill Requests tab

The Order Management windows where the Operating Unit is added as visible:

- Audit History Find, Audit History
- Add Customer window
- Apply Holds (Criteria tab) window

- Approvals (to display Operating Unit of Transaction Type)
- Export Compliance Find, Export Compliance Workbench
- Order Import Corrections Find window
- Open Interface Tracking Find window
- Process Messages Find, Process Messages window
- Payment Types
- System Parameters
- Shipping Tolerances (to display Operating Unit of Customer Address)
- Transaction Types

In the windows where the Operating Unit can be specified, the list of values for the Operating Unit field is determined by the profile MO: Security Profile. The field will have a default value based on the profile MO: Default Operating Unit. For details on MOAC setup please refer to the *Oracle Applications Multiple Organizations Implementation Guide*.

Profile Options

During implementation, you set a value for each user profile option to specify how Order Management controls access to and processes data. This is step four of the Order Management Setup Steps, page 2-3.

Generally, the system administrator sets and updates profile values. See: Setting User Profile Options, *Oracle Applications System Administrator's Guide*.

Profile Categories

In the current release, profiles have been categorized so that they can be easily classified or grouped. The following table displays the profile categories and the profile options that belong to each one. Some profile options belong to more than one category and are indicated in the table below.

Profile Category Name	Profile Option(s)
Configurations	OM: Allow model fulfillment without configuration; OM: Configuration Quick Save; OM: Copy Model DFF to child lines; OM: Included Item Freeze Method; OM: Party Totals Currency; OM: Use Configurator;
Customer Usage	OM: Add Customer; OM: Add Customer (Order Import); OM: Create Account Information; OM: E-Mail Required on New Customers; OM: Party Totals Currency; OM: Sales Order Form: Restrict Customers
Debug	OM: Debug Log Directory; OM: Debug Level; OM: Generate Diagnostics for Error Activities;
Deployment	OM: DBI Installation; OM: Orders Purge Per Commit; OM: New EDI Acknowledgment Framework; OM: Printed Document Extension Class Name; OM: Use Configurator;

Profile Category Name	Profile Option(s)
Electronic Messaging	OM: Change SO Response Required; OM: Electronic Message Integration Event Sources OM: New EDI Acknowledgment Framework; OM: Order Accept State for XML; OM: Run Order Import for XML; OM: Send Acknowledgment for Change PO Response;

Profile Category Name	Profile Option(s)
Forms UI	OM: Add Customer; OM: Administer Public Queries; OM: Automatically Open Related Items Window; OM: Contact Center Actions Menu Name; OM: Cust Item Shows Matches; OM: Display Actions Button vs. Poplist; OM: Display Current Selections in Pricing/Availability; OM: Enable Related Items and Manual Substitutions; OM: Item View Method; OM: Quick Sales Order Form: Auto Refresh; OM: Quick Sales Order Form: Defer Pricing; OM: Sales Order Form: Cascade Header Changes to Line; OM: Sales Order Form: Refresh Method (Query Coordination); OM: Sales Order Form: Restrict Customers; OM: Sales Order navigation from Pricing/Availability form; OM: Sales Orders Form preference; OM: Scheduling Role; OM: Show Line Details; OM: Show Process Messages Flag; OM: Use Configurator; OM: View Cancel Lines; OM: View Closed Lines; OM: View Pricing & Availability Information in Related Items;

Profile Category Name	Profile Option(s)
Fulfillment	OM: Allow model fulfillment without configuration; OM: Included Item Freeze Method; OM: Over Return Tolerance; OM: Over Shipment Tolerance; OM: Population Of Buyer Code For Dropship Lines; OM: Source Code; OM: Under Return Tolerance; OM: Under Shipment Tolerance;
Holds	OM: Modify Seeded Holds; OM: Prevent Booking for Line Generic Holds;
Invoicing	OM: Interface freight tax code from line; OM: Invoice Numbering Method; OM: Set Receivables Transaction Date as Current Date for Non-Shippable Lines;
Item Usage	OM: Customer Item Shows Matches; OM: Enable Related Items and Manual Substitutions; OM: Item Flexfield; OM: Restrict Customer Items for Line Level Ship To Address;
Logistics	OM: Sequence for TP Ship/Deliver Deadline; OM: Source for TP Early Ship/Deliver Date;
Order Import	OM: Add Customer (Order Import); OM: Import Multiple Shipments; OM: Unique Order Source, Orig Sys Document Ref Combination For Each Customer;

Profile Category Name	Profile Option(s)
Payments	OM: Commitment Sequencing; OM: Credit Card Privileges; OM: Preserve External Credit Balances
Portal UI	OM: Customer Service Feedback; OM: Customer Service Report Defect; OM: Records On Summary Page For External Users;
Pricing	OM: Charges For Backorders; OM: Charges for included item; OM: Charging Privilege; OM: Discounting Privileges; OM: Enable Group pricing for DSP lines; OM: Item Change Honors Frozen Price; OM: List Price Override Privilege; OM: Negative Pricing; OM: Promotion Limit Violation Action; OM: Send Changed Lines to Pricing; OM:Unit Price Precision Type; OM: UOM Class for Charge Periodicity;
Returns	OM: Customer Service Feedback; OM: Customer Service Report Defect; OM: Over Return Tolerance; OM: Notification Approver; OM: Return Item Mismatch Action; OM: Return Unfulfilled Referenced Line Action; OM: Under Return Tolerance;

Profile Category Name	Profile Option(s)
Scheduling	OM: Assign New Set For Each Line; OM: Authorized To Override ATP; OM: Auto Push Group Date; OM: AutoSchedule; OM: Enforce Shipping Method for Ship Sets; OM: Schedule ATO Item Without BOM; OM: Scheduling Role;
Security	OM: Add Customer; OM: Add Customer (Order Import); OM: Administer Public Queries; OM: Authorized To Override ATP; OM: Cascade Service; OM: Charging Privilege; OM: Create Account Information; OM: Credit Card Privileges; OM: Discounting Privileges; OM: List Price Override Privilege; OM: Modify Seeded Holds; OM: Scheduling Role; OM: Authorized To Override ATP;
Service	OM: Cascade Service;

Profile Category Name	Profile Option(s)
Transaction Entry	OM: Apply Automatic Attachments; OM: Cascade Service; OM: Configuration Quick Save; OM: Copy Model dff to child lines; OM: Default Blanket Agreement Type; OM: Default Blanket Transaction Phase; OM: Default Sales Transaction Phase; OM: Default Salesrep; OM: Enforce check for duplicate Purchase Orders; OM: Generic Update Constraints Apply to DFF?; OM: Prevent Booking for Line Generic Holds; OM: Return Item Mismatch Action; OM: Return Unfulfilled Referenced Line Action;
Upgrade	OM: Context Responsibility for Upgraded Orders; OM: Notification Approver;

Implementing Profile Options Summary

The following table indicates whether you 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.

The table also displays if the profile option is Optional or Required:

- Required: Requires you to provide a value
- Optional: A default value is provided, so you only need to change it if you do not want to accept the default
- If the profile option from the table is prefaced with an application short code, you can find additional information surrounding the profile option usage in the related Application User Guide.

The table also uses the following values to describe profile option controls for columns User, System Admin User, System Admin Resp, System Admin App, and System Admin Site:

- Yes: You can update the profile option.
- View Only: You can view the profile option value in the Profiles window, but you cannot change it.
- No: You cannot view or change the profile option value.

For the profile options table below, the following codes are used to denote profile options used within Order Management that are defined within other Oracle Applications. See the appropriate User Guide for additional details.

- (AR) Oracle Receivables
- (BOM) Oracle Bills of Material
- (FND) Oracle Applications Foundations
- (GL) Oracle General Ledger
- (INV) Oracle Inventory
- (QP) Oracle Advanced Pricing
- (WSH) Oracle Shipping Execution
- (OKC) Oracle Sales Contracts

Following the table is a more in-depth description of each of the profile options.

Profile Options

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
OM: Add Customer	View Only	Yes	Yes - default is None	Yes	Yes - default is None	Required	NULL	Customer Usage, Security, Forms UI

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
OM: Add Customer (Order Import)	View Only	Yes	Yes	Yes	Yes	Optional	NULL	Customer Usage, Security, Order Import
OM: Administer Public Queries	No	Yes	Yes	Yes	Yes	Required	No	Forms UI, Security
OM: Allow Model Fulfillment Without Configuration	No	No	No	No	Yes	Optional	No	Fulfillment, Configurations
OM: Apply Automatic Attachments	View Only	No	Yes	Yes	Yes	Optional	Yes	Transaction Entry
OM: Assign New Set For Each Line	No	No	No	No	Yes	Optional	NULL	Scheduling
OM: Authorized to Override ATP	View Only	Yes	Yes	No	Yes	Optional	NULL	Scheduling, Security

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
OM: Automatically Open Related Items Window	Yes	Yes	Yes	Yes	Yes	Optional	No	Forms UI
OM: Auto schedule	View Only	No	Yes	No	Yes	Optional	NULL	Scheduling
OM: Auto Push Group Date	View Only	No	Yes	No	Yes	Optional	NULL	Scheduling
OM: Cascade Service	View Only	View Only	View Only	Yes	Yes	Optional	Null - equivalent to Yes	Service, Transaction Entry
OM: Change SO Response Required	View Only	View Only	View Only	View Only	Yes			Electronic Messaging
OM: Charges for Backorders	View Only	No	No	No	Yes	Optional	NULL	Pricing
OM: Charges for included item	View Only	No	No	No	Yes	Optional	NULL	Pricing

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
OM: Charging Privilege	View Only	Yes	Yes	Yes	Yes	Optional	NULL	Pricing, Security
OM: Commitment Sequencing	No	No	No	No	Yes	Optional	No	Payments
OM: Configuration Quick Save	No	No	No	No	Yes	Optional	No	Transaction Entry, Configurations
OM: Contact Center Actions Menu Name	View Only	Yes	Yes	Yes	Yes	No	ONT_C ONTAC T_CEN TER_SU B_MNU	Forms UI
OM: Context Responsibility for Upgraded Orders	View Only	View Only	Yes	View Only	View Only	Optional	No Default	Upgrade
OM: Copy Model DFF To Child Lines	No	No	No	Yes	Yes	Optional	No	Transaction Entry, Configurations

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
OM: Create Account Information	View Only	Yes	Yes	Yes	Yes	Optional	None	Customer Usage, Security
OM: Credit Card Privileges	View Only	View Only	Yes	Yes	Yes	Optional	None	Payments, Security
OM: Cust Item Shows Matches	View Only	No	Yes	No	Yes			Item Usage, Forms UI
OM: Customer Service Feedback	View Only	Yes	Yes	Yes	Yes	Optional	NULL	Returns, Portal UI
OM: Customer Service Report Defect	View Only	Yes	Yes	Yes	Yes	Optional	N	Returns, Portal UI
OM: DBI Installation	View Only	Yes	Yes	Yes	Yes			Deployment
OM: Debug Level	Yes	Yes	Yes	Yes	Yes	Optional	0	Debug

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
OM: Debug log Directory	View	No	Yes	Yes	Yes	Optional	NULL	Debug
OM: Default Sales Transaction Phase	Yes	Yes	Yes	No	Yes		NULL	Transaction Entry
OM: Default Blanket Agreement Type	No	No	Yes	No	Yes	Optional	NULL	Transaction Entry
OM: Default Blanket Agreement Transaction Phase	Yes	Yes	Yes	No	Yes	Optional	NULL	Transaction Entry
OM: Default Salesrep	Yes	Yes	Yes	Yes	Yes	Optional	NULL	Transaction Entry
OM: Discounting Privileges	No	Yes	Yes	Yes	No	Optional	NULL	Pricing, Security
OM: Display Actions Button vs. Pop list	Yes	Yes	Yes	Yes	Yes	Yes	Button	Forms UI

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
OM: Display Current Selections in Pricing and Availability	Yes	Yes	Yes	Yes	Yes	Optional	No	Forms UI
OM: Electronic Message Integration Event Sources	View Only	View Only	View Only	View Only	Yes		XML	Electronic Messaging
OM: E-Mail Required On New Customers	View Only	No	No	No	Yes	Optional	No	Customer Usage
OM: Enable Group Pricing for DSP Lines	View Only	Yes	Yes	Yes	Yes			Pricing
OM: Enable Related Items and Manual Substitutions	View Only	Yes	Yes	Yes	Yes	Optional	No	Item Usage, Forms UI

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
OM: Enforce Check For Duplicate Purchase Order	View Only	Yes	Yes	Yes	Yes	Required	Yes	Transaction Entry
OM: Enforce Shipping Method for Ship Sets	No	No	No	No	Yes	Optional	NULL	Scheduling
OM: Generate Diagnostics for Error Activities	View Only	No	No	No	Yes	No	No	Debug
OM: Generic Update Constraints Apply to DFF?	View Only	No	No	No	Yes	Optional	NULL	Transaction Entry
OM: Import Multiple Shipments	Yes	Yes	Yes	Yes	Yes	Optional	Null - equivalent to No	Order Import

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
OM: Included Item Freeze Method	View Only	No	No	No	Yes	Required	NULL	Fulfillment, Configurations
OM: Interface Freight Tax Classification Code From Line	No	No	No	No	Yes	Optional	No	Invoicing
OM: Invoice Numbering Method	No	No	No	No	Yes	Required	Automatic	Invoicing
OM: Item Change Honors Frozen Price	View Only	Yes	Yes	Yes	Yes	Optional	NULL	Pricing
OM: Item Flexfield	No	No	No	No	Yes	Required	System items	Item Usage
OM: Item View method	Yes	Yes	Yes	Yes	Yes	Optional	NULL	Forms UI
OM: List Price Override Privilege	No	Yes	Yes	No	No	Optional	NULL	Pricing, Security

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
OM: Modify Seeded Holds	Internal Use Only	Internal Use Only	Internal Use Only	Internal Use Only	Internal Use Only	Internal Use Only	Internal Use Only	Holds, Security
OM: Negative Pricing	View Only	No	No	Yes	Yes	Optional	NULL	Pricing
OM: New EDI Acknowledgment Framework	No	Yes	Yes	Yes	Yes	Optional	No	Deployment, Electronic Messaging
OM: Notification Approver	View Only	Yes	Yes	Yes	Yes	Optional	NULL	Upgrade, Returns
OM: Order Accept State For XML	View Only	View Only	View Only	View Only	Yes	Optional	Null - equivalent to Entered	Electronic Messaging
OM: Orders Purge Per Commit	View Only	No	No	No	Yes	Optional	100	Deployment
OM: Over Return Tolerance	View Only	No	No	No	Yes	Required	0	Returns, Fulfillment

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
OM: Over Shipment Tolerance	View Only	No	No	No	Yes	Required	0	Fulfillment
OM: Party Totals Currency	View Only	No	No	No	Yes	Required	US Dollars	Customer Usage
OM: Population Of Buyer Code For Dropship	No	No	No	No	Yes	Optional	NULL	Fulfillment
OM: Preserve External Credit Balances	No	No	No	No	Yes	Yes	Yes	Payments
OM: Prevent Booking for Line Generic Holds	No	No	No	No	Yes	Optional	Null - equivalent to No	Holds, Transaction Entry
OM: Printed Document Extension Class Name	View Only	No	No	No	Yes	Optional	NULL	Deployment

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
OM: Promotion Limit Violation Action	View Only	No	No	No	Yes	Optional	NULL	Pricing
OM: Quick Sales Order Form: Auto Refresh	Yes	Yes	Yes	Yes	Yes	Optional	Application	Forms UI
OM: Quick Sales Order Form: Defer Pricing	Yes	Yes	Yes	Yes	Yes	Optional	No	Forms UI
OM: Records on Summary Page for External Users	Yes	Yes	Yes	Yes	Yes	Optional	NULL	Portal UI
OM: Restrict Customer Items for Line Level Ship To Address	No	No	No	No	Yes	Optional	NULL	Item Usage

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
OM: Return Item Mismatch Action	View Only	Yes	Yes	Yes	Yes	Optional	NULL	Returns, Transaction Entry
OM: Return Unfulfilled Referenced Line Action	View Only	Yes	Yes	Yes	Yes	Optional	NULL	Returns, Transaction Entry
OM: Run Order Import for XML	View Only	View Only	View Only	View Only	Yes	Optional	NULL	Electronic Messaging
OM: Sales Order Form: Cascade Header Changes to Line	No	Yes	Yes	View Only	View Only	Optional	Null	Forms UI
OM: Sales Order Form Preference	Yes	Yes	Yes	Yes	Yes	Optional	Sales Orders	Forms UI

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
OM: Sales Order Form: Refresh Method (Query Co-ordination)	Yes	Yes	Yes	Yes	Yes	Optional	Null - equivalent to Automatic Refresh with Repositioning of Cursor	Forms UI
OM: Sales Order Form: Restrict Customers	View Only	View Only	Yes	Yes	Yes	Optional	Global	Forms UI, Customer Usage
OM: Sales Order Navigation From P&A form	Yes	Yes	Yes	Yes	Yes	Optional	ASK	Forms UI
OM: Schedule ATO Item Without BOM	No	No	No	No	Yes	Optional	No	Scheduling
OM: Scheduling Role	No	Yes	Yes	No	No	Optional	NULL	Scheduling, Forms UI, Security

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
OM: Send Acknowledgment for Change PO Response	View Only	View Only	View Only	View Only	Yes	Optional	Null - equivalent to No	Electronic Messaging
OM: Send Changed Lines to Pricing	View Only	No	No	No	Yes	Optional	Yes	Pricing
OM: Sequence for TP Ship/Deliver Deadline	No	No	No	No	Yes	Optional	Null	Logistics
OM: Set Receivables Transaction Date as Current Date for Non-Shippable lines	View Only	No	No	No	Yes	Optional	No	Invoicing
OM: Show Line Details	Yes	Yes	Yes	Yes	Yes	Optional	NULL	Forms UI

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
OM: Show Process Messages Flag	Yes	Yes	Yes	Yes	Yes	Optional	NULL	Forms UI
OM: Source Code	No	No	No	No	Yes	Required	ORDER ENTRY	Fulfillment
OM: Source for TP Early Ship / Deliver Date	No	No	No	No	Yes	Optional	NULL	Logistics
OM: Use Configurator	No	No	No	No	Yes	Optional	Yes	Deployment, Forms UI, Transaction Entry, Configurations
OM: Under Return Tolerance	View Only	No	No	No	Yes	Required	0	Returns, Fulfillment
OM: Under Shipment Tolerance	View Only	No	No	No	Yes	Required	0	Fulfillment

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
OM: Unique Order Source, Orig Sys Document Ref Combination For Each Customer	View Only	View Only	View Only	View Only	Yes	Optional	NULL	Order Import
OM: Unit Price Precision Type	Yes	Yes	Yes	Yes	Yes	Optional	NULL	Pricing
OM: UOM Class For Charge Periodicity	View Only	View Only	View Only	View Only	Yes			Pricing
OM: View Cancel Lines	Yes	Yes	Yes	Yes	Yes	Optional	Yes	Forms UI
OM: View Closed Lines	Yes	Yes	Yes	Yes	Yes	Optional	Yes	Forms UI

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
OM: View Pricing/Availability Information in Related Items	Yes	Yes	Yes	Yes	Yes	Optional	Both	Forms UI
AR: Credit Limit Selection	No	No	Yes	Yes	Yes			
AR: Item Flexfield Mode (AR)	Yes	Yes	Yes	Yes	Yes	Required	NULL	
AR: Use Invoice Accounting for Credit Memos (AR)	View Only	Yes	Yes	Yes	Yes	Required	No	
HZ: Generate Contact Number (AR)	Yes	Yes	Yes	Yes	Yes	Required	NULL - equivalent to Yes	
HZ: Generate Party Number (AR)	Yes	Yes	Yes	Yes	Yes	Required	NULL - equivalent to Yes	

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
HZ: Generate Party Site Number (AR)	Yes	Yes	Yes	Yes	Yes	Required	NULL - equivalent to Yes	
Tax: Allow Ad Hoc Tax Changes (AR)	View Only	Yes	Yes	Yes	Yes	Required	NULL	
Tax: Allow Manual Tax Lines (AR)	View Only	Yes	Yes	Yes	Yes	Required	NULL	
EBTax: Allow Override of Customer Exemptions (AR)	View Only	Yes	Yes	Yes	Yes	Required	NULL	
Tax: Allow Override of Tax Classification Code (AR)	View Only	Yes	Yes	Yes	Yes	Required	NULL	

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
Tax: Calculate Tax on Credit Memos (AR)	View Only	No	Yes	Yes	Yes	Optional	NULL	
Tax: Use Tax PL/SQL Vendor (AR)	View Only	No	Yes	Yes	Yes		No	
Tax: Use Tax Vendor (AR)	View Only	No	Yes	Yes	Yes	Required	No	
BOM: Check for Duplicate Configuration (BOM)	View Only	No	No	No	Yes	Optional	No	
BOM: Component Item Sequence Increment (BOM)	Yes	Yes	Yes	Yes	Yes	Optional	10	
BOM: Configurator URL of UI Manager (BOM)	Yes	Yes	Yes	Yes	Yes	Required		

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
BOM: Default Bill of Material Levels (BOM)	Yes	Yes	Yes	Yes	Yes	Optional	No	
Sequential Numbering (FND)	View Only	No	Yes	Yes	Yes	Required		
Default Country (FND)	Yes	Yes	Yes	Yes	Yes	Required	NULL	
Flexfields: Open Descr Window (FND)	Yes	Yes	Yes	Yes	Yes	Optional	Yes	
Journals: Display Inverse Rate (GL)	Yes	Yes	Yes	Yes	Yes	Optional	At site level	
INV: Capable to Promise (INV)	Yes	Yes	No	No	Yes	Optional	NULL	
OKC: Enable Sales Contracts (OKC)	No	No	No	Yes	Yes	Optional	NULL	

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
QP: Accrual UOM Class (QP)	View Only	No	No	Yes	Yes	Optional	No Default	
QP: Blind Discount Option (QP)	View Only	No	No	Yes	Yes	Required	Yes	
QP: Item Validation Organization (QP)	View Only	No	Yes	No	Yes	Required	No Default	
QP: High Volume Order Processing Compliance (QP)	No	No	No	No	Yes			
QP: Line Volume UOM Code (QP)	View Only	No	No	Yes	Yes	Optional	No Default	
QP: Line Weight UOM Code (QP)	View Only	No	No	Yes	Yes	Optional	No Default	

Profile Option Name	User	System Admin. User	System Admin. Resp.	System Admin. App.	System Admin. Site	Required?	Default Value	Profile Category Names
QP: Negative Pricing (QP)	View Only	No	No	Yes	Yes	Required	No Default	
QP: Return Manual Discounts (QP)	Yes	Yes	Yes	Yes	Yes			
QP: Source System Code (QP)	No	No	No	Yes	Yes	Required	No Default	
QP: Unit Price Precision Type (QP)	No	No	No	Yes	Yes	Required	Standard	
QP: Verify GSA Violations (QP)	No	No	No	No	Yes	Required	No	
WSH: Internet Proxy URL (WSH)	Yes	No	No	No	No	Optional	NULL	

Order Management Profile Option Descriptions and Settings

OM: Add Customer

ONT_ADD_CUSTOMER

This profile option determines which users who can access the Order Management Add Customer window to enter customers, customer addresses, and customer contact information. Select from:

- All: Users can create new customers, customer addresses, and customer contacts.
- None: User cannot create new customers, customer addresses, and customer contacts.
- Address and Contact only: Users can access the Add Customer window to create both new customer addresses and/or customer contacts for existing customers only

The default for this profile option is *None*.

Note: You cannot update existing customer information from the Add Customer window. However, if the e-mail address field is NULL for a customer and/or customer contact, you can update these fields.

Note: Oracle Trading Community Architecture provides a model for managing information about entities such as customers. The TCA Data Sharing and Security (DSS) feature allows you to define rules around who can create, update or delete customer data. For more information please refer to the *Oracle Trading Community Architecture Administration Guide*.

OM: Add Customer (Order Import)

ONT_ADD_CUSTOMER_OI

This profile option determines which users can create new customers and customer details when importing order using the Order Import concurrent program. Select from:

- All: Users can create new customers, customer addresses, and customer contacts.
- None: User cannot create new customers, customer addresses, and customer contacts.
- Address and Contact only: Users can access the Add Customer window to create both new customer addresses and/or customer contacts for existing customers only

The default for this profile option is *None*.

Note: Oracle Trading Community Architecture provides a model for managing information about entities such as customers. The TCA Data Sharing and Security (DSS) feature allows you to define rules around who can create, update or delete customer data. For more information

please refer to the *Oracle Trading Community Architecture Administration Guide*.

OM: Administer Public Queries

ONT_ADMINISTER_PUBLIC_QUERIES

This profile option determines which responsibility is able to create and update public queries within Order Management windows.

OM: Apply Automatic Attachments

OE_APPLY_AUTOMATIC_ATCHMT

This profile option determines whether rule-based attachments are applied without user intervention.

OM: Allow model fulfillment without configuration

ONT_ALLOW_MODEL_FULFILL_WITHOUT_CONFIG

In order to enable you to progress model lines which do not have child lines attached, the profile option OM: Allow Model Fulfillment without Configuration has been introduced. When you set this profile option to Yes, you are allowed to progress the model line and not wait at fulfillment any longer, even if you do not have a child line attached to it. If you set this profile option to No, which is the default value, the current functionality will be carried out: the model line will get fulfilled only if it does not have any child lines attached to it. If the model line is not configured, i.e. if it does not have any child lines attached to it, then the model line waits at fulfillment thus giving the user a chance to configure the model.

OM: Assign New Set For Each Line

ONT_CHECK_WAIT_TO_FULFILL_LINE

The default is set to "N" which creating ONE Ship/Arrival Set per order. Set to 'Y' which creates a separate ship/arrival set per line, resulting in enforcing that each line is shipped complete.

OM: Authorized to Override ATP

ONT_OVERRIDE_ATP

This profile option controls which responsibilities or users have the authority to perform the ATP override. If YES, then the user or responsibility can override the ATP Schedule Date. Null is interpreted as No. This can be set at the site, responsibility, or user level.

OM: Automatically Open Related Items Window

ONT_OPEN_RELATED_ITEMS

This profile option allows the user who does high volume up-selling and cross-selling to have the Related Items window open automatically for all items which have relationships defined. Options are Yes or No (default).

OM: Auto Push Group Date

ONT_AUTO_PUSH_GRP_DATE

This profile option controls scheduling when a new line is inserted into an existing set. If the new line cannot be scheduled on the same date as the rest of the set, this profile is used. Select from:

- Yes: The entire set will be automatically rescheduled.
- No or NULL: An error will occur. You can change the dates or quantities to make scheduling succeed.

This profile option can be overridden for a parameter specific to customers or customer sites by setting a value in the Customer window.

The default is NULL.

OM: AutoSchedule

ONT_AUTOSCHEDULE

This profile option determines the default setting for autoscheduling orders, and also controls the display of the Availability window within the Sales Order Lines window. Please note that autoscheduling orders is only supported for orders that contain standard line items, not models or kits.

Select from:

- Yes: Order lines are scheduled automatically at the time of entry. Automatically display the Availability window within the Sales Order window when entering order line details.
- No or NULL: Order lines are not scheduled automatically at the time of entry. Does not automatically display the Availability window within the Sales Order window when entering order line details.

Note: If the item or model is a standard item or has the item ATP flag enabled, ATP inquiry will automatically be performed on the item or model once it has been entered on an order line and a user

exits the item field.

The Line Generic workflow process sequences the line scheduling action to occur after you book the order. However, even if you have set this profile option to No and you indicate ship set or arrival set on a order line, the order entry processing schedules the line and sets the Visible Demand Flag.

To group lines into ship sets and arrival sets, order entry processing uses the warehouse, scheduled shipment date, ship to location, shipment priority, and shipment method. Therefore, it schedules the order lines with ship set values to obtain scheduled shipment date.

If you want the Line Generic workflow process to schedule an order line, you cannot specify a ship set or arrival set for it.

OM: Cascade Service

ONT_CASCADE_SERVICE

If set to No, services will not be automatically cascaded from model to its options. When a service is added to a model, depending on the profile value the application will or will not automatically cascade the service to the options.

OM: Change SO Response Required

This profile option determines if a response is required to an outbound Change SO XML message. If a response is required, the order is put on hold until a response is received from the customer.

OM: Charges for Backorders

This profile option controls the setting of the Calculate Price Flag when backorder lines are created.

Select from:

No or NULL: The Calculate Price Flag will be set to Freeze, and the pricing engine will not apply charges. Yes: The Calculate Price Flag will be set to Partial to enable charges to be calculated when the backordered item ultimately ships.

OM: Charges for included item

ONT_CHARGES_FOR_INCLUDED_ITEM

This profile option determines if Order Management will calculate and return charges for included items. The profile option setting does not control the pricing of included items, only the calculation and return of charges associated with an order line containing an included item.

Select from:

- Yes: Calculate and return charges for included items.
- No: Do not calculate charges for included items.

OM: Charging Privilege

OE_CHARGING_PRIVILEGE

This profile option controls your ability to manually apply freight and special charges on an order or order line.

Select from:

- Full Access: You can modify and apply charges, but you cannot modify non-overridable charges.
- View Only Access: You can only view charges.
- Unlimited Access: You can modify and apply all charges including the non-overridable charges.

OM: Configuration Quick Save

ONT_CONFIG_QUICK_SAVE

This profile option determines how Order Management will save option or model class lines for unbooked sales orders from within the Sales Order window *only*.

If you set this profile option to Y, class lines will be saved by a direct database insert call with a minimum of order line defaulting values, unless the value of the Order Management profile option OM: Included Item Freeze Method is set to Entry. If the value of OM: Included Item Freeze Method is set to Entry, you cannot perform direct database inserts of model or class order lines with a minimum of defaulting.

OE: Commitment Balance Checking

OE_COMMITMENT_BAL_CHECK

This profile option is obsolete and no longer used by Order Management.

OM: Commitment Sequencing

OE_COMMITMENT_SEQUENCING

This profile option determines whether or not Oracle Order Management calculates and stores the amount of the line that can be paid using the commitment, and if commitments will be applied in Oracle Receivables in the same sequence that they are applied in Order Management. Select from:

- Yes: Order Management populates the commitment applied and then will interface the applied commitment amount to Oracle Receivables.

Note: If you set this profile option to *Yes*, and you have not installed Bills Receivables for Oracle Receivables, Order Management will not capture the applied commitment amount and therefore will not relay commitment applied amounts to Oracle Receivables; no Warning or Error message is displayed.

- No: Order Management does not calculate the exact commitment applied amount for an order line. Instead, the extended amount of the line is shown in the commitment applied field within the Sales Order Line, Pricing Tab window.

OM: Contact Center Actions Menu Name

ONT_AGENT_ACTION_PROFILE

Agent actions are defined as functions. Depending on the functions that have been mapped to menus, the corresponding associated agent actions are available from the Line Items sub-tab page. This profile option holds the name of that menu. The default value will be the value of the Order Management seeded menu 'ONT_CONTACT_CENTER_SUB_MNU'.

OM: Context Responsibility for Upgraded Orders

OE_RESP_FOR_WF_UPGRADE

This profile option is used to flag certain responsibilities to be used when setting the applications context for deferred activities for upgraded orders and order lines. It is used for customers who are upgrading and only needs to be set if a user, who has created orders, (created_by column in Order Management schema) has multiple responsibilities that point to a single operating unit.

This profile option can only be set at the Responsibility level.

OM: Copy Model DFF to child lines.

This profile option enables copying of all flexfields to the lines from the model line. Context sensitive flexfields are more popular; you may not want the same flexfields copied to all the child lines of a model. The default value is No. Set this parameter to 'Yes' in order for the values to copy.

OM: Create Account Information

ONT_CREATE_ACCOUNT_INFORMATION

This profile option is used to set the user's permissions to create accounts, sites, and

contacts. It can be set at the Site, Application, Responsibility, and User levels.

The seeded profile values are:

- All: The user is permitted to create Accounts, Account Sites, Account Contracts, and related information
- Account Site and Account Contact Only: The user is permitted to create Account Sites, Account Contracts, and related information only
- None: The user is not permitted to create any of the above

The default value is None.

The Create Account Layer API will check this profile and create the account layer only if the user has the correct permissions. The calling application can pass a profile value to the API. It is useful if the calling application has already determined the user's privileges.

OM: Credit Card Privileges

ONT_CREDIT_CARD_PRIVILEGES

This profile option is used for controlling the entry of new credit card details, updating existing details, and allowing for manual authorization. The valid values for this profile option are Yes and No. This profile option has been modified, it's previous valid values were All, Limited and None and in the previous release, this profile option would additionally be used for controlling the card number display. The masking / display function for the credit card number is now controlled from Oracle Payments. Please visit Oracle Payments Implementation Manual for more details.

OM: Cust Item Shows Matches

OE_CUST_ITEM_SHOW_MATCHES

This profile option is obsolete.

OM: Customer Service Feedback

ONT_FEEDBACK_PROFILE

This profile option indicates the Customer contact that a workflow notification will be sent to for RMA requests entered via the Order Information Portal. The values for the LOV for this profile option is all users defined to Oracle Applications via the System Administrator responsibility having *no* customer contacts.

The default for this profile option is Null.

OM: Customer Service Report Defect

ONT_REPORTDEFECT_PROFILE

This profile option indicates the Customer contact that will receive a workflow notification for any Report Defects submitted via the Order Information Portal. The values for the LOV for this profile option is all users defined to Oracle Applications via the System Administrator responsibility having *no* customer contacts.

The default for this profile option is Null.

OM: DBI Installation

ONT_DBI_INSTALLED

This profile option is used to flag whether DBI has been installed. If the profile option is set to Yes, then data is collected for DBI usage. If the profile option is set to No, then data is not collected for DBI.

OM: Debug Level

ONT_DEBUG_LEVEL

This profile option is used to store debug messages to assist in problem identification. The OM: Debug profile option controls which debug messages get written to the debug log based on their assigned level. The directory to be specified for this profile should be available in *utl_file_dir* parameter of the init.ora file (or check v\$parameter) of the application database instance.

Assigning a value greater than 0 or NULL causes debugging to be turned on. The value of this option determines the level of debug messages printed within a log file. For example, if OM: Debug Level has a current value of 3, all debugging messages with a level of 1,2 or 3 will be spooled out to the debug log.

Valid values for this profile option are:

NULL: Do not print any debug messages

1:Level 1; Print a limited subset of debug messages (level 1)

2:Level 2; Print a limited subset of debug messages, including level 1

3:Level 3; Print a limited subset of debug messages, including levels 1,2

4:Level 4; Print a limited subset of debug messages, including levels 1,2 3

5:Level 5; Print all debug messages

If you set this profile option to a value other than NULL, system performance may be affected, because creating and updating a debug log is a task that will consume a lot of system resources as you enter higher debug levels.

Order Management recommends you set this profile option only if you are attempting

to gather additional details for unexpected application issues and then reset the value back to NULL once you have gathered the necessary debug details.

The default for this profile option is NULL.

OM: Debug Log directory

OE_DEBUG_LOG_DIRECTORY

This profile option determines the default directory used to store log file outputs when performing Order Management debugging.

OM: Default Sales Agreement Type

OE_DEFAULT_BLANKET_ORDER_TYPE

This profile is the first preference to default the transaction phase, negotiation or fulfilment on Sales Agreements. This profile should be allowed to setup only at the responsibility and site level.

OM: Default Sales Agreement Transaction Phase

ONT_DEF_BSA_TRANSACTION_PHASE

This profile defaults the order type to generate sales agreement number. This profile should be allowed to setup only at the responsibility and site level.

OM: Default Salesrep

ONT_DEFAULT_PERSON_ID

A profile to default the dummy salesrep for the Telesales Order. The Telesales team will pass the salesrep_id for the order if that information is available in the eBusiness Center. If no salesrep is passed to the Sales Orders form, then Order Management will default the salesrep value from the profile setup in Order Management. Integration with TeleSales is available with a TeleSales license.

OM: Default Sales Transaction Phase

ONT_DEF_TRANSACTION_PHASE

A default source for the transaction phase on the Quote Sales Order. The default is null for negotiation and fulfillment.

OM: Discounting Privilege

ONT_DISCOUNTING_PRIVILEGE

This profile option provides the choice of controlling user's ability to apply discounts on an order or order line.

Select from:

- Full: Ability to apply any valid discount against an order or order line, as long as the order type of the order does not enforce list prices. (Default value).
- Non-Overridable Only: Ability to apply only non-overridable discounts against an order or order line.
- Unlimited: Ability to apply any valid discount against any order or order line, regardless of whether the order type of the order enforces list prices.
- None: No privileges, view-only access.

Note: A Null value for this profile option is handled as if you selected the value FULL.

OM: Display Actions Button vs. Poplist

Controls whether the traditional button for Actions or a pop list will be used to display available Actions. Valid values are: Button and Pop list. The default value will be Button for backward compatibility.

OM: Display Current Selections in Pricing and Availability

ONT_PANDA_DISPLAY

Yes or No - default is No. Determines whether or not to show the saved selections section of the P&A form

OM: Electronic Message Integration Event Sources

ONT_EM_INTEG_SOURCES

Order Sources enabled for Integration Business Event. Based on the source, you can enable the History which will be maintained for that source in the Electronic Messaging history table.

OM: E-Mail Required on New Customers

ONT_MANDATE_CUSTOMER_EMAIL

This profile option determines whether the field E-mail address is required for any customer or customer contact you define within Order Management. Select from:

- Yes: E-mail address is required, for both the customer and customer contact, when defining or updating a customer or customer contact.

- No or NULL (the default): E-mail address is not required when defining or updating either a customer or customer contact.

OM: Enable Group Pricing For DSP Lines

ONT_GRP_PRICE_FOR_DSP

When demand interface appends order lines to an existing order, this profile option controls whether other unchanged order lines should be sent to the Pricing Engine for repricing. Setting this profile option to No improves demand interface performance. The default value is No. You should only set this profile option to Yes when you want your orders created by demand interface qualify for Promotional Goods, Other Item Discounts or other line group level modifiers defined in Advanced Pricing.

OM: Enable Related Items and Manual Substitutions

ONT_OPEN_RELATED_ITEMS

Values: Yes or No

Default Value: No

Usage: This option enables you to turn on Related Items. APS users should not turn on Related Items because the forecast demand consumption would be incorrect. Options are Yes or No (default).

Default Levels: Viewable and updatable at all levels.

OM: Enforce Check For Duplicate Purchase Order

ONT_ENFORCE_DUP_PO

When this profile option is set to Yes or is blank, a check will be made to verify if the entered PO number is duplicate or not. It will display a warning if a duplicate number is found. When the profile option is set to No, a check to verify for duplicate PO number will not be carried out.

OM: Enforce Shipping Method for Ship Sets

ONT_SHIP_METHOD_FOR_SHIP_SET

Determines whether Shipping Method is a set attribute. If set to Yes, all lines in a set must have the same Shipping Method. Site level only.

OM: Estimated Authorization Validity Period

ONT_EST_AUTH_VALID_DAYS

This profile is no longer used . The associated functionality is now controlled by Oracle Payments. Please refer to the Oracle Payments Implementation Guide for more details.

OM: Generate Diagnostics for Error Activities

This profile determines whether the OM Standard Error Process with Retry workflow process automatically triggers the Diagnostics: OM Order Information concurrent program.

Possible values are No (default) or Yes

OM: Generic Update Constraints Apply to DFF?

This profile option determines whether you can update processing-constrained descriptive flexfield attributes on closed orders. There is a seeded processing constraint against updating closed order lines; this profile option does not control order line fields other than the flexfield attributes. Select from:

- Yes: (the default): you cannot update processing-constrained flexfield attributes on closed orders.
- No: you can update processing-constrained flexfield attributes on closed orders.

This profile option is updatable at the site level.

Regardless of this profile option, you can set up constraints specific to flexfield attribute constraints.

OM: Import Multiple Shipments

This profile option is used to import multiple shipments via Order Import. If this profile option is set to Yes, the `orig_sys_shipment_ref` will also be used in determining the uniqueness of the line record in combination with `order_source_id`, `orig_sys_document_ref` and `orig_sys_line_ref`.

OM: Included Item Freeze Method

`ONT_INCLUDED_ITEM_FREEZE_METHOD`

This profile option determines the date and time Order Management uses to determine when included items for a configuration's bill of material are added as lines on the order. Included items for a PTO Model/Class/Kit will also be exploded based on the profile option.

Select from:

- Ready to Pick/ Purchase Release: If the value for this profile option is set to Ready to Pick / Purchase Release, both the Inventory Interface and Purchase Release workflow activities will explode the included items when processed during pick release and purchase release, respectively.
- Entry: If the value for this profile option is set to Entry, included items will explode

on the sales order when moving to a new line or performing a save.

Note: If the Order Management profile option *OM: Configuration Quick Save* is set to *Yes*, you should not set the value of this profile option to *Entry*. If you do, the Quick Save functionality for streamlining model class order lines will be unavailable.

- **Booking:** If the value for this profile option is set to *Booking*, The Booking Activity will explode included items when processed.
- **None:** When the profile is set to this value, the included items will not be processed. Even if the model has included items defined in its BOM, these will not be reflected in Order Management. This value should not be used if you have included items defined in your BOM for models.

Note: When the value of the profile option is *Booking* or *Ready to Pick / Purchase Release*, security-invoked behavior (Versioning, Audit Trail, Acknowledgements) will not take place.

OM: Interface freight tax classification code from line

ONT_TAX_CODE_FOR_FREIGHT

The default value set at site level is *No* (so that existing customers are not impacted due to the change). *Tax_code* is now interfaced to AR for freight lines that are interfaced as revenue lines when the profile is set to *Yes*. Tax code is populated in the same way as the sales order line along with which this freight line is interfaced.

OM: Invoice Numbering Method

WSH_INVOICE_NUMBERING_METHOD

This profile option determines whether or not the Invoicing activity generates invoice numbers based on the delivery name or automatically.

Select from:

- **Automatic:** Choose this value if you want to create invoices with automatic numbering. Transaction numbering is controlled automatically by the Receivables AutoInvoice concurrent program. If you set the profile option to this value, you must use an invoice source with automatic transaction numbering.
- **Delivery Name:** Choose this value if you want to create invoices for all shippable lines based on Delivery Name. If you process order lines in a delivery in more than one batch, then this function modifies the delivery name with a number to create a unique transaction number.

If you set the profile option to this value, you must use an invoice source without automatic transaction numbering.

Note: Delivery based invoicing is not supported if order lines within the delivery belong to different operating units.

Note: In some cases, you will require both options to be enabled as you may have both invoice source and non-delivery invoice source. Use the Transaction Type "Invoice Order" to specify both. You are allowed to choose invoice source regardless of the setting of the OM: Invoice Numbering Method, to allow for those users who have customizations around invoice numbering.

OM: Item Change Honors Frozen Price

ONT_HONOR_ITEM_CHANGE

This profile option determines whether Order Management will change the value of calculate price flag when an item is changed on an unbooked order line.

Select from:

- Yes: Order Management will not change the value of the calculate price flag, whose original value is honored; the original value will control whether the order line gets repriced.
- No: Order management will set the calculate price flag to Y, and the order line will be repriced.

OM: Item Flexfield

OE_ID_FLEX_CODE

This profile option determines the structure of the Item Flexfield (System Items) used by Order Management. This structure should be the same across all applications in the same database.

OM: Item View Method

ONT_ITEM_VIEW_METHOD

This profile option determines the display method of data retrieved within the LOV for the Item field within the Order Management Options Window. Valid values are:

- 1: Only return item descriptions, with child indentations.
- 2: Only return item description without child indentations.

- 3: Display the concatenated item segment values with child indentations.
- 4: Display the concatenated segment values without indentation.

OM: Level of Credit Checking

This profile option is obsolete and no longer used.

OM: List Price Override Privilege

ONT_LIST_PRICE_OVERRIDE_PRIV

View Only is the default value. If set to this value, the current behavior is retained, which means unit list price field is protected. Unlimited Privilege: If set to this value, you can override the unit list price field from the main tab and immediately see selling price adjusted accordingly.

OM: Log Directory for Generated Packages

This profile option is no longer used by Oracle Order Management.

OM: Manual Linegroup Adjustment

This profile is no longer used by Oracle Order Management.

OM: Modify Seeded Holds

ONT_MODIFY_SEEDED_HOLDS

Internal Use Only. Enables you to modify seeded hold attributes. Options are Yes or No. The default is No or Null.

OM: Negative Pricing

ONT_NEGATIVE_PRICING

This profile option controls whether Order Management allows a negative list price or negative selling price to be determined by the Pricing Engine or to be entered as an override by a user on a sales order.

The profile option QP: Negative Pricing is used for price lists, and controls whether a negative unit price can be entered on a price list

OM: New EDI Acknowledgment Framework

ONT_NEW_EDI_ACK_FWK

The new framework is used to generate EDI Acknowledgments. When this profile

option is set to Yes, the derivation of the values for the ids for the EDI acknowledgement will be postponed. If you use EDI Transactions (855 and 856) and set this profile option to Yes, there will be better performance of the process order.

OM: Notification Approver

OE_NOTIFICATION_APPROVER

This profile option is used during upgrading Order Entry Order Cycle History to Order Management Workflow History.

This profile option can be optionally set. Valid values for this profile are based upon a Value Set that uses the seeded view WF_ROLES. The seeded Return Approval flow also sends approval notifications to the role set by this profile.

If the profile option is NULL, then notifications for this role value will go to the user SYSADMIN.

Note: The application retrieves the value for this profile option based on the applications context (User, Responsibility, Application) that was in effect when the transaction was created.

All upgraded approvals are sent to this role value of this Profile option.

OM: Number of Days to Backdate Bank Account Creation

This profile is no longer used by Oracle.

OM Order Accept State For XML

ONT_XML_ACCEPT_STATE

OM: Order Information Regulatory logging

This profile is no longer used by Oracle Order Management.

OM: Orders Purge Per Commit

OM_ORDERS_PURGE_PER_COMMIT

This profile option determines how many orders the purge process should purge before performing a commit to the database.

OM: Over Return Tolerance

OM_OVER_RETURN_TOLERANCE

This profile option indicates the percentage by which a return line can be over-received.

Any value greater than or equal to zero (0) is a valid value. This profile option is set at the site level. Default value is zero (0).

OM: Over Shipment Tolerance

OM_OVER_SHIPMENT_TOLERANCE

This profile option indicates the percentage by which an order line can be over-shipped. Any value greater than or equal to zero (0) is a valid value. This profile option is set at the site level. Default value is zero (0).

This profile is also applicable to Inbound Lines (RMA).

OM: Preserve External Credit Balances

ONT_PRESERVE_EXT_CR_BAL

If this is set to Yes ,external exposure data is not deleted during Intialize Credit Summaries concurrent program. The value of the profile option can be Yes or No, Initialize Credit Summaries program will use to decide whether to use DELETE or TRUNCATE. The profile can be at site level, and the default value is Yes. With the default value, there will not be any change in behavior as the application will use delete and preserve external credit exposure. When this profile is set to 'No', application will truncate the table before populating the credit exposure.

OM: Party Totals Currency

OM_CUST_TOTAL_CURRENCY

This profile option determines the currency used by the Calculate Party Totals current program which sums order totals by Party. Order Management recommends that you set this profile option at the Site level only.

OM: Payment method for Credit Card Transactions

This profile is no longer used by Oracle.

OM: Population Of Buyer Code For Dropship

ONT_POPULATE_BUYER

This profile option is used to control how Order Management will populate buyer details when sending sales order data to Oracle Purchasing for requisition processing during requisition import. Select from:

- Order Creator: The suggested_buyer_id field in the po_requisitions_interface table is populated with the buyer details (the employee_id of the person who enters the sales order). Your sales people must be defined as a buyer in Oracle Purchasing.

- NULL: Oracle Purchasing will perform the Get_Suggested_Buyer_Id function (retrieve the buyer information from the master item)

Note: If you set the value of this profile option to NULL, you will be unable to select the value *Buyer* for the input parameter Group prior to submission of the Oracle Purchasing Requisition Import concurrent program.

OM: Prevent Booking for Line Generic Holds

ONT_PREVENT_BOOKING

If a generic hold has been applied the transaction will fail booking.

OM: Printed Document Extension Class Name

ONT_PRINT_CUSTOMER_EXTN_OBJECT

This profile allows you to update with a custom java code class path that would have been created to print user hooks. The printing API reads the profile class path and executes the java function. Example: You have a custom table and would like data from this table to appear on the Ordering Document.

OM: Promotion Limit Violation Action

ONT_PROMOTION_LIMIT_VIOLATION_ACTION

This system level profile option determines the hold action Order Management will take when encountering a initial promotional hold returned by the pricing engine. If the pricing engine returns a possible promotional hold for an order or order line, Order Management will use the value of this profile option to determine the course of action for the order or line. Messages are generated and can be viewed within the Process Messages Window.

Select from:

- Place holds where violated (either Line or Order): If the pricing engine returns an initial promotional hold, place a hold for the corresponding order or order line.
- No holds applied: If the pricing engine returns an initial promotional hold, do not apply a hold for either an order or order line. Allow the order or order line to continue processing within its associated workflow.
- Place order on hold when any violation occurs (both Line and Order): If the pricing engine returns an initial promotional hold, irrespective of the hold level, place the order on hold, in addition to any order lines that may be marked for promotional hold.

This profile option is optional, and the default is Null.

OM: Process Payment Immediately at Booking

This profile is no longer used by Oracle.

OM: Quick Sales Order Form: Auto Refresh

ONT_QUICK_OE_AUTO_REFRESH

This profile allows you to control if the active line detail region displays data instantly corresponding to the line when navigating between lines and without the detail blocks instantiated/navigated. Also, with the toggle query coordination check box unchecked, you have to navigate to the detail regions to display the information corresponding to each of the detail regions. When a new session begins, the value will be read from the profile to control the instant automatic refresh of the form when changes have occurred.

Values for LOV: Line/Line Details/Both - Site, Application, Responsibility, User.

OM: Quick Sales Order Form: Defer Pricing

OE_UI_DEFER_PRICING

This profile will control the default setting although users will be able to activate it from the form. When a new session begins value will be read from the profile.

The default value is No.

OM: Defer Pricing. Values: Yes/No

Values at Site, Applications, Responsibility, and User Level.

OM: Records on Summary Page for External Users

ONT_ICP_DEFAULT_RECORDS

This profile option indicates the default query (for external users) called when a user requests either the Orders or Delivery summary pages available from the Order Information Portal. Valid values for this option are any positive, whole integer.

For external users, if you set this profile option to some value other than zero, the Order Information Home page and the Order Status page in Order Information will run a default query to show most recent open orders based upon the numeric value of the profile option. If you set the profile option to zero, the default query is not executed when displaying the Order Information Home page or the Order Status page.

OM: Restrict Customer items for Line Level Ship To Address

ONT_RESTRICT_CUST_ITEMS

This profile option enables users to either use the current functionality or use of the new

enhancement to view the Customer Items LOV. If the profile Option is set to YES, then the line level Ship To address displays only the customer items pertaining to that address. If the profile is set to NO, then all customer items are displayed.

OM: Return Item Mismatch Action

ONT_RETURN_ITEM_MISMATCH_ACTION

This profile option controls what should occur if you try to change the item ID of a referenced return line. Select from:

- Reject: Line processing is halted with an error message.
- Warning: Line processing is continued with a warning.
- Allow: Line processing continues with no warning or error.

The default for this profile option is Allow.

OM: Return Unfulfilled Referenced Line Action

ONT_RETURN_FULFILLED_LINE_ACTION

This profile option is used for returns to control return of unfulfilled lines. Default value is Allow.

Select from:

- Reject: Do not create return line if the reference line is non-fulfilled.
- Warning: Create return line with Warning if the referenced line is non-fulfilled.
- Allow: Create return line without Warning if the referenced line is non-fulfilled.

OM: Risk Factor Threshold for Electronic Payments

ONT_RISK_FAC_THRESHOLD

This profile has been obsoleted and the associated functionality is now controlled by Oracle Payments. Please refer to the *Oracle Payments Implementation Guide* for details on setting up risk factor threshold.

OM: Round Unit Selling Price

This profile option is no longer used within Order Management and is obsolete. It has been replaced with the Pricing profile option QP: Selling Price Rounding Options.

OM: Run Order Import for XML

ONT_TRANSACTION_PROCESSING

This profile option determines if the Oracle Order Import concurrent program is automatically submitted after the successful import of XML data into Order Management interface tables. Select from:

- Asynchronous: Order Import will not automatically be submitted for execution once XML data has been interfaced. You must manually submit the concurrent program after XML data has been interfaced to Order Management.
- Synchronous: Order Import will automatically be submitted for execution once XML data has been interfaced to Order Management.

The default for this option is NULL.

Note: A NULL value for this profile option is equivalent to setting the profile option to Asynchronous.

OM: Sales Agreement Default Order Type

OE_DEFAULT_BLANKET_ORDER_TYPE

If you plan to use the Sales Agreements feature, then create a sales agreement sales order and set the profile option to default the above setup order type. This will be used to generate Sales Agreement number. This is not mandatory. The user can select order type from the list of values on the Sales Agreement form.

OM: Sales Order Form: Cascade Header Changes to Line

OM_UI_CASCADE_HEADER_ATTRIBUTES

A predefined list of attributes will cascade from the sales order header to the line when a change is made during data entry. The profile option has three possible values:

- Automatic - the system will cascade the header attributes to lines whenever a header attribute is cascaded.
- Askme - you have a choice to cascade or not.
- Manual - you will need to manually change the values on the lines as the changes from header to lines are not cascaded.

OM: Sales Orders Form Preference

ONT_SALES_ORDER_FORM_REFERENCE

Order Management will provide two wrapper functions which will be packaged in a form library and do not have other dependencies. External products like TeleSales can determine which Sales Order UI to be invoked based on the return value from the function. The wrapper function will look at a OM profile to be seeded by OM and will call the classic Sales Order window or the new Quick Sales Order window. This profile can be set at all levels. The default value is Classic Sales Order window.

OM: Sales Order Form: Refresh Method (Query Coordination)

OM_UI_REFRESH_METHOD

This profile option determines whether the screen is refreshed after every save. There are four options available:

- Automatic Refresh with Repositioning of Cursor: When the profile is set to this option then screen is refreshed and also the cursor is repositioned to the original line from which the save operation was performed.
- Automatic Refresh Without Repositioning Of Cursor: When the profile is set to this option then screen is refreshed and the cursor is always positioned on the first line.
- Manual: With this option, users have to explicitly requery to see the latest changes. User are also not prompted with a message.
- Askme: A dialog box is prompted for the users to decide whether they want to refresh the screen to see the new data. If the user selects yes, then the screen is refreshed. If the user selects No then screen is not refreshed.

OM: Sales Order Form: Restrict Customers

ONT_UI_RESTRICT_CUSTOMERS

The value of this profile option determines if all customers are displayed within the Customer field on the Sales Order Header, Main Tab or only customers who have addresses in the organization the order is defined for. This profile is applicable only for the Sales Order Header Main Tab.

Customers are visible across all operating units; Customer Addresses are Organization specific.

The default for this profile option is *Global*.

OM: Sales Order Navigation From Pricing/Availability Form

Controls navigation to the Sales Order form. Based on the value (Always, Ask, Never) the user is always, asked, or never navigated to the Sales Order form when an order is created.

OM: Schedule ATO Item without BOM

You now have the option to schedule ATO items even without a Bill of Materials (BOM) attached to the ATO item, either in the Ship From warehouse or in the item validation organization. Formerly the ATO Items required an attached Bill of Materials in either the Ship-from organization or the item validation organization for performing scheduling actions on them in Operational Data Store (ODS) mode. The profile related to this functionality is enabled at the site level. When set to Yes, the profile enables scheduling actions on ATO items where there is no BOM attached. When set to No, a check for the BOM is made. The default value for the profile is No.

Note: This applies only when the mode is set to ODS (Profile INV: Capable to Promise set to ATP based on collected data). For Planning Data Store (PDS) mode OM: Schedule ATO Item Without BOM has no effect. For ATO-Buy Items, no BOM is required in the warehouse or item validation organization regardless of the mode (ODS or PDS) or OM: Schedule ATO Item Without BOM.

OM: Scheduling Role

ONT_SCHEDULING_ROLE

Values are CSR Only, CSR and Scheduler, Scheduler Only

Values can be set at Responsibility or User Level.

Only System Administrator can set this at the user level, Not user controlled.

OM: Send Acknowledgment For Change PO Response

This profile option determines whether an acknowledgement will be sent from the Change PO Response.

OM: Send Changed Lines to Pricing

ONT_SEND_CHANGED_LINES_PRICING

When this profile option is set to Yes, this would mean send only changed lines to Pricing when a line is changed. Otherwise, send all lines. The default is Yes. (This used to be an internal only profile option.)

OM: Sequence for TP Ship/Deliver Deadline

Controls the sequence of which date will be the latest schedule date (ship or arrival) for those using Transportation Execution with Order Management. The values are:

- Latest Acceptable Date / Promise Date / Schedule Date (Ship or Arrival)

- Promise Date / Schedule Date (Ship or Arrival)
- Schedule Date (Ship or Arrival)

OM: Set Receivables Transaction Date as Current Date for Non-Shippable lines

OE_RECEIVABLES_DATE_FOR_NONSHIP_LINES

This profile option determines if the Oracle Receivables transaction date will be populated with the system date (SYSDATE) for non-shippable order or return lines.

Select from:

- Yes: Populate the Oracle Receivables transaction date for non-shippable order or return lines with the current system date.
- No: Do not populate the Oracle Receivables transaction date for non-shippable order or return lines with the current system date. Populate the Oracle Receivables transaction date for non-shippable order or return lines with the corresponding line order date or line return date.

This profile option is optional, and the default is NO.

OM: Show Line Details

ONT_SHOW_LINE_DETAILS

This profile option determines whether the line details of a model are displayed in the Sales Orders window. You can also toggle the display of line details using the Tools menu from the Sales Orders window.

OM: Show Process Messages Flag

This profile can be used to view which orders have associated Process Messages. By setting the above profile to Y, the Messages check box will be checked in the Order Summary Window, if there are any messages associated for the queried order.

OM: Source Code

ONT_SOURCE_CODE

This profile option identifies the source code that Order Management passes to Oracle Inventory during scheduling. The source code should be defined as the third segment of the Sales Order Flexfield to guarantee that each transaction is unique.

OM: Source for TP Early Ship / Deliver Date

Controls the sequence of which date will be the earliest ship or arrival date for those

using Transportation Execution with Order Management. The values are:

- Earliest Acceptable Date
- Same Date as Ship / Deliver Deadline

OM: Unique Order Source, Orig Sys Document Ref Combination For Each Customer

This profile option determines if customer information is to be included in the order import key. If it is set to Yes, then Order Import will check the uniqueness based on customer number, order_source_id and orig_sys_document_ref, otherwise customer information will not be included in the order import key.

OM: UOM Class For Charge Periodicity

This profile option determines what domain will be used to hold the allowable charge periodicities. The domain is a UOM class in Inventory. Inventory has seeded a UOM class called 'Period' that will hold UOMs: Daily, Weekly, Monthly, Quarterly and so on. The profile option is seeded with the value 'Period'. Inventory has further seeded a value set INV_CHARGE_PERIODICITY that will hold UOMs: Weekly, Monthly, Quarterly, Yearly and so on.

OM: Use Configurator

ONT_USE_CONFIGURATOR

This profile option indicates which Oracle application software is launched to enter configuration information when selecting the *Configurator* button from the Sales Order window. Valid values are:

- Yes: Use the Oracle Configurator application to enter you configurations via Oracle Configurator user interfaces. Oracle Configurator should be installed and setup if you chose this value. See: Oracle Configurator Installation Guide.
- No: Use the Oracle Order Management application to enter your configurations via the Options window

The default for this profile option is *No*.

- If you set this profile option value to *Yes* and do not have the Oracle Configurator product installed, Order Management automatically displays the Order Management Options window when selecting the Configurator button from the Sales Order Pad.
- Do not switch the value of this profile option when working with existing orders. For example; If a sales order that contains

configurations is created while the profile value is set to *Yes*, do not change your profile option value to *No* and then attempt to update the sales order via the *Configurator* button. Update the configuration information through the same options window as the order was created in, or update via the Sales Order window.

OM: Under Return Tolerance

OM_UNDER_RETURN_TOLERANCE

This profile option indicates the percentage by which a return line can be under-received for it to be considered fulfilled. Any value between zero (0) and 100 (both inclusive) is a valid value. This profile option is set at the site level. Default value is zero (0).

OM: Under Shipment Tolerance

OM_UNDER_SHIPMENT_TOLERANCE

This profile option indicates the percentage by which an order line can be under-shipped for it to be considered fulfilled. Any value between zero (0) and 100 (both inclusive) is a valid value. This profile option can be set only at the site level. Default value is zero (0).

For additional information on profile option descriptions and setting for products other than Order Management, please refer to the product specific users guide.

OM: Unit Price Precision Type

ONT_UNIT_PRICE_PRECISION_TYPE

This profile option controls the display of Unit Selling Price field for sales order lines only.

Select from:

- Standard: You will see at least two decimal places, up to a total of 20 decimal places.
- Extended: You see at least five decimal places, up to a total of 20 decimal places.

The QP: Unit Price Precision profile controls how many decimal points you can use on a Price List for a rounding factor.

OM: View Cancel Lines

ONT_SHOW_CANCEL_LINES

This profile option controls the default value of the Cancel check box when sorting sales

order lines within the Sales Order Lines Tab, Sort window. The default value is Yes.
Select from:

- Yes: The Cancel check box will be automatically selected when sorting sales order lines within the Sales Order Lines Tab, Sort window. Cancelled order lines will not be displayed once the sort completes.
- No: The Cancel check box will not be selected when sorting sales order lines within the Sales Order window, Lines Tab sort window. Cancelled order lines will be displayed once the sort completes if you do not manually select the check box.

OM: View Closed Lines

ONT_VIEW_CLOSED_LINES

This profile option controls the default value of the Closed check box when sorting sales order lines within the Sales Order Lines Tab, Sort window. The default value is Yes.
Select from:

- Yes: The Closed check box will be automatically selected when sorting sales order lines within the Sales Order Lines Tab, Sort window. Closed order lines will not be displayed once the sort completes.
- No: The Closed check box will not be selected when sorting sales order lines within the Sales Order window, Lines Tab sort window. Closed order lines will be displayed once the sort completes if you do not manually select the check box.

OM: View Pricing/Availability Information in Related Items

This profile option controls the amount of information shown in the Related Items and Manual Substitutions window. The available options are: Pricing only, Availability only, Pricing and Availability, and None.

OKC: Enable Sales Contracts

OKC_ENABLE_SALES_CONTRACTS

In order to leverage the functionality of Sales Contracts with Order Management, Sales Contracts must be installed and this profile must be set to YES. This profile can be set at the Application or Site levels.

QP: High Volume Order Processing Compliance

The value is set programmatically, and cannot be updated by users. If No, the pricing setup uses modifiers that will prevent using the optimized pricing code path. If Yes, the pricing setup is suitable for HVOP optimized pricing code. However, you should ensure that custom sourcing rules do not directly access G_HDR or G_LINE. If they do,

modify the custom sourcing rules so that directly accessed fields are passed as parameters.

Related Topics

Oracle Workflow User's Guide

Oracle Applications System Administrator's Guide

Using Workflow in Oracle Order Management

Selected Oracle Application Profile Option Descriptions

(General Ledger) Journals: Display Inverse Rate

DISPLAY_INVERSE_RATE

- If the profile option Journal: Display Inverse Rate is set to Yes, then the value entered for the conversion rate field in the Sales Order window should be entered from Base to Foreign currency (user must enter the conversion rate in functional currency to foreign currency).
- If the profile Journals: Display Inverse Rate is set to No, then the value entered for the conversion rate field in the Sales Order window should be entered from Foreign to Base currency (user must enter the conversion rate in foreign currency to functional currency).

Please note, however, that the system will always store the currency rate in Foreign to Base format irrespective of the profile.

For example, suppose the base currency is USD and the foreign currency is CAD.

- If the profile option Journal: Display Inverse Rate is set to Yes, the following message is displayed when the users navigate to the conversion rate field on the Sales Order window:

Please Enter the Rate for USD to CAD.

- If the profile option Journal: Display Inverse Rate is set to No, the following message is displayed when the users navigate to the conversion rate field on the Sales Orders window:

Please Enter the Rate for CAD to USD.

(Inventory) INV: Capable to Promise

- INV_CTP

This profile option determines which planning data store availability checking is performed against when submitting an ATP inquiry. Select from:

- **Enable PL/SQL based ATP with planning output:** This option enables ATP inquiry against the Planning Data Store (PDS) within the Advanced Planning and Scheduling (APS) database. For a PDS ATP inquiry, you can perform Basic ATP, Single-Level Supply Chain ATP, Multilevel Supply Chain ATP. Only supply and demand of the plan selected is considered during an ATP Inquiry in this mode.

When an ATP inquiry is submitted within Order Management, Oracle Global Available To Promise determines which plan within the PDS is used to determine availability. The item instance/organization combination of the inquiry is sent to Oracle Global Available To Promise, enabling plan selection based upon the following:

- **Inactive On:** Within the APS Supply Chain Plan Names window, the Inactive On (date) determines if a plan should be considered as a source for availability data. If the field contains a date, then the date must be prior to the availability check date.
- **Enable ATP Check Box:** Within the APS Supply Chain Plan Names window, the Enable ATP check box determines if a plan should be considered for availability data. The check box must be selected in order for the plan to be considered as a source for availability data.
- **PLAN_ID:** If the item instance/organization combination of the inquiry resides in the PDS for multiple plans not inactive and enabled for ATP, the plan definition with the lowest PLAN_ID is used as the source for availability checking.

For example, Profile Option INV: Capable to promise = ATP/CTP Based upon Planning Output, and you have the following plans within the PDS, with each plan enabling ATP.

- PLAN_ID=100; Inactive on 20-FEB-2003; Item AS54888; Instance/Organization NEW/M1, NEW/V1
 - PLAN_ID=105; Inactive on 20-FEB-2001; Items AS54888; AS544432, Instance/Organization NEW/M1, NEW/M2, NEW/V1
 - PLAN_ID=202; Inactive on 20-FEB-2005; Item AS54888; Instance/Organization NEW/M1, NEW/M2, NEW/V1
1. When you perform an ATP inquiry for item AS54888 on 18-FEB-2001, while within instance/organization combination NEW/V1, then ATP results displayed are based upon planning data within the PDS for PLAN_ID=100

Item AS54888 is currently defined for instance/organization combination NEW/M1 within the PDS for PLAN_ID=100, PLAN_ID=105, and PLAN_ID=202.

PLAN_ID=100 is active and has the lowest numeric value, so the data within

the PDS for PLAN_ID=100 is used to check availability.

2. When you perform an ATP Inquiry for item AS54888 on 25-MAR-2002 while within instance/organization combination NEW/M2, then ATP results displayed are based upon planning data for PLAN_ID=202.

Item AS54888 is currently defined for instance/organization combination New/M2 within the PDS for PLAN_ID=105 and PLAN_ID=202

PLAN_ID=105 is the lowest numeric value, but is Inactive as of 20-FEB-2001, so the data within the PDS for PLAN_ID=202 is used to check availability.

- Enable PL/SQL based ATP without planning output: This option enables ATP inquiry against the Operation Data Store (ODS) within the Advanced Planning and Scheduling (APS) database.

The ODS consists of all of the data that has been collected, including any incremental refreshes. Data is loaded into the ODS when you submit the APS ATP Data Collections Request Set. For ODS based ATP inquiry, you can currently only perform Basic ATP & Single level Supply Chain ATP. The ATP Rule is used to specify the time fence options and supply and demand sources to use during order promising inquiry.

Operating Unit

In Order Management, the Operating Unit profile MO: Operating Unit determines the operating unit the transaction gets created in. If you enable Multi-Org Access Control, then you can specify the Operating Unit (from those that are accessible to you via your MO: Security Profile) in the various transaction forms.

Setting OM System Parameters

Parameters in the Oracle Order Management Parameters window can be functionally grouped, and you can define controls as easily as defining profile options. OM System Parameters allows you to define new parameters and setting up the values for the parameters using different sources like SQL and constant values. This is step five of the Order Management Setup Steps, page 2-3.

Defining Parameters

Create and define parameters using the following attributes:

- **Parameter Code:** Unique code for the new parameter
- **Name:** Name of the parameter
- **Description:** Description of the parameter

- **Category:** Category the parameter belongs to. The category is controlled using the lookup type "OM_PARAMETER_CATEGORY." To create a new category, add the lookup code in the lookup type "OM_PARAMETER_CATEGORY" and then enter that lookup type in your parameter definition window.
- **Value Set:** Value Set associated as the source of values. The possible value sets can have validation types of NONE or TABLE. For seeded parameters please make sure that you use a value set that begins with "ONT."
- **Open Orders Check:** Provides a control to allow or restrict changes to the parameter value once it is set for a given operating unit.
- **Enabled:** Controls the availability of the parameter. For seeded parameters this field is active for internal users.
- **Seeded:** Indicates whether the parameter is seeded or user-defined. This is only active for internal users.

To define Order Management system parameters:

1. Navigate to the Define OM System Parameters window. Order Management > Setup > System Parameters > Define

Define OM System Parameters

Parameter Code Seeded ☒

Name Enabled ☒

Description

Category

Value Set

Open Orders Check

Warning: You cannot have any open orders when performing updates to Order Management Parameters. If open orders are found, a warning message displays. Select the OK button to ignore the Warning or select the Cancel button to not commit changes.

2. Enter a unique code in the Parameter Code field.
3. Enter a name for the parameter in the Name field.
4. Enter a description of the parameter in the Description field.
5. Select the category from the Category field that the parameter belongs to. This is controlled with a lookup. To create a new category, add the lookup code in the lookup type "OM_PARAMETER_CATEGORY" and then enter that lookup type in the parameter definition window.
6. In the Value Set field, enter a value set associated as the source of values. The possible value sets can have validation types of NONE or TABLE. For seeded parameters, use a value set that begins with "ONT."
7. Select a value from the Open Orders Check field. This provides a control to allow or restrict changes to the parameter value once it is set for a given operating unit. Available options are Allow, Give error, or Give warning.
8. When the Enabled box is selected the parameter is available to use. For seeded

parameters this field is active only for internal users.

9. The Seeded check box indicates if the parameter is a seeded parameter or a user defined parameter. This is active only for internal users.
10. Save your changes and click OK. To cancel without saving any changes, click Cancel.

Setting Parameter Values

You can set up parameter values at the operating unit level by specifying following attributes:

- **Operating Unit:** Select the operating unit from the available list of values for which parameter values are to be set.
- **Category:** Select the category. On selection all the parameters for the selected category display.
- **Show All:** Check this to see all the parameters of all the categories.
- **Parameter:** Displays the name of the parameter for the selected category.
- **Value:** Parameter value of the parameter. This field shows a list of values based on value set attached with the parameter definition.
- **Description:** Displays description of the parameter currently selected.

Note: If Multi-Org Access Control is enabled, you can manage System Parameter values across all Operating Units accessible to you via your MO: Security Profile.

To set up Order Management system parameter values:

1. Navigate to the Define OM System Parameters window. Order Management > Setup > System Parameters > Values

OM System Parameters Values

Parameter	Value
Audit Trail	Enable when Order is Booked
Customer Names	
Customer Relationships	All Customers
Default Hint for Pricing and Availabil	
Enable Freight Ratings	No
Enable Ship Method	No
Item Validation Organization	Vision Operations
Margin Calculation	Cost based

2. Select the operating unit from the available list of values. The Operating Unit field displays your default Operating Unit, however you can pick a different one from the list of values to manage parameters in it.
3. The Category field identifies the category to which the parameter belongs. The available parameters and their currently selected values display. Select the Show All check box to display all the parameters for all categories.
4. In the value field next to the parameter you want to set, select a value. The Value field displays a list of values available for each respective parameter. The Description field describes the currently selected parameter.
5. Save your changes and click OK. To cancel without saving any changes, click Cancel.

Please refer to the sections Processing Constraints and Multiple and Partial Payments for more information.

Seeded System Parameters

Approval Parameters

No Response From The Approver

By default, if an approver does not respond, the transaction will be rejected. When the parameter is set to continue, the transaction will progress to the next approver. The approval notification process waits for three days and then sends a reminder. It waits for another three days after the reminder before rejecting/continuing.

Default value: Blank

Alternate values: Reject (same as Blank) or Continue

Note: If the approver is the final approver on the list and does not respond, the transaction will be rejected regardless of the parameter value.

Copy Parameters

Call line DFF extension API in COPY

Default value is No

Drop Shipment Parameters

Requestor For Drop Ship Orders Created By External Users

This system parameter replaces the profile OM: Employee For Self-Service Orders. It indicates the employee who will be the requestor on the requisition generated to fulfill drop-ship orders that have been created by external users (eg: via iStore).

Generic Parameters

Audit Trail

The audit trail parameter is used in order to capture audit history at either order entry or booking. You can select either Disable, Enable when Order is Entered or Enable when Order is Booked. The default is Null - Disabled. When the default is set, then the you can also capture cancellation history of entered orders. Previously, the processing constraint used to maintain a history of cancellations of orders when the Require Reason action was selected.

Customer Relationships

The default value is Single Customer.

Customer Relationship Parameter Setting Examples

The table below lists sample customers, their sites and business purposes.

Sample Customers, Sites, and Business Purpose

Customer	Site	Bill-to	Ship-to	Deliver-to
A	X	Yes	Yes	Yes
B	Y	Yes	No	No
B	Z	No	Yes	Yes
C	W	Yes	Yes	Yes

The table below lists the relationships that exist between these sample customers. The data within the table will be used to describe how each of the profile option settings control the list of values for available for order data fields when placing an order.

Relationships Between Sample Customers

Customer	Related To Customer	Bill To Relationship Flag	Ship To Relationship Flag
A	None		
B	A	Yes	Yes
C	None		

If the parameter for Customer Relationships is set to Single, using the data within the second table, when placing an order for Customer A:

- The eligible Bill To, Ship To, and Deliver To location is Customer A, Site X

If the parameter for Customer Relationships is set to Related Customers, using the data within the second table, when placing an order for Customer A:

- The eligible Ship To and Deliver To locations are Customer A, Site X and Customer B, Site Z
- The eligible Bill To locations are Customer A, Site X and Customer B, Site Y

If the parameter for Customer Relationships is set to All Customers, when placing an order for Customer A:

- The eligible Ship To, and Deliver To locations are all customers and all of their

ship-to sites and deliver-to sites respectively, within the first table.

- The eligible Bill To locations are all customers and all of their Bill To sites within the first table.

Default Hint for Pricing and Availability

Enable Freight Ratings

The default value is No.

Enable Ship Method

The default value is Yes.

Item Validation Organization

In Order Management, the Item Validation Organization parameter indicates the Oracle Manufacturing organization against which items are validated. Organization is synonymous with warehouse in Order Management. You set the Item Validation Organization parameter in the Parameters window, and can only set the value to the operating unit associated with your current sign on responsibility. You must also define all transactable items in this organization.

Note: Before setting this parameter, you should first setup values for:
HR: Security Profile HR: Business Group profile options. Valid inventory master organizations will be available based on values of HRMS profile settings.

For further information on these profiles please refer to *Configuring, Reporting and System Administration in Oracle HRMS*.

For a list of item attributes, please refer to the appendix Item Attributes, page G-1.

Margin Calculation

The default value is Price Based.

Configuration Date Effectivity

This system parameter is set at the organization (OU) level and decides which date is used to filter effective components in the model BOM. It has the following options:

1. Model Line creation date: If you set this value then model line creation date will be used as the configuration effective date.
2. System Date until Booking - If you set this value then system date until the order is booked will be used as the configuration effective date.

Default value of Null retains existing behavior as seen in prior releases.

Enable Fulfillment Acceptance

This system parameter is used to enable the customer acceptance functionality. The possible values are Yes or No. The default value is No. Once this parameter is enabled,

you call the Accounts Receivables API to invoke the rules engine to validate customer acceptance on every order line

Invoicing Parameters

Credit Memo Transaction Type

This value is transferred to Receivables if no value is defined for the credit memo Receivables transaction type associated with the Inbound Order Line OM transaction type and either: The Order Header has an OM transaction type of Mixed or The Receivables transaction type associated with the Order Header OM transaction type is NULL.

Credit Salesperson For Freight On Sales

This parameter determines whether to credit the Salesperson on the invoicing line or order header for freight charges when the freight charges are treated as revenue. The default value is No.

GSA Discount Violation Action

This parameter determines how you want the user notified when you define a discount that results in an item price less than the price on a GSA discount for the same price list. Select from:

- Error: Provide error message
- Warning: Provide a warning message

Inventory Item For Freight

This parameter is used only when the freight item is passed as revenue line. If you set the value to Inventory Item then the Invoicing module passes this item for freight charges, which will be treated as revenue lines.

Invoice Freight As Revenue

If the Receivables profile option TAX: Allow Tax Code Override is set to YES, and this parameter value is also set to YES, then freight charges are treated as revenue lines, and the Invoicing module will pass VAT tax and associated sales credits for processing. The default value is No.

Invoice Source

This parameter value is transferred to Receivables if the Invoice Source value is null for your transaction type at Order Line and null at the Order Header level.

Invoice Transaction Type

This parameter value is transferred to Receivables if no value is defined for the Receivables transaction type associated with the Outbound OM order line transaction type and OM order Header transaction type.

Non-Delivery Invoice Source

This system parameter value is transferred to Receivables if the OM: Invoice Numbering Method profile option is set to Delivery and the line is non-shippable.

Over Shipment Invoice Basis

This parameter determines whether to invoice the ordered quantity or the shipped quantity for an over shipment. This parameter can be overridden for the parameter specific to customers or customer sites by setting a value in the Customer window. Default value is Shipped.

Show Discount Details On Invoice

This parameter determines whether the discount details are passed to Oracle Receivables for printing on an invoice. Default value is No. If you set this parameter to No, then Extended Amounts will includes discounts.

Payments Parameters

Enable Multiple Payments

This parameter is always set to Yes by default and it is not visible in the System Parameters window. It allows multiple payments per order AND to use the full/partial down payment feature. Enables navigation to the Payments window from the Sale Order form using the Payments Action.

Installment Options

This system parameter has three options:

Authorize First Installment Only the first installment of a payment is authorized.

In this case amount authorized will be total of the first installment less down payment, if applicable.

Enable Pay Now: The entire amount of the order is authorized.

Payment Due with Order functionality is enabled.

None:

The entire order amount will be authorized.

Default value for this parameter is None (same as Null).

Retrobilling Parameters

Default Order Type

The default value is Mixed.

Enable Retrobilling

The default value is No.

Retrobill Reason Code

The default value is Credit and Rebill.

Scheduling Parameters

Allow Partial Reservation

Set to yes if you want right-mouse reserving and the reservation time fence to support partial reservations. The default value is No.

Firm Demand Events

If you are publishing Plan results to Order Management, this parameter allows you to firm demanded lines at different event points within the line flow. Once firmed, ASCP cannot update the warehouse.

Schedule. Lines are firmed when scheduled.

Shipping Interfaced. Lines are firmed be when interfaced to shipping.

None/Null. Lines are not firmed by an event. Default value.

Latest Acceptable Date

System scheduling always honors the Latest Acceptable Date . This parameter provides choices for using the Latest Acceptable Date with manual scheduling. You can control whether manual scheduling honors the Latest Acceptable Date, ignores the Latest Acceptable Date but provide a warning, or ignores the Latest Acceptable Date without warning (default value).

Promise Date Setup

The parameter allows you to control the behavior of the Promise Date.

First Request Date - Select this if you want the Promise Date to be the first Request Date.

First Schedule Ship / Arrival Date - Select this if you want the Promise Date to be the first Schedule Ship / Arrival Date.

Manual Entry - This allows you to enter manually or to default the Promise Date.
Default value.

Request Date - Select this if you want the Promise Date to be dependent on the Request Date. If the Request Date is changed, the Promise Date will also change.

Schedule Ship / Arrival Date - Select this if you want the Promise Date to be dependent on the Schedule Ship / Arrival Date. If the Schedule Ship / Arrival Date changes, the Promise Date will also change.

Reschedule with Request Date Change

Set this parameter to No if you do not want a line to reschedule if the Request Date is changed. The default value is Yes.

Reschedule with Ship Method Change

Setting this parameter to No allows you to change the Ship Method without triggering rescheduling. The default value is Yes. Recommendation: do not set to No if using lead time scheduling.

Reservation Time Fence

This parameter controls automatic reservations during scheduling. The parameter represents the number of days into the future that scheduling will reserve. The default value is NULL which means that scheduling will not automatically reserve. This parameter is used during autoscheduling and also by the scheduling workflow activity and concurrent program to perform reservations.

Schedule Line On Hold

This parameter controls whether scheduling will attempt to schedule lines that are on hold. The default value is NULL, which is the equivalent to Yes.

Accessing the Installation Details form

If you need access the Installation Detail form in Order Management, you will now need to attach it to the Actions menu by using the user-defined menu option. If you do not attach the form, you will get an Forms Error Message "This function is not available for your responsibility".

1. Using the System Administrator responsibility, go to Application > Menu and query for the ONT_SUPER_USER menu.
2. Insert a new record keeping the Prompt and Submenu fields blank.
3. In the Function field, select Installation Details from the LOV (the actual function name in the LOV is ASOCSINS). The Description field should have Installation Details Form.
4. Save your work and verify that the Installation Details option is available through the Actions menu of the sales order window and that it opens up the Installation Details window.

Define Tax Features

Order Management enables you to quote an estimated tax for orders at the time of order entry. This is step eight of the Order Management Setup Steps, page 2-3. The tax estimate can be based on the tax status; address information, and VAT (Value Added Tax) codes assigned to items, ship to sites, and customers. The actual tax value that appears on the customer's invoice in Oracle Receivables may vary.

See: *Oracle Receivables Implementation Guide*.

Credit Check

Tax amount for each line will be stored on the order line. You can control whether the tax amount is included in credit checking while specifying the credit checking rules.

Multiple Tax Amounts on an Order Line

You can specify a tax group for an order line. You can view multiple taxes applied to an order line at the time of entry and query, or on the acknowledgement and notification of shipment. Oracle Receivables allows each invoice line to be taxed automatically with one or more taxes.

Tax Related Processing Constraints

Through the use of seeded processing constraints, Order Management does not allow a user to:

- Enter/Change Tax Classification Code on Order Line if the profile option EBTax: Allow Override of Tax Code is set to NO.
- Enter/Change Tax Handling, Tax Exemption Number and Tax Exemption Reason when the profile option EBTax: Allow Override of Customer Exemptions is set to NO.
- Update Tax Exempt Number, Reason, or any other tax related fields once an invoice has been generated.

If your business process allows tax information to be updated after an invoice has been created, you must modify the seeded processing constraints that affect updating tax information.

Tax Calculation

You can calculate tax by selecting a Tax Date to base your tax rates on, choosing the tax, the tax schedule, requested, promise, and system dates. You cannot set a value for the Tax Date field within the Sales Order window, but you can decide to change or update the existing seeded Defaulting Rule for Tax Date.

Tax calculation in Order Management can occur at one of the following events:

- Entry
- Booking
- Invoicing

Tax calculation for the above events can only be controlled at the order level (not at the order line level). You specify when to calculate the tax for an entire order when you create Order Types within the Order Management Transaction Types window.

The default value for Tax Calculation Event Code is null. Null Tax Calculation Event is same as Entry. For payment verification purposes (to include tax in the total authorized amount), specify Entry or Booking as your Tax Event.

Note: The Copy Order functionality does not copy tax amounts; tax is recalculated for the new order.

For return orders (referenced or non-referenced returns), tax calculation occurs at the tax event defined for the associated Order Management transaction type. To calculate tax at any time, select *Calculate Tax* from the Actions button menu within the Sales Order or Order Organizer windows.

Tax amounts are displayed:

- Within the Sales Orders window, Main Tab. This is value is the current total order tax
- Within the Sales Orders Lines window, Pricing tab. This tax value is for each taxable order line

Additionally, tax is always recalculated when tax-dependent attributes change on the order line.

Tax Calculation at Entry

With tax calculation at Entry, tax is calculated as each order line is entered. This tax calculation is used, for example, in businesses that requires the user performing order entry to view the total of the order, including tax, so it can be quoted to a customer.

To include tax in Commitment Applied Amount, set the tax event to Entry.

Tax Calculation at Booking

When tax calculation occurs at Booking, tax is calculated on each of the booked order lines. This tax calculation option is used, for example, in business that require tax visibility for booked orders, but who want to increase order entry input times by not calculating tax at entry.

Tax Calculation at Invoicing

When tax calculation occurs at Invoicing, no tax calculations will occur within Order Management. Tax calculation will occur in Oracle Receivables when the order or order line is invoiced.

For maximum performance, set the Tax Event as Invoicing.

Inclusive Taxes

When you create your tax codes, you can specify that the taxes are *inclusive* taxes (the tax amounts are already included in the price of the item).

When the Tax Engine is called to calculate taxes, it will return inclusive taxes as well as exclusive taxes. Any inclusive taxes returned are not added to the extended amount of the order line or displayed within the Tax column of an order line. Order Management

displays the estimated tax amount based on the tax date on the order line. However, inclusive taxes are displayed when you View Tax Details from the Action button menu within the Sales Orders Lines window.

You can perform a credit check including or excluding the estimated tax amount.

Tax Method Options

Order Management enables you to specify the tax method for your company or installation as a Oracle Receivables system option. The tax method determines how taxes are calculated. Tax methods include the following:

- Sales Tax

For sales tax, taxes are based on different components of the customer's shipping address. Order Management provides you with a default sales tax location flexfield structure composed of the State, County, and City.

- Value Added Tax (VAT)

For value added tax, taxes are based on tax rates assigned to user- defined codes. These codes are assigned to specific items, customers, and customers business locations.

Note: Tax codes are used for value added taxes or location-based taxes such as a sales tax).

Tax Security

Order Management enables you to update the tax security information on an order or return by setting the eBTax: Allow Override of Customer Exemption profile option. This profile option controls the modification of the Tax Handling Status, Reason & Certificate fields at the order header and order line levels. Standard tax calculations can be overridden by setting the profile option to Yes. The eBTax: Allow Override of Tax Classification Code profile option determines whether the defaulted tax classification code on an order line can be updated.

Non-Taxable Transaction Types

Order Management enables you to define whether Oracle Receivables will automatically calculate taxes for a given OM order line type. You will need to associate a Receivables Transaction Type with the OM Transaction Type for this to occur.

This will determine if tax is required on an order. This option (tax calculation flag) is set in Oracle Receivables. You can specify whether a transaction type is taxable in the Receivables Transaction Types window. See: Transaction Types, Oracle Receivables User's Guide.

Related Topics

Oracle Receivables User Guide

Oracle Receivables Implementation Guide

Define QuickCodes

You can create QuickCodes for Order Management. QuickCode types that you can define include:

- Cancellation Codes
- Credit Cards
- Freight Terms
- Hold Types
- Note Usage Formats
- Release Reasons
- Sales Channels
- Shipment Priorities
- Cascading - line attributes that will be updated as a result of header changes

You can create as many quickcodes as you need. You can also disable QuickCodes.

The Access Level toggles display whether you can define new Lookup Codes. You can modify User and Extensible Lookup Codes, however, system code cannot be modified. Contact your system administrator.

To define quickcodes:

1. Navigate to the Oracle Order Management Lookups window. Order Management > Setup > QuickCodes > Order Management.

[illegible]

- ## Related Topics

Viewing Notifications

You can use a single mechanism for receiving all of your notifications, as opposed to

different review facilities for different types of messages. This viewer is provided with Oracle Workflow.

Customizable Notification Viewer

You can view notifications and take the appropriate action to resolve each one quickly and easily. You can define selection and sorting criteria that let you manage your notification list so you see the most critical notifications first or can view different types of notifications on demand.

Notification Context

Given this universal Inbox of exceptions, you can see the context of each notification. For notifications where you need no additional information, you can choose a button to take the suitable action.

If you require additional information, you can open the appropriate Order Management window. For example, if you must approve or reject an order, you can view the order header and lines easily. The notification can either be a URL message or an attachment.

Related Topics

Using Oracle Workflow in Oracle Order Management

Exception Management

Function Security Options

Sales Orders: View Open Messages

Function: ONT_OEXOEORD_PROCESS_MESSAGES

Description: View Open Messages

This function seeds a new Action available from the Sales Orders windows. The action is accessed from the Actions button or the mouse right-click menu.

Sales Orders: Retry Activities in Error

Function: ONT_OEXOEORD_RETRY_WF

Description: Retry Activities in Error

This function seeds a new Action available from the Sales Orders windows. The action is accessed from the Actions button or the mouse right-click menu.

Exception Management Setup

To setup Exception Management:

1. Set the profile OM: Show Process Messages Flag to Yes to enable the Open Flag to be populated in the Order Organizer.

2. Set the profile OM: Generate Diagnostics for Error Activities to Yes to enable the Diagnostics: OM Order Information concurrent program to be run automatically when there is an error in a workflow activity. Currently Exception Management automatically submits the Diagnostics: OM Order Information concurrent program via the Order Management Error flow if the profile option OM: Generate Diagnostics for Error Activities is set to Yes. In the event that activities are retried and failed multiple times, the concurrent program does not run again and again as this could result in performance issues.
3. Define any custom message statuses desired by editing the seeded lookup type ONT_MESSAGE_STATUS.

Error Messages

These messages display when you try to launch the Process Messages window with no open messages:

OE_NO_ERROR_MESSAGES

There are no open messages. This message displays when you try to view the workflow activities in error, but the transaction does not have any activities in error.

OE_NO_ERRORED_ACTIVITIES

There are no workflow activities in error for this transaction. Please see the Workflow Monitor or status window for more information.

ONT_CONC_MSG

Diagnostic: OM Order Information Request ID: Message displayed if there are any error messages on the stack.

OE_WF_ACTIVITY_ERROR

Workflow activity has failed. Please fix the errors and retry the activity from the Order window or the Workflow Monitor. Message displays if there are no error messages on the stack.

OE_WF_ACTIVITY_UNEXP_ERROR

Workflow activity has failed due to an unexpected error. Please retry the activity from the Order window or the Workflow Monitor. If it fails again, then contact your System Administrator. Message used to display the concatenated line number in the workflow notification for normal orders.

OE_WF_CONCAT_LINE

Message displays the concatenated line number in the workflow notification for return orders.

OE_WF_CONCAT_RETURN_LINE

Message displayed after an activity in error is retried successfully.

OE_RETRY_SUCCESSFUL

Retrying the activity in error completed successfully. Please look at the flow status or workflow monitor for more information.

OE_EM_NO_WF

There is no workflow associated with this transaction.

Define Document Sequences for Order Numbering

Order Management uses AOL Document Sequence functionality for order numbering. This is step eleven of the Order Management Setup Steps, page 2-3. You can define document sequences that automatically generate numbers for your sales documents as you enter them. You can define a single document sequence to assign unique consecutive numbers to all your sales documents, or you can define multiple document sequences that are assigned to different order types. In the latter case, an order or return is uniquely identified by its type and its number, since sales documents of different types may share numbers. Sales document numbers cannot contain alphabetic characters.

Gapless Order Number Source

Many countries have legal and audit requirements for order numbers to be contiguous. You can set up a document sequence as gapless through the Define Documents Sequences window. You can set up a gapless sequence for quotes, sales orders and Sales Agreements. In addition, Order Management prevents deletion of orders that have been numbered using the gapless numbering sequence. The application uses locks to ensure gapless numbering. If you are using gapless sequences, please save your changes frequently to minimize lock contention issues.

Note: Transactions may be gapless, however if all quotes do not become orders, the order numbers will not appear gapless.

Manual Order Numbers

Order Management enables you to enter the order numbers for certain types of orders. You can define a document sequence as manual and assign it to a desired order type. This order type can be used on orders that you want to manually enter order numbers. When an order number is specified for such an order, Order Management validates that it is unique for a given order type.

Prerequisites

- Set the profile option Sequential Numbering to Always Used at the Order Management Application level.

- Set your document sequences to Automatic, Gapless, or Manual.

To define document sequences for order numbering:

1. Navigate to the Document Sequences window. Order Management > Setup > Documents > Define.

Order Management Document Sequences Window

Name	Application	From	To	Type	Message	Initial Value
Order	Oracle Order Manag	23-MAY-2000		Automatic	<input checked="" type="checkbox"/>	50000
					<input type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	
					<input type="checkbox"/>	

2. You can define the sequence to be Automatic, Gapless or Manual.
 - **Automatic:** The system automatically increment document numbers. Automatic sequences *do not* guarantee contiguous numbering.
 - **Gapless:** The system guarantees that the numbers returned are contiguous.
 - **Manual:** The user must specify a unique document number.

For all types of numbering, Order Management validates that the number specified by you is unique for a given order type.

For more information on AOL Document Sequences, see the *Oracle Applications System Administrator's Guide - Configuration, Document Sequences*.

3. Enter a name for the document sequence. Specify Oracle Order Management as the Application.
4. Enter a starting number.
5. Optionally, enter effective dates for the document sequence.
6. Save your work.

Note: When sales document Types are defined, a corresponding Document Sequence Category will automatically be created for order types and not for line types. The category created has the same name as the order type. You must navigate to the AOL Assign Document Sequence window to assign a sequence to the newly created category. If the Document Descriptive Flexfield is enabled, you need to specify the governing ledger. The Document Method code should be left blank.

Related Topics

Profile Options, page 2-14

Define Order Management Transaction Types

Define Order Management transaction types to classify sales documents. As an example, for each order type, you can assign a default price list, defaulting rules, order lines, return lines, line types, workflow assignments, payment terms, and freight terms. This is step twenty-two of the Order Management Setup Steps, page 2-3.

Prerequisites

- Review seeded sales document flows.
- Define all lookups.
- Define freight carriers. See: *Oracle Shipping Execution User's Guide*.
- Define organizations.
- Define document sequences.
- Define defaulting rules. See Define Defaulting Rules, page 2-117.
- Define price lists. See Oracle Pricing Setup, page 3-3
- Define credit check rules, (not applicable for SA). See Define Credit Checking Rules, page 2-127.
- Define currencies and currency types. See: *Defining Currencies, Oracle Applications System Administrator's Guide*.
- Set up your cost of goods sold account flexfield segments. See: *Defining Key Flexfield Segments, Oracle Applications Flexfields Guide*.

Note: You must first define any OM Line Transaction Types so that they can be assigned when defining your OM Order transaction types.

Defining Order Management Transaction Types

If Multi-Org Access Control is enabled, you can manage Transaction Types across all Operating Units accessible to you via your MO: Security Profile.

To define transaction types:

1. Navigate to the Transaction Types window.

Order Management Transaction Types Window

Transaction Types

Operating Unit	Vision Operations	Transaction Type	Mixed
Description	Order and Return Lines	Sales Document Type	Sales Order
Order Category	Mixed	Transaction Type Code	ORDER
Fulfillment Flow	Order Flow - Generic	Negotiation Flow	
Effective Dates	24-MAY-2001 -	Default Transaction Phase	[]
Layout Template	Sales Order RTF Templ		
Contract Template			

☒ Retain Document Number

Approvals Assign Line Flows

Main Shipping Finance

Document

Agreement Type	Standard Terms an	Default Return Line Type	Return (Receipt)
<input type="checkbox"/> Agreement Required		Default Order Line Type	Standard (Line Invt)
<input type="checkbox"/> Purchase Order Required			

Pricing

<input type="checkbox"/> Enforce List Price	Price List	Corporate
	Minimum Margin Percent	

Credit Check Rule

Ordering	Booking	Packing	...
Picking/Purchase Release		Shipping	

2. In the Operating Unit field, select an operating unit from the list of values. The field displays your default Operating Unit, however you can pick any other value from the LOV. Operating Unit sensitive fields on the form are disabled until an Operating Unit is specified. If you specify values for these fields and then change the Operating Unit, those fields will be cleared.
3. Enter the name of the transaction type in the Transaction Type field.

4. Enter a description in the Description field.
5. In the Sales Document Type field, select Sales Agreement or Sales Order from the list of values (for Quotes, Returns and Releases, choose Sales Order).
6. In the Order Category field, select a category from the list of values. For Order Types, you can specify a value of Order, Return, or Mixed. For Line Types you can specify Order or Return. When an order type is assigned to an order, the category determines whether both order and return lines can go on the order. A category of Mixed enables an order to have both kinds of lines. For Sales Agreements, select Order.

For Order Lines, the Sales Orders window automatically sets the category to Order. Order Management seeds defaulting rules to get the appropriate default outbound or inbound line transaction type from an order type to a line based on its category code.
7. In the Transaction Type Code field, select order or line from the list of values to specify whether this is an order or line transaction type. Select "order" for Sales Agreements.
8. In the Fulfillment Flow field, select a flow from the list of values. See Using Workflow in Order Management, page 7-29, Negotiation in Order Management, page 5-2, and Sales Agreements, page 5-22 for more information on Fulfillment Flows.
9. If a negotiation flow is needed, select it in the Negotiation Flow field from the list of values. See Negotiation in Order Management, page 5-2 and Sales Agreements, page 5-22.
10. Enter an effective date for the transaction type in the Effective Dates field.
11. Select the default transaction phase, Fulfillment or Negotiation, in the Default Transaction Phase field from the list of values. Transaction phase determines where in the workflow the transaction begins, and can be used in defaulting rules. This field defaults to Fulfillment—a fulfillment phase must be defined; Negotiation is optional.
12. Enter a value in the Layout Templates field. This field is optional. See Preview and Print Sales Documents, page 5-29 for more information.
13. Enter a value in the Contract Template field. This field is optional. See Authoring and Negotiating Contract Terms, page 20-15 for more information.
14. In order for the Quote number to become the Sales Order number, check the Retain Document Number box. This is not applicable for Sales Orders or Sales Agreements. If the transaction type is associated with both a negotiation flow and

fulfillment flow, the document number can be retained when the document transitions to fulfillment. See *Negotiation in Order Management*, page 5-2 for more information.

15. On the Main Tab in the Document Region:

In the Agreement Type field, select a pricing agreement type from the list of values. This field is optional.

If you enter an agreement type here, you can choose only agreements with this agreement type when using this order type. Define agreement types using Order Management QuickCodes. See *Define QuickCodes*, page 2-89.

16. In the Default Return Line Type field, select a return line type from the list of values.

17. In the Default Order Line Type field, select an order line type from the list of values.

18. Select the Agreement Required check box if a pricing agreement is required. This is only applicable to order transaction types.

19. Select the Purchase Order Required check box check to require purchase order numbers during order entry for orders and returns with this Order type. This is only applicable to order transaction types.

20. On the Main Tab in the Pricing Region:

Select the Enforce List Price check box to prevent discounts and overriding the selling price. If this is selected, you cannot apply discounts to the order line list price when you use this order type and you cannot override the selling price, unless the profile option OM: Discounting Privilege is set at the appropriate level.

21. In the Price List field select a price list from the list of values to serve as a defaulting source. The list of values displays global price lists and price lists defined for the Operating Unit selected.

22. Enter a minimum margin in the Minimum Margin Percent field. This field is optional.

23. On the Main Tab in the Credit Check Rule Region:

In the Ordering field, select an ordering credit check rule from the list of values. This field is optional.

24. In the Packing field, select a packing credit check rule from the list of values.

25. In the Picking/Purchase Release field, select a picking credit check rule from the list of values. .

26. In the Shipping field, select a shipping credit check rule from the list of values. This field is optional.

Select credit check rules to use when performing checking credit at either Booking, Pick Release and Purchase Release (for drop shipments), Packing, or Shipping within the corresponding Credit Check Rule fields.

You can select a credit check rule for each field within the Credit Check Rule region, or choose to select combinations that suit your business purposes. For example, you can choose to select a credit check rule for booking only, or booking and shipping.

If you leave any of the Credit Check Rule fields blank, no credit checking will occur when an order or order line reaches the corresponding workflow activity within the order or line flow, using the order or order line type specified.

Note: When a transaction is created, Order Management automatically creates a Document Sequence Category of the same name for you. You can then go and assign a document sequence that you have defined for order numbering to this document sequence category. Document sequence categories are not MLS Compliant. Order Management recommends that you create your transaction types in the base language of your installation to minimize potential confusion. Two document sequence categories are created - one, with the same name as that of the transaction type and the other with the same name as transaction type but appended with the string '-quote.'

Note: Workflow assignments are required for order types to support the creation of quotes and sales orders as well as for types to support the creation of Sales Agreements.

To define Shipping Related Attributes for Order Management order and line transaction types:

1. Navigate to the Transaction Types window. Order Management > Setup > Transaction Types > Define

Note: None of the fields in the Shipping tab are applicable to Sales Agreements.

Order Management Transaction Types Window Shipping Tab

Transaction Types	
Operating Unit	Vision Operations
Description	Order and Return Lines
Order Category	Mixed
Fulfillment Flow	Order Flow - Generic
Effective Dates	24-MAY-20 -
Layout Template	Sales Order RTF Templ
Contract Template	
<input checked="" type="checkbox"/> Retain Document Number	
<div>Approvals</div> <div>Assign Line Flows</div>	
<div>Main Shipping Finance</div>	
Warehouse	Seattle Manufacturing
Shipment Priority	Standard Priority
FOB	Destination
Demand Class	Europe
<input type="checkbox"/> Inspection Required	
Line Set	Arrival
Shipping Method	DHL-DC01-Air-Door to Door
Freight Terms	Prepaid
Shipping Source Type	Internal
Scheduling Level	No Reservations
<input type="checkbox"/> Auto Schedule	
<input type="checkbox"/> Fulfillment Set	

2. Select the Shipping tab.
3. Warehouses are synonymous with inventory organizations in Oracle Manufacturing.
4. Select the appropriate Shipping Method from the list of values.
5. The Shipment Priority field gets its values from Quick Codes.
6. Freight Terms are defined using Order Management QuickCodes.
7. In the FOB field, enter the FOB point. Define FOB points using Receivables QuickCodes.
8. In the Shipping Source Type field, select the ship source type, internal or external, from the list of values. This determines if the order line is sourced externally through Drop Shipment, or sourced internally. This field is optional and applicable only to Line Transaction Types.
9. In the Demand Class field, select a region from the list of values. Define demand classes using Manufacturing QuickCodes. See Define QuickCodes, page 2-89.

10. In the Scheduling Level field, select one of the following options from the list of values:

- Inactive Demand without Reservations
- Inactive Demand with Reservations
- ATP Only
- Allow all scheduling actions
- No Reservations

Note: If you do not specify a value for an Order Transaction type, the application interprets the null value as *Complete Scheduling*. If you do not specify a value for a Line Transaction Type the application uses the value from the Order Type on the Order.

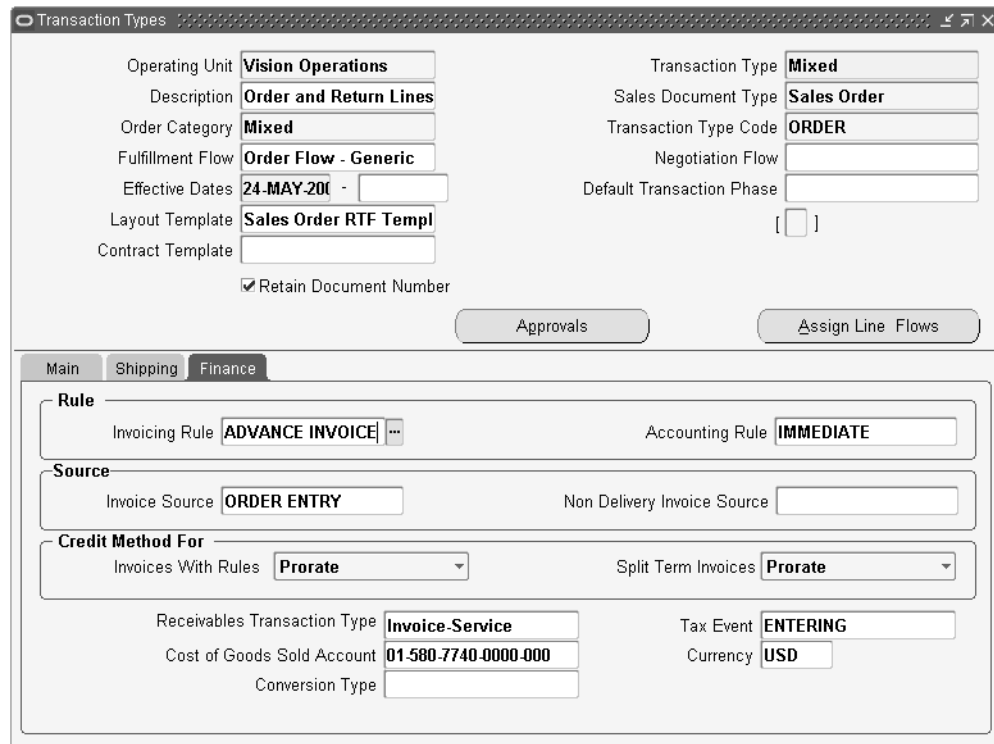
11. Select the Inspection Required check box if an inspection is necessary. This is applicable only to return line transaction types.
12. Select the Auto Schedule check box if you want automatic scheduling for this order type. This is applicable only to order transaction types.
13. In the Line Set field, select Arrival or Ship from the list of values. This field is optional. See Line Sets: Ship/Arrival, page 12-14 in Scheduling.
14. Select the Fulfillment Set check box to apply a fulfillment set. Selecting this enables fulfilling all of the lines of an order at the same time. If you put the lines in a fulfillment set, you cannot fulfill (invoice) the lines until all of the lines are ready.

To define Financial attributes for Order Management order or line transaction types:

1. Navigate to the Transaction Types window.

Note: None of the fields on the Finance tab are applicable to Sales Agreements, the regions are Rule, Source and Credit Method For.

Oracle Order Management Transaction Types Window Finance Tab



Transaction Types

Operating Unit: **Vision Operations**

Description: **Order and Return Lines**

Order Category: **Mixed**

Fulfillment Flow: **Order Flow - Generic**

Effective Dates: **24-MAY-20** -

Layout Template: **Sales Order RTF Templ**

Contract Template:

☒ Retain Document Number

Transaction Type: **Mixed**

Sales Document Type: **Sales Order**

Transaction Type Code: **ORDER**

Negotiation Flow:

Default Transaction Phase: []

Approvals

Assign Line Flows

Main Shipping **Finance**

Rule

Invoicing Rule: **ADVANCE INVOICE** ...

Accounting Rule: **IMMEDIATE**

Source

Invoice Source: **ORDER ENTRY**

Non Delivery Invoice Source:

Credit Method For

Invoices With Rules: **Prorate**

Split Term Invoices: **Prorate**

Receivables Transaction Type: **Invoice-Service**

Cost of Goods Sold Account: **01-580-7740-0000-000**

Conversion Type:

Tax Event: **ENTERING**

Currency: **USD**

2. Select the Finance tab.

In the Rule region on the Finance Tab:

3. The Invoicing Rule controls the amount and timing of your invoices.
4. An Accounting Rule controls the amount and timing of when you recognize revenue for this order.
5. In the Source Region on the Finance tab, within the Invoice Source field, select a Source from the list of values.
6. In the Non Delivery Invoice Source field, select a source from the list of values.
7. In the Credit Method For region on the Finance tab, select a credit method for invoices from the Invoices With Rules pop up menu.

Oracle Receivables uses these accounting credit methods when adjusting the revenue account assignments of invoices using multi-period invoicing and accounting rules. See: *Crediting Transactions, Oracle Receivables Implementation Guide*.

- LIFO (Last In First Out): Backs out revenue starting with the last general ledger

period, and reverses all prior periods until it has used up the credit memo

- Prorate: Credits an equal percentage to all account assignments for that invoice
 - Unit: Reverses the revenue for the number of units you specify from an original line of the invoice
8. Select a credit method for invoices from the Split Term Invoices pop up menu.

Oracle Receivables uses the following the Invoicing credit methods when crediting the installments of invoices that have multiple installments (split term invoices). Crediting Transactions, *Oracle Receivables Implementation Guide*.

- LIFO (Last In First Out): Credits the last installment to be credited first and then credits all prior installments until all of the credit is used
- FIFO (First In First Out): Credits the first installment first and then credits all subsequent installments until all of the credit is used
- Prorate: Prorates the credit received by the installments of invoices by the amount remaining on their installments

Also on the Finance Tab:

In the Receivables Transaction Type, select a value from the list of values. This is applicable if you use Oracle Receivables. Invoice types designate invoice status, invoice printing options, credit memo type, and whether the invoice posts to General Ledger or creates an open receivable. Ensure the Tax Calculation Flag for the Receivables transaction type you choose is set accordingly as this will determine whether Tax is calculated for the order line.

9. The Tax Event determines when Order Management calculates the estimated tax amount for a transaction.
10. In the Cost of Goods Sold Account field, select an account from the list of values. This is applicable only for order transaction types.
11. In the Conversion Type field, select a conversion from the list of values. In the Currency field, select a currency from the list of values. If you choose User as the currency conversion type, the Sales Orders window requires you to enter the conversion rate and date. This is applicable only for order transaction types.

To assign workflows to transaction types:

Use this procedure to assign workflows to line transaction types. The combination of the order type, the line type, and the item type determines the line workflow.

Line flows are required for Sales Orders but not for quotes. Once you have created a

document using an order type you cannot change the existing line workflow assignments. Instead, enter an end date for the existing assignment and enter a new assignment for the for the new workflow.

Note: This is not applicable to Sales Agreements.

1. Navigate to the Transaction Types window and query the desired transaction type.
2. Click Assign Line Flows.

Line Workflow Assignments Window

Order Type:

Assign Workflow Processes

Line Type	Item Type	Process Name	Start Date	End Date
Bill Only		Line Flow - Generic, Bill	24-MAY-2000	
Standard (Header In		Line Flow - Generic with	24-MAY-2000	
Return		Line Flow - Return for Cr	24-MAY-2000	30-MAY-2004
Ship Only		Line Flow - Generic, Shi	28-SEP-2000	
Service		Line Flow - Standard Se	28-SEP-2000	
Return (Receipt)		Line Flow - Return for Cr	28-SEP-2000	
Standard (Line Invoi		Line Flow - Generic	28-SEP-2000	30-MAY-2004
Standard (Line Invoi	Included Item	Line Flow - Generic	28-SEP-2000	
Standard (Line Invoi	ATO Item	Line Flow - ATO Item	28-SEP-2000	
Standard (Line Invoi	ATO Model	Line Flow - ATO Model	28-SEP-2000	30-MAY-2004

OK Cancel

3. In this window, select the order type/line type/item type combination to which you want to assign a workflow.

If you leave Item Type blank, the workflow applies to all item types for the line type (unless they have a specific assignment in this form).

If you use line type ATO Models, use item type Configured Item and return line types use item type Standard even if they are for configurations.

4. In Process Name, select the workflow that Oracle Order Management should use for the order type/line type/item type combination.

If you do not assign a workflow to a configured item type, the configured item does not use a workflow.

5. In Start Date and End Date, select the time period during which the assignment is effective.
6. Save your work.

Defining Approvals

To define Order Management Approvals:

1. Navigate to the Approvals window.

Order Management Approvals Window

OM Approvals

List Name: SA Approval List

Description: List of Approvers for Sales Agreements

Transaction Type: SA with Approvals

Transaction Phase: Negotiation

Effective Dates: [] - 02-MAY-2006

List Members

Sequence	Role	Active
1	MFG9	<input checked="" type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

2. Enter a name in the List Name field.
3. Enter a description of the approval in the Description field. This field is optional.
4. In the Transaction Type field, select the transaction type that the approval applies to, from the list of values. You can pick a Transaction Type from any of the Operating Units you have access to via your MO: Security Profile.
5. In the Transaction Phase field, select Negotiation or Fulfillment from the list of values. Ensure that the workflow assigned to the transaction includes the Approval

activity and the phase assigned corresponds. For example, Workflow: Negotiation with Approval; Transaction Phase: Negotiation.

6. Select an effective date in the Effective Dates fields.
7. In the List Members region, select the members in the Role fields, assign a sequence, and indicate if they are active by selecting the Active check box next to their name.
8. Save your work.

Related Topics

Transaction Types, page 2-95

Negotiation in Order Management, page 5-2

Define Defaulting Rules, page 2-117

Oracle Receivables User Guide.

Define Order Import Sources

You can define Order Import Sources from which to import order information. You can import historical orders, orders from other quote or sales systems, and changes to orders. Oracle Order Management recommends that you define a unique name for each source of order information you are importing. When you run the Order Import program, you can enter the source or sources for each execution. You can run Order Import for multiple sources at one time. This is step twelve of the Order Management Setup Steps, page 2-3.

Internal Sales Orders

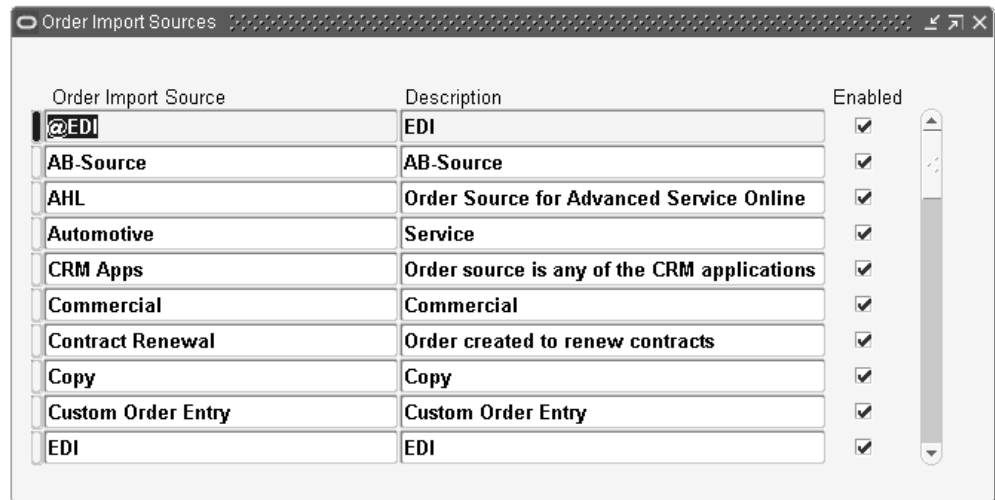
If you are importing internal sales orders from Oracle Purchasing, you need to define an Order Import source to be used when you transfer the internal requisition information from Oracle Purchasing to create an internal sales order in Order Management.

You need to choose an Order Import source for internal requisitions/internal sales orders when you define purchasing options in Oracle Purchasing. You choose this same Order Import source as a parameter when you run the Order Import program in Order Management. See: Integrating Oracle Order Management Using Order Import, *Oracle Manufacturing, Distribution, Sales and Service Open Interfaces Manual*.

To define an Order Import source:

1. Navigate to the Order Import Sources window.

Order Import Sources Window



Order Import Source	Description	Enabled
@EDI	EDI	<input checked="" type="checkbox"/>
AB-Source	AB-Source	<input checked="" type="checkbox"/>
AHL	Order Source for Advanced Service Online	<input checked="" type="checkbox"/>
Automotive	Service	<input checked="" type="checkbox"/>
CRM Apps	Order source is any of the CRM applications	<input checked="" type="checkbox"/>
Commercial	Commercial	<input checked="" type="checkbox"/>
Contract Renewal	Order created to renew contracts	<input checked="" type="checkbox"/>
Copy	Copy	<input checked="" type="checkbox"/>
Custom Order Entry	Custom Order Entry	<input checked="" type="checkbox"/>
EDI	EDI	<input checked="" type="checkbox"/>

2. Enter the Order Import source name and a description.
3. Check Enabled to activate the Order Import source.
4. Save your work.

Defining Processing Constraints

Processing constraints are rules that control who can change what and when they can change it. Processing constraints can prevent certain changes, but can also be set up to perform actions based on those changes. They can define actions that can result from these changes, such as requiring a reason for the change, triggering an action in Audit Trail or Versioning, or raising an Integration Event. This is step twenty-four of the Order Management Setup Steps.

This section describes how to set up your processing constraints based on validation conditions in validation templates (for example, Booked = Yes) which are evaluated for groups of records (record sets).

Prerequisites

Become familiar with the Processing Constraints that are delivered with the Order Management Application.

Note: After updating constraints and/or conditions, close and reopen the Sales Agreements or Sales Orders window for the updated constraints to apply correctly.

To set up processing constraints:

1. Navigate to the Define Processing Constraints window.

Order Management Processing Constraints Window

Application:

Entity:

Constraints

Operation	Attribute	User Action	Applies To	System Changes	User Changes	Enabled	System
Delete		Not Allowed				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Delete		Not Allowed	Negotiation			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Update	Bill To	Not Allowed				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Conditions Applicable To

Group #	Scope	Validation Entity	Record Set	Not	Validation Template	Enabled	System
1	Any	Order Header	Order	<input type="checkbox"/>	Is gapless	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	Any	Order Header	Order	<input type="checkbox"/>	Booked	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
				<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

User Message:

2. Query Application for Oracle Order Management and Entity for the entity for which you want the processing constraint, for example, Order Header or Order Line.
3. Move to Constraints. In the top area of the region, enter each constraint in a line.
4. In Operation, select the operation that you want to constrain.
5. Select an Attribute to constraint, based upon the operation selected.
 - If you select the value UPDATE for the Operation field and you do not select an Attribute value, the constraint allows no update to any field of the entity, by any user.
6. In User Action, select one of the following:
 - Not Allowed: You cannot perform the constrained operation
 - Require Reason and History: You can perform the operation only if you enter a reason. Use this with Operation CANCEL, Operation UPDATE if the constrained attribute is Ordered Quantity only, and for recording Audit Trail

history when requiring a reason for an attribute change

- Requires History: You can perform the operation and will not be prompted to enter a Reason. You still have the option to enter both a Reason and Comment, and if you do so, the information is recorded. Use the value for enabling Audit Trail history to be recorded without a reason for an attribute change
7. Select a value for the System Changes field. The value selected in this field determines if system changes are allowed, despite the constraint. Choose from:
 - Always: System changes allowed
 - Never after Insert: System changes allowed if the entry has not been saved to the database
 8. Select a value for the User Changes Field. Choose from:
 - Never: The user is always constrained
 - Never after Insert: The user is constrained after the entry is saved to the database
 9. The Enabled field indicates whether the current constraint is active. This allows constraints to be temporarily disabled if necessary.
 10. System check box - If a Constraint has the System check box selected, you cannot update the constraint definition.
 11. Move to the Conditions tab. Enter a constraining condition for the selected constraint. The selected constraint is determined by the previous cursor position prior to moving to the Conditions tab region.
 12. In the Group Number field, enter a numeric value according to the following principles:
 - For conditions that should together evaluate to TRUE (AND conditions), enter the same group number. The constraint applies if the entity in question meets all of the conditions defined.
 - For conditions that should together evaluate to OR (OR conditions), enter a different number for each record. The constraint applies if the entity in question meets any one of the conditions defined.
 13. In Scope, if the record set applies to multiple records, indicate the scope of evaluation of the record set for this condition. An example of a record set that applies to multiple records is the record set of all of the lines of a sales order. Select one of the following:

- Any: The condition is satisfied if one of the records meets it, for example, the condition is satisfied if one of the sales order lines is booked
 - All: The condition is satisfied if all of the records meet it, for example, the condition is satisfied if all of the sales order lines are booked
14. In Validation Entity, enter the entity for which the condition is validated. You can enter the same entity as the constraint (at the top of the Constraints region) or you can enter an entity related to the constraint. For example, if the constraint is against Order Header, Validation Entity can be Order Line.
 15. In Record Set, select the record set that corresponds to the entities to which the constraints process should apply the condition. For example, if you enter the order line record set Line, the condition is evaluated against the order line in question. If you enter the order line record set Order, the condition is evaluated against any or all (depending on the scope) lines of the order in question.

If Validation Entity is different from Entity (at the top of the form), you can only select record sets based on the primary key of the validation entity.
 16. Select the Not check box (the negative condition modifier) to direct the constraints processing to evaluate the NOT condition of Validation Template. For example, if you expect to select Validation Template Booked, selecting NOT creates the condition of not booked for the constraint.
 17. In Validation, select a validation template. This item specifies the condition being evaluated.
 18. Enabled- The Enabled field indicates whether the current constraint is active. This allows constraints to be temporarily disabled if necessary.
 19. System check box:
 - If a Constraint has the seeded check box selected, and the constraint condition check box is also selected, you cannot update the constraint condition.
 - If a Constraint has the seeded check box selected, and the constraint condition check box is not selected, you can update the constraint condition.
 20. In User Message, enter the trailing portion of the error message that the constraint processing should display when the user violates the constraint.

For example, if the constraint was to not allow an update of the item field on the order line if the line has been previously booked, constraints processing displays the error message You are not allowed to update the item; the item is booked.
 21. Move to the Applicable To tab and specify who the constraint applies to.

Processing Constraints Window

Application

Entity

Constraints

Operation	Attribute	User Action	Applies To	System Changes	User Changes	Enabled	System
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

Conditions **Applicable To**

☐ All responsibilities
☐ Authorized responsibilities
☐ Constrained responsibilities

22. Select one of the following:

- All responsibilities: The constraint applies to all responsibilities.
- Authorized responsibilities: The constraint applies to all responsibilities except ones that you specify. Specify the excepted responsibilities in the untitled lines below your selection.
- Constrained responsibilities: The constraint applies to the responsibilities that you specify. Specify the excepted responsibilities in the untitled lines below your selection.

23. Save your work.

Note: Please ensure that when you are creating or updating Processing Constraints, the window that will be using the constraints (e.g. Sales Order, Sales Agreement) is closed. The constraints are cached and if they are updated while a sales transaction window is open, the updated constraints may not function according to the updates. Therefore it is advisable to close all sales transaction windows before updating Processing Constraints.

Processing Constraints Example

To set up a processing constraint that forbids update of the sales order header order

type when there are order lines created or when the order is booked, do the following after navigating to the Define Processing Constraints form:

- Query in the top of the form:
 - Application: Oracle Order Management
 - Entity: Order Header
- Enter on a new line at top of the Constraints region:
 - Operation: Update
 - Attribute: Order Type
 - User Action: Not allowed
 - Leave System Changes, User Changes blank
 - Clear Seeded check box
- Enter in the first line of the Conditions tabbed region:
 - Group Number: 1
 - Scope: Any
 - Validation Entity: Order Header
 - Record Set: Order
 - Clear NOT check box
 - Validation Template: Booked
 - Clear Seeded check box
 - User Message: the order is booked
- Enter in the second line of the Conditions tabbed region:
 - Group Number 2
 - Scope: Any
 - Validation Entity: Order Header
 - Record Set: Order

- Clear NOT check box
- Validation Template: Lines Exist
- Clear Seeded check box
- User Message: the order has lines

Processing Constraints Usage

As you use Order Management, processing constraints are evaluated for any *entity* you try to cancel, delete, create, split, or update. If you are trying to modify an order line, Order Management evaluates the processing constraints for the Line *entity*.

Using Processing Constraints

Versioning

To set up Automatic Versioning, you must set up processing constraints to enable a select attribute update to autogenerate versioning

Defining Validation Templates

Order Management provides you the ability to define your own validation conditions by the use of validation templates. A validation template names a condition and defines the semantics of how to validate that condition. Validation templates can be used in the processing constraints framework to specify the constraining conditions for a given constraint. These conditions are based on:

- Where the entity is in its workflow
- The state of attributes on an entity
- Any other validation condition that cannot be modeled using the above methods

API based validation templates are not available if constrained entity is different from the entity for which the validation template has been defined (or the Validation templates are not available even if the record set being used is anything other than the primary key record set).

For example, API based Validation template Pick Released has been set up for entity Order Line. If you set up a constraint for attribute Ship To on Order Line, the validation template Pick Released is available but for a constraint on attribute Ship To on Order Header, Pick Released will not be available.

For attribute Ship To on Order Line, if the constraint condition uses any record set (ATO Configuration, for example) other than the primary key record set Order Line, the

validation template Pick Released will not be available.

To define a validation template:

1. Navigate to the Validation Templates window.

Validation Templates Window

Application:

Validation Templates

Entity	Template Name	Seeded?	Short Name	Description	Validation Type
					WF API TBL
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="radio"/> <input type="radio"/> <input type="radio"/>

Validation Semantics

Item Type:

Activity:

Status:

Result:

2. Select an entity the condition is defined for in the Entity field.
3. Enter a Template Name for the condition.
4. Enter a name in the Short Name field for the condition.
5. Optionally, enter a Description for the constraint condition.
6. Select the Validation Type to be performed by the condition. Select from:
 1. **WF: (validation is based on the workflow status of this entity):**
 - Select the Activity for the condition
 - Select the Activity Status for the condition. Select from: Active, Complete, Error, Notified, and Suspended
 - Select the activity Result for the condition
 - Save your work

1. **API (validation is completed through an Application Program Interface):**

- Select the PL/SQL Package you wish to interface with the constraint condition
- Enter the Procedure name of the API
- Save your work

1. **TBL (validation is based on the values of database columns on this entity):**

- Select the Attribute Column name on the entity for the constraint condition
- Select the Validation Operation for the constraint condition. Select from: = (Equal To), <> (Not Equal To), Is NULL, Is Not NULL
- Select the Value String you want to validate against the value of the column

Note: You can add more than one attribute, value pair, otherwise all pairs will be added together in the validation.

7. Save your work.

8. When you have created new validation templates or record sets, you will need to submit the Create Validation Packages concurrent program from the Tools menu to submit a concurrent request to create a validation package for all new or modified validation templates and record sets that may constitute a permitted validation combination. After the request completes, all validation templates that processed successfully will be visible in the list of values in the Processing Constraints window.

For information on Seeded validation templates, please see appendix E for a complete listing.

Defining Record Sets

The Records Sets feature in Order Management is used to define and maintain record set definitions for processing constraints. A record set is a set of records that are bound by common attributes such as ship sets. You can define constraining conditions and specify a record set to be validated for a given condition as defined by its validation template.

To define a record set:

1. Navigate to the Record Sets window.

Order Management Record Sets

Application:

Entity	Seeded?	Record Set	Short Name	Description	Based On Primary Key?
Order Header	<input checked="" type="checkbox"/>	OrdHeader	OHDR	Order Header record set	<input type="checkbox"/>
	<input type="checkbox"/>				<input type="checkbox"/>
	<input type="checkbox"/>				<input type="checkbox"/>
	<input type="checkbox"/>				<input type="checkbox"/>
	<input type="checkbox"/>				<input type="checkbox"/>

Matched Columns For Record Selection

Column:

2. Select the Entity for which you are defining a record set.

The Seeded check box is enabled if the system automatically defines the name of the record set. This check box is non updatable.

3. Enter the name of the Record Set.
4. Enter the Short Name for the record set.

Note: You cannot modify the Short Name once it has been entered.

5. Optionally, enter a Description for the record set.

The Based On Primary Key check box is used to indicate the record set that is based on the primary key columns for the entity. There can only be one primary record set per entity. These records are seeded and cannot be updated.

6. Select the name of the columns that should be matched from the validated record in the Matched Columns For Record Selection region.

For example, if you define a Ship Set record set, the matching columns will be the Header ID and the Ship Set number.

7. Save your work.
8. Select the Create Validation Packages concurrent program from the Tools menu to

submit a concurrent request to create a validation package for all modified validation templates and record sets that may constitute a permitted validation combination.

Only after the request completes, the created validation template is visible in the list of values in the Processing Constraints window.

9. Save your work.

Define Defaulting Rules

You can create and modify defaulting rules to improve the efficiency and accuracy with which you enter orders. You can define the rules to determine the source and prioritization for defaulting order information to reduce the amount of information you must enter manually in the Sales Orders window. For most fields, you can assign one or more defaulting sources in a priority sequence, or, if the default is always the same, you can define a constant value. This is step twenty-five of the Order Management Setup Steps, page 2-3.

Updates to defaulting rules take effect once the Defaulting Generator concurrent program has been submitted for the application and the program successfully completes for the entity combination modified. Existing orders are only affected by updates to defaulting rules if you update an attribute on an order that was included in the modified defaulting rule. If you do not perform a change to an existing order that uses the modified defaulting rules, thus activating validation of defaulting, the order is not affected by the modification.

Note: Seeded defaulting rules can be disabled, but not modified.

If you wish to modify a seeded defaulting rule, disable the seeded defaulting rule condition, and then create a copy of the seeded defaulting rule and include your changes in the copied defaulting rule.

To query entities and attributes:

1. Navigate to the Defaulting Setup - Entity Attributes window.

Defaulting Setup-Entity Attributes Window

Defaulting Sequence	Attribute	Include in Building Defaulting Conditions
1	Customer	<input checked="" type="checkbox"/>
2	Ship To	<input checked="" type="checkbox"/>
3	Deliver To Org	<input checked="" type="checkbox"/>
4	Agreement	<input checked="" type="checkbox"/>
5	Bill To	<input checked="" type="checkbox"/>
6	Price List	<input checked="" type="checkbox"/>
8	Request Date	<input checked="" type="checkbox"/>

Entity Region

2. Application: The Application field displays the application context for the entity displayed. For Oracle Order Management, the value is "Oracle Order Management". This field is non updatable.
3. Entity: The Entity field displays the name of the object for which defaulting rules and conditions are being defined such as the order line. For Order Management you have the following options:
 - Order Header
 - Order Line
 - Sales Agreement Header
 - Sales Agreement Line
 - Order Payment

- Line Payment

Note: Defaulting rule creation is not supported for the sales credit entity and the price adjustment entity.

Note, defaulting rules can be created for Releases only. Sales Agreements have several hard coded defaults in place but currently does not support the defaulting framework.

Attribute Region

The Attributes Region displays all the entity attributes for which defaulting rules can be defined. You are NOT allowed to enter new records here.

4. The Defaulting Sequence field enables a user to assign the sequence (priority) number in which this attribute should be defaulted.

Note: Attributes with identical sequence numbers are defaulted in alphabetical order.

e.g. If the attribute Contact has a sequence number of 1 and the price list has a sequence number of 1, then the Contact defaults before the price list.

5. The Attribute field stores the name of available attributes. Values are currently displayed based upon the entity selected.
6. The Include in Building Defaulting Conditions check box indicates whether an attribute can be used in defining conditions for the entity selected.

Note: The Include in Building Defaulting Conditions check box is for display purposes only, and is non-updateable.

7. Save your work.

The Defaulting Condition Templates button enables you to define defaulting template and conditions for the application/entity combination displayed on the defaulting rules setup window. Selecting this button will take you to the Defaulting Condition Validation Templates window.

The Defaulting Rules button enables users to define defaulting rules for the attribute selected. Selecting this button will take you to the Attribute Defaulting Rules window. For more information on defining or updating defaulting sourcing rules, see the Define Defaulting Rules section.

Select the Defaulting Condition Templates button to define the defaulting condition

for this entity.

Note: The template that appears after selecting the Default Condition Template button is based upon current values displayed in the Application and Entity field on the Defaulting Setup window.

To define Defaulting Condition Templates:

1. Navigate to the Defaulting Conditions Validation Templates window.

Defaulting Condition Validation Templates Window

Condition Name	Description	Seeded
Always	Generic Condition	<input checked="" type="checkbox"/>
In Negotiation Phase	Order is in Negotiation Phase	<input checked="" type="checkbox"/>
Payment Type	Payment Type = 'Credit Card'	<input checked="" type="checkbox"/>
XC		<input type="checkbox"/>
		<input type="checkbox"/>

Group #	Attribute	Validation Operation	Value String
1	Transaction Phase	=	Negotiation

2. Defaulting conditions enable you to define conditions that can be used to dictate when an attribute is sourced and defaulted. Select an existing condition name if you wish to update the associated validation rules or add a new condition name with associated validation rules.
3. In the Description field, enter a brief description of the condition.

Note: A generic condition of *Always* is seeded for each entity. Use this condition to define generic defaulting rules

4. The Seeded check box will be checked for seeded conditions. This field is protected against update. You cannot update seeded conditions or validation rules associated with seeded conditions, however, you can disable seeded conditions and create your own.

In the Validation Rules Region, enter the validation rules based on the attribute values of the above entity. For example, standard orders could have the order type Standard. Order type = Standard.

5. In the Group Number field:
 - For conditions that should together evaluate to TRUE (AND conditions), enter the same group number
 - For conditions that should together evaluate to OR (OR conditions), enter a different number for each record
6. Select the Attribute name, such as Contact.
7. Select the validation operation: Select from:
 - (>) Greater Than
 - (<) Less Than
 - (>=) Greater than or Equal to
 - (<=) Less than or Equal to
 - (=) Equal
 - (!=) Not Equal
8. Enter the Value String of the attribute that you want to validate against.
9. Navigate to the Defaulting Setup - Entity Attributes window.

The Attribute name displays in the Attribute field. Descriptive Flexfield attributes will not be displayed.
10. Save your work.

Select the Defaulting Rules button to define your defaulting rules.

To define defaulting rules:

1. Navigate to the Attribute Defaulting Rules window.

Attribute Defaulting Rules Window

Application:

Entity: Attribute:

☒

Defaulting Conditions

Precedence	Defaulting Condition	Enabled	Seeded
1	Always	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

Default Sourcing Rules

Sequence	Source Type	Default Source/ Value
1	Related Record	Customer.Ship To

Defaulting Conditions Region

2. Enter a value in the Precedence field to determine the precedence when resolving multiple TRUE defaulting conditions.

Note: If more than one defaulting condition is valid, the conflict is resolved by internally ranking conditions using the Precedence value.

For example, defaulting condition Standard Order has a precedence value of two and Copied Order has a precedence value of one. If an order is standard *and* a copied order, then the defaulting condition with higher priority, Copied Order, is used initially. If your conditions for Copy Order do not return a default, conditions for Standard Order will be evaluated.

3. Select a Defaulting Condition from the List of Values and then enter the defaulting rules to be used if this defaulting condition is TRUE.

Note: The Always condition should be the last in this sequence as it would always evaluate to True and no other defaulting conditions would be evaluated.

4. Select the Enable check box if you wish to enable the defaulting condition. If this check box is not selected, the defaulting condition is disabled and the rules and condition associated with this condition are not used in default processing.
5. The check box for the field Seeded cannot be updated. This value is seeded by Order Management. For seeded Order Management defaulting conditions, you are unable to update or delete any fields except:
 - The Precedence field on the defaulting rule condition
 - The Enable check box. You can disable seeded Order Management defaulting rules.

6. Within the Default Sourcing Rules region, select the priority sequence in which you want to retrieve the default for this attribute.

The defaulting process searches for a default for your attribute by evaluating defaulting rules in ascending order.

7. Select the defaulting source type. The defaulting source type determines data entry in the Default Source/Value field.
8. Based on the default source type selected, either select the default sources or enter default values in the Default Source/Value field.

The table below describes Order Management Source Types and the appropriate action required by a user.

Order Management Source Types and Actions

Source Type	Action required
Constant Value	Enter the default constant value.
Application Profile	Select the profile option from where you want to retrieve the default value.
Same Record	Select the attribute on the same record from where you want to retrieve the default value.

Source Type	Action required
Related Record	<p>Object--Select the related object.</p> <p>Attribute--Select the attribute on the related object from where you want to retrieve the default value.</p>
System Variable	<p>Expression--Enter the system expression to be evaluated to obtain the default value. (E.g. System Date.)</p>
PL/SQL API	<p>You can write a custom API to obtain a default value if the value cannot be obtained using other source types such as, the default order number from a sequence.</p> <p>Package--Enter the PL/SQL package name.</p> <p>Function--Enter the function name.</p> <p>Object--Optionally, enter the name of an object to be passed to this API.</p> <p>Attribute--Optionally, you can also enter the name of an attribute to be passed to this API. (See the PL/SQL API Procedure below.)</p>
WAD	Attribute
WAD	Object Attribute

9. Save your work.

Caution

If defaulting rules or conditions are updated, the Defaulting Generator concurrent program must be run to generate new defaulting packages.

- If you update an existing defaulting rule or condition from within the Defaulting Rules window and the update is saved, a pop up window will display a note reminding you to submit the Defaulting Generator concurrent program.
- Choose to submit the program by selecting Defaulting Generator from the Tools menu while within the Defaulting Rules window, or from the Order Management SRS window.

- To generate the Defaulting Generator concurrent program for an entity, you must go to the Requests form and select your entity.

You may execute the Defaulting Generator concurrent program while users are still on the system, although the defaulting package may not generate successfully. This can be due to the package currently being called by other users who are processing orders on the system. Common errors within the output log file for this concurrent program may contain text that a time-out occurred while waiting to lock object.

If defaulting packages do not generate successfully, you must choose to run the program at a later time, or to have users briefly log off the system while defaulting packages are regenerated.

Defaulting Rule Example

Here is an example of a defaulting rule that you can define so that a specific Price List will default to the Sales Order Header window. You may also define a sequence (priority) in which you want Order Management to search for a Price List.

The default sequence can also be complex.

For example, look on an Agreement for a Price List, followed by the Invoice To Location, then the Ship To Location, then the Customer, and finally, the Order Type. If Order Management still does not find a price list for any of the source locations listed (Invoice-To, Ship To, Customer, Order Type), you can have a *Constant Value* default, such as *1998 USA Prices*, which you enter in the Value field of the Attribute Defaulting Rules window.

The table below corresponds to the example stated above.

Example of Complex Default Sequence

Sequence	Defaulting Sources	Source Field or Value
1	Related Record	Agreement.Price List
2	Related Record	Invoice To Location.Price List
3	Related Record	Ship To Location.Price List
4	Related Record	Customer.Price List
5	Related Record	Order Type.Price List
6	Constant Value	1998 USA Prices

Note: Oracle Order Management does not recommend that you define

any overly complex or recurring defaulting rules.

PL/SQL API Procedure

The signature of the PL/SQL API is:

```
(p_database_object_name VARCHAR2  
  
 ,p_attribute_code VARCHAR2)  
  
return VARCHAR2
```

The table below describes Order Management entities, their associated entity code, and the database object called when the entity is processed within Order Management.

Order Management Entities, Entity Code, and Database Objects Called

Entity	Entity Code	Database Object
Order Header	HEADER	OE_AK_ORDER_HEADERS_V
Order Line	LINE	OE_AK_ORDER_LINES_V

For example:

Function to default order number from a sequence based on the order type:

```
Function Get_Order_Number(p_database_object_name IN VARCHAR2,  
p_attribute_code IN VARCHAR2)  
return varchar2  
  
IS  
  
l_header_rec OE_AK_ORDER_HEADERS_V%ROWTYPE;  
BEGIN  
  
-- Getting the defaulting global record  
  
l_header_rec: <= ONT_Header_Def_Hdlr.g_record;  
  
-- for internal orders, use this sequence but for all other order types use the -- sequence  
for STANDARD orders.  
  
if l_header_rec.order_type_id = 1 then  
  
return to_char(OE_INTERNAL_ORDERS_S.nextval);
```

```
else  
return to_char(OE_STANDARD_ORDERS_S.nextval);  
end if;  
END;
```

Note: The PL/SQL API should only access global record for entity being defaulted else rules might not work as expected. For e.g. API should not access values on ONT_Header_Def_Hdlr.g_record if rule is for an order line attribute. Instead reference values from ONT_Line_Def_Hdlr.g_record.

Deleted Seeded Defaulting Rules

In a multi-org environment, you can no longer specify Order Type and Salesrep at the Customer Account using the Receivables Customer Form. The multi-org upgrade copies the values for these attributes from the customer account to the site use (provided there is no value there) and clears them from the account level.

Therefore Order Management seeded defaulting rules which defaulted Order Type and Salesrep from the Customer are deleted. The sources (Customer.Order Type and Customer.Salesrep) are now disabled. To view the deleted defaulting rules, run the Upgrade Script Report, ontexc16.sql, to get the ontexc16.lst output.

Related Topics

Defaulting Rules, page 2-117

Cascading, page 7-47

Define Credit Checking Rules

Define your credit checking rules. This is required if you plan on performing any type of order credit checking. This is step twenty-six of the Order Management Setup Steps, page 2-3.

Defining Credit Profiles

Organization Credit Profiles are a set of criteria that define an operating unit's credit policy for credit control and order credit checking. Credit Profiles include the credit limit and pertinent data needed to determine total credit exposure for orders undergoing credit checking.

Credit Profile Limits Hierarchy when performing credit checking:

- Customer Site Profile

- Customer Credit Profile
- Operating Unit Default Credit Profile

Note: Item Category Credit Profiles are used if you enable Item Category Credit Check for a credit check rule.

The Credit Profile window enables users to create and maintain credit information for Operating Units and Item Categories.

Operating Unit Default Credit Profiles can assist in further defining your credit policies by providing global defaults if no other information is present during credit checking.

To create a new credit profile, users must specify what type of credit profile to create, and depending on the credit profile type chosen, appropriate fields within the window become updatable or non-updatable.

- You cannot define Credit Profiles for Customer or Customer Site by directly navigating to the Credit Profile window.
- Credit Profiles for Customer and Customer Sites are initially defined when entering credit information in the *Credit* section of the *Profile-Transactions* tab of the Customer and Customer Site windows. See Oracle Receivables, Customers.
- You must then assign a Credit Usage Rule to your Customer or Customer Site if you want to enable multi currency credit check.

Credit Profile Types

- Customer: Enables you to define credit limits by currency for Customers.
- Customer Site: Enables you to define credit limits by currency for Customer Sites.
- Operating Unit Default: Enables you to set credit limits and terms, by currency, within a given operating unit
- Operating Unit Default Credit Profiles enable you to effectively enforce a formal credit checking process for all order transactions/currencies from any customer, provided you define an Operating Unit Default Credit Profile for each currency you process order transactions for. For example, if a transaction is entered and no credit limits exist at the customer or customer site levels for the specified order currency, the Operating Unit Default Credit Profile for the transaction/currency entered will be used to determine credit availability.

Note: The Operating Unit Credit Profile is used as the default profile for all customers that do not have an individual credit profile either at customer or site level.

- Item Category: Enables you to set order credit limits, by currency, for one or more Item Categories. This type of profiles enables you to specify limits for the maximum amount on each order for an item category irrespective of a customer or site

Note: Only categories associated with the default category set for the Order Management functional area are supported.

Unlike the Operating Unit Default Credit Profile that defines credit limits for specific operating units, Item Category Credit Profiles are applicable *across* operating units. Item Category profiles are global credit profiles and are transaction currency based: the credit limits defined for an item category are for individual transactions (orders) only. There is no overall system credit limit for a category.

Item Categories enable you to set order credit limits/profiles for one or more item category (applicable for all customers). For example, an Item Category Credit Profile can specify that the maximum order value cannot exceed \$10,000 USD for any order lines that contain an item associated with the Item Category *Computers*. This is extremely useful if your business practice requires item-based insurance coverage.

To Define Credit Profiles:

1. Navigate to the Define Credit Profiles window.

Credit Profiles Window

The screenshot shows the 'Credit Profiles' window with the following fields and values:

- Profile Section:**
 - Credit Profile Type: **Operating Unit Default** (dropdown)
 - Operating Unit: **Vision Operations** (text)
 - Effective Date From: (empty)
 - Item Category: (empty)
 - Effective Date To: (empty)
 - ☒ Enabled
- Credit Section:**
 - Credit Rating: **High Risk** (text)
 - Tolerance: **1** (text)
 - Next Review Date: **30-NOV-2005** (text)
 - ☒ Credit Check
 - ☒ Credit Hold
- Currency Credit Limits Section:**

Currency	Order Credit Limit	Overall Credit Limit
USD	500,000.00	50,000,000.00

[]

Assign Rule Sets

2. . Valid Values for Credit Profile Type are:

- Item Category
- Operating Unit Default

Based upon the Credit Profile Type you chose, certain fields become protected or non-updatable.

Note: If Credit Profile Type = Operating Unit Default, the Item Category field is disabled.

If Credit Profile Type = Item Category, the Overall Credit Limit field is disabled.

Enter remaining fields that require a value, or update any fields that contain a default value based upon the Credit Profile Type selected:

- Operating Unit:
Select an Operating Unit name from a list of values if you are defining a Operating Unit Default Credit Profile.
- Item Category:
Select an Item Category name from a list of values if you are defining an Item

Category Credit Profile.

- Effective Date From/ Effective Date To:

Select the Effective Date From and Effective Date To for your Credit Profile.

Note: When defining Credit Profiles for Operating Unit Default and Item Category, the Effective Dates From/To cannot overlap previously defined Credit Profiles for the same Operating Unit Default or Item Category, regardless of the currency.

- Tolerance:

Enter a numeric value in the Tolerance field. Tolerance values are used to calculate extended exposure limits during credit checking.

For example, supposed you enter a value of 5 for Tolerance, and an Credit Limit of \$10,000 USD. During credit checking, the exposure credit limit would actually be \$10,500 USD. $((\text{Tolerance} + 100) * \text{Credit Limit} / 100)$.

- Currency:

Select a value in the Currency field to limit the Credit Profile to a specific currency.

- Order Credit Limit:

Enter a value in the Order Credit Limit field, based upon the Credit Profile Type. New orders may not exceed the value entered in the Order Credit Limit field if the checking processing defaults to the operating unit level.

- Overall Credit Limit: Enter a value in the Overall Credit Limit field for a Operating Unit Default Credit Profile Type. Total exposure within an operating unit for the particular customer may not exceed the value entered in the Overall Credit Limit field if credit checking processing defaults to the operating unit level.

The following fields are for future use and are for information purposes only. Values that are ignored during the credit checking process are:

- Credit Check
- Credit Hold
- Credit Rating
- Next Review Date

3. If you wish to enable multi currency credit check, you must assign Credit Usage Rule Sets to your Credit Profile. Select the Assign Rule Set button. The Assign Rule Set button is only enabled for the following Credit Profile Types:

- Item Category
- Operating Unit Default

To assign Credit Usage Rules to Customer or Customer Sites Credit Profile Types, you must use the Assign Credit Usage Rules window.

4. Save your work.

Defining Credit Usage Rule Sets

The Define Credit Usage Rules window enables a user to create and maintain credit usage rule sets that can be assigned to Credit Profiles.

Credit Usage Rule Sets define the set of currencies that will share a predefined credit limit during the credit checking process, and enable the grouping of currencies for global credit checking. Usage Rules Sets ensure that if credit checking is enabled, that all transactions for specified currencies go through the currency conversion process and are summarized by currency prior to the credit checking process.

- You can define a usage rule set for a single currency or multiple currencies
- You can choose to assign a global usage rule (all currencies) and then exclude one or more currencies from the rule set
- You can choose to define multiple usage rules for multiple currencies within the usage rule set
- You can choose to add or delete new Currency records for an existing Usage Rule Set

Usage rule sets consist of *at least* one usage rule/currency combination, and once a rule set is assigned to an Oracle Entity, the rule set provides processing defaults for determining credit availability during multiple currency credit checking processing routines.

To define credit usage rule sets:

1. Navigate to the Define Credit Usage Rules window.

Define Credit Check Usage Rules Window

Usage Type	Currencies	Exclude
Currency	USD	<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

2. Enter a name for your rule set in the Usage Rule Set Name field.
3. Select the Global Exposure box if you wish to enable the Usage Rule Set for global exposure (across operating units). By default, this box is unchecked (do not enable Global Exposure for the usage rule set).

If you are unable to select the Global Exposure check box, submit the Credit Limit Usages Report. Review the report output and un-assign any usage rule sets with different Global Exposure options for the same credit profile.

4. Select the value Currency in the Usage Type field.
5. Enter a currency in the Currency field.

The Currency field can contain any Currency Code currently defined. The Currency field may also use the lookup All Currencies to indicate the usage rule is for all currencies defined.

6. Chose to exclude a specific currency for your usage rule by selecting the Exclude check box. The default is unchecked, or No.

Note: If the field Currency has value of All, the Exclude check box is non-updateable.

7. Save your work.

Warning: Given a customer with the following credit profiles:

- FRF (french francs) credit limit
- EUR (euro) credit limit assigned to a european set of currencies that includes FRF (using the new multicurrency feature - usage rule sets)

The credit checking process for a transaction in FRF is determined by the credit check engine; perform multi-currency credit check if a Credit Usage Rule Set assignment has been defined.

Assigning Credit Usage Rule Sets

The Assign Credit Usage Rules window enables a user to assign credit usage rules sets for multiple currency credit checking to Credit Profiles.

To assign credit usage rules:

1. Navigate to the Assign Usage Rules window. Order Management > Setup > Credit > Assign Usage Rules.

Find Credit Profiles Window

Find Credit Profiles Window

Credit Profile Type: **Party/Customer/Customer Site**

Profile Class: [disabled]

Party: **Computer Service and Consulting**

Customer: **Computer Service and Consulting**

Bill To Site: **Burlington (OPS)**

Operating Unit: [disabled]

Item Category: [disabled]

Currency: [disabled]

Find **Clear**

Find Credit Profiles Window

Before you can assign a Usage Rule Set to a Credit Profile, you must first select the Credit Profile Type and then locate the corresponding Credit Profiles.

Certain query processing logic has been disabled within the Find Credit Profiles window;

- If the value of the Credit Profile Type field is Profile Class, then the Operating Unit, Customer, Bill To Site, and Item Category fields are disabled.
- If the value of the Credit Profile Type field is Customer, then the Profile Class, Operating Unit, and Item Category fields are disabled.
- If the value of the Credit Profile Type field is Operating Unit Default, then the Profile Class, Customer, Bill To Site, and Item Category fields are disabled.
- If the value of the Credit Profile Type field is Item Category, then the Profile Class, Operating Unit, Customer, Bill To Site, and Overall Credit Limit fields are disabled.

Once you have entered your search criteria, select the Find button to either locate

your existing credit profile usage rules or to define new usage rules for an existing profile.

Assign Credit Usage Rules Window

Assign Credit Usage Rules

Credit Profile Type: **Party/Customer/Customer Site**

Profile Class:

Party: **Computer Service and Consulting**

Customer: **Computer Service and Consulting**

Bill To Site: **Burlington (OPS)**

Operating Unit:

Item Category:

Effective Date From:

Effective Date To:

Currency: **CAD**

Order Credit Limit: **1,304,400.00**

Overall Credit Limit: **3,913,200.00**

Rule Set Name	Included Currencies	Excluded Currencies
Credit Management	USD,EUR,CAD,MXP,GBP,AUD	

2. The data appearing in the upper region of the window defaults from the Credit Profile you have queried. This information is protected against update.
3. The multi-row section of the Assign Usage Rules widow enables you to select Credit Usage Rule Sets to use with the credit profile.

You select a Name from the List of Values, and the included and excluded currencies fields will display currencies that the usage rule set consists of. These values are protected against update from this window.

For detailed field information, see Defining Credit Profiles, Step 3 and 4., page 2-127

4. Save your work.
 - Upon saving your usage rule assignments, a message is displayed to ask if you wish to cascade changes to usage rule assignments for existing customers with the Customer Profile Class you are saving.
 - New customers created using Customer Profile Classes with previously defined credit usage rules do not automatically inherit the Customer Profile Class usage rule assignments. You must

manually create these assignments.

Defining Credit Check Rules

Overview

Order Management credit check rules enable you to determine what credit checking criteria is used when determining credit exposure during the credit checking process. Order Management transaction types determine when credit checking actually occurs, and when used in conjunction with credit checking rules, define your credit checking process.

For example, you can define credit checking rules that utilize pre-calculated exposure information to use when comparing a customer's current order amount against their overall exposure; if the order transaction type utilizes this rule, and the order fails during the credit check process, it is automatically placed on credit check hold. You can define as many credit checking rules as you need, and if you inactivate a credit checking rule, you also must remove it from any order types that use it.

Additionally, you can include in or exclude from your credit check rule some or all of your open accounts receivable balances, and some or all of your uninvoiced orders.

Order Management uses the currency of the order you are credit checking to determine which credit limits to use in credit checking calculations. Order Management only includes orders and invoices in the same currency as the order you are credit checking when calculating a customer's outstanding credit balance, unless you have set up multiple currency credit checking.

You can also include/exclude returns based on your credit check rule definition. However this should be used only if you are using return lines with credit memos.

Besides defining your credit exposure composition, the credit check rule also determines:

- Credit check level (order or line)
- Credit Hold level (order or line)
- Conversion type used when you enable multi-currency credit check
- Use of item category credit check
- Send hold notifications to the sales order creator
- Use of pre-calculated exposure

Credit Limits for Credit Checking and Rules Summary

1. When the Credit Check flag is turned off at the site level that pertains to the Bill-To address, there will be no credit checking for orders for this Bill-To site. It doesn't roll up to the next level to get the credit limits.
2. If the Credit Check flag is turned on at the site level, and both overall credit limits and order credit limits are all NULL/BLANK, then the limits for a customer who owns that bill to site will be automatically considered .
3. If the Credit Check flag is turned on at the customer level, and both overall credit limits and order credit limits are all NULL/BLANK, roll up to the next level in the party hierarchy (if any). Otherwise, use the Operating Unit Credit profile. Note that party profiles are used only if Credit Management is setup. If not, from the customer level we go directly to the Operating Unit.
4. If the Credit Check flag is turned on at each level, and there is only one field left NULL/BLANK (for example, order limit is null but overall exposure is some number), then this NULL/BLANK field is treated as unlimited and it does not rollup to next level.
5. If the last level reached with the Credit Check flag enabled has both overall and order credit limits set as NULL/BLANK, it means no credit checking should be performed. IF the Credit Check flag is enabled and order credit limit is not NULL/BLANK, then a credit check will be performed at the item category level.
6. If the Credit Check flag is disabled for item category or if the Credit Check flag is enabled and both order credit limit and overall credit limit are all NULL/BLANK for item category, then credit checking will not happen at the item category level, but credit checking will still be performed for the site-customer-(party)-OU level based on the rules discussed. IF the Credit Check flag is enabled and at least one of the order credit limit and overall credit limit fields are not NULL/BLANK, then a credit check will be performed at the item category level.

Performance Note

In order to improve performance you can enable the use of pre-calculated exposure. Utilizing this option, the credit check engine will use summary balance details stored in a periodically updated summary table.

The update is done by running a concurrent program which accesses Order Management and Account Receivable transactional tables. This program should be scheduled to run periodically based on your specific business needs. You should also run this concurrent program when you have done major changes in your set up or transactional data (merge customers, incorporate transactions from external systems, change transaction status using customized programs, etc.).

To define a credit check rule:

1. Navigate to the Credit Check Rules window.

Credit Check Rules Window

Rule **Rule 1**

Effective Dates **06-NOV-2004** -

Options **Exposure**

Credit Check Level **Sales order line**

Credit Hold Level **Sales order**

☒ Override Manual Release

Days to Honor Manual Release **3**

Conversion Type **Corporate**

☐ Check Item Categories

☐ Segd Hold Notifications

2. Enter a name for your credit check rule.
3. Optionally, enter the Effective Dates for your rule.

Options Tab

4. Select the entity to perform credit checking against for your rule. Select from:
 - Sales Order
 - Sales Order Line

Note: If you select Sales Order Line as your credit check level, the Use Pre-calculated Exposure check box will be checked and protected against update

If you choose to perform credit checking at the Sales Order level, you are limited to the system generating header level credit holds only. The Credit Hold Level field will default to Sales Order and is protected against update.

5. Select the Credit Hold Level for your credit rule. Select from:
- Sales Order: Sales Order (order level) credit check is performed for the header Bill To site. Sales Order level credit checking provides backward compatibility with previous credit check versions. When credit checking rules are defining using Sales Order as the credit check level, the credit check engine will examine order totals and evaluate credit exposure against the credit profile attached at header level.

Holds will be always applied at header level.

Use order level credit check when order lines always have the same Bill To Site as the Order Header.

- Sales Order Line: Sales Order Line (line level) credit check is performed against order line Bill To Sites. The credit check engine will group all order lines belonging to the same Bill To Site and check available credit for each specific Bill To Site. When an order line fails credit check, any remaining lines grouped with the same Bill To Site are placed on hold.

Holds can be placed at either the order or order line level when you use line level credit checking.

Use line level credit check when sales order lines are attached to different Bill To Sites and you want to use the credit profile defined at that level.

Additionally, you can use line level credit check when you have defined customer relationships within your system and actively use them within Order Management. Using customer relationships, you can create sales orders with order lines attached to different Bill To Sites owned by different customers.

Order Header level credit checking uses header level information ignoring different bill-to sites detailed at the line. Credit Check uses the credit profile attached to the customer Bill-to site defined at order (header) level. Credit checking at the Order Header level will use order totals and will evaluate credit exposure against the credit profile attached at header level, and holds are always applied at header level.

Special Considerations for Credit Hold Level

- If you update the Credit Hold Level from Sales Order to Sales Order Line, a pop up dialog box will display a message indicating that existing sales order credit holds will need to be released manually. Select Yes to continue or No to not commit the update.
- If you update the Credit Hold Level from Sales Order Line to Sales Order, a pop up dialog box will display a message indicating that existing sales order line credit holds will not be released automatically. Select Yes to continue or No to not commit the update.

6. Override Manual Release check box: This check box enables an order or line which

had failed credit checking and then was subsequently manually released to be eligible for additional credit check processing. Select from:

- Yes: Manual Released Holds will be overridden. You must also enter a value within the Days to Honor Manual Release field.
 - No: Manual Released Holds will be honored. The field Days to Honor Manual Release will be non-updatable.
7. Days to Honor Manual Release: The field is used in conjunction with the Override Manual Release check box. If you enable the Override Manual Release check box, you must enter a numeric value greater than zero within this field.

Manual Released Holds (Credit Checking Procedures)

Each time a credit check failure occurs for order or order line, the corresponding order or order line is placed on credit check hold. However, prior to the credit check holds actually being applied, the credit check process determines:

- If a manually released credit check hold exists *and*
- If your credit check rule enables override of manually released holds (in conjunction with the value for Days to Honor Manual Release).

If Override Manual Release is not enabled for your credit check rule, then manually released holds are honored and no additional credit checking will occur.

If Override Manual Release is enabled, the credit checking process will validate if the release date is within the interval defined by the value of Days to Honor Manual Release. If the value is within the range defined, then manually released holds will be honored and additional credit checking is not performed. If the value is not within the range defined, credit checking can occur again and credit check holds can be applied if the order or lines fails the credit check process.

Note: The value of OE_HOLD_RELEASES.CREATION_ DATE is used by the credit check process to determine if the duration defined for the credit check rule is within range for additional credit checking: when any hold is released for an order or line, Order Management inserts a record within OE_HOLD_RELEASES.

8. Select the conversion type to use when performing credit checking using your credit rule. The LOV for this field is limited to the values you define within the Oracle General Ledger Conversion Rate Types window.
9. Select the Check Item Categories check box for your credit rule if you wish to perform credit checking for sales orders by Item Categories defined for Order Management.

10. Select the Send Hold Notifications check box if you wish to send hold notifications whenever a credit hold is placed for a sales order or order line. The notification is sent to the creator of the order.

Determine the type of credit exposure to use when defining your credit check rules by selecting the Exposure Tab within the Define Credit Check Rules window.

Exposure tab in the Credit Check Rules Window

The screenshot shows the 'Credit Check Rules' window with the 'Exposure' tab selected. At the top, there are fields for 'Rule' and 'Effective Dates'. Below these are two tabs: 'Options' and 'Exposure'. The 'Exposure' tab contains several checkboxes and input fields. The 'Use Pre-Calculated Exposure' checkbox is checked. Below it is the 'Include External Credit Exposure' checkbox, which is unchecked. A group box contains 'Include Open Receivables Balance' (checked) and 'Include Payments at Risk' (unchecked), with an 'Open Receivables Days' input field. Another group box contains 'Include Uninvoiced Orders' (unchecked), 'Include Freight and Special Charges' (unchecked), 'Include Tax' (unchecked), 'Include Orders Currently On Hold' (unchecked), and 'Include Returns' (unchecked), with a 'Scheduled Shipping Horizon Days' input field. At the bottom right, there is a 'Maximum Days Past Due' input field and a '[]' button.

Exposure Tab

11. Select the Use Pre-calculated Exposure check box for your credit rule if you wish to perform credit checking against pre-calculated exposure summary tables.
 - When the first credit check rule that has the Use Pre-Calculated Exposure check box checked is successfully saved, the following message will display:

This credit check rule uses pre-calculated exposure. Please run the Initialize Credit Summaries program to update the pre-calculated data.
 - If the Use Pre-calculated Exposure check box is checked and the Include Open Receivables balance check box is checked, then Open Receivables Days is protected against update and is NULL.
 - If the Use Pre-calculated Exposure check box is checked and the Include Uninvoiced Orders check box is checked, then Shipping Horizon Days is protected against update and is NULL.

12. Select the Include External Credit Exposure check box if you wish to include external exposure details imported into Order Management during the credit checking process.

When an Oracle Order Management sales order is credit checked, the exposure data from the external system is included in the overall exposure check. The default value for this check box is un-checked (exclude external exposure details when performing credit checking).

Receivables Balance Region

13. Select the Open Receivables Balance check box for your credit rule if you wish to include open receivables balances.

You must enable either the Include Open Receivables Balance check box or the Include Uninvoiced Orders check box in your credit check rule. You can activate both, but you cannot toggle both off.

If you select both the Pre-calculated Exposure and Open Receivables Balance check boxes, you are unable to specify Open Receivables Days.

14. If you enabled Include Open Receivables Balance in your credit check rule, you can indicate whether to Include Payments at Risk when calculating a customer's outstanding balance.

Receipts at risk are remitted receipts that have not been cleared, or discounted (factored) receipts that have not been risk eliminated. If the performance of credit checking requires improvement you can toggle off this option.

15. If you enabled Include Open Receivables Balance, enter a value to indicate the range of dates for open receivables you wish to include for your credit check rule.
 - *Negative Number*: Includes past due, current, and future open receivables up to X days beyond the current date
 - *Positive Number*: Includes open receivables with invoice dates X days earlier than the current date
 - *No Value*: Includes all open receivables

Uninvoiced Orders Region

Note: If you do not select the *Include Uninvoiced Orders* check box, you cannot select any check boxes within the region.

Important: If an order line has been interfaced to the Receivables interface table but hasn't been invoiced yet, the Order Management credit check engine will include this line amount as part of the

uninvoiced order amount. If your system enables credit checking and your Receivables Interface table can potentially contain large volume of data, it is recommended that you create a custom index on RA_INTERFACE_LINES_ALL table
ORIG_SYSTEM_BILL_CUSTOMER_ID column.

16. Select the *Include Uninvoiced Orders* check box if you wish to include uninvoiced orders for your credit rule.

If you enabled Include Uninvoiced Orders:

- Indicate whether to include Freight and Special Charges for uninvoiced orders when performing credit checking.

Select the Freight and Special charges check box to include Freight and Special Charges.

- Indicate whether to include Tax information for uninvoiced orders when performing credit checking

Select the *Tax* check box to include Tax information for uninvoiced orders. Credit checking calculations on open receivables always include tax amounts and are not affected by the Include Tax option. If the performance of credit checking requires improvement you can toggle off this option.

- Indicate the number of scheduled shipping horizon days for your credit rule for uninvoiced orders to be included in your total credit exposure when performing credit checking.

For example, if you enter 45, the total exposure includes only uninvoiced orders scheduled to ship within 45 days of the current date. Orders scheduled to ship after 45 days are not included when calculating exposure.

Note: If the Use Pre-calculated Exposure check box is checked, Scheduled Shipping Horizon Days is protected against update.

- Indicate whether to Include Orders Currently On hold. Select the Include Orders Currently On hold check box to include orders on hold within the exposure calculation for your credit rule.

17. Indicate the Maximum Days Past Due.

The *Maximum Days Past Due* field value specifies the number of day that you will allow an invoice to be past due before holding the customers orders. During the credit checking process, Order Management will verify that no invoices for the customer have been past due beyond the number of days you specified with this field. If there are any such past due invoices, the order is placed on credit hold.

18. Save your work.

Deactivating Credit Checking

There are three ways to deactivate Credit Checking on an order:

- Use an order type that does not have an assigned credit rule
- Define the Customer Profile so that the Credit Check box is not selected
- Use payment terms for which the Credit Check box is not selected

Deactivating Credit Checking does not automatically release orders previously on credit hold. However, the next time you attempt to Book, Pick Release or Purchase Release (for drop shipments), Pack, or Ship Confirm an order which utilizes a Order Management Transaction type that enables credit checking to occur at the specified order points, or you perform an order change that trigger credit checking in the Sales Orders window, Order Management will releases the credit check hold if the order or line meets the requirements for successful credit check.

Related Topics

Payment, page 17-29

Sales Orders, page 5-12

Holds and Releases, page 11-1

Oracle Payments Processing

Order Management provides you with the ability to record credit card information through the Sales Orders window and obtain authorizations for credit card transactions using Oracle Payments. You can also set up the security feature to mask confidential card holder information.

Order Management tracks the following credit card information at the order header:

- Credit card numbers
- Credit type
- Credit card holder's names
- Expiration dates
- Payment types and methods
- Authorization codes and amounts

Warning: Oracle Payments processing can only occur if you are using an order type that has a credit checking rule and the rule will perform the authorization at Booking or Shipping.

Risk Management

Oracle Payments offers a risk management feature to identify high risk transactions by Oracle Risk Management. This feature enables merchants and e-commerce service providers to manage the risk when processing transaction through the internet. Oracle Risk Management enables you to define any number of risk factors to verify the identity of your customers, assess their credit rating, and manage risk in a secure on-line environment.

You will receive the customer's risk score, which is based on the risk factors, scores, and formulas that are setup in Oracle Risk Management.

If the risk factor score exceeds the risk score threshold, the order is automatically placed on hold. High risk holds include credit card authorization and high risk failures. If a customer's transaction receives both authorization failures, the authorization failure hold will be applied. Both hold types can be removed manually and the order will continue through the order cycle process.

Order Management authorizations use the default risk formula that you have set up in Oracle Payments. Below is a list of risk factors that can be used by Oracle Payments:

- Payment amount
- Time of purchase
- Payment history
- Frequency of payments
- Transaction amount limit
- Ship To and Bill To addresses

Quantity Changes and Cancellations

Authorizations occur at the sales order header for the total order amount less any amounts covered by commitments. Return lines are not included in the order amount to be authorized.

When an authorized order is changed, Oracle Payments Processing re-authorizes the credit card if the existing authorization has expired. Estimated expiration of the authorization is calculated by Oracle Payments. Actual expiration of authorization varies by card issuer. Because these incremental amounts may not be authorized, you might not be able to collect those funds.

To perform authorization of these incremental amounts, do either of the following:

- Enter a new order for the additional items or quantities.
- Use action Authorize Payment. This process reauthorizes the full order amount and may result in a understating of the customer's open to buy balance on their credit card.

Manual and Online Authorizations

You can choose to obtain manual authorizations and enter the authorization code in the Authorization Code field in the Sales Orders window.

Security

Order Management enables you to mask cardholder information including credit card numbers and authorization codes by setting the OM: Credit Card Privileges profile option. Only the last four digits of the credit card number are displayed if the profile option is set to Limited or None. If the profile option is set to All, the full credit card number is displayed.

Drop Shipments

Order Management provides the ability to obtain credit card authorizations for drop shipments. Authorizations are obtained at the booking and purchase release activity of the drop shipment order.

Related Topics

Drop Shipments, page 14-27

Payment, page 17-29

Define Automatic Holds

You can define holds to halt processing of your sales documents as well as order and return lines. This is step twenty-seven of the Order Management Setup Steps. Because orders and returns are not affected by holds until they are applied, you can define all the holds you use in your business at once. You can define holds that are effective only at certain steps of the order or line workflow and holds that apply regardless of the stage in the order's flow.

For example, you may want to apply an item hold to prevent order lines for a particular item to be released for shipment. Any orders that are not ready for shipment or any orders that have already been shipped are not affected by this hold. You can also define a hold that affects all orders, no matter where the order is in its flow. When this type of hold is applied, it is effective regardless of the order's position in the flow.

For each hold, you can specify hold security by responsibility to control which responsibilities have authority to apply and/or remove the holds you define. Holds can be defined to be specific to pick, pack, ship, or invoice interface activities.

Order Management Hold database tables are striped by organization ID. Therefore, you will need to define holds for each operating unit within your enterprise structure. However, hold type quickcodes only need to be defined once.

The table below describes Order Management seeded Hold Names, the associated Hold Type, and a description of the hold source.

Order Management Seeded Hold Names and Associated Hold Type and Description of the Source

Hold Name	Hold Type	Description
Configurator Validation Hold	Configurator Validation	Automatically applied to order lines that fail Configurator Validation.
Credit Card Authorization Failure	Electronic Payment	Automatically applied to orders if credit card authorization request to Oracle Payment fails.
Credit Card High Risk	Electronic Payment	Automatically applied to orders if risk score determined by Oracle Payments is greater than the value of the risk factor threshold.
Credit Check Failure	Credit Check	Automatically placed if credit check rule evaluation fails on orders setup to be credit checked.
Credit Check Failure	Credit Check	Automatically placed if the Credit Hold box is selected on the customer record in AR.
GSA Violation	GSA Violation	Automatically placed on orders which are in violation of GSA.

Hold Name	Hold Type	Description
NO pre-defined hold name for this hold type	Order Administration Hold	Reserved for you to define administration holds based on your business processes.
Denied Parties Hold	Import / Export Compliance	This hold is applied when an order fails denied party screening
ePayment Failure Hold	Electronic Payment	This is for expected errors returned by Oracle Payments like invalid data
ePayment server Failure Hold	Electronic Payment	This is for unexpected errors returned by Oracle Payments, for example a failure to connect to the server.
Export Compliance Hold	Import/Export Compliance	This hold is applied when an order fails export compliance screening.
Pending Process Payment Hold	Electronic Payment	This is applied when process payments is deferred.
Promotional Line	Promotional Hold	Automatically placed on lines which exceed a soft modifier promotional limit.
Promotional Order	Promotional Hold	Automatically placed on orders which exceed a soft modifier promotional limit.

Note: Promotional Line/Order Holds functionality is only available if you have licensed and installed Oracle Advanced Pricing.

To define a generic hold:

1. Navigate to the Holds window. Order Management > Setup > Orders > Holds

Holds Window

Name

Description

Type

Workflow Item

Workflow Activity ☐

☐ Hold Included Items

Effective Dates -

Authorizations

Responsibility	Authorized Action	Effective Dates		[]
		From	To	
Order Management Super User, Visio	Apply Hold	03-OCT-2000		
Order Management Super User, Visio	Remove Hold	03-OCT-2000		

Generic holds are placed at the order level. Order lines are considered implicitly on hold for an order that has a generic hold against it.

You will not see hold information for generic holds at the order line level, only at the order header. A new check box "Apply to Order And Line" has been introduced on holds definition form, which will be enabled only if a line level workflow activity is entered in the hold definition. If the check box is checked, then this line level hold is applicable at the header also. The default value of this check box is unchecked so that existing behavior is maintained.

2. Enter the Name and Description for the hold you want to create.
3. Select a valid Hold Type. Hold Types are defined using the Order Management Quickcodes window. See: Quickcodes
4. Workflow Item: Leave this field blank for generic holds.
5. Workflow Activity: Leave this field blank for generic holds.
6. Optionally, enter the Effective Dates for the hold to control when you can use this hold.
7. Optionally, determine which user responsibilities have authority to apply and/or release holds by entering combinations of responsibilities, authorized actions, and effective dates.

You can give some responsibilities the authority to apply a hold, other responsibilities the authority to release it, and others the authority to do both. If you do not specify a responsibility for a hold, any responsibility can apply or release it.

8. Save your work.

To define an activity-specific hold:

1. Navigate to the Holds window. Order Management > Setup > Orders > Holds
2. Enter the Name and Description of the activity-specific hold you want to create.
3. Select a valid activity-specific hold Type.

Order Management provides two standard hold types that are used for the GSA and Credit Checking features: GSA Violation Failure and Credit Check Failure. Order Management also provides the Configurator Validation hold type, which is used if you invalidate a configuration after booking and an order administration hold. Hold types are also provided for import/export compliance, ePayment and promotional limits. Define other hold types using quickcodes.

4. Select the Workflow Activity for the hold.

The workflow activity determines where in the order process the hold will be applied. At the line level, All other lines will be processed except for the line for which the hold is effective.

The LOV for this field is determined by the value selected for the field Workflow Item. This field is required if you have entered or selected a value within the Workflow Item field only.

For example, you can define a hold that prevents an order line from being released for picking by entering Pick Release in this field. The hold takes effect as soon as an order line that meets your hold criteria is eligible for Pick Release.

5. If you want included items of a configurations option class the included items may have had a hold placed against it to be included in the applied hold. This is an optional feature based on your specific business requirements.
6. Optionally, enter the Effective Dates for the activity-specific hold to control when you can use this hold.
7. Optionally, determine which user responsibilities have authority to apply or release activity-specific holds by entering combinations of responsibilities, authorized actions, and effective dates.

You can give some responsibilities the authority to apply a hold, other responsibilities the authority to release it, and others the authority to do both. If you do not specify a responsibility for an activity-specific hold, anyone can apply or

release it.

8. Save your work.

Define Attachments

Order Management provides you with attachments features to:

- Include attachments with orders and order lines
- Include attachments with order returns and order return lines
- Add free form text to the Sales Order Acknowledgement Report
- SA header includes attachments
- Quote header and lines include attachments

This is step twenty-eight of the Order Management Setup Steps, page 2-3.

Defining Documents for use by the Attachment feature

Using standard Oracle Application Attachment functionality, you can define and set up standard or one time documents with or without attachment addition rules. These documents can later be attached to your sales documents using the Attachments window or automatically by specifying attachment addition rules. You can add free form text to your orders, order lines, returns, and return lines as attachments, and you can also copy standard documents and modify them into one time document attachments. You may also translate documents to the language of your choice.

Applying Attachments

You can automatically apply standard attachments to orders and returns based on the attachment addition rules you define. You can also apply attachments manually by selecting the Actions button and then selecting Apply Automatic Attachments within the Sales Orders or Order Organizer window.

If you wish to enable the automatic attachment functionality, you must set profile option OM: Apply Automatic Attachments to Yes. However, if an order or return is modified, attachments must be reapplied manually, by the method mentioned above.

Editing Attachments

You can edit existing attachments by the following methods:

- Via the Sales Orders or Order Organizer window by choosing the Attachments icon from the Toolbar, and then modifying existing attachments (provided the attachment has been enabled for edit) or

- Via the Documents window by first locating your document, and then performing your edit.

Viewing Attachments

You can view the attached documents in the Order Organizer, Sales Orders, Sales Agreement Organizer, Sales Agreement, Quick Sales Orders, Quick Order Organizer, Quote, and Quick Quote windows. Within these windows, you can view attachments in either of the following manners:

- From the View menu, select Attachments or
- Select the Allotment icon (paperclip) from the Toolbar

Copying Orders

You can copy document attachments to a new order or return when you copy an order by using the Copy orders feature. When performing a order copy, within the Copy Orders window, select either the option of including or excluding manual attachments when copying orders, order lines, returns, and return lines. Note: Sales Agreements do not copy attachments or contract documents.

Order Import

Once an order has been imported through Order Import into Order Management, you can apply your attachments. You can automatically apply attachments to imported orders based on your attachment addition rules. When creating the order or order line through Order Import, automatic attachments are applied if the profile option OM: Apply Automatic Attachments is set to Yes.

Report Assignment

Order Management currently utilizes Oracle Attachments functionality for the Sales Order Acknowledgement Report. You can choose to attach a document of type Text to be printed on the report output for either the Order Header, Order Body, or Order Footer entity.

Security

When viewing order and returns, you can specify which user responsibility can apply and update or simply view attachments. The function security feature available from the Oracle System Administrator responsibility also applies attachments. If you set the function security to view orders and returns, you will only be able to view attachments without the ability to apply or update the attachment.

Application Object Library Profile Option setting for Attachments

Attachment File Directory

ATTACHMENT_FILE_DIRECTORY

The directory in which file type attachments data is stored. The system administrator sets this profile option during the install process. Users can view, but not update this profile option.

This profile option is visible and updatable at all levels.

Attachment File Directory

Profile Level Setting	Visible	Allow user Update?
System Administrator: Site	Yes	Yes
System Administrator: Application	Yes	Yes
System Administrator: Responsibility	Yes	Yes
System Administrator: User	Yes	Yes
User	Yes	No

Indicate Attachments

ATCHMT_SET_INDICATOR.

This profile option allows you to turn off indication of attachments when querying records (for performance reasons). Users can see and update this profile option.

This profile option is visible and updatable at all four levels.

Indicate Attachments

Profile Level Setting	Visible	Allow user Update?
System Administrator: Site	Yes	Yes
System Administrator: Application	Yes	Yes
System Administrator: Responsibility	Yes	Yes

Profile Level Setting	Visible	Allow user Update?
System Administrator: User	Yes	Yes
User	Yes	Yes

Defining Documents in Advance

You can predefine standard, template, and one-time documents to attach to your orders or returns and additionally, order and return lines, also Quote and Quote lines as well as Sales Agreements (not for SA lines).

The only prerequisite is to define your document categories.

Defining Attachment Addition Rules

Using standard Oracle Attachment functionality, you can specify rules for automatically attaching of all types of documents to orders and order lines. You can specify that documents be applied to orders or lines for a certain customer, Bill To customer, Ship To customer, item, order type, and/or purchase order. For Order Management, you can specify attachment addition rules at the order level for the following attributes for orders, quotes, or returns:

- Customer
- Customer PO
- Invoice To
- Order Category
- Order Type
- Ship To

At the order line level, you can specify your attachment addition rules by specifying values for the following attributes on the order, order line, quote line, or return line:

- Customer
- Inventory Item
- Invoice To
- Line Category

- Line Type
- Purchase Order
- Ship To

Note: SA does not support rule based attachments.

Defining Document Categories

Using the functionality of Document Categories within the Oracle Applications Documents feature, you specify document categories to define Order Management attachment definition rules. You can choose to use the following Document types as attachments:

- Document Reference
- File
- Long Text
- Short Text
- Web Page

Once you have defined your document Category, you can then perform Category Assignments to enable Oracle Applications functionality for the following entities:

- Oracle Forms
- Oracle Application Functions
- Oracle Reports that have been enabled for usage with Attachments.

To define document categories:

1. Navigate to the Document Categories window.

Document Categories Window

Category	Default Datatype	From	To
<input checked="" type="checkbox"/> AD-File	File		
<input type="checkbox"/> AD-Picking Notes	Short Text		
<input type="checkbox"/> ARBSAfile	File	20-APR-2004	
<input type="checkbox"/> ARBSAtext	Short Text	20-APR-2004	
<input type="checkbox"/> ARBSAweb	Web Page	20-APR-2004	
<input type="checkbox"/> Notes		20-AUG-2003	
<input type="checkbox"/> Printed Documents		20-AUG-2003	
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			

Assignments

Note: Ensure that you navigate to the Document Categories window available from the Order Management Super User Responsibility, Attachments submenu (Setup->Sales Order/Returns->Attachments->Document Categories) when defining attachments for Order Management reports or windows.

The Document Categories window available from the Order Management Super User Responsibility, Documents submenu (Setup->Documents->Categories) is for creating document categories to assign document sequence rules.

2. Enter a value for your category name in the Category field.
3. Select the default attachment datatype in the Default Datatype field.
The default Datatype can be overridden when you create documents. If you are creating a document category for Order Management reports, you must choose either Short Text or Long Text.
4. Optionally, enter an effective date range for your attachment category.
5. Save your work.

To assign document categories to functions, forms, or report:

1. Navigate to the Document Categories window. Order Management > Setup > Documents > Categories

2. Either enter a new Document Category and save your work, or select a Document Category previously defined, and click *Assignments*.

Category Assignments Window

The screenshot shows a window titled "Category Assignments - AD-File". Inside, there is a table with four columns: "Type", "Name", "Format", and "Enabled". The first row is highlighted, showing "Form" in the Type column, "Sales Orders" in the Name column, and a checked checkbox in the Enabled column. There are several empty rows below the first one. A vertical scrollbar is visible on the right side of the table.

Type	Name	Format	Enabled
Form	Sales Orders		<input checked="" type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

3. Select the entity type you wish to enable document category attachments for. Select from:

- Forms
- Functions
- Reports

Order Management enables Oracle Application Attachment functionality for the following entities:

- The Sales Order and Order Organizer Window (form)
- The Sales Order Acknowledgement Report

If you choose to include an Attachment for printing on the Sales Order Acknowledgement Report, you are currently limited to selecting a data type of Short or Long Text. Additionally, order-level attachments print only at the order header or order footer within the output, and order line-level attachments print only in the report body (within the body of each record displayed).

You can associate as many reports as you need with a single category. If you customize your own reports to include documents, you can specify your own as well as Order Management's default reports in this field. Only text documents

can print on reports.

Oracle Shipping Execution enables Oracle Application Attachment functionality for entities such as Bill of Lading, Commercial Invoice, Pack Slip, and Pick Slip. See *Oracle Shipping Execution User's Guide*.

Oracle Pricing enables Oracle Application Attachment functionality for entities such as Agreements and Price Lists. See *Oracle Advanced Pricing User's Guide*.

4. Select a Format. Select from:

- Header
- Body
- Footer

The Format value determines where documents in this category will appear on the report. You can add your own formats for selection within the Category Assignment window by adding values to the Order Management QuickCode NOTE_FORMAT type. However, standard reports support only the seeded format of Header, Body, and Footer.

Warning: In standard reports, order-level notes print only at the header and footer levels; line-level notes print only in the report body.

5. Save your work.

Related Topics

Oracle Applications User's Guide.

Define Freight and Special Charge Types

Order Management enables you to charge for freight and special charges to meet your business needs. The full charge to your customer is visible at the time of order entry and can be communicated to the customer. The freight and special charge amounts can be estimated or final. The actual costs incurred are captured at Ship Confirmation and can be converted to charges based on freight terms and other rules you define. Freight and Special Charges are created and enabled using pricing Modifiers. This is step twenty-nine of the Order Management Setup Steps.

Order Management captures the freight and special charges information and Shipping Execution captures all costs incurred on the shipment of goods. Once ship confirmation completes, the costs are transferred to Order Management and may be used to convert the costs into charges. You can set up your different freight costs in Shipping Execution.

Order Management's freight and special charge feature enables you to:

- Capture the charges at the time of order entry
- Change the freight and special charges until invoicing
- Capture the freight and special charge information at any point in the order flow
- Create various freight and special charge types
- Support charges at various levels (order and line)
- Specify the controls for refunds

Freight Terms

You can choose the freight terms for an order line depending on the Customer Contracts (agreements), Customer, Ship To, and Ship-From locations. Freight Terms can be used as Qualifiers to apply freight & special charges, although no such functionality is seeded with the application. Freight terms can include the following:

Prepaid

You (the shipper) take responsibility for paying the freight costs. The costs are recorded in Shipping Execution.

Prepay and add with fixed charges

You can prepay the freight costs and charge your customer a fixed amount. The costs are recorded in Shipping Execution and transferred to Order Management.

Prepay and add with cost converted to charge

You can prepay the freight costs and pass it on to your customer as a charge with a markup or markdown or a direct pass through. The costs are recorded in Shipping Execution and transferred to Order Management.

A pricing formula and pricing modifier are used to calculate the markup/markdown and apply the charge to the customer invoice.

Collect

The freight carrier bills the customer directly; not you. The costs are not recorded in Shipping Execution or Order Management.

Third Party Billing

The freight carrier bills a third party, not the seller or buyer. The costs are not recorded in Shipping Execution or Order Management.

Freight and Special Charge Types

Order Management provides you with the ability to setup and capture different charge

types and sub type including (but not limited to):

- Duty
- Handling
- Insurance
- Export
- Freight
- Administration
- Miscellaneous

Grouping of Freight and Special Charges

You can setup different sub-types under a give charge type, such as, if the freight or special charge type is Miscellaneous, you can group the following different charges:

- Late penalty charges
- Restocking charges
- Negotiations and legal fees
- Foreign agent commissions

The following Charge Types and sub-types have been predefined by Oracle Advanced Pricing under the Oracle Shipping Execution lookup for FREIGHT_COST_TYPE:

- Insurance
- Export
- Duty
- Freight
- Administration
- Handling

Order Management shares these Freight Cost Types with Shipping Execution for the COST to CHARGE conversion.

Note: You cannot define sub-types for the Shipping Execution Charge

Types lookups.

Additionally, you can only receive cost to charge conversions for auto configured items.

Additionally, Oracle Advanced Pricing has its own lookup type, also called FREIGHT_CHARGES_TYPE. You are allowed to add charge types codes to the Advanced Pricing lookup FREIGHT_CHARGES_TYPE. The following charge type code is predefined for this lookup:

- Miscellaneous

You can define sub-types for the Oracle Advanced Pricing Charge Type Code of FREIGHT_CHARGES_TYPE. The following sub-types are predefined for the Advanced Pricing FREIGHT CHARGE TYPE = Miscellaneous:

- Penalty
- Restocking
- Return Fees

Definition Data Elements

You can define different attributes for setting your charges including the following elements:

- Charge Currency: The currency for the Charge amount setup at list level
- Charge Name: Charge Name picked from the pre-defined setup in pricing
- Level: Order Level or Line level charges
- Calculation Method: Percentage (%), Amt (Per pricing unit), Lumpsum amount Formula based
- Refundable: Whether the charge is refundable
- Automatic: Whether the charge is automatic or manual
- Overridable: Whether the charge is overridable after it is applied
- Start/End Dates: Active date range
- Qualifiers: Qualifiers to apply charges conditionally

Calculation Method

Various common methods of calculating charges are supported. Examples of calculation methods include:

- Fixed amount
- Percentage of line or order amount
- Fixed rate per pricing unit of measure
- Simple pass of a cost
- Percentage markup or markdown of a cost
- User-defined formula for a given charge type. The formula can be constructed using the pricing attributes, constant values, or function returning a value.

Qualifier /Pricing Attributes for Freight and Special charges

The tables indicate both Qualifier Attributes and Pricing Attributes that have been predefined for Freight and Special Charges.

Note: You can also make use of any other Qualifier / Pricing Attributes setup in the Pricing for freight and special charges

Freight and Special Charges Qualifier Attributes

Context	Attribute
ORDER	SHIPPABLE_FLAG
ORDER	SHIPPED_FLAG
ORDER	FREIGHT_COST_TYPE_CODE
VOLUME	LINE_WEIGHT
VOLUME	LINE_VOLUME

Freight and Special Charges Pricing Attributes

Context	Attribute
PRICING ATTRIBUTES	INSURANCE_COST
PRICING ATTRIBUTES	HANDLING_COST
PRICING ATTRIBUTES	DUTY_COST
PRICING ATTRIBUTES	EXPORT_COST
PRICING ATTRIBUTES	FREIGHT_COST
PRICING ATTRIBUTES	ADMINISTRATIVE_COST

For more information on Freight and Special Charges using qualifiers within Order Management, refer to the *Oracle Order Management Implementation Manual, Freight and Special Charges Examples*.

Application of Charges

You can have freight and special charges applied to an order in the following ways:

- Manually Applied
- Open Interface
- Automatically based on the qualifier setup

Note: Any freight charge modifier's you wish to define for ATO configuration items should use a phase that is included in the Order Management workflow 'SHIP' event.

Order or Order Line Charges

You can enter charges for order or order line levels. The Freight and Special Charges are returned by the Pricing Engine and if there are multiple automatic charges of same charge type and subtype then Order Management applies the one with Maximum amount. If the user wants the charge to be applied in preference then they may need to set them up with incompatibility group and precedence as described in the Modifier Setup section.

Note: If there is an applied charge of a Charge Type/Subtype then the LOV for Charge Name field in Charges window will not show any manual charges for the same type/subtype. The Charge Name is always derived from the meaning for the charge sub-type lookup code. If the charge sub-type is NULL then the name is derived from the meaning for the charge type lookup code

Estimate or Actual

The estimated or fixed charge is displayed in the Charges user interface. You can set the amount as Estimated or Fixed.

Note: You can set estimated or fixed charges only after a charge has been applied on an order or order line.

Multiple Unlimited Charges

You can enter an unlimited number of charges at each level with unique combination of Charge Type and Charge Sub-Type.

Timing of Charges Entry

You can enter freight and special charges at any event point or activity, up to the point where the order and line is invoiced. At the point of invoicing the charge will be fixed and no more charges can be added after the line is invoiced.

Changing and Deleting of Charges

Based on your processing constraints, you have the ability to manually change the amount, delete, or cancel charges applied to an order or order line until invoicing. You can enter a reason code if the charge is being changed, however, the history will not be maintained. In addition, you can add processing constraints to prevent charges from deletion or cancellation after a user-definable point in the order's process.

Freight Charges and Included Items

In order to apply any eligible freight charges for an Included Item, the profile option OM: Charges for Included Item should be set to Y.

When this profile option is set to Y, and the calculate price flag of the order line with an included item is either Calculate Price (Y) or Partial Price (P), then the eligible freight charges are applied to the order line.

For backordered lines within Included Items, both the profile options OM: Charges for backorders and OM: Charges for Included Item need to be set to Y to view and apply

any freight charges.

Any freight charge modifiers you define for included item should be within a pricing phase that is included within the Order Management 'LINE' or 'SHIP' workflow event.

Freight charges for Backordered Lines

The Order Management profile option *OM: Charges for backorders* controls how the system will set the value of the calculate price flag for backordered lines.

- If the profile option is set to Y, the system will set the calculate price flag to P and freight charges are calculated for backorder lines
- If the profile option is set to N, the system will set the calculate price flag to 'N' and freight charges are not calculated for backorder lines

Rounding of Freight charges

The Oracle Advanced Pricing profile option QP: Selling Price Rounding Options determines if your freight charges are rounded. See: Oracle Advance Pricing Implementation Guide, Profile Options.

To define Order Management Freight Cost Type Names:

1. Navigate to the Oracle Order Management Freight Cost Types window. Order Management > Setup > Shipping > Freight Carriers, Cost Types > Freight Cost Types.

Order Management Freight Cost Types Window

Name	Type	Currency	Amount	From	To
Export Fee	Export Fees	ANY	259,347,694.96	27-JUN-2004	23-JUN-2005

Description

2. Enter a name for your Freight Cost type in the Name field.
The value entered in this field is the value a Shipping Clerk will see on within the Oracle Shipping Execution Transactions window when entering Freight Costs during the shipping process.
3. Choose a type for your Freight Cost Name from the LOV in the Type field.
4. Select a currency that the Freight Cost Type will use in the Currency field.
5. Enter the default value for your Freight Cost Type in the Amount field. The amount will be defaulted in the Freight Cost window when you enter or select the Freight Cost Name during the shipping process.
6. Enter effective dates for you Freight Cost Name in the Effective Date From/To fields.
7. Save your work.

Setup for Integration with Transportation Execution for Freight Rating

If you plan to use Transportation Execution for Freight Rating, then complete the following steps:

1. In Order Management System Parameters window, the Freight Rating feature has

to be enabled.

2. In Pricing, Formulas and Modifiers need to be setup to convert freight costs returned by Transportation Execution to Charges.
3. In Transportation Execution, Lanes and Rates need to be set up for the Ship Method used in the order.

To define Order Pricing or Shipping Execution Freight Charge lookups

:

Note: Freight and Special charges setup has two different lookups. One lookup is from the Oracle Pricing window and the other is from the Shipping Execution window. The lookup type for Oracle Pricing is *FREIGHT_CHARGES_TYPE* and should be used to define freight charges which are *not shipping related*.

The lookup type from Shipping Execution is *FREIGHT_COST_TYPE* and it should be used to define Freight Costs *that are captured in Shipping*. Ensure that the lookup_codes defined for these two types should be unique in terms of lookup_code and the meaning.

As discussed previously in this section, the meaning is used to display names for freight and special charges.

1. Navigate to the Oracle Pricing / Oracle Shipping Lookups window. Order Management > Pricing > Setup > Lookups

Oracle Pricing Lookups Window

2. Query for Pricing / Shipping lookup = FREIGHT_CHARGES_TYPE / FREIGHT_COST_TYPE respectively.
3. Enter a name for your Pricing or Shipping freight charge lookup in the *Code* field.
4. Enter a meaning that will appear in the List of Values when defining a freight charge within the Modifiers window.

For example, the Lookup type Print has a code of Y, and a value Yes in the Meaning field. When you select the LOV for the Print lookup code, you will see Yes as opposed to Y.
5. Enter a description for your Pricing or Shipping freight charge lookup.
6. Optionally, enter a value in the Tag field to describe your lookup. Tags are used to make Lookups visible within web-based applications such as Oracle iReceivables.
7. Enter effectivity dates for your lookup in the Effective Date From/To fields.
8. Select the Enable check box to enable you Pricing or Shipping freight charge lookup to be selected when entering an order line.
9. Save your work.
 1. To define a new sub-type for Pricing FREIGHT_CHARGES_TYPE, create a new Pricing Lookup where lookup_type = <lookup_code previous defined> This becomes a Type for all sub-type codes.

Sales Orders window

You can setup Charges to apply automatically when a new order or order line is entered. The charges are displayed in Charges user interface accessible from Sales Orders window.

Viewing and Applying Freight and Special Charges

Freight and special charges can be viewed from within the Sales Order window, provided the profile option OM:Charging Privilege has been properly set.

- To view Order level charges, navigate to the Sales Order Header window, select Actions, then select Charges.
- To view Order Lines charges, navigate to the Sales Order Lines window, select Actions, then select Charges.

Field Information for Charges window

- Charge Name: The charge name for the charge.
- Type: The charge type code for Freight Charge
- Rate: The rate percentage specified in the setup of the Freight Charge
- Amt/Unit: If the charge is setup as AMT, then this field contains the amount per pricing unit
- Charge: The applicable charge amount in the Order currency
- Fixed: This check box can be used to mark the charge as Fixed so that the charge is not overridden by the Pricing Engine or any cost conversion programs
- Auto: This check box indicates whether the charge is automatic or manual. Automatic charges are applied directly by the Pricing Engine
- Overridable: This check box indicates whether the charge is overridable by the user. Unless the user has unlimited privileges, no changes are allowed on charges with this box unchecked, although a user can mark or un-mark the charge as fixed or estimated
- Refundable: This check box indicates whether the charge is refundable or not
- Invoiced: This check box will indicate whether the charge is invoiced or not. Invoiced charges are non-modifiable

- Reason: If any change is made to the charge, the user will need to specify the reason for the change.
- Comments: Optional field for entering the comments on the charge

You are allowed to change a Charge as a Credit within the Charges window by changing the integer sign for a value within either the Rate, Percent, Amt/Unit, or Charge Amount fields, provided the charge you are modifying is overridable.

Charge Types which have been defined as Automatic are applied to an order or order line. If multiple charges (automatic charges only) of the same type/subtype are returned by the Pricing Engine, then the charge with highest amount will be applied to the order or line.

Manual Charges are available for use on order or order lines through the Charges window. The LOV for the Charge Name field displays available manual charges only.

- When navigating to the Charges window, if there currently is an applied charge of a type/subtype appearing, then the LOV for the Charge Name field will not show a charge of the same type/subtype.
- If there are no manual charges setup in Pricing, then the Charge Name field LOV returns no records.

Note: If the profile option OM: Charging Privilege is set to UNLIMITED, then you can update manual non-overridable charges.

However, if you choose to update manual non-overridable charges, the update must be performed manually; manual non-overridable charges are never altered by the system, even if the order undergoes repricing.

Returns

The user will be allowed to set Freight Charges for return lines using the Line Category/Line Type as the Qualifier Attributes.

- These Freight charges can be a charge or credit to the customer
- These charges can be setup using a Qualifier of Freight Terms defined on the return line
- The Freight Term will be either defaulted or copied from the referenced line
- User may change the (Defaulted/Referenced) Freight Term, depending upon the contract he has with the Customer, for the Freight on return
- If the Return Line is referenced from any existing Order Line, the refundable freight charges associated with the referenced order, will be available as a credit to the user

- If the user creates a new Return line without a reference to any existing line, then the user will have to manually apply any Refundable Freight Charges on it

Copying Charges

The copy order functionality in Oracle Order Management supports the following pricing options for standard copying of orders and returns:

Copy for Orders

Retain Original Pricing: Retains manual, automatic price adjustments, and charges. The `CALCULATE_PRICE_FLAG` is set to Freeze Price.

Re-price based on user-defined date: Manual adjustments and charges will be recalculated. The `CALCULATE_PRICE_FLAG` is set to Calculate Price.

Copy for Returns

Retain original pricing: Retains the refundable manual and automatic charges. The `CALCULATE_PRICE_FLAG` will be set to Partial. The `CALCULATE_PRICE_FLAG` is set to Partial in order for any manual charges, such as the return and restocking fees can be added to the order.

Re-price based on user-defined date: Retains the refundable manual and automatic charges. The charges are marked as Fixed so that they cannot be overridden by subsequent re-pricing requests. The `CALCULATE_PRICE_FLAG` is set to Calculate Price.

Invoicing

A line level charge is invoiced with the invoicing order line. All order and order line level charges are invoiced with the first invoicing order line. If any new charges are added at the order header level, then the charges are invoiced with the next invoicing order line.

Related Topics

Sales Orders, page 5-12

Invoicing, page 15-1

Returns and Credits, page 5-40

Order Import, page 18-1

Overview of Shipping Tolerances

Oracle Order Management provides you with the ability to capture shipping tolerance

levels for over and under shipments recorded during ship confirmation. The shipping tolerance feature enables you to define various shipping tolerance levels for ordered and expected return quantities. Order Management shipping tolerances are used to validate the percentage of the ordered quantity. Once shipping tolerances have been defined, Order Management then automatically fulfills order lines using the tolerances you defined.

Order Management's shipping tolerances feature captures the following:

- Over and under shipments and returns percentages at the system, customer, site, item, site-item, and customer item levels
- Different tolerances for ordered and returned quantities
- Defaulted tolerances from various sources based on your defaulting rules
- Automatic fulfillment of total shipped quantities for order lines within the under tolerance limit
- Tolerances levels that enable you to over ship at the time of ship confirmation

Over Shipments

When Oracle Shipping Execution attempts to over ship an order, Order Management processes the order based on the shipping tolerances you define. In order to perform an over shipment, Order Management:

- Determines if the ship quantity is within the defined over shipment tolerance levels you defined by setting the OM: Overshipment Tolerance profile option or setting your shipment tolerances in Order Management.
- Notifies the appropriate personnel when an over shipment is above the set shipping tolerance.
- Issues the material for any unpicked or unreserved quantity.

Under Shipments

When Oracle Shipping Execution attempts to under ship an order, Order Management processes the order based on the shipping tolerances you define. In order to perform an under shipment, you must:

- Ship confirm the quantity at the time of closing the delivery
- Determine if the total quantity shipped is within the under shipment tolerances you defined. Any remaining shipment allocations are removed

Note: If the total quantity shipped is under the shipment

tolerances, Order Management will split the original shipment line. The shipment will be shipped as a partial shipment.

Under Shipment tolerances greater than 100% are treated as the equivalent of a 100% tolerance; to close order lines a shipment of a non-zero quantity is required, even if the under shipment tolerance is set to 100%.

Note: If a zero quantity is entered at shipment, the system will process the transaction. However, zero quantity shipments are not allowed; Order Management will therefore perform a backorder for the zero quantity shipment line at ship confirm.

Note: A shipment of a quantity other than zero is needed in order to enable order lines to progress to closure.

Over Shipments Report

Oracle Shipping Execution provides the Over Shipments Report for displaying shipping tolerances. This report displays shipping tolerance information based on the customer, site, item, warehouse, ship date, and order type.

Related Topics

Profile Options, page 2-14

Oracle Shipping Execution User's Guide

Defining Shipping Tolerances

Defining shipping tolerances are based on your customers and items or your customer site and item tolerances.

Prerequisites

- Set up your customer and customer site tolerances in the Customer window
- Set up your tolerances for items in the Master Items window

To define shipping tolerances for orders or returns:

1. Navigate to the Setup Tolerance window.

Setup Tolerance Window

Customer: Computer Service and Rep
Address: Atlanta (OPS)
Address Use: Ship To
Item: AS18947
Number: 1006
Description: Sentinel Deluxe Desktop
Vision Operations
Over Shipment Tolerance: %
Under Shipment Tolerance: %
Over Return Tolerance: %
Under Return Tolerance: %

2. Select the Customer name for the shipping tolerance.
3. Select the customer Address for the shipping tolerance. You can pick a customer address in any Operating Unit accessible to you via your MO: Security Profile.
4. Select the Item Number for the shipping tolerance.

5. Enter the Over Shipment Tolerance percentage.

The over shipment tolerance percentage determines the amount of the shipment you can exceed at the time of ship confirmation.

6. Enter the Under Shipment Tolerance percentage.

The under shipment tolerance percentage determines the minimums amount of the shipment at the time of ship confirmation. If you enter more than 100, the shipping process will use 100.

Note: Order Management currently does not support over and under shipment tolerances for ATOs (Model, Kit and all children). Updates to shipment tolerances for PTOs is currently not allowed.

If you have defined non-zero tolerances within either the Item Form, Customer Form, Shipping Tolerances Form, or the profile option value, the values are ignored for PTOs; the over and under shipment tolerance for PTOs will always default to 0.

If the tolerances are defined with unequal values for a combination of Ship_To with an item, the Ship_To field is not updated.

7. Enter the Over Return Tolerance percentage for return receipts.
The over return tolerance percentage determines the amount of the return you can accept above.
8. Enter the Under Return Tolerance percentage for return receipts.
The under return tolerance percentage determines the amount of the return you can accept below.
9. Save your work.

Release Management Integration Setup for Sales Agreements

Oracle Release Management

Oracle Release Management locates the releases against a Sales Agreement, and uses this information to determine the current picture of demand. In the past, Release Management looked at only one sales order to determine demand (this sales order is identified in the Release Management Processing Rules). Release Management uses the Sales Agreement number in the processing rules, and determines all releases against the Sales Agreements to define the current demand.

See the Oracle Release Management User's Guide, Oracle Release Management Implementation Manual, and Sales Agreements in the Oracle Order Management User's Guide and Implementation Manual.

Scheduling Across Orders Setup

Setting Up

You can control access for the appropriate role.

To set up for the appropriate role:

1. Set the profile option OM: Scheduling Role:
 - CSR only: Will not be able to access the Scheduling Find tab and Scheduling Organizer window. All other functionality for the Order Organizer and Sales Order Pad will remain unchanged.
 - Scheduler only: Will be able to access Scheduling Find tab and Scheduling Organizer window, but not other tabs within the Order Organizer, i.e. Order Information, Line Information, Advanced, and Holds Information.

Note: Scheduler-only users should have their own Menu which should not have access to functionality such as the Sales Orders window, Price Lists, etc.

- CSR and Scheduler: Will be able to access both the Order tabs (Order Information, Line Information, Advanced, and Holds Information) and the Scheduling tab within the Find Orders window as well as the Scheduling Organizer window.
2. Save your work.

Gross Margin

To Set up for Gross Margin:

1. Navigate to the Order Management Parameters window. The default for Calculate Margin is No. To use margin, you must enable Calculate Margin control. Choose whether to do the calculation based on Price or Cost. Save your work.
2. Decide if you want to hold orders that do not meet minimum margin percentages. If you do, decide which order types you want to do this for. Go to the Order Management Transaction Type window and query up each Order Type record and enter the minimum margin percentage. Save each record.
3. Determine which responsibilities do NOT need to be able to see Gross Margin information in the Sales Orders window and the Pricing & Availability window. Using the System Administrator responsibility, navigate to Applications > Responsibility, define or query up a responsibility with "Orders, Returns Main Menu" attached, and exclude the View Margin function from those responsibilities.
4. Create a folder for the Sales Orders window, Order Information tab, Other sub-tab to display both or either Margin Amount and Order Margin %, and a folder for the Line Items tab to display any or all of the Cost, Margin Amount and Margin % fields on the Main sub-tab or the Pricing sub-tab. Assign that folder to be the default folder for those responsibilities who can see margin.

Create a folder for the Pricing & Availability window Pricing tab to display any or all of the Cost, Margin Amount and Margin % fields and assign that folder for those responsibilities who are allowed to see margin.

User Item Description

To set up the User Item Description:

To set up the Order Management system to use the User Item Description for invoicing purposes or for ad hoc item entry, do the following:

1. Create a folder for the Line Items tab to show the User Item Description on the Main sub-tab. Assign that folder to be the default folder for those responsibilities who need to be able to key or view the User Item Description. Save your work.
2. To create a generic item to be used for drop shipping miscellaneous items that you do not typically sell or stock, create a dummy item in the Inventory Master Items window. Set the item attribute Default Source Type to External, so the item will be always drop shipped. Set the item attribute 'Allow Description Update' on the Purchasing tab to checked, so that PO will not reject the user item description.

Setup for Related Items

To set up the Related Items feature:

Set the profile OM: Enable Related Items and Manual Substitutions to Yes. Setup for Scheduling Usability Enhancements Across Orders.

Note: APS customers should not use this feature as there is an impact on collections and forecast consumption which APS will take up in next release

To set up the Item Relationships using Oracle Inventory:

1. Navigate to the Item Relationships window.
2. Define the relationships between items by selecting the Type of relationship, the most commonly used relationship types are:
 - Substitute:** One item is a substitute for another (alternate item)
 - Superseded:** One item is replacing another, probably older version
 - Up-sell:** Selling an improved version of the item originally ordered
 - Cross-Sell:** Selling additional items that go along with the item originally ordered

Item Relationships Window

The screenshot shows the 'Item Relationships (V1)' window. It contains a table with columns: From Item, To Item, Type, Reciprocal, Planning Enabled, and Effective Dates (From, To). The table lists several relationships for the 'From Item' AS54888. The 'Type' column has dropdown menus with values like Up-Sell, Substitute, Superseded, Cross-Sell, Related, and Service. The 'Reciprocal' and 'Planning Enabled' columns have checkboxes. The 'Effective Dates' columns have text boxes and a calendar icon. Below the table is an 'Item Description' section with 'From' and 'To' fields, and a 'Planning Details' button.

From Item	To Item	Type	Reciprocal	Planning Enabled	Effective Dates (From)	Effective Dates (To)
AS54888	AS18947	Up-Sell	<input type="checkbox"/>	<input type="checkbox"/>		
AS54888	CM31556	Substitute	<input type="checkbox"/>	<input type="checkbox"/>		
AS54888	CM18761	Superseded	<input type="checkbox"/>	<input type="checkbox"/>		
AS54888	CM76840	Cross-Sell	<input type="checkbox"/>	<input type="checkbox"/>		
AS54888	CM00044	Related	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
AS54888	BR-101	Service	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
			<input type="checkbox"/>	<input type="checkbox"/>		
			<input type="checkbox"/>	<input type="checkbox"/>		
			<input type="checkbox"/>	<input type="checkbox"/>		
			<input type="checkbox"/>	<input type="checkbox"/>		

Item Description

From: Sentinel Standard Desktop
To: Sentinel Deluxe Desktop

Planning Details

In the above window, the item 'AS54888' is setup with different related items of different relationship types like Cross-sell, Up-sell, Supersede, Substitute. This window can be accessed from Inventory > Items > Item Relationships.

Current Relationship Types

- Related
- Substitute
- Cross-Sell
- Up-Sell
- Service
- Prerequisite
- Collateral
- Superseded
- Complimentary
- Impact
- Conflict

- Mandatory Charge
- Optional Charge
- Promotional Upgrade
- Split
- Merge
- Migration

Note: The relationship type 14 (Promotional Upgrade) is used by Advanced Pricing for Item Upgrade setup. So on the Related Items window, the items that are setup with relationship type 14 are not shown.

3. Save your work.

Setup of Recurring Charges

Charges are classified into 3 types: One-time, Recurring, and Usage for service items. Order Management now provides the Recurring Charges functionality to order and price products with recurring and one-time charges. The MACD (Move Add Change Disconnect) feature of Order Management has been enhanced with the addition of the Recurring Charges functionality, and is now referred to as TSO (Telecommunications Service Ordering).

The following are the setup steps to be carried out for Recurring Charges:

If MACD is already installed, you only need to set up the following:

- Profile option OM: UOM Class for Charge Periodicity. It determines what domain will be used to hold the allowable charge periodicities. The domain is a UOM class in Inventory. Inventory has seeded a UOM class called 'Period' that will hold UOMs: Daily, Weekly, Monthly, Quarterly and so on. The profile option is seeded with the value 'Period'. Inventory has further seeded a value set INV_CHARGE_PERIODICITY that will hold UOMs: Weekly, Monthly, Quarterly, Yearly and so on.
- System Parameter Enable Recurring Charges should be set to Yes. The default value is No. This is a one-time enabling process and cannot be reversed.
- Defaulting rule for retrieving the correct charge periodicity defined for the item in Item Master.

If MACD is not installed, you require to install it first and then setup the Recurring

Charges features.

Trading Community Usage Within Order Management

In general, previous releases of Order Applications and initial releases of Oracle CRM products utilized the Oracle Receivables Customer Model for storing and retrieving customer information.

You can model customers and customer details using Oracle's Trading Community model. Oracle's Trading Community customer model is a powerful customer architectural design, building on the Receivables Customer model, enabling users to now define and maintain customer hierarchies and relationships between customers and sites. If a CRM or ERP application maintains customer information, the application is using the Trading Community customer model.

Trading Community enables you to:

- Separate entities you enter into a relationship with, from the business relationship itself
- Provide a common location entity that can be shared, enabling greater optimization for distributed planning
- Maintain businesses and people as different entity types
- Enables multiple customer relationships to be established for one common entity

Terminology

Trading Community

- **Party:** This is a generic term for any entity which can have any type of relationship with your company. The three primary party types are:
 - **Person:** This party type is typically used when you are creating an entity that operates within a business to customer environment.
 - **Organization:** This party type is typically used when you are creating an entity that operates within a business to business environment.
 - **Party Relationship:** This party type represents a binary relationship between two parties such as a partnership. Party relationship types can be seeded or user-defined. A party relationship is optionally a party itself, meaning certain party relationships can enter into relationships themselves (currently not supported within Order Management).
- **Party Site:** Party Site represents the link between a party and a location (a valid location for the party. Typically, your organizational hierarchy is used when

modeling using party relationships.

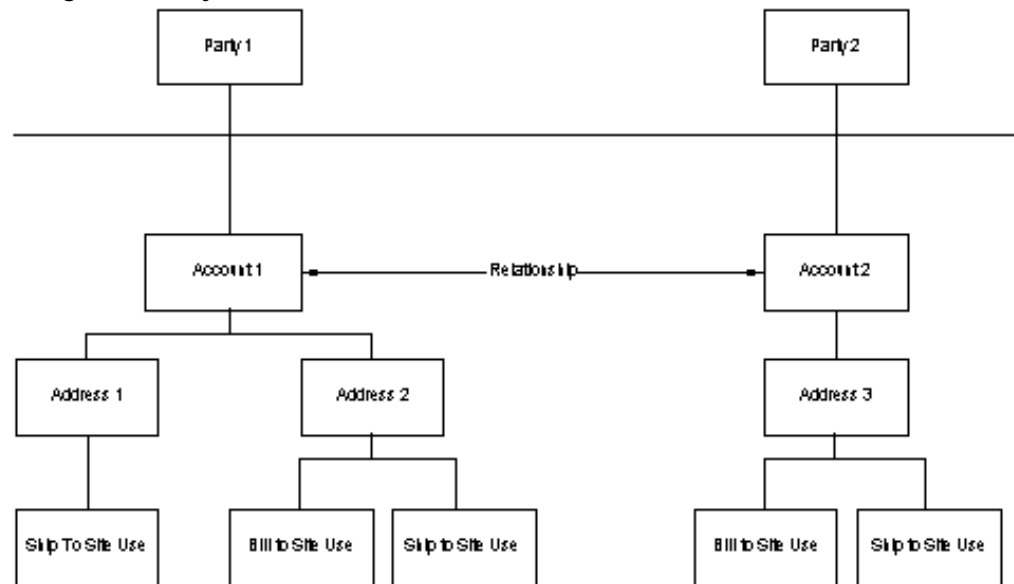
- **Account:** An account represents a relationship between your company and a party in the Trading Community model who is your customer. Accounts contain the attributes of the selling relationship between your organization and a party. Account attributes do not describe a party; they only exist when a selling relationship is present between the your organization and a party. The information which is used for processing orders and receivables transactions is part of the account information.
- **Account Site:** A party site address that is used within the context of an account.
- **Account Site Usage:** An account site created for specific usage; for example, billing or shipping purposes. If a new account site usage is created for a Customer, then that Account Site Usage will be marked as Primary.

Mapping Order Management terminology to Trading Community terminology

- **Customer Site, Customer Location, Customer Address:** These terms, within Order Management equate to Trading Community Account Sites.
- **Bill To, Ship To, Deliver To:** These terms, within Order Management, equate to Trading Community Account Sites Usages.

The following figure describes the conceptual usage of the Trading Community model as utilized currently within Order Management.

Trading Community Model



The figure above conceptually represents the Trading Community customer model and how Trading Community has been integrated within the Order Management Application. When defining a customer, you are defining a Trading Community account, which can be linked to a new or existing Party. Accounts have at least one address and each address may have one or more site uses. You can also create new relationships among accounts across parties.

Within Order Management, each account belongs to a party. These parties may have additional relationships and details defined, but Order Management currently only utilizes a limited subset of the party data (accounts, addresses, and sites usages).

The Trading Community model includes all the information which was previously stored in the Receivables customer model. This includes information such as:

- Customers
- Customer addresses and site uses
- Profile amounts
- Customer relationships

In order to maintain backward compatibility for the Oracle Receivables customer model, Order Management currently accesses data stored in Trading Community database tables via Order Management database views. Future development projects are in progress to update Order Management applications code to retrieve Trading Community details directly from Trading Community base tables rather than utilizing

Order Management views.

As Order Management adds new features and additional functionality to its core application, users will begin to see Trading Community terminology incorporated into Order Management Forms (windows), Reports, Concurrent Programs, and product documentation. Until these project are completed, Order Management forms will continue to use names of entities as they existed in the Receivables customer database tables. The following table provides a mapping of these field names.

Mapping of Entities in Receivables Customer Database Tables

Order Management Form (window) Entity Name	Trading Community Base Table Entity Name
Customer Number	Account Number
Customer Name	Party Name

For more information on Trading Community and the new Trading Community customer model, see :*Oracle Receivables User Guide*, Customers.

Oracle Pricing Setup

This chapter covers the following topics:

- Overview of Basic Pricing
- Oracle Advanced Pricing Versus Basic Pricing
- Pricing Terminology
- Basic Pricing Features
- Setting Up Basic Pricing
- Overview of Pricing Security
- Pricing Security Terms
- Pricing Security and Operating Units
- Setting up Pricing Security
- Changes to Pricing windows after Upgrading and Turning Pricing Security On
- Assigning Ownership of Pricing Entities to Operating Units (Entity Usage page)
- Creating Pricing Entity Usage
- Making Bulk Updates to Pricing Entity Usage
- Creating Privileges
- Using the Bulk Create Privileges feature
- Setting up Default Security Profile Options for New Pricing Entities
- Security Profile Option Settings Compared
- Setting Pricing Security ON
- Overview of Price Lists
- Maintaining Price Lists
- Price List Features
- Overview of GSA Pricing

- Setting up GSA Pricing
- Overview of Formulas
- Overview of Modifiers
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- Price Book
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Overview of Basic Pricing

This section explains how to implement the Basic Pricing component of Oracle Order Management and includes information on the following topics:

- Definitions of pricing terms and feature highlights
- Implementation Planning Process Flow
- Defaulting Rules in Basic Pricing
- Pricing Security
- Price Lists
- GSA Pricing
- Formulas
- Freight And Special Charges
- Pricing Engine Request Viewer
- Agreements
- Modifiers
- Contexts and attributes
- Profile Options and Systems Parameters (see the Pricing chapter on profile options)

The Basic Pricing component of Oracle Order Management provides the capability to price orders according to price lists, pricing formulas, or agreements. You can also apply discounts, control the lowest level price that may be given in order to comply with General Services Administration Agency (GSA) regulations, and apply freight and logistics related charges to orders.

Note: If you have licensed Oracle Advanced Pricing, you should not use this section for implementation guidance. Instead, refer to the *Oracle Advance Pricing Implementation Manual* and *Oracle Advanced Pricing User's Guide*.

Oracle Advanced Pricing Versus Basic Pricing

The term basic pricing refers to a component of Oracle Order Management that provides pricing functionality when Oracle Advanced Pricing is not installed. Oracle

Advanced Pricing and basic pricing have common software components; however, Oracle Advanced Pricing extends and expands the capabilities of basic pricing.

The pricing system software components examine the installation type (either full or shared) to determine the appropriate mode in which to run. Users of basic pricing are installed as "shared" and are not licensed to use Oracle Advanced Pricing capabilities. When in basic mode, the pricing system software components restrict exposure of advanced features in the setup windows. Because the information necessary to drive Oracle Advanced Pricing functionality cannot be set up in a pricing implementation running in basic mode, use of Oracle Advanced Pricing features is also inhibited.

Users who have licensed Oracle Advanced Pricing are installed as "Full." The pricing setup windows enable setup for all information needed to drive features provided by Oracle Advanced Pricing.

The following table describes the primary differences between Oracle Advanced Pricing and the basic pricing capabilities included in Oracle Order Management:

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Archive and Purge Pricing Entities	Same as Advanced Pricing.	Supports removal of price list and modifier list lines data no longer required for current operations
Pricing Security (Privileges)	Same as Advanced Pricing.	The Pricing Security Administrator responsibility can grant access privileges to the following pricing entity types: <ul style="list-style-type: none">• Standard Price List• Modifier• Agreement Price List
Pricing Security (Entity Sets)	Entity sets are not available in basic pricing.	Using the Entity Set Page, the Pricing Administrator can create "sets" of pricing objects such as a set of price lists that can be granted access roles.

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Pricing Security (Access Levels)	<p>The following access levels are supported by site level profile settings:</p> <ul style="list-style-type: none"> • View Only • Maintain 	Access levels and privileges are the same as in basic pricing.
Pricing Security (Privileges)	<p>You can grant access privileges to the following Grantee types:</p> <ul style="list-style-type: none"> • Global • Operating Unit <p>Pricing Security supports authorization roles for creating maintaining, and viewing pricing data. Security Privileges are set up and managed in the HTML user interface.</p>	In addition to those in basic pricing, you can grant access privileges to the following Grantee Types: Responsibility and User.

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Price list	<p>Enables you to set up:</p> <ul style="list-style-type: none"> • Price List Header/Lines • One currency per list • Effective date at list • Rounding factors • Payment terms • Freight terms • Freight carriers • Percentage price for service items • Service price • Active Flag • Mobile Download • Global Flag to support Security feature • Security enabled rules checking 	<p>Advanced Pricing includes all basic price list features and adds the capability to define point and range price breaks on a price list. In the current release, all price breaks have been made continuous, which means that the high value of one break would be the low value of the next break.</p>
Pricing attributes on Price List	<p>In basic pricing, you can use one data source, called a context, per order line. Each context can have 100 attributes.</p>	<p>Advanced Pricing adds the capability to support multiple contexts. You can use seeded values or you may define your own contexts. You are limited to 100 attributes per context.</p>

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Secondary price lists	One secondary price list is supported.	<p data-bbox="1187 331 1446 527">Advanced Pricing adds capability to define and use unlimited secondary lists. The chaining of secondary lists is <i>not</i> supported.</p> <p data-bbox="1187 548 1446 638">A profile option enables a qualifier check for secondary price lists.</p>

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Qualifiers: Price Lists	Qualifiers are not supported for price lists in basic pricing. In Oracle Order Management, you can create defaulting rules that define when (and thus qualify) a price list is defaulted to the sales order header or line. As an example, you can qualify a price list based on order type, customer, and other attributes from Order Management.	<p>Qualifiers are fully supported for price lists in Advanced Pricing:</p> <ul style="list-style-type: none"> • Ability to attach qualifier groups or enter qualifiers for the price list. • All seeded context values for Advanced Pricing as well as user-defined qualifiers (requires Attribute Mapping) are supported. • Precedence is derived from the Precedence Number field on the Contexts Setup window and can be configured by the user in Advanced Pricing. • Multiple with and/or relations between qualifiers is possible. • Qualifiers enable you to define unlimited price lists for an item. • Note: You cannot define Order Amount as a qualifier.
Product hierarchy price list notes	Basic pricing only supports flattened categories.	Advanced Pricing supports hierarchical and flattened categories.

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Price breaks on price lists	Not supported in basic pricing.	<p>Advanced Pricing enables price breaks on price lists using the following measures of quantity:</p> <ul style="list-style-type: none"> Quantity Amount (excluding Item Amount) Weight Other user defined attributes <p>The following break types are supported for Application Method of Unit Price and Percent Price:</p> <ul style="list-style-type: none"> Point break Range break
Price include breaks on price lists: Block Pricing	Not supported in basic pricing.	<p>Use Block Pricing (Application Method of Block Price) to define a price for the entire set of a block:</p> <ul style="list-style-type: none"> Block pricing can be used with existing setups (Point Breaks and Range Breaks).

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Multi-Currency Conversion Lists	Basic pricing does not include multi-currency conversion lists.	<p data-bbox="1089 336 1360 590">Maintain prices in a single list with one base currency and to define multiple currency conversion rates and currency-specific markup/markdown equations.</p> <p data-bbox="1089 615 1360 768">A Multi-Currency Conversion window enables users to define Currency To conversion criteria.</p> <p data-bbox="1089 793 1360 953">Seeded conversion types include: Fixed, Formula, User-defined, Spot, EMU fixed, transaction, and corporate.</p> <ul data-bbox="1109 978 1360 1604" style="list-style-type: none"> <li data-bbox="1109 978 1360 1171">• Some of these seeded conversion types require Oracle General Ledger to be installed. <li data-bbox="1109 1197 1360 1339">• You can define markup criteria per currency definition. <li data-bbox="1109 1365 1360 1604">• A concurrent program Update Price Lists with Multi-Currency Conversion Criteria is provided.

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Formulas	<p>Basic pricing enables you to define Static Formulas. Static Formulas require a concurrent manager program to be run that populates the list price column in the price list window so that price is available for engine calls.</p> <p>With basic pricing, you can attach formulas to price lists. These formulas can include mathematical operators, numeric operands, and PL/SQL functions, such as min/max, that may be imbedded in a formula.</p> <p>Sixteen seeded formulas are included (these can be updated):</p> <ul style="list-style-type: none"> • Eight Cost-to-Charge formulas • Eight Cost-to-Charge with Markup formulas 	<p>Advanced Pricing adds the following features:</p> <ul style="list-style-type: none"> • You can attach formulas to modifiers as well as price lists. However, static formula generation is available only for price lists in Advanced Pricing. • Dynamic Formula Expansion: Dynamic expansion enables the pricing engine to dynamically calculate the formula price at based on variable values available at run time. Dynamically expanded formulas can be attached to either price lists or modifiers. <p>Note: Price lists that have a dynamic formula with a Modifier Value as a component cannot be attached to a price list line.</p>

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Formula Components	<p>Component types include:</p> <ul style="list-style-type: none"> Numeric values Factor list One pricing context throughout formula with up to 100 attributes. Context must match context on the price list line to which the formula is attached. <p>Adjustment factors (factor list): Basic pricing supports multiple factors. However, it has a limitation in basic pricing of one pricing attribute context throughout the formula with up to 100 attributes. Seeded context must be used.</p>	<p>Advanced Pricing includes all formula component types available in basic pricing, and adds the following:</p> <ul style="list-style-type: none"> List price of an item in a specific price list (product and service) pricing attribute. Modifier Value is entered in the Modifier Value field on the modifier setup window for a modifier line as a component to a formula. A FUNCTION type that calls Advanced Pricing API <code>Get_Custom_Price</code>. Adjustment Factors: Advanced Pricing supports multiple adjustment factors. Both context - seeded and user-defined contexts and attributes can be used as adjustment factors. Multiple pricing contexts for pricing attributes.

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Price List Maintenance	Not available in basic pricing.	<p>Advanced Pricing provides search and maintenance capability for a single price list or across multiple price lists.</p> <p>Use the Bulk Change feature for mass updates or update individual price list lines.</p> <p>Updates can be made to price list lines for:</p> <ul style="list-style-type: none"> Value Static and Dynamic Formula Price List Line effective dates <p>Price List Maintenance is available through the HTML user interface. See the <i>Oracle Advanced Pricing User's Guide</i>, Using the Price List Maintenance feature for more information.</p>
Bulk Import of Price List	<p>Basic pricing:</p> <ul style="list-style-type: none"> Imports large volume of price lists via the interface tables. Provides increased performance compared to using the Business Object API. 	Same as basic pricing.
Copy price list	Basic pricing provides this capability.	Same as basic pricing.

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Adjust price list	Basic pricing provides this capability.	Same as basic pricing.
Add items to price list	Supported. (User must have Maintain access privilege to add items.)	Same as basic pricing. (User must have Maintain access privilege to add items.)
GSA pricing	Supported	Same as basic pricing.
Modifier list types	Basic pricing supports the following Modifier List Types: <ul style="list-style-type: none"> • Discount • Surcharge • Freight and Special Charges 	Advanced Pricing provides all Modifier List Types provided in basic pricing, and adds the following: <ul style="list-style-type: none"> • Promotion • Deal
Modifier application methods	Basic pricing supports the following modifier application methods: <ul style="list-style-type: none"> • Manual • Automatic • Overrideable 	Same as basic pricing and adds Ask For Promotions and Deals.
Active box on Modifier header	Not enabled in basic pricing.	Enabled in Advanced Pricing.
Modifier levels and level code	Order, order line level.	Basic level codes and adds Line Group.

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Modifier header qualifiers and attributes	<p>Basic pricing provides seeded qualifier contexts including:</p> <ul style="list-style-type: none"> • Customer • Price List • Unlimited price lists (new OM feature) • Seeded attributes within contexts. Customer context includes these attributes: Customer class (defined in RA customers); Site; and Customer Name. <p>Note: Modifier List Type of Freight and Special Charges supports additional modifier header qualifiers and attributes.</p> <p>Security-enabled rules checking.</p>	<p>Includes basic pricing features, plus Advanced Pricing adds these capabilities:</p> <ul style="list-style-type: none"> • User assignment and override of precedence is possible. • Qualifiers can be used with both seeded and user defined contexts possible. • Users can define attributes with user-defined contexts. Up to 100 attributes can be defined for each context, and users can define any number of contexts. • Seeded qualifier attributes can be redirected to other data sources using the attribute mapping feature (see attribute mapping topic). • Users can control qualifier precedence. • Entered Context: Seeded and user-defined is possible. • User control of

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Modifiers: line types	Types available include:	attribute precedence possible.
		<ul style="list-style-type: none"> • Attaching qualifier groups to modifier headers possible.
	<ul style="list-style-type: none"> • Discount: Fixed amount, Percent, New Price • Surcharge: Fixed amount, Percent, New Price • Freight Charges: Fixed amount, Percent, Lumpsum • Price Break 	<p>Advanced Pricing includes the basic pricing types and adds:</p> <ul style="list-style-type: none"> • Coupon Issue • Item Upgrade • Other Item Discount • Terms Substitution • Promotional Goods

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Modifiers: line qualifiers and attributes	<p>Basic pricing provides the following fixed qualifiers including:</p> <ul style="list-style-type: none"> • Agreement Name • Agreement Type • Order type • Customer PO <p>Usable Product Attributes include:</p> <ul style="list-style-type: none"> • Item • Item categories • All items <p>Usable pricing attributes:</p> <p>Limited to one context when product attribute is ALL Items</p> <p>Note: Modifier Line Type of Freight and Special Charges supports additional modifier line qualifiers and attributes.</p>	<p>Advanced Pricing includes the line level qualifiers provided in basic pricing and adds:</p> <ul style="list-style-type: none"> • Define unlimited number of qualifiers. • Can attach qualifier groups as qualifiers. • Can use seeded contexts and define additional contexts. • User-defined contexts are active. • Multiple qualifiers with AND/OR conditions can be created. <p>Product attributes in Advanced Pricing include those defined in basic pricing and adds user-defined product attributes.</p> <p>An unlimited number of pricing attributes can be created in Advanced Pricing. The user can change the precedence.</p>

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Modifiers: Buckets for Manual Modifiers	Basic pricing does not provide this feature.	Buckets for manual line/group of line level modifiers are supported for the following modifier types: <ul style="list-style-type: none"> • Discount • Surcharge • Price Break • Freight and Special Charges
Modifier: Optional Currency	Enables modifier to be used across all transaction currencies: <ul style="list-style-type: none"> • Optional Currency selected from LOV. • Percent, Amount, New Price, Lumpsum. • No currency conversion applied. • Modifier setup numeric value will always be applied in currency units of the transaction currencies. • No restrictions to use; therefore, user discretion advised for appropriate use. 	Advanced Pricing provides the same capabilities available in basic pricing.

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Modifiers: Price Breaks	<p>Line level price breaks in basic include:</p> <ul style="list-style-type: none"> • Percent • Amount • Fixed Price • Equal operator • Break Type Code - Limited to point type only • Volume Type (Item Amount, Item Quantity) 	<p>Line level price breaks in Advanced Pricing includes all price break functionality in basic pricing, and adds the following:</p> <ul style="list-style-type: none"> • Equal, between arithmetic operator • Point and Range • Context - Seeded and user defined • Recurring <p>Define automatic continuous price breaks based on Net Amount for line and group of line level.</p> <p>Define accumulated range price breaks based upon an accumulated value that is used as starting point of the break calculation. Regular unused pricing attributes with volume context can be assigned as the accumulation attribute for a modifier range break. Accumulation attribute can be sourced by the engine via two methods in attribute management</p> • Attribute Mapping

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Modifiers: Freight and Special Charges	<p data-bbox="630 426 938 457">Supported Header Qualifiers</p> <ul data-bbox="630 478 837 856" style="list-style-type: none"> <li data-bbox="630 478 837 510">• Freight Terms <li data-bbox="630 548 837 579">• Order Amount <li data-bbox="630 617 837 648">• Line Weight <li data-bbox="630 686 837 718">• Order Weight <li data-bbox="630 756 837 787">• Line Volume <li data-bbox="630 825 837 856">• Order Volume <p data-bbox="630 894 906 926">Supported Line Qualifiers</p> <ul data-bbox="630 947 932 1535" style="list-style-type: none"> <li data-bbox="630 947 837 978">• Order Volume <li data-bbox="630 1016 837 1047">• Order Type <li data-bbox="630 1085 846 1117">• Order Category <li data-bbox="630 1155 837 1186">• Line Type <li data-bbox="630 1224 837 1255">• Line Category <li data-bbox="630 1293 932 1325">• Shipment Priority Code <li data-bbox="630 1362 837 1394">• Shipped Flag <li data-bbox="630 1432 837 1463">• Shippable Flag <li data-bbox="630 1501 870 1535">• Freight Cost Type 	<ul data-bbox="1089 331 1325 363" style="list-style-type: none"> <li data-bbox="1089 331 1325 363">• Runtime Sourced <p data-bbox="1089 426 1341 552">Advanced Pricing provides the same capabilities available in basic pricing.</p>

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Effectivity date controls	Effectivity Date: order date only	<p>Order date, plus Advanced Pricing adds:</p> <ul style="list-style-type: none"> • Ship Date • Order and Ship Date <p>Advanced Pricing also adds fields for Promotion Version, parent promotion, and parent version.</p>

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Promotional limits	Basic pricing does not provide this feature.	<p>Advanced Pricing includes this feature. You can define promotional limits by:</p> <ul style="list-style-type: none"> Gross Revenue Usage Cumulative Discount Amount Item Quantity Accrual Units <p>Limits can be set:</p> <ul style="list-style-type: none"> Within current transaction Across all transactions <p>Can apply limits for:</p> <ul style="list-style-type: none"> Customer attributes Product Hierarchy <p>Types of limits:</p> <ul style="list-style-type: none"> Soft Limit (If limit is exceeded, give the full benefit) Hard Limit (If limit is exceeded, adjust or deny the benefit) <p>Hard Limit enforcement:</p> <ul style="list-style-type: none"> Hold No Hold <p>Security enabled rules checking</p>

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Duplicate Modifier Lines	Basic pricing supports duplicate modifier lines if the profile option QP: Allow Duplicate Modifiers is set to Yes.	Advanced Pricing allows duplicate modifier lines within a modifier list.
Copy Modifier	Basic pricing does not provide this feature.	You can create a new modifier by copying an existing one.
Pricing Organizer: Modifiers	Basic pricing does not provide this feature.	<p>Advanced Pricing includes this feature, which allows users to query on the setup of modifiers:</p> <ul style="list-style-type: none"> • Modifier List • Modifier Lines • Products (including Excluded Products) • Pricing Attributes • Qualifiers <p>Query criteria can be saved in Personal or Public folders. Can open Modifiers from the Organizer Summary. Security-enabled rules checking.</p>

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Pricing Engine Request Viewer	<p>Basic pricing features include viewing pricing requests information such as:</p> <ul style="list-style-type: none"> • Pricing Engine Requests • Pricing Engine Request Lines <ul style="list-style-type: none"> - List Price - Selling Price - Service and Serviceable items - Price List lines and Modifier lines evaluated and deleted by the pricing engine • Pricing Engine Request Line Details <ul style="list-style-type: none"> - Price List lines and Modifier lines evaluated and deleted by the pricing engine - Attributes sent to the pricing engine by the calling application - Attributes used in pricing by the pricing engine • Debug Log <p>Note: Accessible from the Tools menu of the Sales Order Pad.</p>	<p>Same as basic pricing, plus can view the relationship between lines for modifier types promotional goods and other item discounts.</p> <p>Also accessible from the Pricing Manager Responsibility</p>
Security enabled rules checking		

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Agreements	<p data-bbox="722 331 1149 394">Basic pricing agreement features enable you to:</p> <ul data-bbox="722 415 1149 1066" style="list-style-type: none"> <li data-bbox="722 415 1149 489">• Set payment terms: Invoicing rule, Accounting rule <li data-bbox="722 520 1112 552">• Set freight terms: Freight carrier <li data-bbox="722 583 1117 657">• Create Standard and Agreement Price List <li data-bbox="722 688 1063 762">• Define using customer part numbers. <li data-bbox="722 793 1003 825">• Revise original terms. <li data-bbox="722 856 1149 930">• Enter Revision numbers, date, and reasons at the line level only. <li data-bbox="722 961 971 993">• Set Effective dates. <li data-bbox="722 1024 1015 1056">• Create Volume breaks. 	Same as basic pricing.

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
HTML Pricing Setups - Home Page	Basic pricing does not provide this feature.	<p data-bbox="1089 331 1370 590">With the Oracle Pricing User responsibility, Advanced Pricing users can perform the following tasks in Advanced Pricing HTML Pricing Setup from the Home Page:</p> <ul data-bbox="1089 611 1354 1003" style="list-style-type: none"> <li data-bbox="1089 611 1354 674">• Search for price lists and modifier lists <li data-bbox="1089 716 1333 873">• Shortcut links to create price lists, modifier lists, and price list maintenance <li data-bbox="1089 915 1338 1003">• View Recently Created Price Lists and Modifier Lists

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
HTML Pricing Setups - Price List	Basic pricing does not provide this feature.	<p data-bbox="1187 333 1464 558">With the Oracle Pricing User responsibility, Advanced Pricing users can perform the following tasks in Advanced Pricing HTML Pricing Setup:</p> <ul data-bbox="1187 583 1464 1283" style="list-style-type: none"> <li data-bbox="1187 583 1425 615">• Create a Price List <li data-bbox="1187 653 1425 747">• Create a Price List line with Pricing Attributes <li data-bbox="1187 785 1446 879">• Create a Price Break line with Pricing Attributes <li data-bbox="1187 917 1442 976">• Update Price List and Price List Lines <li data-bbox="1187 1014 1464 1052">• Delete a price list line <li data-bbox="1187 1089 1451 1148">• Access Price List Maintenance feature <li data-bbox="1187 1186 1464 1283">• BSA related fields are not available in the HTML user interface

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
HTML Pricing Setups - Modifiers	Basic pricing does not provide this feature.	<p data-bbox="1089 333 1370 554">With the Oracle Pricing User responsibility, Advanced Pricing users can perform the following tasks in Advanced Pricing HTML Pricing Setup for Modifiers:</p> <ul data-bbox="1089 579 1370 1199" style="list-style-type: none"> <li data-bbox="1089 579 1370 705">• Create a modifier list (Discount, Surcharge, Deal, or Promotion List) <li data-bbox="1089 743 1370 999">• Create a modifier line for discount, surcharge, price break, or promotional goods (additional buy products not supported) <li data-bbox="1089 1037 1370 1142">• Update modifier list and modifier lines for types supported <li data-bbox="1089 1167 1370 1199">• Excluded Products

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Price Book	<ul style="list-style-type: none"> • Create full price books • Supported publishing options: <ul style="list-style-type: none"> - Send to Printer - E-mail - View Document (PDF, Excel, RTF) • Delete Price Book • Attributes for Price Calculation Criteria limited to basic pricing attributes • Accessible from Oracle Pricing User responsibility 	<ul style="list-style-type: none"> • Adds capability to create and publish price books: <ul style="list-style-type: none"> - Create Delta Price Book - Get Catalog XML message • Additional publishing option: <ul style="list-style-type: none"> - Send XML Message • More extensible attributes used for Price Calculation Criteria • Accessible from Oracle Pricing User responsibility
Attribute Mapping (Extensibility Feature)	Basic pricing does not provide this capability.	Use attribute mapping to extend pricing to a variety of non-standard sources to drive your pricing. These data sources can be within or from outside Oracle Applications.
Get_Custom_Price API (Extensibility Feature)	Basic pricing does not provide this capability.	Advanced Pricing adds this feature. The Get_Custom_Price API allows you to execute your own code as a part of the Advanced Pricing Engine's execution cycle.
Qualifiers and groups	Not available in Basic Pricing. Defaulting is available for price lists and modifiers.	Included in addition to defaulting for basic pricing.

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Modifiers other differences	Defaulted to single available bucket (bucket 1). User control of incompatibility feature inactive in basic pricing. User control of phase/event mapping inactive in Basic.	Oracle Advanced Pricing adds: multiple buckets, seeded or user defined buckets, user control of phase event mapping, user control of incompatibility/exclusivity modifier control feature, user control of incompatibility resolve method by setting choice of best price or precedence, accrual features, formula in a modifier feature, and active exclude item (product attribute).

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Oracle Order Management integration with Pricing	<p>Order Management integration with basic pricing supports the View Adjustments feature and the following features:</p> <ul style="list-style-type: none"> • Manual price override • Manual discount override • Reason Code • Modifier Dates • Display Qualifier Attributes and display Pricing Attributes buttons on UI • One pricing attribute context • Up to 100 attributes can be used in the single context • Action >Price Order is available. • Action >Price Line is available. • Calculate Price Freeze Flag can be set. • Sales Agreement Order Support: Create a simple price list from the Sales Agreement window. <p>Security enabled rules checking. Global Flag and security rules enforced. If Global box selected on price list, modifier, or agreement price list, the pricing window can be used regardless of which operating unit created it.</p>	<p>Order Management, when integrated with Advanced Pricing, provides all features supported with basic pricing and adds:</p> <ul style="list-style-type: none"> • View Adjustment: Relationship button, Item Upgrade, Term Substitution • Coupon entry • Ask for promotions • User entered attributes: Multiple attribute contexts can be used • Up to 100 attributes per context • Promotional Limits Hold: <ul style="list-style-type: none"> - Place holds where violated. - No holds are placed. - Place order on hold when any violation occurs.

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Oracle Order Management integration with Pricing: Sales Agreement	<p>Create simple in-line price list and modifier list from within the Sales Agreement window. Other tab displays additional information:</p> <ul style="list-style-type: none"> List Source Document Number (Sales Agreement number) and List Source Code automatically populated on Price List and Modifier List. Automatic creation of sales agreement as qualifier for Price List and Modifier header and lines Price List provides fields for: Customer Item, Address, Address Category Customer Name and Number populated 	<p>Create price break range type modifiers based on accumulated sales agreement fulfillments (across releases). The price break here will be continuous.</p> <p>Volume accumulation attributes have been seeded for Sales Agreement use only. The following accumulation attributes can be selected when setting up the modifier:</p> <ul style="list-style-type: none"> Sales Agreement Amount Sales Agreement Line Quantity Sales Agreement Line Amount
Pricing Engine	<p>In basic pricing, the pricing engine does not return Oracle Advanced Pricing modifiers or features to the calling application.</p> <p>Security rules checking is enabled. Global box and security rules are used.</p>	<p>In Oracle Advanced Pricing, the pricing engine is enabled to return all advanced features.</p>

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Reports	<p>Reports for basic pricing include:</p> <ul style="list-style-type: none"> • Order Discount Detail Report • Order Discount Summary Report • Diagnostics List Line Details • Diagnostics Performance Analysis <p>Security-enabled rules checking across all reports.</p>	<p>Advanced Pricing adds the following reports:</p> <ul style="list-style-type: none"> • Accruals Details Report • Attribute Mapping Rules Error Report • Cross Order Volume Report • Modifier Detail Report • Price List Detail Report (including Multi-currency fields when Multi-currency is installed) • Pricing Formulas Report • Qualifier Grouping Report

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Concurrent Programs	Not available in basic pricing.	<p data-bbox="1089 331 1354 426">Advanced Pricing adds the following concurrent programs:</p> <ul data-bbox="1089 447 1365 1287" style="list-style-type: none"> <li data-bbox="1089 447 1300 516">• Build Attribute Mapping Rules <li data-bbox="1089 548 1292 617">• Build Formula Package <li data-bbox="1089 648 1357 718">• Cross Order Volume Load <li data-bbox="1089 749 1365 819">• Purge Pricing Engine Requests <li data-bbox="1089 850 1341 919">• QP: Bulk Import of Price List <li data-bbox="1089 951 1365 1056">• QP: Maintains the denormalized data in QP Qualifiers <li data-bbox="1089 1087 1357 1192">• Update Price Lists with Multi-Currency Conversion Criteria <li data-bbox="1089 1224 1357 1287">• Update Promotional Limit Balances

Pricing Features	Basic Pricing in Oracle Order Management	Oracle Advanced Pricing
Support TCA Party Hierarchy	This functionality is only available with Advanced Pricing.	<p>This functionality is only available with Advanced Pricing.</p> <ul style="list-style-type: none"> • Applies To Party Hierarchy check box is not visible on the Price List and Modifier Qualifiers in basic pricing • Party Hierarchy Enabled check box is not visible on Attributes UI in basic pricing.
Public APIs	Not available in Basic Pricing.	Advanced Pricing provides several public APIs. For more information, see the <i>Oracle Order Management Open Interfaces, API, & Electronic Messaging Guide</i> .

Pricing Terminology

Customer Hierarchy

The customer hierarchy in Basic Pricing enables you to roll up individual customers according to the following structure:

- The sold-to organization
- Site
- Customer Class

You can use elements of the customer hierarchy as defaults to control the operation of price lists and modifiers.

Note: Additional customer hierarchy capabilities, such as additional levels, can be defined if Oracle Advanced Pricing is installed. In Basic Pricing, you can define additional pricing contexts. See Overview of Contexts and Attributes in Attribute Management, page 3-86 for more information.

Pricing Engine

The pricing engine is the program module called by Order Management that prices the order as orders are entered or order data changed.

Pricing Request

A pricing request is the specific information provided to the pricing engine when the engine is called by Order Management. In general, this includes the customer, the product, the attributes associated with the customer or product that may be used by the pricing engine, the pricing date, and other pricing data attributes that may be required by the pricing engine.

Product Hierarchy

The product hierarchy in Basic Pricing enables you to up roll individual items as defined in MTL_SYSTEM_ITEMS table into single level groups called Item Categories. For price lists, you can only define products at the item level; You can price at all the seeded levels of product hierarchy. For modifiers, you can use item, item and pricing attribute, item categories, or the Super Group of item ALL.

Additional levels of product hierarchy can be defined if Oracle Advanced Pricing is installed.

Oracle Advanced Pricing

Oracle Advanced Pricing and Basic Pricing share common software components; however, Oracle Advanced Pricing is a separate licensable product that can be used as an alternative to Basic Pricing. Oracle Advanced Pricing provides the functionality of Basic Pricing, while adding significant functionality and extensibility.

The pricing software examines the installation type (either full or shared) to determine the appropriate mode to run in: users of Basic Pricing are installed as "shared" and are not licensed to use Advanced Pricing capabilities.

When in basic mode, the Advanced Pricing features cannot be viewed or selected in the user interface setup windows. Because the information for Advanced Pricing cannot be set up in pricing implementation running in basic mode, use of Advanced Pricing features is also inhibited.

Users who have licensed Advanced Pricing are installed as "full" and can access the Advanced Pricing features. For additional information about the features available with

Oracle Advanced Pricing, see the *Oracle Advanced Pricing User's Guide* and the *Oracle Advanced Pricing Implementation Guide*.

Warning: Since Advanced and Basic Pricing share common lookups, a user with the responsibility of Pricing User can modify and save Advanced Pricing lookups in Basic Pricing. It is not possible to restrict the update of Advanced Pricing lookups in Basic Pricing.

Basic Pricing Features

The following section describes the key Basic Pricing features supported by Oracle Applications.

Pricing Security

Oracle Pricing provides a level of security called *pricing security* in addition to the existing functional security. Pricing security enables you to restrict pricing activities such as updating and viewing pricing entities to users granted specific access privileges.

Pricing security can be set up and maintained by a user who is assigned the Oracle Pricing Administrator responsibility. Pricing security is set up and maintained in the HTML user interface. The Oracle Pricing Administrator typically has the authorization to access and update all pricing entities for all functional users. Pricing entities include price lists, pricing agreements, and modifiers.

Price Lists

Price lists relate a selling price to a product. Price lists consist of price list lines, pricing attributes, and a secondary price list and include information such as the price list name, effective dates, currency, rounding factor, and shipping defaults such as freight terms and freight carrier.

You may default a price list based on any one of the following:

- An agreement
- The sold-to organization
- The ship-to organization
- The bill-to organization
- Order type

You can create multiple price lists. Alternatively, you may enter a specific price list on the order header or at the order line level. For each price list, you can also assign a secondary price list, which the pricing engine searches when it cannot find an item on the primary list. Only one secondary price list will be searched for each primary list.

Price lists and Currencies

Price lists may be specified in different currencies. During order entry, if you enter a currency on the order, the pricing engine will select price lists having a currency matching the currency you entered on the order.

Maintaining Price Lists

You can maintain price lists using any one of the following functions:

- Copy Price List
- Adjust Price List
- Add Items to Price List

Pricing Engine Request Viewer

The Pricing Engine Request Viewer window captures the pricing call from any calling application such as Oracle Order Management and displays the inputs and outputs of the pricing call.

The information displayed by the Pricing Engine Request Viewer enables you to review which lines were selected or rejected by the pricing engine and to evaluate why certain prices and adjustments were or were not applied. For more information on using the Pricing Engine Request Viewer, see the *Oracle Advanced Pricing User's Guide*.

Agreements

Agreements enable you to define the prices, payment terms and freight terms that you negotiated with specific customers. Using agreements, you can:

- Define your agreements using customer part numbers and inventory item numbers.
- Make revisions to the original terms and maintain these changes and their reasons under separate revision numbers.
- Attach an already existing price list to the agreement or define new prices.
- Assign optional price breaks by quantity
- Set effective dates for agreement terms
- Set payment terms including invoice rule and accounting rule.
- Set freight terms including the freight carrier.
- Apply agreement terms to sales orders by reference agreements.
- Use Sales Agreements.

GSA Pricing

General Services Administration Agency (GSA) pricing enables you to define a GSA price list for your GSA customers. The GSA price list is created in the modifier window and uses the new price. You create a discount that adjusts the base price of the item to the GSA price.

Formulas

Formulas enable you to define a mathematical expression that the pricing engine can use to determine the list prices of items. A full complement of mathematical operators and numeric operands can be used.

When processing formulas, the pricing engine locates a price list line linked to a formula. It then applies the mathematical expression to generate a final list price. In Basic Pricing, formulas are static; that is, the variables in the formula must be pre-populated with data by running a concurrent manager job before the formula can be used.

Modifiers

Using modifiers, you can increase or decrease the list price to arrive at a net selling price for your orders. A modifier can be applied automatically by the pricing engine, or you can manually apply a modifier. Additionally, modifiers, with proper setup, can be overridden.

Modifiers consist of a header region with one or more modifier lines. You can define three types of modifier headers:

- Discount
- Surcharge
- Freight and Special Charge (supports only point breaks)

You can attach following customer attributes as qualifier attributes to the modifiers at the header level : Site, Customer Name, and Customer class (as defined in RA_CUSTOMERS table).

Alternately, you can also default the pricing engine's selection of modifiers based on the price list name.

You may define default modifiers at the order line level based on agreements including:

- Agreement Type
- Agreement Name

Alternatively, you can default modifiers based on sales order. For a modifier to default at the line level, it must first default at the header level. If it does not default at the

header level, the line level default will have no effect.

Combined with the preceding defaults, you can also default modifiers based on the following product-level attributes:

- Item
- Item Category
- All Items

Modifiers can be used to calculate price breaks. You can define breaks at the line level to be computed as percent, amount or fixed price. Price breaks are available only on modifiers in Basic Pricing. Point type price breaks are supported in Basic Pricing. In Basic as well as Advanced Pricing, price breaks are now continuous, which means that the high value of the break is greater than the low value of the next break. Example: 0-100, 100-200, 200-300 etc.

Note: In basic Pricing all the modifiers created are active and you can not change the active status. This feature is available in Advanced Pricing only. Also, to make the modifier inactive, you need to end date the modifier. This can be done on the modifier header. Once the modifier is end dated it will no longer be active.

Qualifiers

Oracle Pricing lets you define qualifiers to determine eligibility rules governing who can receive a particular price, discount, promotion, or benefit. Qualifiers can then be linked to modifiers. See the *Oracle Order Management User's Guide* for more information on setting up and using qualifiers for modifier lists and modifier lines.

Freight and Special Charges

The Freight and Special Charges capability of Oracle Order Management enables you to capture, store, update and view costs associated with a shipment, order, container, or delivery. You can either itemize or summarize such charges on your orders. This capability includes functionality to pass customer charge information to Oracle Receivables for invoicing.

When using freight and special charges, you set up freight and special charges as pricing modifiers. The pricing engine applies the qualified freight and special charges to order lines. You can view the application of freight and special charges. Order Management captures costs at shipping and converts them to charges. Freight and special charges appear on invoices. See *Setting up Pricing Modifiers for Freight and Special Charges*.

Pricing Attributes and Attribute Management

Order Management with Basic Pricing is delivered with seeded pricing attributes. The seeded attributes are described in the appendix of this implementation manual. You can use one pricing context per order line. See Overview of Contexts and Attributes in Attribute Management.

Setting Up Basic Pricing

Whether you are implementing from a fresh install or upgrading from a previous version, the process flows for implementation require that:

- Oracle Applications, including Order Management, have been successfully installed.
- Oracle Pricing has been installed as Shared.
- All necessary patches have been applied.

Implementing from Fresh Install

The following table recommends the implementation steps for a fresh install (no prior implementation of Oracle Order Entry/Shipping exists). The recommended implementation steps differ when upgrading from a prior release.

Fresh Install Steps

Step #	Name	Description
1	Analyze and Understand Business Pricing Scenarios	It is highly recommended that an exact understanding of pricing business requirements be established, before beginning an implementation of Basic Pricing.
2	Develop Logical Pricing Model Solutions	For each Pricing Scenario, plan how you will use Basic Pricing to accomplish each. An excellent resource for this is the remainder of this manual.

Step #	Name	Description
3	Setup and Test Prototype Solutions	Prior to implementing a production system, setup prototype Basic Pricing solutions for all the pricing scenario's you have identified, and have entered test orders against them to determine that they are handled properly. The Vision Sample database shipped with the software can be used to facilitate this process.
4	Make necessary defaulting decisions	See subsequent section of this manual for details.
5	Set up Basic Pricing Profile Options and System Parameters	See subsequent section of this manual for details.
6	Set up Customers and necessary customer hierarchy information	Customer setup must be performed using Oracle Accounts Receivable
7	Set up Items and Item Hierarchy information (except Pricing Attributes)	Item setup must be performed using Oracle Inventory
8	Set up Pricing Attributes	See subsequent section of this manual for details.
9	Set up Pricing Security	See subsequent section of this manual for details.
10	Set up Price Lists	See subsequent section of this manual for details.
11	Set up Formulas	See subsequent section of this manual for details.
12	Set up Agreements	See subsequent section of this manual for details.

Step #	Name	Description
13	Set up Modifiers	See subsequent section of this manual for details.
14	Set up GSA Pricing, if required	See subsequent section of this manual for details.
15	Set up Freight and Special Charges, if required	Refer to Appendix for information on Freight and Special Charges

Overview of Pricing Security

This section describes the implementation of pricing security for Oracle Pricing. In Oracle Applications, a basic level of security called *functional security* manages and controls users' access to each application and to windows, functions, and reports within an application.

Typically, the System Administrator administers functional security and assigns operating unit, responsibility, and system access to users. See the *Oracle Applications System Administrator's Guide* for more information about functional security.

Oracle Pricing provides an additional level of security called *pricing security* in addition to the existing functional security. Pricing security enables you to restrict pricing activities such as updating and viewing pricing entities to users granted with specific access privileges.

Pricing security can be set up and maintained in the HTML user interface by a user with the Oracle Pricing Administrator responsibility. The Oracle Pricing Administrator can access and update all pricing entities for all functional users. Pricing entities include price lists, pricing agreements, and modifiers.

With pricing security, you can implement a higher level of control by:

- Assigning pricing entities such as price lists and modifiers to operating units.
- Assigning privileges to pricing entities to control who can view or maintain the specified entity. You assign privileges to a "Grantee."
- Setting default security access rules for newly-created pricing entities. Use security profile options to set access rules.

Assigning pricing entities to Operating Units

A pricing entity can be assigned ownership to a specific operating unit. You can restrict

usage to one operating unit or allow usage by all operating units.

Assigning security privileges to control users' access to pricing entities

You can use security privileges to control users' access to pricing entities in the following ways:

- Grant view-only or maintain access privileges to functional users at the Global or Operating Unit level.
- Grant temporary access - for example, to auditors or temporary employees - for a specified date range.
- Assign or reassign Operating Unit ownership to price lists and modifiers and control which operating units can use them for pricing transactions.

Note: Before setting the profile option QP: Security Control to ON, you must create privileges for existing pricing entities.

Related Topics

Overview of Pricing Security, page 3-43

Assigning Ownership of Pricing Entities to Operating Units (Entity Usage page), page 3-51

Setting up Default Security Profile Options for New Pricing Entities, page 3-63

Creating Privileges, page 3-55

Setting Pricing Security on , page 3-67

Pricing Security Terms

The following terms are used in Oracle pricing security:

- **Pricing Entity Security:** The highest level of security administration for Oracle Pricing. This level of security is in addition to Functional Security and PTE plus Source System Code security. Functional security is established for each user by responsibility set up. The Oracle Pricing Administrator is a new Responsibility which has complete access to all pricing entities without restriction and is used for global administration of secured access to pricing entities. This security is administered in the Oracle HTML user interface.
- **Pricing Entity:** A pricing entity can be a price list, modifier list, or pricing agreement.
- **Entity Type:** A term used to describe one of the following pricing entities: Standard

Price list, Modifier List, and Pricing Agreement.

- Entity Usage: Grants the entity's usage to one or all operating units so it can be used during pricing engine calls.
- Entity Set: A set of grouped pricing entities.
- Global Usage: When Global Usage for a pricing entity is set to Yes, the pricing entity can be used across all operating units for processing orders. If No is selected, the entity's usage is restricted to the operating unit that created or owns it.

When security is turned on, a Global box indicating Global Usage is dynamically added to the header region of all price lists and modifiers. A user with Maintain access privileges can update the Global box. The Oracle Pricing Administrator can also update the Global Usage settings in the Entity Usage pages.

- Grantee: The specific user or users of a Grantee Type that are given permission to view or maintain a pricing entity. Used in combination with a Grantee Type.
- Grantee Type: The level to which privileges are granted:
 - Global: Includes all users with access to pricing menus.
 - Operating Unit: Includes users within the named operating unit.
- Access Level: Provides Maintain or View-Only access to a pricing entity:
 - View-Only: Enables the user to view but not update the pricing entity.
 - Maintain: Enables the user to view and update pricing entities. Not all of the entities support delete capabilities.

Pricing Security and Operating Units

Pricing Security allows you to create pricing data specific to an operating unit. The multi-org access control (MOAC) feature further enables users to access multiple operating units within one responsibility, and to create multiple pricing entities (price lists, modifiers) for different operating units without changing responsibility. This feature is controlled by the profile option MO: Security Profile. When MOAC is enabled, you can enable pricing security to provide centralized control of pricing entities for use by operating unit or across all operating units for pricing orders.

Note: See the Multiple Organizations in Oracle Applications guide for information on setting the profiles MO: Security Profile and MO: Default Operating Unit.

Multi-Organization Access Control

Profile option MO: Default Operating Unit automatically creates pricing security privileges

When you create a price list or modifier list, the default pricing security privileges are created for the operating unit set in the MO: Default Operating Unit regardless of whether the price list or modifier list is created as Global or for a different operating unit. This occurs when:

- Profile option MO: Default Operating Unit is enabled (MO: Security Profile is set)
- Pricing security is ON (profile option QP: Security Control is ON)
- One of the pricing profile options, QP: Security Default ViewOnly Privilege or QP: Security Default Maintain Privilege, is set to Operating Unit

For example, suppose you are assigned the Pricing Manager responsibility with access to the following operating units--OU1, OU2, and OU3--and the following conditions exist:

- Pricing security is ON
- MO: Default Operating Unit profile is set to OU1
- QP: Security Default Maintain Privilege and QP: Security Default View Only Privilege profiles are set to Operating Unit

If you then create a global price list (PL1) or price list for OU2 (PL2), the view and maintain privileges will be created for OU1 because the operating unit defaults from the MO: Default Operating Unit profile (the default operating unit set for the responsibility) for both PL1 and PL2.

Update to Operating Unit field allowed if users have Maintain access

In Oracle Advanced Pricing, the operating unit on the price list or modifier list must match the operating unit of the transaction (for example, a sales order) being priced. If pricing security is ON, any user granted maintain access to the price list or modifier list can update the Operating Unit field of the modifier or price list.

For example, suppose you have a price list PL1 from operating unit OU1 that is assigned a maintain privilege of Global, but you log into a responsibility with access to only OU2, OU3 as assigned by the MO: Security Profile. You could update the price list PL1 due to Global security privilege and update it from OU1 to OU2; however, you cannot change it back to OU1 through the same responsibility because the security profile does not provide access to OU1.

Setting up Pricing Security

After you upgrade to pricing security, pricing security is not switched on automatically. Pricing users with functional access can still fully view and maintain existing price lists and modifiers as before the upgrade. Before turning security on, it is recommended that you review and complete the following setup steps for implementing pricing security, **otherwise, pricing users may be unable to query any price lists or modifiers in the pricing windows**. After you have completed the security setup steps, you can set the QP: Security Control profile option to ON which turns security on.

Complete the following steps to set up and use pricing security:

1. Map Complete Security Access Requirements

For price lists, modifiers, and agreement price lists (the pricing entities), map to the following:

- Operating units that should own and maintain them.
- The users in those operating units who require View-Only or Maintain access to pricing entities.
- Operating units that can use them when pricing transactions.

2. Assign Ownership of Pricing Entities to Operating Units (Entity Usage page)

The next step is to assign pre-existing price lists and modifiers to an operating unit. You can also select Global Usage settings that determine if the entity is restricted to that operating unit or available across all operating units. See Assigning Ownership of Pricing Entities to Operating Units (Entity Usage page), page 3-51 for more information.

3. Create Privileges (Privileges page)

The next step is to assign privileges for all users in all operating units. Using security privileges, you can provide access to view and/or maintain pricing entities. See Creating Privileges, page 3-55 for more information.

4. Set up Default Security Profile Options for New Pricing Entities

You can use the following profile options to set the default security privileges for newly-created pricing entities:

- QP: Security Default ViewOnly Privilege
- QP: Security Default Maintain Privilege

These profile options are delivered in default settings that maintain the existing functional security features of Oracle Pricing.

Before changing these profile settings, the Oracle Pricing Administrator must map the complete security access requirements for each pricing entity. No security profile option should be changed until these steps have been completed. See Setting up Default Security Profile Options for New Pricing Entities, page 3-63 for more information.

5. Set Pricing Security ON

. See Setting Pricing Security ON , page 3-67 for more information.

Changes to Pricing windows after Upgrading and Turning Pricing Security On

This section summarizes the changes that occur to pricing entities after you upgrade to pricing security and turn security on. Some of the changes, such as the Global box on price lists and modifiers, are only visible to users after pricing security is turned on.

Entity Usage

After the upgrade to security, all existing price lists and modifiers are assigned the default entity usage of Global Usage. Global usage enables the pricing entity to be used across all operating units. When security is turned on, a Global box is added to the header of all modifiers and price lists to indicate the global usage status for the entity:

- If selected, global usage is enabled for the entity.
- If cleared, global usage is not enabled for the pricing entity, and an operating unit must be assigned to the entity.

The Global check box is not visible to users until the concurrent program Security Control is turned ON. When visible, a user with Maintain access privileges can select or clear the Global check box. However, users with view-only privileges cannot change the Global box. If a user creates a new pricing entity (such as a price list) and clears the Global box, then an operating unit must be assigned to that entity. If MOAC is not enabled, this defaults to the value of the profile MO: Operating Unit.

With MOAC, this operating unit will default to the value in the MO: Default Operating Unit profile. You can override this default and select from any operating unit assigned to the MO: Security Profile option. If the Global check box is left selected (the default value), then the entity can be used across all operating units when pricing transactions.

Alternately, the Pricing Administrator can also update the Global box for one entity at a time or in bulk using the Bulk Update Entity Usage page available from the Entity Usage page.

Changes to Price Lists

After the upgrade, you can review the operating unit and global usage settings for an

entity in the Entity Usage page. An example of the information that displays for a selected entity is outlined in the following table:

Default Entity Usage after Upgrade: Entity Usage Page

Entity Name	Type	Global Usage	Owned by Operating Unit
Name of the Entity (for example, Summer Pricelist)	Type of Entity (for example, Standard Pricelist)	Yes	Blank (not assigned to an operating unit)

The following other changes occur to price lists after the upgrade to pricing security:

- Price lists assigned Global usage cannot be assigned to an operating unit as well. Any such global price lists will be updated to clear out the operating unit.
- Once security is turned on, all new price lists have their view and update properties determined by the pricing security profile options.
- You need at least view-only access privileges to display or query price lists in the price list windows. With view-only access, you cannot change header or any associated information such as price list lines, pricing attributes, qualifiers, or secondary price lists.
- Users who have view-only privileges on a price list as per pricing security rules will be in view-only mode on the price list window. To update a price list, the user requires specific maintain-access privileges.
- Secondary price lists: You can only select the price lists with view-only or maintain privileges for the secondary price list. In addition, secondary price lists are also restricted by entity usage assigned to primary price list: if the primary price list is global, you can select any secondary price list (global or assigned to any operating unit). If an operating unit is assigned to the primary price list, you can select a global price list for secondary price list or a secondary price list that has the same operating unit as the primary price list.
- The Public API, QP_PRICE_LIST_PUB.PROCESS_PRICE_LIST will only update price lists as per price list security rule.
- You can select Price Lists > Copy Price Lists to copy price lists. A copied price list is assigned the default privilege from the security profile options. During copying, you can override defaults that are derived from Copy From price list and specify your own settings for global flag and operating unit for the Copy To price list. However if the default security privilege profile is set to Operating Unit, the copied price list is still assigned default privilege based on MO: Default Operating Unit

profile.

Changes to Modifier windows

- Modifiers assigned Global usage cannot be assigned to an operating unit. Any such global modifiers will be updated to clear the Operating Unit field.
- After pricing security is turned on, the default view and maintain properties for all new modifiers are determined by the security profile options.
- You need at least view-only access privileges to display or query modifiers in Define Modifier window. With view-only access privileges, you can view all line limits for a modifier including attributes and transactions for the limit.
- With view-only access privileges, you cannot modify the header information, lines, list or line qualifiers, pricing attributes, and related modifier information. A message will display to advise you about the view-only status.
- In the Modifier Incompatibility Setup window, only those modifier lines belonging to a modifier list that can be viewed or maintained will get queried as per pricing security rules. Modifiers opened by clicking the Modifiers button may be viewed or maintained depending on the privileges defined by the Pricing Security Administrator.
- A copied modifier will inherit the default privileges set by the security profile options. The copied modifier will always belong to the operating unit of the user that created it, regardless of the source operating unit.

Changes to Order Management

All list of values (LOV) for price lists in Oracle Order Management will call the Pricing API, Get_Pricelists(), to return a list of valid price lists. The API returns the price lists owned by the same operating unit as the operating unit of the current user and those price lists where the Global box is selected.

Changes to other Pricing windows

The following table outlines the impact of pricing security and security privileges on various windows in pricing:

Impact of Pricing Security on Pricing Windows

For the following:	Security Privileges are enforced:
Copy Price Lists	Yes. User needs at least View-only access.

For the following:	Security Privileges are enforced:
Copy Modifier	Yes. User needs at least View-only access.
Adjust Price List	Yes. User needs Maintain access.
Add Items to Price Lists	Yes. User needs Maintain access.
Formulas	No security at present.
Agreement Header	Agreement inherits security rules of attached price list.

Assigning Ownership of Pricing Entities to Operating Units (Entity Usage page)

By default, a new price list or modifier is assigned Global usage. If the Global check box is deselected for a pricing entity such as a modifier, the Operating Unit field is enabled. The operating unit defaults from the profile option MO: Default Operating Unit if Multi-Org Access Control (MOAC) is enabled. If MOAC is not enabled, the value defaults from the profile option MO: Operating Unit.

This operating unit field value displays in the Owned by Operating Unit field on Pricing Entity Usage user interfaces. A pricing entity assigned to an operating unit can only be used for that operating unit and not across all your operating units.

Since pre-existing price lists and modifiers are not assigned a default operating unit, the Oracle Pricing Administrator can:

- Assign or reassign ownership of pre-existing price lists and modifiers to the appropriate operating unit.
- Grant or revoke Global Usage of pricing entities which enables the pricing entity to be accessed across all operating units.

Warning: It is recommended that the Oracle Pricing Administrator assigns ownership to all price lists and modifiers prior to upgrading or implementing Oracle Pricing Security. This can be done using the Bulk Update Entity Usage feature in the Entity Usage page.

Creating Pricing Entity Usage

To assign pricing entity usage:

1. Navigate to the EntityUsage, page B-1 page to perform the following:
 - **Global Usage:** To make the entity available across all operating units, select Yes for Global Usage. If not selected (cleared), global usage is not enabled for the pricing entity, and the entity's usage is restricted to the assigned operating unit. The Global Usage status is also displayed to users via the Global box on price list and modifier windows.
 - **Owned by Operating Unit:** To restrict the entity's usage to a specific operating unit, select the operating unit name.

To make bulk changes to multiple pricing entities, click Bulk Update Entity Usage.

Entity Usage page

ORACLE Advanced Pricing [Close Window](#) [Preferences](#) [Help](#) [Personalize Page](#) [Diagnostics](#)

Security

Privileges | Entity Sets | **Entity Usage**

Entity Usage [Apply](#)

Please enter search criteria and click 'Go' to search pricing entities. This page is used to grant usage across operating units (global) or to restrict usage. Click 'Apply' to save changes.

Search

Entity Type: Standard Pricelist Entity Name: RI-NEW-PRICE-LIST [Go](#)

Related Information

Global Usage: A pricing entity can be used across all operating units when making a pricing request. A pricing entity is originally owned by the creating organization. At creation checking the 'Global' flag allows usage across operating units; unchecking it restricts usage to the owner organization. Ownership/Usage may be updated on this page.

Pricing Entities are displayed per your search criteria. Set 'Global Usage' to 'Yes' to use entity across operating units. Set to 'No' to restrict entity to be used within the specified operating unit. Click 'Apply' to confirm changes. Select one or more entities and click 'Bulk Update Usage' to update ownership and/or Global Usage.

Select Standard Pricelist(s): [Bulk Update Entity Usage](#)

[Select All](#) | [Select None](#)

Select	Details	Entity Name	Type	Global Usage	Owned by Operating Unit
<input type="checkbox"/>	Show	RI-NEW-PRICE-LIST	Standard Price List	Yes	Vision Operations

[Apply](#)

2. In the Search region, select your search criteria:
 - Entity Type: Select an entity type such as Standard Pricelist or Modifier.
 - Entity Name: Optionally, enter an Entity Name to search for a particular price list or modifier.
3. Click Apply to display the search results in the Results region of the page. For each listed entity, the following information is displayed:
 - Details: Click the Expand icon to view additional details about the selected Entity such as its Active Status, Start and End Dates, Description, and Currency.
 - Entity Name: Displays the unique name that identifies the selected entity.
 - Type: Describes the Entity Type selected such as Standard Price List or Modifier.
 - Global Usage: Indicates the current usage status of the pricing entity.
 - Owned by Operating Unit: Displays the name of the Operating Unit associated with the Entity.

Note: For fresh upgrades or new installations, the Global Usage box is Yes (selected) and the Owned by Operating Unit field is blank.

To update Operating Unit and Global Usage for a pricing entity:

1. For each pricing entity listed in the Results region, you can assign a Global Usage and Owned by Operating Unit value. To make bulk changes to multiple pricing entities, use the Bulk Update Entity Usage feature. See Making Bulk Updates to Pricing Entity Usage, page 3-54 for more information.
2. To make the entity available across all operating units, select Yes for Global Usage. Alternately, select No to restrict the entity's use to within the specified operating unit.
3. Select the operating unit in the Owned by Operating Unit field.
4. Click Apply to save your changes.

Making Bulk Updates to Pricing Entity Usage

Use the Bulk Update Entity Usage page to quickly apply settings for global usage and operating unit assignment across multiple pricing entities; for example, to assign the same operating unit across all price lists.

To make bulk updates:

1. Navigate to the Bulk Update Entity Usage, page B-1

Bulk Update Entity Usage page

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Security

[Privileges](#) | [Entity Sets](#) | **Entity Usage**

[Security : Entity Usage](#)

Bulk Update Entity Usage

[Cancel](#) [Apply](#)

Click 'Apply' to apply your bulk update; Click 'Cancel' to abort your bulk update and return to Entity Usage page.

Review the Selected Entities

Please review carefully the following pricing entities you've selected for update. The update will apply to all these and only these pricing entities.

Entity Name	Type	Global Usage	Owned by Operating Unit
RL Price List Forms 1	Standard Price List	Yes	Vision Operations

Select Bulk Update Action

☒ Global Usage [Yes](#)

☒ Owned By Operating Unit

[Cancel](#) [Apply](#)

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2. In the Global Usage box, select one of the following:
 - Yes: To set the global usage for the selected entities to Yes.
 - No: To set the global usage for the selected entities to No.
3. Select the Owned by Operating Unit box and an Operating Unit to update all the entities with the specified Operating Unit.
4. Click Apply. If successful, a Confirmation message advises that you have successfully bulk updated the entity usage.

Creating Privileges

You can use security privileges to define who can access each pricing entity and their access level.

Note: You must be assigned the Oracle Pricing Administrator responsibility to grant security privileges

You can assign privileges using the following setup pages:

- Privileges page: To search for and update existing privileges.
- Express Create Privilege page: To create an access privilege for one specific pricing entity.
- Bulk Create Privileges page: To select multiple pricing entities and create access privileges for a grantee.

Precedence Levels for Multiple Privileges

A Maintain access privilege is a higher privilege than View Only, and therefore, the higher Maintain privilege prevails for the named user.

If a user has a Maintain access privilege to a given entity at any level of their user hierarchy (operating unit or Global), they will have Maintain access regardless of any other privileges.

Implementation Suggestions for Privileges

It is recommended to list all users and have their access privileges maintained by the Pricing Administrator. Once mapping has been completed and access privileges granted, you can query the privileges granted using the Privileges page of the Security pages. A search by Entity Type such as Standard Price List displays all Standard Price Lists by Entity Name, Grantee Type, Grantee Name, Access Level (ViewOnly or Maintain}, and Effective Dates. Your listing of new access privileges can be checked against the results.

To create privileges:

1. Navigate to the Privileges, page B-1

Privileges page

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Security

Privileges | Entity Sets | Entity Usage

Privileges

[Apply](#)


This page is used for searching, updating and creating privileges. Please enter search criteria and click 'Go' to search privileges granted.


* Indicates required field

Search

Entity Type

Grantee Type

Entity Name


Grantee Name


[Go](#)

If Grantee Type is 'Global' or blank, leave Grantee Name blank.

Related Information

Click 'Express Create Privilege' to create a privilege for one specific pricing entity; Click 'Bulk Create Privileges' to select multiple pricing entities and create privileges through three-steps flow.

After updating access level and effectivity dates, click 'Apply' to save your changes. For deletion of privileges, select one or more privileges and click 'Delete'.

[Express Create Privilege](#)
[Bulk Create Privileges](#)

Select	Standard Pricelist Name	Grantee Type	Grantee Name	Access Level	Effective Start Date	Effective End Date
	No search conducted.					

[Apply](#)

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- In the Search region, select an Entity Type. Optionally, select additional search criteria such as Entity Name, Grantee Type, or Grantee Name to filter your search results. To view the available values for an Entity Name or Grantee Name, click the Search icon.
- Click Go to display the search results in the Privileges page.

Results: Privilege(s) page

Privileges

Apply

This page is used for searching, updating and creating privileges. Please enter search criteria and click 'Go' to search privileges granted.
* Indicates required field

Search

Entity Type

Modifier

Grantee Type

Entity Name

Grantee Name

Go

If Grantee Type is 'Global' or blank, leave Grantee Name blank.

Related Information

Click 'Express Create Privilege' to create a privilege for one specific pricing entity; Click 'Bulk Create Privileges' to select multiple pricing entities and create privileges through three-steps flow.

After updating access level and effectivity dates, click 'Apply' to save your changes. For deletion of privileges, select one or more privileges and click 'Delete'.

Select Privilege(s):

Delete

Express Create Privilege

Bulk Create Privileges

Select All

Select None

Select	Modifier Number	Grantee Type	Grantee Name	Access Level	Effective Start Date	Effective End Date
<input type="checkbox"/>	Charges11		OPERATIONS	Maintain	20-FEB-2004	
<input type="checkbox"/>	Charges11	Global		View Only	20-FEB-2004	
<input type="checkbox"/>	Test_gsa		OPERATIONS	Maintain	26-FEB-2004	
<input type="checkbox"/>	Test_gsa	Global		View Only	26-FEB-2004	
<input type="checkbox"/>	rgr-gsa		OPERATIONS	Maintain	19-FEB-2004	
<input type="checkbox"/>	rgr-gsa	Global		View Only	19-FEB-2004	

Apply

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If the message *No data exists displays* in the Results: Privilege(s) region then no privileges exist for the entity.

If search results display, then you can view or update the privileges directly in the Results: Privilege(s) region.

4. To revoke privileges, select the line to delete and click Delete.
5. To assign or update an Access Level, select Maintain or View Only.
6. Enter or update the Effective Start and End Date and click Apply to save your changes.

To use Express Create Privilege:

1. To create a privilege for one specific pricing entity, select the entity and click the Express Create Privilege button to display the Express Create Privilege page.

Express Create Privilege page

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Security

[Privileges](#) | [Entity Sets](#) | [Entity Usage](#)

Security : Privileges

Express Create Privilege

[Cancel](#) [Apply](#)

This page is used to create a privilege for one specific pricing entity.
* Indicates required field

Select Security Entity

* Entity Type * Entity Name

Select Grantee

* Grantee Type Grantee Name

If Grantee Type is 'Global', leave Grantee Name blank.

Select Access Level

Access Level ☐ Maintain ☒ View Only

Specify Duration

* Start Date End Date

(example: 17-MAR-2004) (example: 17-MAR-2004)

[Cancel](#) [Apply](#)

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2. In the Select Security Entity region, select the Entity Type and Entity Name of the pricing entity to be granted privileges.
3. In the Select Grantee region, select one of the following Grantee Types and a Grantee Name:
 - Global: If Grantee Type is Global, leave Grantee Name blank. This makes the privilege available to all users with functional access to pricing menus.
 - Operating Unit: Grants the privilege to a specific operating unit. For example, select Vision1 to give a privilege to all users that have Vision1 as the default operating unit.
4. In the Select Access Level region, select the Access Level to be granted to the Grantee:
 - Maintain: Enables users to delete, view, and update pricing entities.
 - View Only: Enables users to view but not update the pricing entity.
5. In the Specify Duration region, select the Start and End Date. For example, to provide temporary access to a temporary employee, you could enter a Start Date of

02-Jul-2004 and an End Date of 31-Aug-2004. Alternately, accept the system dates.

6. Click Apply.

Using the Bulk Create Privileges feature

Use the Bulk Create Privileges page to create and assign privileges to multiple entities for a specific entity type. For example, you could grant access to several price lists to the Operating Unit: Vision France.

To use the bulk create privileges feature:

1. Navigate to the Bulk Create Privileges page
2. In the Quick Search region, search by Entity Type to find the pricing entity or entities to be granted privileges. For example, select Standard Pricelist to search for standard price lists.
3. Optionally, select additional search criteria to refine your search. In the Based on field, select Owned by Operating Unit or Entity Name then enter related details.

For example, to find the Summer Pricelist, select Standard Pricelist as the Entity Type, then select Entity Name and enter Summer Pricelist to specify your search criteria. Click Go to display the search results in the Results region.
4. From the search results, select the entities to be assigned privileges.
5. Click Next to display the Bulk Create Privileges: Provide Additional Privileges Information page.

Bulk Create Privileges: Provide Additional Privileges Information page

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Search and Select Pricing Entities **Provide Additional Privileges Information** Review and Submit

Bulk Create Privileges: Provide Additional Privileges Information [Cancel](#) [Back](#) Step 2 of 3 [Next](#)

Fill in the information below before proceeding.
* Indicates required field



Select Grantee

* Grantee Type Grantee Name 
If Grantee Type is 'Global', leave Grantee Name blank.

Select Access Level

Access Level ☐ Maintain ☒ View Only

Specify Duration

* Start Date  End Date 
(example: 17-MAR-2004) (example: 17-MAR-2004)

[Cancel](#) [Back](#) Step 2 of 3 [Next](#)

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6. Select one of the following Grantee Types and select an associated Grantee Name. To display the available values for a Grantee Name, click the Search icon:
 - Global: If Grantee Type is Global, leave Grantee Name blank. This makes the privilege available to all users across operating units.
 - Operating Unit: Grants the privilege to a specific operating unit. For example, select Vision1 to give a privilege to all users that have Vision1 as the default operating unit.
7. Select the Access Level to be granted to the Grantee:
 - View Only: Enables users to view but not update the pricing entity.
 - Maintain: Enables users to delete, view, and update the pricing entity.
8. Select the Start and End Date in the Specify Duration region. For example, to grant temporary access to a summer employee, you could enter a Start Date of 02-Jul-2004 and an End Date of 31-Aug-2004. Alternately, accept the default system dates.
9. Click Next to display the Bulk Create Privileges: Review and Submit page.

Bulk Create Privileges: Review and Submit page

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Security

Privileges | Entity Sets | Entity Usage

Search and Select Pricing Entities | Provide Additional Privileges Information | **Review and Submit**

Bulk Create Privileges: Review and Submit

[Cancel](#) [Back](#) Step 3 of 3 [Finish](#)

Please review the information you provided and click 'Finish'.

Privileges Information

Grantee Type	Global
Grantee Name	
Access Level	View Only
Pricing Entity Type	Standard Pricelist
Start Date	01-APR-2004
End Date	

Selected Pricing Entities

Standard Pricelist Name	Description	Type	Owned By Operating Unit
ARBSAPL1		Standard Price List	Vision Operations
ARDE01		Standard Price List	Vision Operations

[Cancel](#) [Back](#) Step 3 of 3 [Finish](#)

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10. Review the information in the following regions before submitting your changes:
 - Privileges Information region: Displays the privilege information.
 - Selected Pricing Entities region: Displays the following information about the pricing entities to be granted the privileges listed in the Privileges Information region: Entity Name, Description, Type, Owned By Operating Unit.
11. If changes are required, click Back, or click Cancel to stop the process completely.
12. Click Finish. The Privileges Summary page displays the Privileges Information and Results Summary.

Privileges Summary page

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Security

[Privileges](#) | [Entity Sets](#) | [Entity Usage](#)

Bulk Create Privileges: Privileges Summary [Printable Page](#)

Privileges Information

Grantee Type **Global**
Grantee Name
Access Level **Maintain**
Pricing Entity Type **Standard Pricelist**
Start Date **01-APR-2004**
End Date

Results Summary

Name	Description	Type	Status
ARDE01		Standard Price List	New privilege has been created successfully.
ARBSAPL1		Standard Price List	New privilege has been created successfully.

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Setting up Default Security Profile Options for New Pricing Entities

Security profile options are used to define the default security privileges for newly-created price lists and modifiers. These profiles should be left in default setting (maintaining current functionality) and not be changed until you have decided which users should have automatic privileges of View Only or Maintain whenever a pricing entity is newly created.

These privileges are automatically created as soon as the creating user saves the new entity. The following discussion will assist you in choosing the combination of settings to meet your security policy.

The following profile options are used to assign the default view-only or maintain access privileges to newly created price lists or modifiers:

- QP: Security Default ViewOnly Privilege: Controls the default *view-only* privileges for NEWLY CREATED price lists and modifiers. View and maintain responsibilities are controlled separately by different profile options. This profile option enables you to set the view-only privileges at one of the following levels: Global (Default), Operating Unit, or None. This controls which users (if any) can view newly-created price lists and modifiers.

- QP: Security Default Maintain Privilege: Controls the default *maintain* privileges for NEWLY CREATED price lists and modifiers. For example, if the profile option is set to Operating Unit, then the maintain privileges for that price list or modifier are restricted to the pricing users of the operating unit where the price list or modifier was created. This profile option enables you to set maintain privileges at one of the following levels: None, Global (Default), or Operating Unit.

Before setting the security profile options and changing the defaulting privilege profiles, complete all security setup requirements.

Note: To change the access privileges for *pre-existing* price lists and modifiers, use the Security Privileges window.

Security profile options and existing pricing entities

The two security profile options, QP: Security Default Maintain Privilege and QP: Security Default ViewOnly Privilege, do not change the behavior of existing pricing entities. Access to existing pricing entities depends on the privileges already granted by the Oracle Pricing Administrator using the Security Privileges and related pages.

QP: Security Control: The profile option QP: Security Control (read-only) displays the current setting of the security option for your entire installation (either on or off). This profile option value cannot be directly updated and can only be turned on using the concurrent program Security Control.

Resolving conflicts between multiple access levels

If the user has two different access privileges to the same pricing entity, the access level of Maintain always prevails.

In all cases, the highest access level (the Maintain access privilege) prevails over the View-Only privilege. This rule applies regardless of what operating unit id the user is in.

Security Profile Option Settings Compared

The following section lists possible combinations of security profile option settings that define the default view and maintain access privileges for newly created pricing entities. Review the combinations of profile option settings and select the combination that suits the requirements for your installation. When security is turned on, a price list and modifier that is newly created will be assigned the default view and maintain security privileges from the profile option settings.

Security Profile ON: Behavior when creating a new Pricing Entity

The following shows behavior by combinations of profile settings when setting up new price lists and modifiers. Available values are: None, Operating Unit, and Global.

Security Profile ON: Behavior when creating a new Pricing Entity

QP: Default View Only Privilege	QP: Default Maintain Privilege	Behavior while being created	After saving and exiting the Entity's (Price list or Modifier) setup windows
None	None	Entity can be viewed/updated while being created.	1. The new entity cannot be viewed or updated by anyone.
None	Operating Unit	Entity can be viewed/updated while being created.	4. The new entity can be viewed and updated by all users with the same default operating unit as the user who created the entity
None	Global	Entity can be viewed/updated while being created.	5. The new entity can be viewed and updated by all users.

Security Profile ON: Behavior when creating a new Pricing Entity for Combination: Values for Operating Unit

The following show behavior by combinations of profile settings when setting up new price lists and modifiers. Available values are: None, Operating Unit, and Global.

Security Profile ON: Behavior when creating a new Pricing Entity for Combination: QP: Default View Only Privilege is Operating Unit

QP: Default View Only Privilege	QP: Default Maintain Privilege	Behavior while being created	After saving and exiting the Entity's (Price list or Modifier) setup windows
Operating Unit	None	Entity can be viewed and maintained by user who created it.	All the users within the same Operating Unit as the user who created it can view the new entity. Nobody can update it.
Operating Unit	Operating Unit	Entity can be viewed and maintained by user who created it.	Same as None/Operating Unit settings. The new entity can be viewed and updated by all users with the same default operating unit as the user who created the entity
Operating Unit	Global	Entity can be viewed and maintained by user who created it.	Same as None/Global settings. The new entity can be viewed and updated by all users.

Security Profile ON: Behavior when creating a new Pricing Entity for Combination: Values for Global

The following show behavior by combinations of profile settings when setting up new price lists and modifiers. Available values are: None, Operating Unit, and Global.

Security Profile ON: Behavior when creating a new Pricing Entity for Combination: QP: Default View Only Privilege is Global

QP: Default View Only Privilege	QP: Default Maintain Privilege	Behavior while being created	After saving and exiting the Entity's (Price list or Modifier) setup windows
Global	None	Entity can be viewed and maintained by user who created it.	All the users can view the new entity. But nobody can update it.
Global	Global	Entity can be viewed and maintained by user who created it.	Same as None/Global. The new entity can be viewed and updated by all users

The Oracle Pricing Administrator can assign or change ownership of a pricing entity using the Entity Usage page.

The Pricing Administrator can make changes to Global Usage of price lists and modifiers one by one, or use the Bulk Update Entity Usage function in the Entity Usage page to make changes more quickly.

Warning: It is important that the Oracle Pricing Administrator assigns ownership to all price lists and modifiers prior to upgrading or implementing pricing security. This can be done using the Bulk Update Entity Usage feature in the Entity Usage page. Otherwise, users will be unable to query any price lists or modifiers.

Setting Pricing Security ON

Warning: The concurrent program QP: Security Control with Views Conversion turns pricing security on or off for your entire installation. If you are upgrading or freshly installing the security feature for the first time, ensure that you have completed the following setup and implementation steps before turning pricing security on or setting the default security profile options; otherwise, users will be unable to query any price lists or modifiers in the pricing windows:

- You have assessed and mapped out the behavior your business requires when a

new price list or modifier is created.

- Assigned an operating unit owner for existing pricing entities.
- Granted privileges at all levels based on your security policy and needs.

When security control is first turned ON, a Global check box displays in the header region of all price lists and modifiers. If the Global box is enabled for the entity, then that entity is available across all operating units in your organization. The Global box is visible to end-users and can be updated (cleared or selected) by users with Maintain access privileges.

To activate pricing security, set the concurrent program QP: Security Control with Views Conversion to ON. This is the "switch" that turns security on or off for your installation. Before setting the program to ON, ensure you have completed all the preceding implementation steps.

Note: The Global box is visible to end-users and can be updated (cleared or selected) by users with Maintain access privileges.

You can update the Global box for each price list and modifier window singly, or do bulk updates in the Bulk Update Entity Usage page. See *Assigning Ownership of Pricing Entities to Operating Units (Entity Usage page)*, page 3-51 for more information.

Prior to setting the pricing security on, pricing entities are not assigned to an operating unit. It is important that the Oracle Pricing Administrator assigns ownership to all existing price lists and modifiers prior to turning pricing security on. You can use the Bulk Update Entity Usage feature in the Entity Usage page to assign or reassign global usage values.

After turning pricing security on, all newly created pricing entities are assigned a unique default operating unit identification that makes the creating operating unit the "owner" of the pricing entity.

The following table shows the behavior of existing pricing entities when pricing security is on and no pre-security is assigned:

Security Profile ON: Behavior of Existing Pricing Entities

QP: Default View Only Privilege	QP: Default Maintain Privilege	Privileges from Pricing Security Administrator	Behavior
Not applicable	Not applicable	No privileges granted	Entity cannot be viewed or updated by anybody except the Oracle Pricing Administrator through the security management pages selected from the Oracle HTML user interface.
Not applicable	Not applicable	Maintain	Entity can be viewed and updated by the user with Maintain access privileges.

Overview of Price Lists

This chapter explains implementation considerations for price lists in Basic Pricing for Oracle Order Management.

Price Lists are essential to ordering products because each item entered on an order must have a price. To book the order, the ordered item must be on a price list. Each price list contains basic list header information and one or more pricing lines, pricing attributes, and a secondary price list. Basic price list information includes the price list name, effective dates, currency, pricing controls, rounding factor, and shipping defaults such as freight terms and freight carrier.

Price lists contain prices and currencies for specific products and services. The prices can be defined by:

- Unit price: A fixed price.
- Percent Price: A price which is a percent of the price of another item. This is especially useful in pricing service items.
- Formula: Multiple pricing entities and constant values related by arithmetic operators. For example, you define the price of an item to be a percentage price of another price list line.

For additional information see the Pricing chapter of the *Oracle Order Management User's*

Guide.

Related Topics

Maintaining Price Lists, page 3-70

Basic Pricing Features, page 3-70

Using Precedence to Resolve Multiple Price Lists, page 3-72

Deleting Price Lists, page 3-73

Maintaining Price Lists

Once price lists have been set up Oracle Order Management, you can do the following using price lists:

- Manually add lines to a price list or copy price list lines from one price list to another.
- Add a new group of inventory items to a price list by specifying a range.
- Add a new group of inventory items to a price list by specifying an item category.

See the Pricing chapter of the *Oracle Order Management User's Guide* for additional information on completing these tasks.

Price List Features

Multiple Price Lists

Order Management enables you to define and use multiple price lists to serve various business needs. At least one price list must be established to price all orders. A base or corporate price list can be created with all inventory items to establish a base price for each. This price list can be used in the absence of a specific price list.

Price lists in Basic Pricing feature the following characteristics:

- one Product Context: Item
- one Product Attribute: Item Number
- Product Value is the item Id.
- The default precedence value of 220.

If price list defaulting rules are not defined for a customer or order type, the sales order header does not require a price list to be selected. In this event, the pricing engine uses precedence to search for and return the price with the lowest precedence value for any

given order line from among the several price lists.

Multiple price lists may contain the same products but with different prices. For example, item AS54888 on Price List A may be priced at \$7.00 but on Price List B it is priced at \$8.00. The price list containing the item ordered with the lowest precedence value will be selected by the pricing engine. Precedence is not used by the pricing engine if a specific price list defaults to the customer or order type, or is selected at order entry. See *Using Precedence to Resolve Multiple Price Lists*, page 3-72 for more information.

Price lists can be in several currencies. If you have international sales, you can record transactions in different currencies by defining a price list for each currency. After entering the currency for an order or return, you must choose a price list in the same currency.

If an ordered item is not on any price list, the pricing engine returns an error message that it cannot locate the item and UOM. In such cases, the order cannot be booked with an un-priced line.

Secondary Price Lists

The pricing engine uses secondary price lists when it cannot determine the price for an item using the price list assigned to an order. Primary and secondary price lists must have the same currency. You can only assign one secondary price list to any specific primary price list, however, you can assign the same secondary price list to multiple primary price lists.

If an item appears on both the primary and a secondary price list with the same effective dates, the pricing engine uses the primary price list to price the item. If an item appears on the primary price list but is not active (the effective end date has passed), the pricing engine uses the price on the secondary price list.

Discounts and modifiers apply irrespective of whether the price is taken from the primary or secondary price list.

Multiple Currencies

International sales transactions can be recorded in different currencies by defining a price list for each currency. After entering the currency for an order or return, you must select a price list in the same currency.

Negative Pricing

Depending upon the Profile setting of QP: Negative Pricing, you can have either positive or negative prices (or both) on a price list. The profile option OM: Allow Negative Pricing determines if a negative list price or selling price can be entered on an order.

GSA (USA General Services Administration) Price List

If your business requirements require GSA price lists, you can set these price lists up using the GSA Price Lists window. See the Profile Options section for discussion of setting up GSA profile options.

Qualifiers for Price Lists

You cannot create qualifiers to a price list in Basic Pricing. To make a price list, customer or order specific you need to use the Defaulting Rules in Order Management to default the appropriate price list. These defaults can be set up in Order Management at the Customer Setup or when setting up Order Types.

Active box in Price List windows

The Active box on the price list header indicates if the price list is active or not. When the Active box is selected (the default for new price lists), the price list is Active. You can temporarily or permanently disable the price list by clearing the Active box. This enables a user to manually activate or deactivate a particular price list.

In query mode, the Active box is selected, but the underlying value is null. Therefore, when doing a "query by example" to retrieve active price lists, you must clear then re-select the Active box on the query window.

Effective dates

Price lists can have Starting and Ending Dates. This enables you to prepare price list before they are valid and ensure they are not used until their Start Date.

You can use price list and price list line effective dates to retain a history.

Default Price List

You cannot create qualifiers for a price list in the pricing Price List window. Price lists default from the Customer Setup or from the Sales Orders window.

- Customer Setup: In the customer definition, a price list can be assigned to a customer. At order entry for this customer, this price list will be defaulted from that source.
- Sales Orders window: In the Sales Orders window, a price list may be selected from the LOV of available price lists.
- Order Type: In Order Management, order types are defined and may be defined to default a specific price list.

Using Precedence to Resolve Multiple Price Lists

The Precedence value for price list lines decides what price the pricing engine should

select when an item is found on more than one price list. This could occur if the price list was not specified on the order line and as a result the pricing engine searched all eligible price lists for an item.

The Precedence value controls which price list or modifier is applied to the order line if multiple price lists or modifiers are eligible. The price list line or modifier with the highest precedence is selected. Remember that the lower the Precedence number, the higher its precedence. Precedence (or Specificity) means the lower the precedence, the more specific the price or discount.

Static Formulas

You can use static formulas to create a price on a price list. Once static formulas are created, or updated, you must run a concurrent process BEFORE any order entry to update the price on the price list. Otherwise, the pricing engine will not return the new price. Static formulas are calculated once, and related price lists updated.

Uploading Price Lists using QP: Bulk Import of Price List

You can use the concurrent program QP: Bulk Import of Price List to import price lists from interface tables into the Oracle Pricing tables.

This provides an efficient alternative to APIs for validating and loading large pricing data into pricing tables. To improve processing efficiency, it is recommended that you run the concurrent program at optimal times such as when no active users are on the system.

See the *Advanced Pricing User's Guide*, *Reports and Concurrent Programs*, and the *Advanced Pricing Implementation Manual* for more information.

Deleting Price Lists

You can delete only price lists lines once they are created and saved. However, price lists can be ended by entering an End Date on the price list header for the entire price list, or on the price list line to effectively remove use of the line to be deleted. You can also make a price list inactive, by clearing its Active box.

Overview of GSA Pricing

This section describes the implementation of Government Services Administration (GSA) pricing for companies that follow GSA pricing guidelines. GSA pricing can also be used to create minimum price floors.

Oracle Order Management enables you to identify when a selling price of an item falls below a minimum price. This can be used by companies that have Government Services Administration agreements. Commercial customers, otherwise known as non-GSA customers, should not receive a selling price for an item that is equal or less than a price for a GSA customer.

Order Management provides functionality to manage this pricing practice. It does not provide any official GSA pricing policies. Setting up and managing GSA customers is solely the responsibility of internal corporate policies and practices. Business practices for overriding GSA violation warnings should be determined by the company.

Even though this feature is designed to enforce GSA Pricing, it's functionality can also be used to set price floors.

GSA Pricing Guidelines

GSA policies require that commercial (non-GSA) customers of a company do not receive equal or greater discounts than GSA customers. If the price of the same item is equal or lower then it causes a GSA violation. Oracle Order Management provides functionality to warn when a GSA violation has occurred.

The GSA Advantage policy allows the Order to have several ship-to locations but a single bill-to (GSA Address). Order Management also provides functionality to allow different ship-to addresses on the same order. Order Management also allows you to have more than one bill-to address for a customer, but only the bill-to addresses checked GSA will get the GSA price.

Using Agreements for Minimum Price Floors

Even if your business is not governed by the pricing rules of the Government Services Administration, the GSA Pricing feature can be used to monitor minimum price floors for items. This provides the ability to define price minimums and issue warnings when selling prices go below this minimum.

GSA Pricing = GSA Discount

In Oracle Order Management, the GSA Pricing window actually uses a modifier discount with an application method of New Price to define GSA prices.

At order entry time, when the item is entered for a GSA customer, the base price will be returned from the regular price list. When you leave the order line, the New Price discount will be applied and become the new base price. A price adjustment will be created for the difference of the new price and the base price:

For example:

- Base Price Item A: \$12
- GSA Price Item A: \$10
- Unit Selling Price on Order Line: \$10
- GSA Discount Item A: \$2

A GSA Discount is created for the requirement that some companies need to manage the discounts given to GSA customers. The value of these discounts represents the loss

in revenue for an item for doing business with a GSA customer versus a non-GSA customer.

GSA Violation

A GSA Violation occurs when the price of an item for a non-GSA customer is equal to or less than the price of this item in the GSA Price List. In Oracle Order Management there is a profile option that determines how the company wants this violation to be controlled.

In the event of multiple GSA price lists, the violation floor will be set based on the GSA price list with the highest price for the item.

Related Topics

GSA Pricing Guidelines, page 3-74

Setting up GSA Pricing, page 3-75

Setting up GSA Pricing

The Define GSA Pricing window uses modifier functionality for setting up GSA Prices (GSA Discounts), and only accepts GSA Price setup. You cannot use this window to define any other modifiers. See the *Oracle Order Management User's Guide* for detailed information about Define GSA Pricing window and related fields.

Creating a GSA Customer

To identify a customer that is eligible to receive a GSA Price, select the GSA box on the Customer record of the Order Management tab. You can navigate to the Customer window from Oracle Order Management > Customers > Standard. Only GSA customers can receive prices listed on the GSA price list.

Note: You do not need to specify any customers as being GSA in order to use the GSA feature for monitoring price minimums.

QP: Verify GSA

You must enable this system profile option to use the GSA feature for monitoring price minimums. This profile option controls the comparison between the selling price for items being sold to non-GSA customers and items priced in the GSA Price List. The default value of No must be switched to Yes before the GSA Pricing feature is activated.

OM: GSA Discount Violation Action

This system parameter instructs Order Management what to do when a GSA Violation occurs. You can select from the following values:

- Prevent GSA Violation by Causing Error
- Issue Warning when GSA Rules are violated (Default)

GSA Violation Hold

Oracle Order Management has seeded the hold type: GSA Violation Failure. If the OM: GSA Discount Violation Action is set to Prevent GSA Violation by Causing Error, orders that are in GSA violation will automatically be placed on hold. The GSA Violation holds are automatically released if the order or order line is updated and no longer violates the business rule due to which the hold was applied.

Overview of Formulas

You can create mathematical expressions called formulas that the pricing engine uses to calculate the list prices of items and the discounts that apply to them. You can use these formulas to:

- Create a price from a computation as an alternative to entering prices in a price list.
- Calculate a price adjustment. For example, you can instruct the pricing engine to calculate Freight and Special charges by attaching a formula to a freight charge modifier line.

This enables you to meet different business needs by determining how to use each formula and by establishing controls around the naming and description of each formula.

Note: In Basic Pricing, only static formulas can be used on price lists. The concurrent program Build Formula Package should be run if you create a new formula or update an existing formula expression.

Related Topics

Seeded Freight and Special Charge Formulas, page 3-103

Overview of Formulas, page 3-76

See the *Oracle Order Management User's Guide* for information about:

- Creating a Pricing Formula
- Defining Factor List Details
- Updating Formula Prices

Overview of Modifiers

This section contains information about modifiers and modifier implementation. For detailed information on setting up modifiers and modifier lines, see the *Oracle Order Management User's Guide*.

The Define Modifier window is used to set up price adjustments, freight and special charges, simple discounts and surcharges. Modifier lists contain one or more modifier lines. Modifiers have list-level and line-level components.

You can define qualifiers at the modifier list and line levels to define a customer's eligibility for the modifier. The modifier level, product and product groups, and attributes also help to determine which modifiers will get applied. In Basic Pricing, pricing phase, incompatibility group, and bucket are default values. The pricing engine returns volume breaks and price adjustments back to the calling application.

Related Topics

Implementing Modifiers, page 3-77

Types of Adjustments, page 3-77

Modifiers: How Do I Define My Product Hierarchy?, page 3-78

Modifier: Additional Controls and Special Considerations, page 3-81

Manual Adjustments using Modifiers, page 3-81

Implementing Modifiers

There are certain questions you should consider when implementing modifiers, including the following:

- What types of adjustments can I make?
- At what item level can I apply my adjustments?
- How are these modifiers qualified?
- How are my adjustments applied?
- Are there any additional controls and special cases?

Types of Adjustments

You can create three modifier list types in Basic Pricing:

- Discount List

- Freight and Special charge List
- Surcharge List

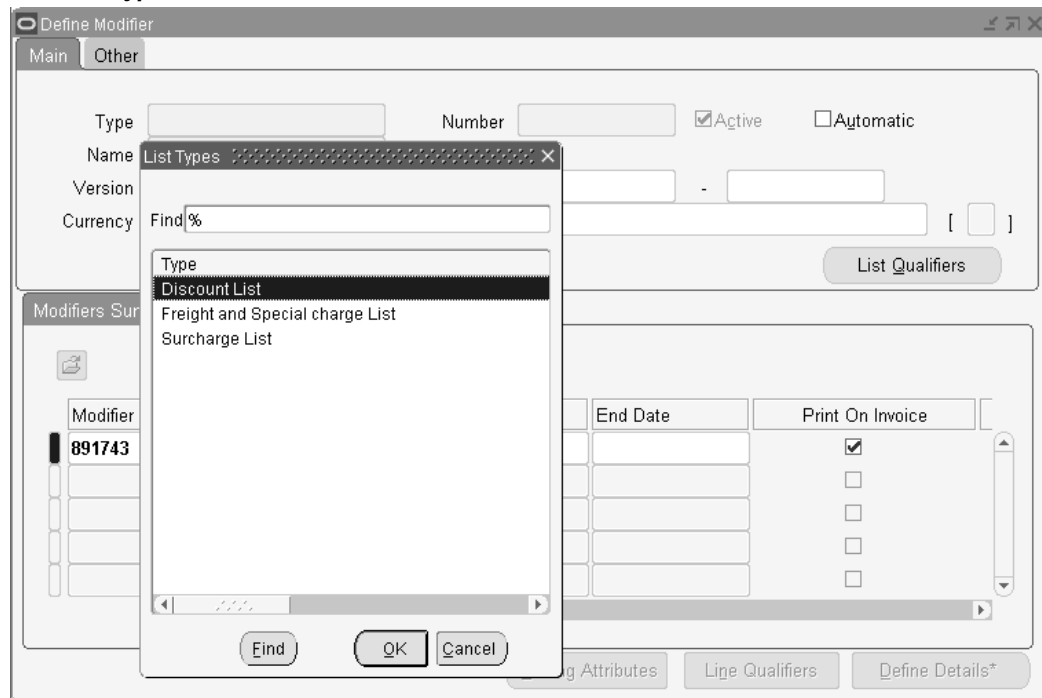
There are four modifier line types available in Basic Pricing:

- Discount: Creates a negative price adjustment
- Freight and Special Charges: Amount applied to the customer invoice for movement of a shipment to a destination. See *Setting up Pricing Modifiers for Freight and Special Charges*, page 3-105 for more information.
- Price Break Header: Creates price breaks based on item quantity or item amount.
- Surcharge: Creates a positive price adjustment

Discounts and Price Breaks can be defined for a Discount list modifier. Similarly, a Surcharge list can include surcharges and price breaks. Freight and special charges are only available from the Freight and Special Charges List.

The following image displays the modifier types.

Modifier Types



Modifiers: How Do I Define My Product Hierarchy?

Modifiers can be defined at the line or order level:

- Discounts, surcharges, and freight and special charges may be defined at the line or order level.
- Price Breaks are only defined at the line level and are continuous.

Line level modifiers can be defined for an item, an item category, or for all products within your product hierarchy. You can attach pricing attributes when Product Attribute field is ITEM_ALL. Only one context per order line with 100 attributes is allowed for Pricing Attributes.

Example:

- Discount of \$15 on Item A
- Surcharge of 10% for All Items with Grade A
- Price Break for item category- Sodas

Setup Considerations

The Precedence field is defaulted based on the Product Attribute selected and can be updated. When two modifiers qualify to apply to the same line, precedence determines which one applies. The lower the value the higher the precedence.

The unit of measure (UOM) is not mandatory unless the modifier line type is price breaks.

For line-level Discount and Surcharge Lists, the values for the following fields are defaulted:

- Pricing Phase: List Line Adjustment
- Incompatibility: Level 1 Incompatibility
- Bucket: 1

Modifiers: How are they qualified?

Qualifiers are linked individually to modifiers and are used to determine who is eligible for certain modifiers. Oracle provides basic seeded qualifier contexts and attributes. You cannot create new qualifier attributes.

Qualifiers may be grouped to create and/or conditions using grouping numbers. Qualifiers with the same group number create and conditions and require that all conditions be met. Qualifier groups with different numbers create or conditions indicating that at least that at least one (set of) qualifier conditions with the same grouping number must be met.

Qualifiers can be defined at the list or line level. List Qualifiers are Customer Name, Price Lists, Customer Class, and Customer Site. Line Level Qualifiers are Agreement

Name, Agreement Type, Order Type, and Purchase Order. Line level qualifiers are only applicable if the Product Attribute is ITEM_ALL.

See the *Oracle Order Management User's Guide* for more information on setting up and using qualifiers for modifier lists and modifier lines.

Setting up a Common Qualifier using Grouping Number -1

To make a qualifier mandatory for all qualifying conditions, you can use a qualifier grouping number of -1. The pricing engine will always ensure that a common qualifier condition is met before proceeding to other qualifiers.

For example, suppose that customers must order an item from the "Fall" price list to get a discount. To enforce this condition, the "Fall" price list is assigned the -1 Grouping Number to make it a common qualifier. You can also set up other qualifiers (in addition to the common qualifier) to define other qualifying conditions, for example:

Customer Name is Computer Store OR

Customer Class is High Tech AND the Customer Name is Customer Y

The following table shows how these qualifier values would be set up in the qualifiers window:

Example of Setup for Qualifiers and Common Qualifier

Grouping No	Qualifier Attribute	Operator	Value From	Value To
-1 (This is the Common Qualifier whose conditions must be met).	Price List	=	Fall Price List	-
1	Customer Name	=	Computer Store	-
2	Customer Class	=	High Tech	-
2	Customer Name	=	Customer Y	-

Even if the customer is eligible for qualifier 1 or 2, the conditions of the Common qualifier must be met.

Modifier: Additional Controls and Special Considerations

Precedence

The precedence value defaults from the Context Setup window (Setup > Attribute Management > Context and Attributes). In Basic Pricing, all modifiers are automatically incompatible with one another as the Incompatibility Code is always set as Level 1. Basic Pricing only honors precedence processing for modifiers. If there are two modifier lines with the same precedence value, then the modifier for the best price will get applied. For example:

- Modifier 1: Discount by Item Category: All 6 Packs of Soda \$1.00, (Defaulted Precedence > 290).
- Modifier 2: Discount by Item: 6 Pack of Pepsi \$2.00, (Defaulted Precedence > 220).
- The engine will select a discount of \$2 when pricing a 6 Pack of Pepsi because the precedence value is lower for the second discount

Optional Currency

When Optional Currency is selected for a modifier using the lookup OPTCUR, the modifier can be used with any price list regardless of its currency. Such modifiers could be used with both single price lists that are set up in a single currency, or with multi-currency enabled price lists.

Modifier Effectivity

The pricing engine determines if a modifier is valid by evaluating the modifier's Active box and effective dates. The pricing engine evaluates all Active modifiers, then evaluates if the modifier must have current effective dates for the pricing engine to continue. Modifier effective dates can be set at the header and line level. The effective dates of the modifier line must fall within the effective dates for the modifier list.

Unit of Measure (UOM)

The UOM is not a mandatory field for modifier types other than price breaks. UOM conversions are not carried out for modifiers.

Manual Adjustments using Modifiers

To manually create a new selling price on the order line, either a discount, surcharge or new price, you can define a manual discount to decrease the price or a manual surcharge to increase the price. When you move to another line or the line is saved, a new price can be typed and the manual adjustment type selected.

If you have only manual overridable discounts eligible at the line level, you can only decrease the price. If you have only manual overridable surcharges eligible at the line level, you can only increase the price.

A manual adjustment has the following field value characteristics: Automatic box is cleared at the modifier list and line level, Modifier Line is overridable, and the bucket is null. Please note that buckets are used in Advanced Pricing only.

The pricing phase determines when you can override the selling price. For lines in the pricing phase List Line Adjustment, you cannot override the selling price without moving to another line or saving the order for lines. For Order level adjustment, you cannot override the selling price without saving the order. For the pricing phase All Lines Adjustments (Phase 30), the modifier is applied only when the order is saved. Please note that if you include pricing attributes for the sales order line, then batch event gets triggered and Phase 30 gets applied. This means that the modifier gets applied. Batch events are workflow driven and Phase 30 contains batch events.

Only seeded phases in Price Line and Order support manual adjustment. If you want to create a brand new phase of your own, you have to attach it to the BATCH event. For example, Phase 80 by default (seeded definition) is assigned to the BOOK event, and will not appear in the manual adjustment LOV. Again, only seeded phases in Price, Line and Save Order support manual adjustments. If you use a phase other than these, for example, phase 80, you will need to associate it to BATCH event.

If the profile option QP: Return Manual Discounts Profile Option set to Y, then ALL manual discounts will be returned and all automatic discounts that were not considered will be returned as manual discounts. This is the default value.

If this profile option is set to N, then the pricing engine will return only one automatic or one manual discount. Discounts (automatic or manual) will not be returned as manual discounts.

Applying Manual Adjustments

In the Sales Orders window, select Actions and select View Adjustments. In the Modifier Name field, select the LOV to view the unapplied manual adjustments for the line.

In the Sales Orders window Line Items Tab, choose Unit Selling Price LOV to apply line level manual adjustments. Type over the Unit Selling Price field to apply manual overridable adjustments for the line.

Overtyping the Unit Selling Price field to apply line level manual overridable adjustments.

The profile option *OM: Discounting Privileges* determines if a manual modifier can be applied to the price or not. Please note that this profile option determines the application of the manual modifier and not the Calculate Price Flag which is mainly for automatic discounts. So whatever the value of the Calculate Price Flag (Yes, No or Partial), the profile option allows the user to apply all eligible manual adjustments. It can have the following values:

1. Unlimited: The manual modifier will be applied irrespective of the value of the Calculate Price Flag.
2. Full: The manual modifier will be applied.
3. Non-Overridable: The manual modifier can only be applied if the Override option is not checked. Also make sure the Enforce List Price check box for the order type is unchecked so that the order allows manual override of the selling price.
4. None: The manual modifier will not be applied.

Note: If you invoke the Unit Selling Price LOV twice, you may get an error message because the manual adjustment was applied the first time and there are no more manual adjustments eligible.

Overview of Agreements

Oracle Order Management enables you to establish agreements with your customers that let you define the prices, payment terms, and freight terms that you negotiated in your agreement. This section contains information about the implementation considerations of agreements in Oracle Order Management.

Types of Agreements

Order Management provides the following Agreement types:

- **Standard Agreements:** Standard Agreements use standard price lists. Price list lines are set up and maintained through the regular Price List Setup window. Use Standard Agreements to define special terms and conditions that are defaulted onto the order, but use prices that are available to other orders. Standard Agreements can be generic or can be specific to a customer or customer family.
- **Pricing Agreements:** Pricing Agreements use Agreement Price Lists. These price lists are setup and maintained through the Agreements window. Use Pricing Agreements to setup special pricing arrangements with either a customer or a group of customers. You are also able to define special terms and conditions that are defaulted onto the order.
- **Sales Agreement:** In Oracle Order Management, you can define the prices, payment and freight terms that you negotiated with your customers in a Sales Agreement. Defining a default price list for a sales agreement enables all releases against the sales agreement to receive the special sales agreement pricing. See the *Oracle Order Management User's Guide* for information on using sales agreements.

Since each agreement type serves different business needs, you need to determine how you will name, number, and use each agreement.

Standard Agreement vs. Pricing Agreement

The following table compares Standard and Pricing agreements:

Differences Between Agreements

Standard Agreements	Pricing Agreements
Agreement lines not allowed.	Agreement lines required.
Associated with standard price list (type PRL).	Associated with agreement price list (type AGR).
Maintain and view price list lines through price list window.	Maintain and view price list lines through agreement window.
Use each standard price list with multiple standard agreements and to price orders not associated with an agreement.	Use each agreement price list with multiple pricing agreements. Not usable to price orders not associated with an agreement.
Cannot revise price list lines using agreement window.	Can revise price list lines using agreement window.
Agreement number not automatically created as a qualifier for the associated price list.	Agreement number automatically created as a qualifier for the associated price list. You can only use it to specify the pricing agreement on the order line.

Related Topics

Types of Agreements, page 3-83

Revising Agreements, page 3-84

Setting up Agreements, page 3-85

Defining Special Terms for an Agreement, page 3-85

Revising Agreements

Order Management enables you to maintain multiple versions of the same agreement. This enables you to keep the same agreement name but make changes to the original terms and keep a record of these changes. You can create new versions by changing the Reason number field on the Agreement header.

You can further manage these changes by providing a reason for the revision. You can

have many versions of the agreement, but only one version of an agreement can be active. Effective date ranges must also be exclusive for each agreement version.

For Pricing Agreements only, you have line level revision and reason capability that is independent of the Agreement level revision. You must manually end date the line and enter a reason number prior to entering the new agreement line.

Defining Special Terms for an Agreement

Order Management enables you to define special terms for an Agreement. These become defaults to the order lines when an agreement is used on an order. Defaulted attributes include: price list, freight terms, freight carrier, payment terms, accounting rule, and invoicing rule. The values of these attributes will default to the order lines when this agreement is used on an order.

Pricing Agreement Price List and Lines

Pricing Agreement price lists are defined in the Agreements window on the Pricing tab. When you select the Price List Type of Pricing Agreement, the LOV price lists that are displayed in the Price List field only those associated with Agreements. Choose to use an existing Agreement Price List, or create a new Agreement Price List. You can use each agreement price list with multiple pricing agreements. Agreement number is automatically created as a qualifier for the associated agreement price list. Only use this price list to specify the pricing agreement on the order line. You cannot use an agreement price list to price orders not associated with an agreement.

Pricing Agreement Price List lines are defined on the bottom region of the agreements window. Here you can define agreement prices for the agreement price list using customer part numbers and inventory item numbers. You can also maintain line revisions and keep track of these with revision reasons.

Customer Items

You can define Pricing Agreements for customer items. The Customer Item must be setup in the inventory system. At order entry time, you can order either by the customer item or its cross referenced internal item.

Single Currency

Both Standard Agreements and Pricing Agreements are for a single currency. This is the currency that is specified on the price list. If you need an agreement to apply to multiple currencies, then you need to setup multiple price lists for each currency, and then setup multiple agreements and attach the price list to each.

Setting up Agreements

Before defining agreements, you need to consider the following implementation

considerations to determine how agreements can be used in your business processes.

Note: For more information on setting up Pricing Agreements, Standard Agreements, and Sales Agreements, see the *Oracle Order Management User's Guide*.

Agreement and Customer Relationship

Agreements can be defined to be generic, that they can be used by any customer. Agreements can also be defined for a specific customer and all their related customers.

Defining Agreement Types

By setting up different Agreement Types (not to be confused with Type of Agreement), you can categorize agreements into a particular type. A type can be used to limit which agreements can be entered on a particular order type or a type can be used for segmenting for reporting purposes. Agreement type is not mandatory. You define Agreement Types by using the Lookups menu item under the Pricing menu.

Revision Reason

Revision reasons help you track why an agreement was revised. This is an optional field. You can define Revision Reasons by choosing Lookups from the Pricing menu.

Customer Items

You can define Pricing Agreements for customer items. The Customer Item must be set up in the inventory system. Set customer items in Order Management Super User > Items > Customer Items. You can specify the org ID and set up the customer items. The customer item must then be cross-referenced to an internal item.

In the Agreement window, the customer item LOV shows all customer items set up for that customer and the product value has its internal item number defaulted when a customer item is chosen.

Overview of Contexts and Attributes in Attribute Management

Contexts and attributes are used to define customer, pricing, and product hierarchies. Creating new pricing contexts and attributes enables you to create additional user-defined data sources for your pricing actions. For each attribute, you can select "User-Entered" as the attribute mapping method to derive the value for the attribute. User-entered means that the value is obtained when a user enters the value.

Using Attribute Management you can complete the following:

- Create new pricing contexts and attributes.

- Update existing contexts and attributes. However, you cannot update seeded contexts or their attributes.
- Disable existing attributes.

Note: For information on attribute mapping methods available only in Oracle Advanced Pricing, see the *Oracle Advanced Pricing Implementation Manual*.

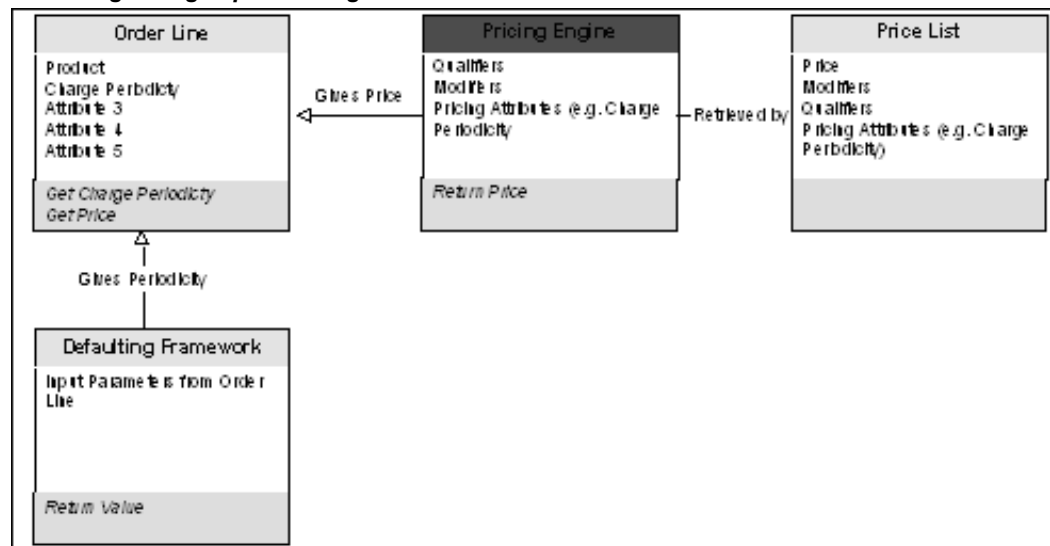
You can navigate to the Attribute Management feature as follows: Oracle Pricing Manager Responsibility > Setup > Attribute Management, page B-1.

Recurring Charges

A recurring charge is a fixed charge that will be repetitively applied to an account on a periodic basis. Recurring charges are most commonly associated with subscription services such as Internet Service Provision, some Utility Rate Plans, Bank Account Fees and Credit Card fees. Charge periodicity is the interval by which the price for a recurring charge has been set up on a price list (e.g. Monthly, Quarterly, Yearly).

Oracle Advanced Pricing seeds CHARGE_PERIODICITY as a pricing attribute and the pricing engine now accepts an input value for this pricing attribute from the calling application. For details on how to set up the attribute, refer to the sections below.

Recurring Charges processing



Creating Context and Attributes to be used for Pricing Setup windows

Pricing rules such as pricing attributes are used to drive your pricing actions. You can create new pricing contexts and attributes in the Context Setup window to help define

your pricing rules. See *Creating Context and Attributes*, page 3-88 for more information.

Linking Attributes to a Pricing Transaction Entity

Once you create a context and its attributes, you can link the context-attribute grouping to a specific Pricing Transaction Entity (PTE). For a given PTE, this combination can be used within a pricing setup. Each PTE has its own unique combination of attributes. See *Linking Attributes to a Pricing Transaction Entity*, page 3-88.

Related Topics

Deleting Contexts, page 3-90

Summary of Attribute Levels for Pricing Setup windows, page 3-99

Creating Context and Attributes

The following sections describe how to set up contexts and attributes for Oracle Basic Pricing. Product contexts and their attributes define a product hierarchy for product information. For example, a product context called "Item" may consist of attributes such as Item Number, Item Category, and All Items. Pricing contexts and their attributes are used to define eligibility for a price list line or modifier. Once created, contexts and attributes can be used in price list lines, formula components, and modifiers.

In Basic Pricing, you can define new contexts for the Pricing Context, and new attributes for Pricing and Product contexts. You cannot create new contexts or attributes for the Qualifier context. Once you define a new context, you can also create its attributes.

The following table outlines the contexts and attributes that can be created in Basic Pricing:

Contexts and Attributes You Can Create in Basic Pricing

Context Type	Can you create new contexts for this Context Type?	Can you create new attributes?
Pricing Context	Yes	Yes
Product Context	No	For Item context only
Qualifier Context	No	No

To create new pricing contexts:

1. Navigate to the Context Setup, page B-1 window.

Context Setup window

Type	Code	Name	Description	Seeded	Enabled
Pricing Context	PRICING ATTRIE	Pricing Attribute	Pricing Attribute Context	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>

Code	Name	Description	Precedence	Application Name
QC_GRADE	Grade		782	Oracle Pricing
PARENT_LIST_F	Parent List Price		710	Oracle Pricing
INSURANCE_CO	Insurance Cost		730	Oracle Pricing
HANDLING_COS	Handling Cost		740	Oracle Pricing
FTECHARGE	Transportation Charge		810	Oracle Pricing
FREIGHT_COST	Freight Cost		770	Oracle Pricing

Value Sets

2. Select Pricing Context as the Type.
3. Enter a Code which is a short name for the context. Once created, it cannot be updated.
4. Enter a Name and Description for the context. This creates the name that can be selected from the context field in the pricing setup windows.

The Seeded box is selected automatically if the context is a seeded value. You cannot change a seeded value.
5. Select the Enabled box to make this context available for pricing setup windows. If not selected, the context is disabled and does not display in the Context field on the pricing setup windows. All the attributes defined under this context will also be unavailable for setup.
6. When you have completed your entries, enter the attributes information in the Attributes region. See: Creating Attributes, page 3-90 for more information on adding attributes.

Deleting Contexts

You cannot delete a context if it has one or more attributes.

Creating Attributes

For a context, you can create attributes that define the specific values which define pricing rules. For example, a pricing context such as Volume may consist of attributes such as Handling Weight or Handling Volume or whatever additional attributes you have chosen to define.

The pricing engine evaluates attributes during engine run time to determine which price lists and modifiers are eligible for the transaction. Attribute values can be derived at the order level, line level, or for both order and line levels. You can define attributes for a given context, and decide which attributes display in the list of values in the Pricing Setup windows.

Note: You must create all new attributes using the Attribute Management setup windows: Oracle Pricing Manager Responsibility > Setup > Attribute Management > Context and Attributes.

To create new attributes:

1. Navigate to the Context Setup, page B-1 window and select the context to which you want to add attributes.

Context Setup window: Attributes region

Context

Type	Code	Name	Description	Seeded	Enabled	
Pricing Context	PRICING ATTRIE	Pricing Attribute	Pricing Attribute Context	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	[]
				<input type="checkbox"/>	<input type="checkbox"/>	

Attributes

Code	Name	Description	Precedence	Application Name	
OC_GRADE	Grade		782	Oracle Pricing	PRIC
PARENT_LIST_F	Parent List Price		710	Oracle Pricing	PRIC
INSURANCE_CO	Insurance Cost		730	Oracle Pricing	PRIC
HANDLING_COS	Handling Cost		740	Oracle Pricing	PRIC
FTECHARGE	Transportation Charge		810	Oracle Pricing	PRIC
FREIGHT_COST	Freight Cost		770	Oracle Pricing	PRIC

Value Sets

2. In the Attributes region, enter the Code which is a short name for the attribute. This is an internal name that is unique for a given attribute. Once created, it cannot be updated.
3. Enter a display Name and Description for the attribute. Since new attributes can be introduced by different applications besides Pricing, adding a brief description about the attribute is helpful.
4. Enter a numeric Precedence value which decides the processing sequence of qualifier/pricing attributes. For example, if two price list lines qualify for the same item, then the line with the higher precedence (lower precedence number) is given. Precedence numbers in the series of 5's and 10's are reserved for seeded pricing attributes and should not be used.
5. Enter the Application Name that created this attribute. If an Application Name is not entered, the system defaults Oracle Pricing as the creator of the attribute.
6. Select a Column Mapped value to which an attribute will be mapped. The list displays the names of unused columns only.

Columns QUALIFIER_ATTRIBUTE1 through QUALIFIER_ATTRIBUTE30 are reserved for seeded qualifier attributes. Columns 1-30 are available only for user Datamerge. The Pricing Manager user's list has unused columns between 31-100.

Columns 1 to 100 are available and it is recommended to use pricing attributes 1 to 30 as user-entered pricing attributes.

7. Select a value from the Value Set field to define a domain of valid values for an attribute. The Datatype value indicates if the Value Set is numeric (Number) or alphabetic (Char).
1. Alternately, to create a new Value Set or view an existing one, click Value Sets to display the Value Sets window.

Value Sets window

The screenshot shows the 'Value Sets' window with the following details:

- Title Bar:** Value Sets
- Value Set Name:** QP: Number
- Description:** Any Number
- List Type:** List of Values
- Security Type:** No Security
- Format Validation:**
 - Format Type:** Number
 - Maximum Size:** 32
 - Precision:** 10
 - ☒ Numbers Only (0-9)
 - ☐ Uppercase Only (A-Z)
 - ☐ Right-justify and Zero-fill Numbers (0001)
 - Min Value:** (empty field)
 - Max Value:** (empty field)
- Value Validation:**
 - Validation Type:** None
- Buttons:** Edit Information

2. Once you have created a new value set, you can select the newly created value from the Value Set field.

Note: If you want to replace a Value Set of an attribute, the new Value Set must be the same datatype as the old one.

The Seeded box is selected automatically if the context is a seeded value. It remains selected even if you overwrite a seeded context.

8. Select Required to make the attribute a required value in pricing windows. If the attribute is made Required, then a user must enter the specified attribute, for example, every time he or she creates a sales order line.
9. Save your work.

Once you have created the context and its attributes, you can link an attribute grouping to a specific Pricing Transaction Entity (PTE).

Related Topics

Linking Attributes to a Pricing Transaction Entity, page 3-93

Deleting Attributes

Attributes already used in pricing setup windows cannot be deleted.

Linking Attributes to a Pricing Transaction Entity

Once you have created the context and its attributes, you can link an attribute grouping to a specific Pricing Transaction Entity (PTE).

You must link the context and attribute combination to a PTE, so that the context and attributes become available in the pricing setup windows for that PTE. Each PTE has its own unique combination of attributes. See Viewing Information about a Pricing Transaction Entity, page 3-95 for additional information on Pricing Transaction Entities.

To link pricing attributes to a Pricing Transaction Entity:

1. Navigate to the Pricing Transaction Entity-Attribute Linking, page B-1 window.

Pricing Transaction Entity-Attribute Linking window

Assigned to PTE	Code	Name	Description	Seeded	Enabled
<input type="checkbox"/>	LOGISTICS	Logistics	Logistics Exchange Context	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	PRICING ATTRIBU	Pricing Attribute	Pricing Attribute Context	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	VOLUME	Volume	Volume Context	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>

2. Select a Pricing Transaction Entity such as Order Fulfillment. To search for a Pricing Transaction Entity, click the Find icon.
3. Select Pricing Context as the Context Type.

Optionally, select the Show Linked Contexts box to display only those contexts assigned to the selected Pricing Transaction Entity.

The context(s) matching the criteria for the selected PTE and Context Type display in the Contexts region.

4. In the Contexts region, select the context whose attributes are to be linked to the PTE. If the Assigned to PTE box is not selected, then the attributes have not been created/selected for that context in the given PTE.
5. Click Link Attributes to display the Link Attributes window.

Link Attributes window

The screenshot shows the 'Link Attributes - (Order Fulfillment) (Pricing Context - Volume)' window. It contains a table with the following columns: Code, Name, Precedence, Level, Attribute Mapping Method, LOV Enabled, and Use. The table lists several attributes, including ITEM_QUANTITY, PERIOD1_ITEM, PERIOD1_ITEM, PERIOD2_ITEM, PERIOD2_ITEM, PERIOD3_ITEM, PERIOD3_ITEM, and ITEM_AMOUNT, each with a corresponding precedence value, level (all are LINE), and mapping method (either USER ENTERED or ATTRIBUTE MAPPING). The LOV Enabled column has checkboxes, and the Use column has a 'Use' button. An 'Attribute Mapping' button is located at the bottom right of the window.

Code	Name	Precedence	Level	Attribute Mapping Method	LOV Enabled	Use
ITEM_QUANTITY	Item Quantity	800	LINE	USER ENTERED	<input checked="" type="checkbox"/>	<input type="button" value="Use"/>
PERIOD1_ITEM	Period1 Item Amount	850	LINE	ATTRIBUTE MAPPING	<input checked="" type="checkbox"/>	<input type="button" value="Use"/>
PERIOD1_ITEM	Period1 Item Quantity	820	LINE	ATTRIBUTE MAPPING	<input checked="" type="checkbox"/>	<input type="button" value="Use"/>
PERIOD2_ITEM	Period2 Item Amount	860	LINE	ATTRIBUTE MAPPING	<input checked="" type="checkbox"/>	<input type="button" value="Use"/>
PERIOD2_ITEM	Period2 Item Quantity	830	LINE	ATTRIBUTE MAPPING	<input checked="" type="checkbox"/>	<input type="button" value="Use"/>
PERIOD3_ITEM	Period3 Item Amount	870	LINE	ATTRIBUTE MAPPING	<input checked="" type="checkbox"/>	<input type="button" value="Use"/>
PERIOD3_ITEM	Period3 Item Quantity	840	LINE	ATTRIBUTE MAPPING	<input checked="" type="checkbox"/>	<input type="button" value="Use"/>
ITEM_AMOUNT	Item Amount	810	LINE	USER ENTERED	<input checked="" type="checkbox"/>	<input type="button" value="Use"/>

Attribute Mapping

6. Select the attribute Code to be linked to the PTE.
7. Select an attribute level such as LINE that determines the level from where the attribute will be sourced.
8. Select USER ENTERED as the Attribute Mapping Method.
9. Select LOV Enabled if you want the attribute to display in the list of values of the pricing setup windows.

Link Attributes window (continued)

Link Attributes - (Order Fulfillment) (Pricing Context - Volume)					
Code	Name	Precedence	Mapping Enabled	Column Mapped	Attribute Mapping Status
					Used In Setup
ACC_QTY	Acc Line Qty-Java	824	<input type="checkbox"/>	PRICING_ATTRIBUTE48	<input type="checkbox"/>
BLANKET_AMO	Blanket Amount	900	<input checked="" type="checkbox"/>	PRICING_ATTRIBUTE6	<input checked="" type="checkbox"/>
BLANKET_LINE	Blanket Line Quantity	940	<input checked="" type="checkbox"/>	PRICING_ATTRIBUTE8	<input checked="" type="checkbox"/>
BLANKET_LINE	Blanket Line Amount	920	<input checked="" type="checkbox"/>	PRICING_ATTRIBUTE7	<input checked="" type="checkbox"/>
TEST_ACC-AMO	Test-Accumulated Amour	911	<input type="checkbox"/>	PRICING_ATTRIBUTE19	<input type="checkbox"/>
TEST_ACC_QTY	Test-Accumulated Qty	920	<input type="checkbox"/>	PRICING_ATTRIBUTE17	<input type="checkbox"/>
ITEM_QUANTITY	Item Quantity	800	<input checked="" type="checkbox"/>	PRICING_ATTRIBUTE10	<input type="checkbox"/>
PERIOD1_ITEM	Period1 Item Amount	850	<input checked="" type="checkbox"/>	PRICING_ATTRIBUTE13	<input checked="" type="checkbox"/>

- Use in Limits box: This field is view-only in Basic Pricing.
 - Attribute Mapping Enabled: This field is view-only in Basic Pricing. Indicates if the attribute is used in Attribute Mapping. This box is cleared for all seeded attributes to avoid the mapping of unwanted attributes.
 - Attribute Mapping Status: This field is view-only in Basic Pricing. This box is selected (or cleared) automatically by the concurrent program which generates the Build_Contexts API for mapped attributes.
 - Used in Setup box: Indicates if the attribute is used in an active pricing setup such as a price list, modifier, formula, or qualifier.
10. Save your work. The attribute is now linked to a Pricing Transaction Entity.

Note: You can view the newly linked context in the Pricing Transaction Entity-Attribute Linking window. The Assigned to PTE box indicates that the context and its attributes have been assigned to this PTE. The attributes you created can be viewed in the pricing setup windows.
 11. Optionally, click Contexts to create a new context, or to update, enable, or view an existing context.

Viewing Information about a Pricing Transaction Entity

A Pricing Transaction Entity (PTE) consists of a group of applications that point to the

same setup data and attributes. A PTE includes Request Types and Source Systems:

- **Source System:** The application that captures the pricing setup data. For example iStore, Oracle Pricing and Oracle Marketing generate modifiers. Hence these applications could be source systems.
- **Request Type:** Identifies the type of transaction that is being priced.

All applications belonging to the same pricing transaction entity have the same set of attributes available to them. This ensures that the applications sharing the same data always give the same price for an item regardless of the request type.

Assigning contexts and attributes to a Pricing Transaction Entity narrows the search parameters because the search engine only needs to evaluate the setup data generated by the source systems defined for that Pricing Transaction Entity.

Note: In Basic Pricing, the Pricing Transaction Entity - Source System and Request Types window is view-only: you can view the request types and source system for a given Pricing Transaction Entity but not make any updates.

Seeded Pricing Transaction Entities (PTE)

The following tables display the seeded Request Types and Source Systems for each PTE. For a list of seeded Attributes and PTEs, please refer to the *Oracle Advanced Pricing Implementation Guide*.

Pricing Transaction Entities: Request Type and Source Systems

Pricing Transaction Entity	Source Systems	Request Types
Order Fulfillment	AMS (Oracle Marketing)	ASO (Order Capture)
	ASO (Oracle Order Capture)	OKC (Oracle Contracts Core)
	OKC (Oracle Contracts Core)	ONT (Order Management Order)
	QP (Oracle Pricing)	

To view a Pricing Transaction Entity (PTE):

1. Navigate to the Pricing Transaction Entity - Source System and Request Types, page B-1 window.

Pricing Transaction Entity - Source System and Request Types window

Pricing Transaction Entity

Name: ORDFUL

Description: Order Fulfillment

PTE Parameters

Source Systems Request Types

Code	Description	Enabled
AMS	Marketing	<input checked="" type="checkbox"/>
ASO	Order Capture	<input checked="" type="checkbox"/>
OKC	Contracts Core	<input checked="" type="checkbox"/>
OKS	Service Contracts	<input checked="" type="checkbox"/>
QP	Advanced Pricing	<input checked="" type="checkbox"/>
		<input type="checkbox"/>

Functional Areas for Source System

Functional Area	Category Set	Enabled	Seeded
Product Reporting	Product	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Order Entry	Inv.Items	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

In Basic Pricing, this window is view-only so you can view but not update the request types and source system for a given Pricing Transaction Entity.

2. Click the Source Systems tab.

A source system defines the application such as Oracle Pricing that generates the setup data. You can view the following fields in the Source Systems tab:

- Code and Description: The short name and Description for the source system application.
- Enabled box: Indicates if the Source System is activated for the defined PTE.

3. Click the Request Types tab.

Pricing Transaction Entity - Source System and Request Types window: Request Types tab

Code	Description	Header Structure	Line Structure	Header View	Line View	Enabled
ASO	Order Captu	ASO_PRICIN	ASO_PRICIN			<input checked="" type="checkbox"/>
OKC	Oracle Cont	OKC_PRICE	OKC_PRICE			<input checked="" type="checkbox"/>
ONT	Order Mana	OE_ORDER_	OE_ORDER_			<input checked="" type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>

- Code and Description: A short name and Description for the request type.
- Header or Line Structure and/or a Header and Line View: Displays the request type which may include a global record structure or a view defined to map the data.
- Enabled box: Indicates if the request type is activated.

Note: A request type cannot be created for more than one Pricing Transaction Entity.

A request type cannot be deleted if a mapping rule is defined for it. A source system cannot be deleted if it is used in a setup for a given Pricing Transaction Entity.

Header/Line Structures

The table below shows examples of the header and line structures for the different request types for the Order Fulfillment Pricing Transaction Entity.

Global Structures

PTE	Request Type	Header Structure	Line Structure
Order Fulfillment	Order Capture	ASO_PRICING_INT _G_HEADER_REC	ASO_PRICING_INT _G_LINE_REC
Order Fulfillment	Oracle Contracts Core	OKC_PRICE_PUB.G _CONTRACT_INFO	OKC_PRICE_PUB.G _CONTRACT_INFO
Order Fulfillment	Oracle Contracts for Service	OKS_QPATTRIB_P VT.G_CONTRACT_ HDRREC	OKS_QPATTRIB_P VT.G_CONTRACT_ LINREC
Order Fulfillment	Order Management Order	OE_ORDER_PUB.G _HDR	OE_ORDER_PUB.G _LINE

Summary of Attribute Levels for Pricing Setup windows

The following describes the attributes that display in each of the pricing component setup lists based on the level assigned to the attribute.

Price Lists window

The values for the pricing attributes display at the Line attribute level.

Modifier List Setup window

The values for pricing attributes display at the Line attribute level.

Formula Lines and Factors List

Since a formula can be applied either at order level or at line level, it is not possible at the definition time to restrict the attributes appearing in the lists based on the attribute level. There will be no level-based restrictions in the list of values.

Using Defaulting Rules in Basic Pricing

Some of the defaulting rules set up in Oracle Order Management (OM) can potentially change the final price returned by the pricing engine. Therefore, it is important to carefully select your defaulting values during order entry. It is important to note that defaulting rules are not supported for price adjustment entities.

Pricing Date

The pricing date instructs the pricing engine to price the order using list prices and benefits that are valid on that day.

At the Order Line level, you can setup a defaulting rule to default the pricing date entered in the order header, ordered date or requested date etc. By controlling the defaulting value of the pricing date you control the LOV of price lists being queried in OM and the list price and benefits applied on to the order.

Agreement

By entering an agreement name on an order the customer is able to receive the prices negotiated in the agreement. An agreement is tied to a standard price list or an agreement price list. An agreement price list could be chosen in Order Management only if the agreement to which the price list is tied to has been entered in the Sales Orders window.

You can use agreements to default details such as sales person, purchase order number, payment terms, and freight terms.

Price List

The price list on the order line is used to fetch the list price and apply benefits. If the item is not found in the price list, the secondary price list is searched. If the item is not listed on the secondary price list, or if there is no secondary price list, an error message is given.

If an agreement is mentioned on the order, then standard price lists and agreement price list attached to the agreement can be used. Price lists can be defaulted from customer, agreement, or order type.

Currency Code

The pricing engine searches for the price lists and benefits in the currency code mentioned on the order. Use defaulting to control the currency in which the order is going to be priced.

Accounting Rule Duration

Accounting Rules are defined in Receivables. Previously only Fixed Accounting Rules were used. Now both Fixed and Variable Accounting Rules are used to interface to Receivables. If the Variable Accounting Rule is used, the Duration field is enabled and the user must enter a value here. When you copy a PTO model with Variable Accounting Rule, only the Accounting Rule is copied, but not the Duration value. When you try to book the order, it gives an error prompting you to specify the duration, as the Duration value is missing. Additionally, if the profile option OM: Include Item Freeze Method is not set to Booking, then the lines which have the missing Duration values are not visible. Therefore it is recommended that whenever you are copying a PTO model

with an accounting rule, ensure that:

- The profile option is set to Booking.
- Set up a defaulting rule in Order Management where you can populate the Duration field with a value. This will ensure that the Duration field will not be blank when copying.

Overview of Freight and Special Charges

This section discusses freight and special charges in Order Management, and provides tips and examples on how to set up the charges to perform common charge scenarios. In particular, the setup of the automatic conversion of costs to charges is detailed.

Freight and Special Charges are defined as the amount applied to the customer invoice for movement of a shipment to a destination or for other miscellaneous reasons. Freight and Special Charges can be applied on the order as a whole, or can be assessed on specific order lines. Costs that are associated with shipment of goods can be captured during the shipping process and can be passed through to orders as charges, if desired. These charges can be viewed and modified from the Sales Orders window by users with appropriate security.

Companies may choose to assess charges such as freight or handling charges which may vary based on customer, size of order, destination, weight, and other factors. While some companies pass actual shipping costs to their customers, other companies use shipping and handling charges to increase revenues.

In most cases, companies would like these policies to be implemented without manual intervention by an order taker or clerk; for example, in an e-business environment, where users can enter their orders through a self-service or other web interface.

Applying charges and capturing freight costs is now divided between Oracle Order Management and Oracle Shipping Execution. Order Management applies freight or other charges to the customer invoice while shipping captures all freight costs incurred on a shipment of goods

The charges can be applied to the order manually, via order import, through the Process Order open API or automatically based on the charges setup. At the time of order entry, some of the freight and special charges that will be applied on the order may be known. Other charges can be applied later in the order process, depending on user setup and business practices. The following seeded Freight and Special Charge types are included:

- Export fees
- Freight
- Handling
- Insurance

- Miscellaneous charges.

All freight and special charges are passed to Receivables to be invoiced.

Freight Costs are actual expenses incurred by the shipper while transporting a shipment. Seeded Freight Cost types include:

- Administration Fees
- Duty Fees
- Export Fees
- Freight Costs
- Handling Costs
- Insurance

Shipping Execution allows users to input costs incurred on the shipment of goods using the Shipping Transaction window or through the Shipping Open Interface. Once the ship confirmation process completes, any costs input are transferred to Order Management for storing on the order, and they can be converted to charges based on rules the user specifies. Freight costs captured at shipping are not invoiced to the customer.

Freight Charges

Freight charges can be automatically derived from the freight cost. The freight charge represents the amount passed to the customer receiving the shipment. The freight charge can be equivalent to the freight cost or a greater amount, for example, freight cost plus a markup. Other ways commonly used to assess freight charges are based on predetermined fixed amount for each order or for each item or tiered amounts based on total order amount, ship method, priority, freight terms and other variables.

Therefore, pricing modifiers are used to define charges, and pricing qualifiers to define the rules for applying those charges. A pricing formula can be used to define the passing through of freight costs to charges.

The Freight and Special Charges features are available with Basic Pricing.

Seeded Freight and Special Charge Types

The following lists the available seed freight and special charge types that you can set up for a modifier.

Seeded Freight and Special Charge Types

Lookup Code	Lookup Type	Description
Administration Fees	FREIGHT_COST_TYPE	Administrative Charges
Duty Fees	FREIGHT_COST_TYPE	Charges applied for duties
Export Fees	FREIGHT_COST_TYPE	Charges applied for Export/Import of goods.
Freight Costs	FREIGHT_COST_TYPE	Freight movement charges
Handling Costs	FREIGHT_COST_TYPE	Charges applied for Handling and packaging of goods
Insurance	FREIGHT_COST_TYPE	Charges applied for Insured Shipment
Miscellaneous Charge	FREIGHT_CHARGES_TYPE	Any miscellaneous Charges

Seeded Freight and Special Charge Formulas

Oracle Pricing provides the following seeded formulas to use when setting up freight charges:

- Cost to charge conversion formulas (simple pass-through formulas)
- Cost to charge markup formulas (simple markup formulas)

Each seeded formula features its own formula expression, so you can select an existing seeded formula when setting up freight charges rather than create a new formula and expression. For example, you could select the QP: Cost to charge conversion of Administration Cost formula to convert the Administration Cost pricing attribute to a charge. See *Oracle Order Management Implementation Manual*, Seeded Pricing Formulas appendix for more information about seeded pricing formulas.

Process Flows

In this section, several common business flows are described to help explain the freight and special charges process.

Typical Sales Order with Automatic Charges

The basic flow for applying Freight or Special Charges to an order starts in the Sales Orders window: a user creates an order and enters the lines. When saving the lines, the freight and special charges are automatically applied to the order line based on the setup done by the customer. Once charges have been applied to the order header and line, the user can see the total charges in the total area of the main tab of the Order, and a total of charges for each line in the Charges column on the Order Lines window, Pricing tab.

In addition a user can view, modify or add manual charges by selecting Action > Charges in the Sales Orders window. The Charges window displays details about the Freight and Special Charges applied. If the charge has the Override Allowed box selected, then the user can change the charge.

Entering Costs and Converting Them to Charges

When you are ready to ship the order, you can enter any costs associated with the line or delivery. During ship confirmation (and specifically when the Order Management Interface processes), those costs are transferred to the order line as price adjustments. Then the conversion of the costs into charges will be triggered, provided the cost-to-charge conversion setup has been done. The converted charges will be applied to the line, and then those charges will get invoiced with the order line. Once the line is invoiced, the user will not be able to apply any new charges to the order line.

Sales Order with Manual Charges

The flow for adding charges manually is similar to the flow for automatic charges. The user enters the order header and lines. Automatic charges may be applied, depending on how the setup was done. The user can also manually apply any non-automatic charges if he or she has appropriate security. To do this, select the header or line that you want to apply charges to, click the Action button, and select Charges.

When the Charges window displays, select from the list of values in a blank line any manual charge that the order or line qualifies for. Security for manual charges is based on the profile option: OM: Charging Privilege. If the profile is set to None, the user will only have viewing access to charges and cannot apply manual charges. If set to Full Access, the user can apply manual charges and modify overrideable charges. If set to Unlimited Access, the user can apply manual charges and even modify non-overrideable charges.

Invoicing and Taxation

All charges are invoiced. Line level charges are invoiced with the line they are attached to. Header level charges are invoiced with the first line that is invoiced for that order. Header charges that are added after some lines have been invoiced will be invoiced with the next line that is interfaced to Invoicing. Charges are sent individually to Receivables as invoice header level freight charges, although Accounts Receivable

summarizes them into one freight line for the Invoice.

Taxes on charges are not calculated at this time during order entry, even if charges are taxable in the jurisdiction. If it is necessary for charges to be taxed, the user should set the TAX: Invoice Freight as Revenue system parameter to Yes and also set up a dummy Freight item in Inventory that is taxable and specify it in the TAX: Inventory Item for Freight system parameter. Then OM's Invoicing Integration will send the charges to Receivable's Autoinvoice as Lines with that Inventory Item on them, rather than as Freight. There the charges can be taxed as required and revenue accounting for the charges using AutoAccounting can be done.

Returns

There are a few considerations regarding charges for return lines:

- First, you can set up Freight and Special Charges that will be charged on return lines or orders such as restocking fees or return handling fees. These charges are set up just like any other charges, though you would most likely create rules (qualifiers) for applying these charges so that they apply only to return lines (line category = return).
- Secondly, you may or may not want to refund charges that the customer paid on the original order that is being returned. You can define which charges are refundable by checking the Include on Returns box when the Charge Modifier is set up. If the return line is created referencing an existing order line, any refundable charges associated with the original line will be automatically applied as a negative charge on the return. If the user creates a new return line without a reference to any existing line, then the user will have to manually apply any refundable charges.

Back orders

There is a profile option that controls whether or not charges will be applied to backordered lines on an order. Some companies by policy do not charge freight or special charges on backorders, while other companies do. The profile OM: Charges for Backorders controls this function. Set it to YES to assess charges for backordered lines. The default is NO. This profile option can only be set at the site level.

Freight Terms

Freight Terms is an attribute of the order header and line. They can be used as a qualifier for applying charges.

Setting up Pricing Modifiers for Freight and Special Charges

In Oracle Order Management, you use a modifier type list of "Freight and Special Charges" to define the charges to be applied to the order or order lines. You define the specific charges such as handling, freight, or miscellaneous charges in the modifier lines

region of the modifier list.

You can also select qualifiers for the modifier that define certain qualifications to be met before the modifier(s) can be applied to the order or order lines. For example, does this particular customer get these freight charges? Does the order amount justify (qualify for) these freight terms? Or does the size of the order (amount or quantity) dictate standard freight cost conversion with markup?

Each modifier features the following information such as:

- The name of the charges to be applied.
- How the charges are calculated.
- What level the charges are applied.
- How they are applied (automatically, based on qualifiers, or manually, or by a user).

The application method selected for a modifier line determines how the charges are applied:

- Fixed LUMPSUM amount: A fixed charge amount such as a \$10.00 handling fee.
- Fixed AMOUNT per Pricing Quantity: A fixed amount charge per pricing quantity such as a \$1.00 charge for each item ordered.
- Fixed PERCENTAGE: A fixed percentage of the List Price of the item such as a 5% handling fee.
- FORMULA: A formula to calculate the charge such as Insurance Cost * Constant. The basic components of the formula can be a PRICING ATTRIBUTE and NUMERIC CONSTANT to return a numeric value. The user can attach the formula to the Freight Charge modifier.

Note: If you set up charges to apply at the Order Header level, only Lumpsum or Formula types of calculations are allowed.

Terminology

Freight Costs:

Are costs incurred in the shipment of goods. In Order Management and Shipping Execution, these costs are entered at Ship Confirmation and reflect costs that your company pays for the movement of goods.

Freight Cost Types:

You must classify the Freight Costs by Freight Cost Types which categorize the types of

costs incurred. Freight Cost Types are defined in the Oracle Shipping Lookups window. Additional Freight Cost Types lookups can be created by navigating to: Shipping > Setup > Lookups. Use the Search icon to view the existing lookups.

Freight Cost Names:

Are associated with a Freight Cost Type and identify the Freight Costs you are going to use. For example, a freight cost type "Export" might include the following names: harbor maintenance fee, ad valorem tariffs, import quota tariff. These are the names that the shipping clerk will see in the Shipping Transaction window when Freight Costs are entered. You set up Freight Cost Names by navigating to Shipping > Setup > Freight > Define Freight Cost Types. Press Control+F11 to view existing freight cost names. On a blank line, enter a new Name, choose a Freight Cost Type, Currency and Amount. The Amount entered here will default in the Freight Costs window at ship confirmation when that particular Freight Cost Name is selected in the Cost Type field. At ship confirm, the user has the option of accepting this default Amount, or entering a different amount.

Freight and Special Charges:

Defines the charges to be applied to a customer for shipping goods or for other services. Associated with each Freight Charge Type are Freight Charge sub-types. Charges are defined under the Miscellaneous lookup in Pricing. You can define any charges to be assessed that will not be converted from Shipping costs. These sub-types along with the Freight Cost Types (not Names) described show up as Charge Names when you define your Freight and Special Charge modifiers.

Business Scenario 1: Creating a simple freight charge and applying it to an order

Assume your company always wants to automatically assess a Freight Charge of \$39.99 to all orders, and also a Handling Charge of \$10.00. Certain users can change the amount of the charges at entry.

For this scenario, we will be using the lumpsum calculation method for the charges.

To create a simple freight charge and apply it to an order:

1. Navigate to the Define Modifier, page B-1 window.

Define Modifier window: Main tab

Define Modifier window: Main tab

Main Other

Type: Freight and Special charge Li Number: Freight-USD-1 ☒ Active ☒ Automatic

Name: Freight-USD-1 ☒ Global Operating Unit: -

Version: Start Date: End Date: Description: []

Currency: USD

List Qualifiers

Modifiers Summary Discounts/Charges Price Breaks*

Modifier No	Level	Modifier Type	Start Date	End Date	Print On Invoice
501741	Line	Freight/Special			<input checked="" type="checkbox"/>
501742	Line	Freight/Special			<input checked="" type="checkbox"/>
501743	Order	Freight/Special			<input checked="" type="checkbox"/>
501744	Order	Freight/Special			<input checked="" type="checkbox"/>

Pricing Attributes Line Qualifiers Define Details*

2. Select Freight and Special charges List as the Type.
3. Enter a Number and Name that you will be able to recognize. The Number does not have to be numeric.
4. Select the Automatic box so that the modifier will be automatically applied to the order.
5. Select the Currency (optional - can be blank), Start and End Date range, and a Description for the modifier.

Note: Optionally, qualifiers could be added to the modifier to have charges applied only to orders or lines with certain attributes. However, for this scenario, no qualifiers are created so freight charges will always be applied.

Next, add one modifier line for Freight Charges and another one for the Handling Charges. You enter modifier lines in the Modifiers Summary tab in the lower half of the Modifiers window.

6. Enter a user-defined Modifier No for the first line.
7. Select Order or Line Level to indicate whether you want the modifier to be applied

at the order or line level. For this example, select Order.

The Modifier Type of Freight/Special Charges is selected by default.

8. Optionally, enter a Start and End Date.
9. Select Automatic to apply the charges without user intervention.
10. Select the Override box to allow authorized users to change the amount of the charge once it is applied.
11. Select a Pricing Phase that controls when the charge will be applied.
12. Select Header Level Charges for Order Level modifiers and Line Charges for Line Level modifiers.

In the Discounts/Charges tab, enter the charge details:

Define Modifier: Discounts/Charges tab

The screenshot shows the 'Define Modifier' window with the 'Discounts/Charges' tab selected. The 'Main' sub-tab is active, displaying various input fields. The 'Type' is 'Freight and Special charge Li', 'Name' is 'Freight-USD-1', 'Number' is 'Freight-USD-1', 'Version' is empty, 'Currency' is 'USD', 'Start Date' is empty, and 'Description' is empty. Checkboxes for 'Active', 'Automatic', and 'Global' are all checked. The 'Operating Unit' is empty. A 'List Qualifiers' button is at the bottom right of the main section. Below this is a 'Modifiers Summary' section with three tabs: 'Modifiers Summary', 'Discounts/Charges', and 'Price Breaks*'. The 'Discounts/Charges' tab is selected, showing a table with the following data:

Modifier No	Level	Modifier Type	Charge Name	Include On Returns	Form	Application Method
501741	Line	Freight/Special	Freight Costs	<input checked="" type="checkbox"/>		Lumpsum
501742	Line	Freight/Special	Handling Costs	<input checked="" type="checkbox"/>		Lumpsum
501743	Order	Freight/Special	Administration Fees	<input checked="" type="checkbox"/>		Lumpsum
501744	Order	Freight/Special	Miscellaneous Charge	<input checked="" type="checkbox"/>		Lumpsum
				<input type="checkbox"/>		

At the bottom of the window are three buttons: 'Pricing Attributes', 'Line Qualifiers', and 'Define Details*'.

13. Select Freight Costs from the Charge Name field.
14. Select Include on Returns to copy this charge to returns created from these orders.
15. Select Lumpsum as the Application Method and enter a value of \$39.99.

Similarly, enter a second line within the Modifiers Summary tab region with settings similar to the first line:

16. In the Discounts/Charges tab, select Handling Costs as the Charge Name.
17. Select (or clear) Include on Returns.
18. Select Lumpsum as Application Method and the Value is 10 (\$10.00).
19. Save your work. A basic Freight and Special Charge modifier with one line detailing Freight Charges and one line for Handling Charges has been created.

Note: To apply a modifier without any qualifiers (as in this example), then you must also set the pricing profile option QP: Blind Discount Option to Yes.

Applying Automatic Order Level Charges on an Order

To see how the modifier you created in the preceding step is applied, create a new order within the Oracle Order Management.

1. Enter the order header information including:
 - Customer
 - Order Type (for example, Standard)
 - Price List
 - Ship To & Bill To Addresses and Salesperson.
2. In the Lines tab, enter any Item with a quantity of 1 and save the order.
3. In the Order Main tab and can view in the Totals area the Charges of \$49.99 which is the sum of the \$39.99 Freight Charge plus the \$10.00 Handling Charge.
4. To see the applied charges, select the Actions button > Charges to display the Charges window. You can view the following two applied freight charges:
 - Charge Name = Freight Costs and amount = \$39.99
 - Charge Name = Handling Costs and amount = \$10.00

Note: A user with appropriate security (based on the setting of the OM: Charging Privilege profile option) can override the amount of either charge by entering a new amount and a Reason and Comments, and then clicking Apply.

Applying Manual Order Level Charges on an Order

Suppose your company does not want to automatically apply charges to every order. Instead, you want the order entry clerk to choose what orders to charge.

To do this, change the setup of the previous modifier by clearing the Automatic box at the modifier list header and lines. Then enter a new order and line and save it. You will see that now no charges have been applied automatically.

To apply manual order level charges on an order:

1. To apply the freight and handling charges manually, select the Actions button > Charges from the Order Header.
2. Click a new line in the Charges window.
3. Select the Charge Name = Freight Costs from the list of values. A charge named Freight Cost of \$39.99 will appear. Now, click another new line in the Charges window, select the Charge Name = Handling Cost from the list of values. A charge named Handling Cost of \$10.00 will appear.
4. If you cannot apply charges manually:
 1. Confirm that the profile option, OM: Charging Privilege is set to Full Access or Unlimited Access.
 2. Confirm that QP: Blind Discount Option is set to Yes (all modifiers with no qualifiers will be considered if Blind Discount is set to Yes).
 3. To confirm these profile settings, navigate to: Edit > Preferences > Profile and query those profiles.
5. To verify that the manual application of the freight and special charges has occurred, review the Total Charges on the Order Main tab or click the Actions button > Charges.

A total of \$49.99 displays in the Totals area, and the Freight Costs of \$39.99 and Handling Costs of \$10.00 displays in the Charges window. Since these charges were applied manually, the Fixed box will be automatically selected on the Charges window, indicating that those charges should not be changed by the system.

Business Scenario 2: Setting up Automatic Order Level Charges using Qualifiers

Assume your company always wants to automatically assess a Freight Charge of \$39.99 to all orders with Freight Terms of Prepay & Add, and a Handling Charge of \$10.00 for those same orders.

For this scenario, you can add simple qualifiers to the modifier set up in the previous

scenario. Select the Modifier window and query the modifier list that was set up in the last section. Now we will make two changes to the modifier lines. First we will mark them as Automatic again and then specify qualifiers for them.

When you set up qualifiers for modifiers, select the qualifiers at the Modifier list header level or at the list line level. The qualifiers selected at the list header level will apply to all modifier lines defined in that list. This can be useful to specify common business rules at the list header only once. Any qualifiers specified at the list line level are specific to that particular modifier line. Use this if you need unique rules for applying one of the Charges but not all of them on a list.

For this scenario, we will set up header level qualifiers which will apply to both of our charges in this list.

To set up automatic order level charges using qualifiers:

1. Click the List Qualifiers button on the top of the Define Modifier window to display the Qualifier - Header Level Qualifiers window.

Note: A window displays any predefined qualifier groups you may have already set up. For this scenario, do not select any of these. Instead, click OK to display the Qualifier - Header Level Qualifiers window.

Qualifier - Header Level Qualifiers window

Group	Grouping Number	Qualifier Context	Qualifier Attribute	Precedence	Operator	Value From	Value To
	1	Order	Order Category	480	=	ORDER	Order
	1	Terms	Freight Terms	640	=	Prepay & Add	Select

Cancel OK Copy Group

2. Enter 1 as the Grouping Number.
3. Enter Order as the Qualifier Context.
4. Select Order Category as the Qualifier Attribute. Accept the default Precedence value.

5. Select Operator is = and Value From = Order.
6. Similarly, enter the second qualifier for Freight Terms.

Applying a Qualified Automatic Order Level Charge to an Order

Create a new order and select Freight Terms as Prepay and Add on the header. Choose the Lines tab and enter a line or two and save your order. You should see the two charges applied automatically at the order header level as completed previously in Scenario 1. Confirm that the charges are correct by looking at the Order Main tab, Charges Total and by clicking Action > Charges to see details of the charges.

You can verify that the qualifier is working by entering another order with a different Freight Terms, and seeing that the charges are not applied.

Business Scenario 3: Case Study

The company's freight policy is defined as follows:

- For each Regular delivered order, a charge of \$3.00 will be applied automatically for freight.
- For Regular deliveries, an additional freight charge of \$0.50 per quantity is applied.
- For Special deliveries, a charge of \$11.50 per order and an additional \$1.00 per quantity is applied.

The difference between Regular and Special deliveries depends on the carrier or transport company. It will be modeled as Shipment Priority at the Order Header which can be implemented in different ways:

- Set up one Freight and Special Charges List with automatic application, with list lines qualified by Shipment Priority.
- Set up a new Freight and Special Charges List with the Automatic box selected. Do not assign any List Qualifiers. Then enter four list lines:

The first two qualified by Shipment Priority equal to Regular

The second two qualified by Shipment Priority equal to Special

For each pair of list lines, one will be at Order level and will be calculated as a Lumpsum and the other will be at Line level and will be an Amount per quantity. For all of these, the Charge Name would be Freight Costs.

The following displays the Define Modifier window - Discounts/Charges tab with the following set of modifier lines.

Define Modifier window - Discount/Charges tab

The screenshot shows the 'Define Modifier' window with the 'Discounts/Charges' tab selected. The 'Main' tab is also visible. The 'Type' is 'Freight and Special charge L', 'Name' is 'Scenario 3', 'Version' is empty, 'Currency' is 'USD', 'Number' is 'Scenario 3', 'Start Date' is empty, 'Description' is empty, 'Active' is checked, 'Automatic' is checked, and 'Global' is checked. The 'Operating Unit' is empty. A 'List Qualifiers' button is at the bottom right. Below the tabs, a table lists four modifiers:

Modifier No	Level	Modifier Type	Charge Name	Includ	Form	Application Method	Value
502749	Order	Freight/Special	Freight Costs	<input checked="" type="checkbox"/>		Lumpsum	3
502750	Order	Freight/Special	Freight Costs	<input checked="" type="checkbox"/>		Lumpsum	.5
502751	Order	Freight/Special	Freight Costs	<input checked="" type="checkbox"/>		Lumpsum	11.5
502752	Order	Freight/Special	Freight Costs	<input checked="" type="checkbox"/>		Lumpsum	1

Buttons at the bottom: Pricing Attributes, Line Qualifiers, Define Details*.

The following table displays the qualifiers used in the setup. The second qualifier ensures that these charges are applied only on order lines and not on return lines.

Line Level Qualifier

Grouping Number	Qualifier Context	Qualifier Attribute	Precedence	Operator	Value From
1	Order	Shipment Priority Code	<accept default>	=	Regular
1	Order	Line Category	<accept default>	=	Order

Applying Automatic Order and Line Level Freight Charges on an Order

Create a new order and select the Shipment Priority as Regular on the header. Select the Line Items tab and enter several lines and save your order. You should see the header charge of \$3.00 applied and you should also see line charges of 0.50 per item for each line. Confirm that the charges are correct by viewing the charges total on the Order Main tab, and the total charges for each line in the Lines tab, Pricing tab.

You can verify that the qualifier is working by entering another order with a Shipment Priority of Special and confirming that the higher charges are applied: \$11.50 at the header and \$1.00 for each unit of quantity on the lines.

This is how Charges can be applied or entered during order entry. The following section describes how to automatically convert Freight Costs entered at Ship Confirmation to Freight Charges.

Setting up Freight and Special Charges For Cost to Charge Conversion

After you define any Freight Cost Names in Shipping Execution, any costs entered at Ship Confirmation are transferred to Order Management and are available for the cost to charge conversion process. You can convert the exact cost amount to the charge amount, or you can do it with a markup or markdown.

The cost to charge conversion described here applies line level charges only. Costs are passed from Shipping to Order Management as line level price adjustments. These costs can be converted into order level charges using a user-defined pricing attribute for Order Level Costs and a custom sourcing rule to sum up the line-level costs.

To make the conversion process work (even if you are doing a straight cost conversion with no markup), you must set up a Pricing Formula specifying the conversion algorithm, and then use that Formula when you set up the Charge Modifier. For example, suppose you want a markup of 30% to be applied to the cost to get the final charge (e.g. freight cost + 30%).

Seeded Formulas:

Pricing also provides two types of seeded formulas that you can use when setting up freight charges:

- Cost to charge conversion formulas (simple pass-through formulas)
- Cost to charge markup formulas (simple markup formulas)

To set up freight and special charges for cost to charge conversion:

1. Navigate to the Pricing Formulas window.

Pricing Formulas window

The screenshot shows the 'Pricing Formulas' window with the following fields and values:

- Name:** Cost plus 30%
- Description:** Freight Cost plus 30%
- Effective Dates:** (Empty) - (Empty)
- Formula:** 1*2
- Seeded:** ☐

Below these fields is the 'Formula Lines' section, which contains a table with the following data:

Formula Type	Pricing Attribute Context	Pricing Attribute	Component	Step	Reqd Flag
Pricing Attribute	Pricing Attribute	Freight Cost		1	<input type="checkbox"/>
Numeric Constant			1.3	2	<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

At the bottom right of the window is a button labeled 'Factors'.

2. Enter a formula Name, a Description, Effective Dates (optional), and the Formula equation.
3. Enter the equation 1*2 which means to multiply step 1 by step 2.
4. In the Formula Lines region, the steps define the Pricing Attribute Freight Costs multiplied by a Numeric Constant of 1.3.
5. So using this formula, the system will take the freight cost (step 1) assigned at ship confirmation and multiply by the numeric constant of 1.3 (130%) (step 2) which will equal the final freight charge:

Now you create a new Charge Modifier List that uses this formula.

6. Navigate to the Define Modifier, page B-1 window.
 7. Enter the Type as Freight and Special Charges List.
 8. Enter a Number and a Name.
 9. Select the Automatic box.
 10. Select the Currency, Start and End Dates and add a Description for the modifier.
- Next, enter modifier lines for the charge list:

11. Enter a Modifier Number.
12. Choose the Level = Line.
13. Select the Modifier Type as Freight and Special Charges.
14. Optionally, enter a Start and End Date. Check the Automatic box to apply the charges automatically. Then choose the Discounts/Charges Tab and enter the charge details.
15. In the Charge Name field, select Freight Costs, Application Method is Lumpsum and select the Formula you just created.

Now you can set up list level qualifiers which will apply to this modifier list. Click the List Qualifiers button on the list header and enter some qualifiers similar to the ones in this table:

Grouping Number	Qualifier Context	Qualifier Attribute	Precedence	Operator	Value From
1	Order	Line Category	<accept default>	=	Order
1	Order	Shipped Flag	<accept default>	=	Yes
1	Order	Shippable Flag	<accept default>	=	Yes

These qualifiers will make sure that these charges will be applied to Order Lines only when shipping occurs. (Shipped Flag = Yes). You can add any other qualifiers that make sense to your business such as limiting these freight charges to certain customers or orders with particular Freight Terms.

Apart from these list level qualifiers, you will need to create a line level qualifier for each modifier line in your list. This qualifier will link the Freight Cost Type entered at Ship Confirm to this Charge.

16. Select the modifier line with Charge Name = Freight Cost.
17. Click the Line Qualifiers button then enter: Grouping Number = 1, Qualifier Context = Order, Qualifier Attribute = Freight Cost Type Code, Precedence = accept default, Value From = Freight.

Header Level Qualifiers

Grouping Number	Qualifier Context	Qualifier Attribute	Precedence	Operator	Value From
1	Order	Freight Cost Type Code	<accept default>	=	Freight

With the Formula and this Modifier created, you can now convert Shipping Cost into a Freight Charge. To try this, you will need to create a new order that matches the qualifiers (such as Customer or Freight Terms) you set up for your Charges.

Assigning Actual Freight Costs at Ship Confirmation

Once you have booked and pick released the order (using autocreate deliveries to simplify the process), you then enter the actual Freight Costs in the Shipping Transaction window when you do ship confirmation.

To assign actual freight costs at ship confirmation:

1. Navigate to the Shipping Transactions window, and query the lines of your order.
2. In the Lines/Containers tab of the Shipping Transaction window, select the Actions button > Freight Costs and click Go.
3. Enter the Cost Type = Freight Costs, Currency Code = USD and type in an Amount such as \$15.00.
4. Ship confirm the delivery.

Ensure that you enter the Freight Costs before you Ship Confirm; if you do the ship confirm first, then it will be too late to add the freight costs. The actual Charges will be calculated based on the formula and the Freight Costs you just entered. If you have deferred the OM Interface at Ship Confirm, then you may not see the charges until after that interface has run.

5. To confirm freight costs to freight charges conversion, navigate back to the Sales Order Pad and query up your order. You will see the Freight Charge = \$19.50 (15 + 30% of 15) on the Main tab.

Freight Costs Not included as Freight Charges

Inevitably, some freight costs are incurred after Ship Confirm which cannot be invoiced to the customer. For example, a truck shipment is delayed at the customer's dock during unloading and the carrier assesses the shipper a detention charge. Since the cutoff point

for passing through freight costs occurs at the time of Ship Confirm, there is no possibility of invoicing the customer for this extra charge except manually.

Other Business Scenarios

Several other common business scenarios are provided to assist you in better understanding the setups required to map freight costs to freight charges.

Business Scenario 4: Standard Handling Charge

In this scenario, a distributor of music CDs wants to assess a standard handling charge of \$1.99 per CD.

1. Navigate to the Define Modifier, page B-1 window and enter the following information:

Define Modifier Window: Heading

Type	Number	Name	Automatic
Freight and Spec.	<user defined>	<user defined>	<selected>

2. On the first line of the Modifiers Summary tab, enter:

Define Modifier window: Modifiers Summary Tab

Level	Modifier Type	Automatic	Override	Phase
Line	Freight/Spec	<selected>	<selected>	Line Charges

3. Click the Discounts/Charges tab and enter:

Define Modifier window: Discounts/Charges Tab

Charge Name	Application Method	Value
Handling Costs	Amount	1.99

By using an application method of Amount, the pricing engine will assess a handling charge of \$1.99 for each item ordered. If "Lumpsum" were used as the

application method, the pricing engine would assess a handling charge of \$1.99 per line (or per order if we had used an Order level modifier).

4. Click the Line Qualifiers button and enter:

Define Modifier window: Qualifiers -- Line Level

Grouping Number	Qualifier Context	Qualifier Attribute	Precedence	Operator	Value From
1	Order	Line Category	<accept default>	=	Order

The setup for this modifier is completed. A handling charge of \$1.99 will be automatically applied to each item ordered. To verify that the Handling charge is functioning properly, navigate to the Sales Order Pad and enter a new order. Enter one line with a quantity of 10. Click the Action button and select Charges. The Charges window should show a Handling Charge of \$19.99.

Business Scenario 5: Freight cost markup applied to all invoices with freight terms of prepay and add

A shipper wishes to assess a freight markup of \$50 per line for all shipments with freight terms of Prepay and Add. The markup will be assessed against the actual freight cost entered by the Shipping Department. Since the Freight costs will not be available until the order is shipped, the company wants customer to see an estimated Freight Charge of \$300 on each line of the order, which will be replaced with the actual charge after shipping. In addition, a standard Handling Charge of \$10 will be added to each line of the order. All charges will be applied at the line level.

In this example, you need to set up a formula and a modifier with qualifiers.

1. First, set up the pricing formula and name it "Freight XX". Navigate to the Formulas Setup, page B-1 window, and enter:

Pricing Formulas window: Heading

Name	Description	Formula
Freight XX	Freight Costs	1 + 2

2. In the Formula Lines region, enter:

Pricing Formulas Window: Lines

Formula Type	Pricing Attribute Context	Pricing Attribute	Component	Step
Pricing Attribute	Pricing Attribute	Freight Cost	<blank>	1
Numeric Constant	<blank>	<blank>	50	2

A pricing attribute can be anything used to price the item, from volume to item to freight cost. The purpose of setting up this formula is to apply a markup to the freight cost assigned at shipping. In this formula, the system will take the freight cost (step 1) assigned at ship confirmation and add \$50 (step 2) which equals the final freight charge.

Now, when the formula Freight XX is selected in any pricing modifier, the \$50 will be added to the Freight Cost at the line or header level, as defined in the modifier.

3. Navigate to the Define Modifier, page B-1 window to set up the pricing modifier for freight and special charges that should appear on the order:

Define Modifier window: Heading

Type	Number	Name	Automatic
Freight and Spec.	<user defined>	<user defined>	<selected>

4. Next, select the Modifier Summary tab. On the first line, we will use the Freight XX formula in the modifier. Enter this:

Define Modifier Window: Modifiers Summary Tab

Level	Modifier Type	Automatic	Override	Phase
Line	Freight/Spec	<selected>	<clear>	Line Charges

5. Select the Discounts/Charges tab, and enter:

Define Modifier window: Discounts/Charges Tab

Charge Name	Formula	Application Method	Value
Freight Costs	Freight XX	Lumpsum	<blank>

Note that the formula used is the one you set up in the Pricing Formulas window. The Value column is null because the freight cost amount will be input by the Shipping Department at ship confirm.

Two more modifier lines must be created:

- One line for Freight Charges
- One line for Handling Charges

These lines will set up standard default amounts for these charges in case Shipping neglects to enter actual freight costs.

6. In the Modifier Summary tab, enter the Freight charge line information:

Define Modifier Window: Modifiers Summary Tab

Level	Modifier Type	Automatic	Override	Phase
Line	Freight/Spec	<selected>	<clear>	Line Charges

7. In the Discount/Charges tab, enter the Freight Charge line information:

Define Modifier Window: Discounts/Charges Tab

Charge Name	Formula	Application Method	Value
Freight Costs	<blank>	Lumpsum	300

8. Repeat the same process for the Handling Charge.
9. Enter the following:
 - Modifier No: Null

- Level: Line
- Modifier Type: Freight and Special Charge
- Start Date: Null
- End Date: Null
- Automatic: Selected
- Override: Cleared

10. In the Discount/Charges tab, enter the following information:

- Charge Name: Freight Costs
- Formula: Null
- Application Method: Lumpsum
- Value: 10

This modifier line will modify the invoice to include an amount of \$10 as a Handling Charge per order. The standard Handling Charge will be assessed automatically; no manual input is required at order entry or ship confirm.

The completed Modifiers Summary window should appear like this:

Define Modifier Window: Modifiers Summary Tab

Level	Modifier Type	Automatic	Override	Phase
Line	Freight and Spec.	<selected>	<clear>	Line Charges
Line	Freight and Spec.	<selected>	<selected>	Line Charges
Line	Freight and Spec.	<selected>	<clear>	Line Charges

The completed Discount/Charges window should appear like this:

Define Modifier Window: Discounts/Charges Tab

Charge Name	Formula	Application Method	Value
Freight Costs	Freight XX	Lumpsum	<blank>
Freight Costs	<blank>	Lumpsum	300
Handling Cost	<blank>	Lumpsum	10

Next, you need to set up list qualifiers and line qualifiers. In this example, the List Qualifier is used to apply the modifier to orders with Freight Terms of Prepay and Add. The Line Qualifiers allow the pricing engine to apply the modifier to the order lines according to the processing status such as shippable, shipped. Prior to ship confirm, the order status is shippable and the standard freight charge (\$300) will appear on the order entry Charges window. When the order status changes to shipped after ship confirm, the actual freight cost plus the \$50 markup will apply. The Line Qualifiers trigger this functionality.

To set up the list qualifiers:

1. Click the List Qualifier button on the Modifier Definition window. The Qualifiers Group window appears, click OK.
2. Enter the following:

Define Modifier Window: Discounts/Charges Tab

Grouping Number	Qualifier Context	Qualifier Attribute	Precedence	Operator	Value From
1	Terms	Freight Terms	<accept default>	<accept default>	Prepay and Add

The order must pass this list level qualifier before it will review the line level qualifiers. Line qualifiers add more detailed requirements for the order to qualify for the Freight Charge.

To set up the line qualifiers:

1. To set up the Line Qualifiers for this example, select the first modifier line and click the Line Qualifier button. The Qualifiers Group window appears, click OK. The

Qualifier - Line Level Qualifiers window will appear.

2. Enter this information as qualifies for the 'cost to charge conversion modifier line:

Line Level Qualifiers: Line 1

Grouping Number	Qualifier Context	Qualifier Attribute	Precedence	Operator	Value From
1	Order	Shippable Flag	<accept default>	=	Yes
1	Order	Line Category	<accept default>	=	Order
1	Order	Shipped Flag	<accept default>	=	Yes
1	Order	Freight Cost Type Code	<accept default>	=	Freight

For Line 1, a grouping number is used because there are more than one line qualifiers that have to pass before the freight charge can be applied to the order. The table for Line 1 is read as follows: the Shippable Flag on the line must be Yes, AND, the Line Category on the line must be Order, AND, the Shipped Flag on the line must be Yes, AND, the Freight Cost Type Code on the Order must be Freight. All of these qualifiers must be true to apply the qualifier to the line.

3. To set up the Line Qualifier for the \$300 estimated charge, select the second modifier line and click the Line Qualifier button. The Qualifiers Group window appears, click OK. The Qualifier - Line Level Qualifiers window will appear.
4. Enter the following to create the qualifiers to apply to lines with Line Category of Order and for Shippable lines that have not been shipped:

Line Level Qualifiers: Line 2

Grouping Number	Qualifier Context	Qualifier Attribute	Precedence	Operator	Value From
1	Order	Line Category	<accept default>	=	Order

Grouping Number	Qualifier Context	Qualifier Attribute	Precedence	Operator	Value From
1	Order	Shipped Flag	<accept default>	=	No
1	Order	Shippable	<accept default>	=	Yes

5. To set up the Line Qualifier for the Handling Charge, select the third modifier line and click the Line Qualifier button. The Qualifiers Group window appears, click OK. The Qualifier - Line Level Qualifiers window should appear.
6. Enter this information to apply the Handling Charge to outbound lines (Line Category = Order) that are shippable:

Line Level Qualifiers: Line 3

Grouping Number	Qualifier Context	Qualifier Attribute	Precedence	Operator	Value From
1	Order	Line Category	<accept default>	=	Order
1	Order	Shippable	<accept default>	=	Yes

The setup for formulas and modifiers in this example is complete.

7. To confirm that the setup for these Freight and Handling charges is correct, navigate to the Sales Order Pad and enter a new order.
8. Click the Others tab to confirm that the Freight Terms are Prepay and Add; this is so the list qualifier will be satisfied.
9. Click the Lines tab and enter a line.
10. Click the Action button and select Charges.

The charges should show the estimated freight charge of \$300 and the handling charge of \$10. These amounts are the default values set up in the modifier. When the actual freight costs are input by the Shipping Department at ship confirm, then the freight charge will change.

11. Book your order.
12. Navigate to the Shipping Transactions window and enter actual freight costs, then ship confirm the order.
13. Navigate to: Shipping > Transactions and find your order.
14. Click the Actions box and select Launch Pick Release and click Go.

Also, make sure to autcreate a delivery either at picking or before ship confirming the order. Once a delivery is created, click the Delivery tab. If your order line does not appear, use the Query Manager (flashlight icon) to find your order. When the order line appears, click the Actions box again and select Freight Costs and click Go.

Here is where you enter the actual freight costs for the shipment. Set Cost Type = Freight and enter an Amount = 200 and click Done.

Note: If you enter any other cost types here, they will not appear as a freight charge because you did not set up any other charges in the modifier for cost conversion. A charge was set up for Handling but it is not set for cost conversion.

15. Now, click the Actions box again and select Ship Confirm and click Go.
16. Return to the Sales Order Pad and find your order. Notice that the Charges Line total is now \$260. This amount is Freight = \$250 (actual freight charge + \$50 markup from the pricing formula), Handling = \$10.

In this example, the estimated Freight Charge of \$300 went away after shipping, since the Shipped Flag = No qualifier on that modifier line is no longer satisfied. This means that if the Shipping Department neglects to input a Freight Cost, the estimated charge would still disappear, because of this qualifier. If instead you wanted the \$300 charge to stay on the order even if the Freight Cost was not entered, then you should remove that second line of the qualifier for the estimated charge. Then, if the Freight Cost was not entered, the \$300 charge would remain. If however a Freight Cost was entered, the resulting charge from the formula would replace the \$300 charge if that charge was larger than \$300.

Troubleshooting Freight and Special Charges

The following section provides troubleshooting information and suggestions when implementing charges and particularly the cost to charge conversion.

Fixed vs. Estimated Charges

A common business case is to set up the charges to apply estimated charges automatically at order entry with the expectation that they will be replaced with actual

charges when the order is ship confirmed. To do this, you might set up a Charge Modifier that applies an automatic charge at entry, qualified by the line being shippable but in status entered. Later, when the cost to charge conversion occurs at ship confirm time, the converted actual charge will overwrite the estimated charge.

This can be controlled by using the Fixed box on the Sales Orders window - Charges window. If you do not want an applied charge to be overwritten by the system, at cost to charge conversion or by any subsequent pricing calls, select the Fixed box on the Charges window. The Fixed box is selected automatically for charges that are manually applied or any automatic charges that are manually overridden.

Note: The Fixed box should not be confused with the Overridable box, a view-only box which controls whether a user can manually change the amount of the charge.

Name Confusion

The naming convention you use is critical for using cost to charge conversion. You enter costs in the Shipping Transaction window using the Freight Cost Names defined in Shipping Execution, each of which belongs to a particular Freight Cost Type. It is the Freight Cost Type that you need to use as the qualifier for the Charge Modifier line, however, not the Name.

In Order Management, you never really see the Freight Cost Names except at Ship Confirm. To keep things simple, you might want to just have one Freight Cost Name for each Freight Cost Type, and have it be the same name.

Also, if you define additional Freight Cost Types (the lookups) (with their Freight Cost Names and amounts) thinking you can then convert them into charges, this can be done. But you have to tell Pricing that the new Freight Cost Type is to be used as a Pricing Attribute (so you can put it in a formula); otherwise you won't see it in the pricing attributes LOV in the formula, and so you won't be able to use it.

Multiple Automatic Charges

If you have multiple automatic Freight and Special Charge lists set up, then ONLY ONE charge for each Charge Type and Sub-Type combination will be used by Order Management. Which one will it be?

Which charge gets applied depends on INCOMPATIBILITY GROUP, PRECEDENCE and PHASE on the modifier. If the INCOMPATIBILITY GROUP is null (not specified) on the modifier, then the largest freight charge for each distinct/unique combination of charge type/sub-type will get applied to the order/line. If the INCOMPATIBILITY GROUP is not null, then within a particular PHASE and a particular INCOMPATIBILITY GROUP, the freight charge with the highest PRECEDENCE will be selected by the Pricing Engine if the INCOMPATIBILITY RESOLVE CODE is set to Precedence for the phase. If there is more than one freight charge eligible within a particular INCOMPATIBILITY GROUP in a particular PHASE and the PRECEDENCE

is the same or if the INCOMPATIBILITY RESOLVE CODE is set to Best Price for the phase, then the smallest charge will get selected. Amongst these selected freight charges, Order Management applies the largest freight charge for each unique combination of charge type/sub-type to the order and line.

If you are using Basic Pricing, then you can only use an INCOMPATIBILITY RESOLVE CODE of Best Price. If you have licensed Advanced Pricing, then you can choose to use an INCOMPATIBILITY RESOLVE CODE of Precedence.

Pro-Rating the Costs

If you enter Costs in ship confirm at the Delivery Level, the costs that transfer back to the lines in Order Management are pro-rated to all the lines of the delivery, based on weight (if present) or volume (if present) or quantity shipped on each line. See the *Shipping Execution User's Guide* for how to get weight and/or volume on delivery details.

Cost to Charge Conversion Not Working

Did you enter the cost? If you don't enter Costs in ship confirm, then the cost to charge conversion will not occur. If you enter a cost of zero, then the conversion will take place based on the formula you set up. So if you want the charge to be Cost plus \$50 and you enter a zero cost, then the charge generated will be \$50. But if you don't enter a cost at all, then no charge will be put on the order.

Included items? Is the line you're trying to get the charges onto an included item in a PTO kit or model? If so, you won't be able to get the charges to convert easily. The reason for this is that the costs come to Order Management from Shipping as line level price adjustments, and the SHIP pricing event triggers the Freight and Special Charges modifier to be applied; since included items are not priced, this doesn't happen. Your only recourse to getting a cost-to-charge conversion working on an included item is to use an order level modifier.

Check the Phase: The phase which you selected when you set up the cost-to-charge conversion modifier line has to be one that is executed during the SHIP pricing event. For Basic Pricing, use the Line Charges phase. If you choose some other phase, then the phase that you use for the modifier line should be one that has the SHIP event associated with it.

You can check this by querying up the phase in the Event Phases window. (Navigation Path is Setup -> Event Phases under Pricing Manager responsibility.) Also make sure that the phase has freeze override flag checked. Please check the Advanced Pricing User's Guide to learn more about how to use this window.

Did the OM Interface run? If you defer running the interfaces (check box on Ship Confirm), the OM Interface may not have run yet. Be sure it has completed.

Did the cost to charge still not work? Finally, you can run a debug utility. This utility will help you or Support see whether the cost got to Order Management and if so, why it didn't get converted to a charge properly. It will spool the debug output to a file, where you can view the results.

To use this debug utility, you will need to know the `line_id` (order line id) of the order line for which the freight charge (cost to charge conversion) is not coming through. You can determine the order line by using the menu option: Help > Diagnostics > Examine, after querying up the order line. You also need to know the `list_line_id` (modifier line id) of the modifier that you set up to do the cost to charge conversion. You can figure this out by using the menu option: Help > Diagnostics > Examine, after querying up the freight charge modifier, navigating to the lines region and selecting the modifier line that you want to examine.

This debug utility will do the following things:

- Check if cost was inserted by Shipping.
- Check that the phase freeze_override flag is not N.
- Check that the `qp_list_header_phases` table is populated.
- Check if sourcing (attribute mapping) happened. If it did not, you need to run the Build Sourcing Rules concurrent request.
- Check if line is an included item of a model; if it is, the charge will not be created.
- Check if `Charge_Type_Code` matches the Cost Type Code being selected at Ship Confirm. It will also print out all other costs that have been passed to OM.
- Check if this line has been Inventory Interfaced and OM Interfaced.

Service Duration Computation

Service duration based on the Service Contract start date/end date is calculated using the Service Contracts conversion routines (with or without UOM conversion). When the contract dates are not specified, inventory routines are used to calculate the service duration. In Oracle Order Management, the service duration is calculated service duration is still calculated in Order Management using the same service contracts routines that Pricing uses. Please note that if the service is renewed in Contracts, the price value will be recalculated and will display a different value.

Price Book

A price book enables you to view and/or print pricing data for a specific customer. You can also use it to see the final price that will be used in pricing an item within a category. The final price will be the list price with the adjustments and Freight and Special Charges (This is different from the Sales Orders window where you can see the list price and adjustments). You can add textual information, images, and other data to use as a catalog with specified effective dates.

Price Book publication allows authorized users to enter varied criteria to determine

what they want to see and how they want to publish the Price Book data. This functionality is available through secure self-service portal that restricts the output to users with specific secure access to the data available to them. You can view the output, and download and/or print the Price Book. You have a choice of publishing formats such as paper, web portal, email, or excel spreadsheet.

You can use the Price Book in both basic and advanced pricing. As an Advanced Pricing user, you have access to all the functionality (viewing the Price Book online, creating Delta Price Books, and all publication options), while as a Basic Pricing user, you will be able to create and print only full Price Books.

Using the Pricing User responsibility, navigate to the Reports tab in the Advanced Pricing HTML Page. You can create a new Price Book or search for an existing one.

ORACLE
Advanced Pricing

Diagnostics Home Logout Preferences Help Personalize Page

Home Lists Reports

Reports

Search

Please complete one of the following fields before starting your search: Price Book Name or Customer.

Type Price Book Name % Go

Show More Search Options

Select Price Book:
Delete

Create Price Book Refresh Data

Select All Select None

Select	Name	Customer	Operating Unit	Currency	Pricing Effective Date	List Name	Pricing Type Errors	View Request Status	View Document	Create Delta
<input type="checkbox"/>	RI-TEST-PO		Vision India - OU1	US dollar	05/11/2006	PO-PRICE-LIST1	Full No			
<input type="checkbox"/>	PO-PB-1		Vision India - OU1	US dollar	05/10/2006	PO-PRICE-LIST1	Full No			
<input type="checkbox"/>	J0531.1	Business World-Eric Moulds-1568	Vision India - OU1	Indian Rupee	05/31/2006		Full Yes		pricebook56142.pdf	
<input type="checkbox"/>	J0530.1	Business World-Eric Moulds-1568	Vision India - OU1	US dollar	05/30/2006	Corporate	Full No		pricebook53142.pdf	
<input type="checkbox"/>	J0526.2	Business World-Eric Moulds-1568	Vision India - OU1	Indian Rupee	05/26/2006		Full Yes		pricebook46144.pdf	
<input type="checkbox"/>	J0526.1	Business World-Eric Moulds-1568	Vision India - OU1	US dollar	05/26/2006	Business World	Full No		pricebook46143.pdf	

Click the Price Book Name in the search results table to view the Price Book details. You can print the Price Book from the window shown below:

Home
Lists
Reports

Reports >

Price Book: J0530.1
Currency = US dollar
* Indicates required field

Customer: **Business World-Eric Moulds-1568**
Customer Number
Operating Unit: **Vision India - OU1**
Pricing Perspective: **Order Management**

Pricing Effective Date: **05/30/2006**
Item Quantity: **1**
Product Criteria: **Item**
Item Number: **AS54999**
View Document: [pricebook53142.pdf](#)

Publish Price Book
Create Delta

Price Book Lines
Publishing Options
Additional Pricing Criteria

Search

Product

Expand All | Collapse All

	Focus Products	Description	List UOM Name	Line Type	Modifier Line	List Price	Modifier Value	Net Price	Pricing Attribute	Pricing Breaks	Pricing Errors
<input type="checkbox"/>	Price Book Lines										
<input type="checkbox"/>	Computer/Hardware/Desktop	Desktop									
<input type="checkbox"/>	AS54999	Sentinel Standard Desktop - Rugged	BG			16.00		<1.00>			
<input type="checkbox"/>	AS54999	Sentinel Standard Desktop - Rugged	BX5			80.00		2.00			
<input type="checkbox"/>	AS54999	Sentinel Standard Desktop - Rugged	Ea			1,901.00		1,226.00			
<input type="checkbox"/>	COMPUTER.DESKTOP										
<input type="checkbox"/>	MISC.MISC										

The Price Book lines are categorized according to categories. For more information on the Price Book, please refer to the *Advanced Pricing Implementation Manual* and the *Advanced Pricing User's Guide*.

Bulk Loader Import

Bulk Loader for Price List enables you to import large volumes of Price List data into the Pricing Tables from the interface tables. All selected records are processed at the same time rather than one record at a time. You can load one record or multiple records without interruption during the upload.

Errors are captured and held for later review and correction after which corrected interface data can be resubmitted. The interface program id is stored in the main pricing tables so users can determine which request id updated the records.

Bulk Loader can be used as a more efficient method than using the business object API which only processes one record at a time.

For more information on how Bulk Loader works, please refer to the *Oracle Advanced Pricing Implementation Manual*.

Oracle Configurator Setup Requirements

This chapter covers the following topics:

- Overview
- Configurator

Overview

This chapter details the necessary setup needed to access the Configurator in Oracle Order Management. For details on implementing Configure to Order (CTO), refer to the *Oracle Configure to Order Implementation Manual*. Refer to the section on Configure to Order Process to see how Order Management is integrated with CTO, ATO, PTO and KITS and how these items are processed to their fulfillment.

Configurator

You must have the following setup in place before using the CTO process and Configurator window in the Sales Order Window:

Installation Status

The status of configurator product must be in complete installed mode (**Status = 'I'**).

Profile OM: Included Item Freeze Method

This profile determines when included items for Model, Class or Kit are frozen. Once the included items are frozen, they cannot be re-exploded. The profile has the following values:

- Entry - Indicates included items will be exploded at the time the MODEL, CLASS or KIT is entered
- Booking - If the profile value is booking, the included items will be exploded at the

time of booking

- Pick Release - If the profile value is pick release, the included items will be exploded when the parent line reaches workflow activity 'SHIP_LINE' in the flow
- None: When the profile is set to this value, the included items will not be processed. Even if the model has included items defined in its BOM, these will not be reflected in Order Management.

Profile BOM:Configurator URL of UI Manager

This profile option indicates the Oracle Configurator Servlet URL, which is where the Oracle Configurator Servlet resides. This profile option must be set correctly for the host application to locate the Oracle Configurator Servlet. The person installing Oracle Applications supplies this URL when running Oracle Rapid Install. Oracle Rapid Install uses this information as the default value for BOM: Configurator URL of UI Manager. If you recently upgraded to a new version of Oracle Configurator, verify that this profile option is set correctly.

All URLs in your profile options should be specified with the URL format:

machine_name.domain:port_number; where *machine_name* is the name of the server machine, *domain* is your domain name, and *port_number* is the port where your service is running. The Apache server port is typically 880n. For example:
<http://appsmachine.appsdomain:8800/configurator/oracle.apps.cz.servlet.UiServlet>.

Related Topics

Oracle Configurator Implementation Guide

Order Entry

This chapter covers the following topics:

- Negotiation in Order Management
- Setup
- Considerations
- Sales Orders
- Process Steps
- TeleSales eBusiness Center to Sales Orders Window
- Order Purge
- Considerations during Order Copy
- Sales Agreements
- Preview and Print Sales Documents
- XML Publisher Multi-Language Support
- Internal Sales Orders
- Enhanced Intercompany Invoicing for Internal Sales Orders
- Integration of Advanced Pricing and Intercompany Invoicing
- Intercompany Invoicing
- Intercompany Invoicing Incoming Cost
- Returns and Credits
- Process Flow
- Workflow

Negotiation in Order Management

Overview

Order Management provides an end to end solution for processing a simple Quote through the negotiation process and automating the transition of the document to fulfillment. This process reduces administration expenses, and increases productivity in an environment geared for rapid response to the customer base.

A quote can pass through various stages from its initial preparation to fulfillment (as a Sales or Sales Agreement). These stages include preparation of a draft; negotiation with the customer; internal and external business approvals; versioning based on customer feedback and conversion to an order or archival as an unsuccessful or unused quote. Negotiation in Order Management provides a seamless flow from a quote status through to firm order. Negotiation:

- Prepares and publishes quotes for assisted selling of products and services to customers and business partners.
- Creates and manage quotes as a negotiation tool and transition the quote to a firm order acting as a single point of entry into Order Management.
- Allows quick entry of order lines with a minimum of data entry. Quoting processes the quote and submits to Oracle Order Management a firm order complete with approvals (Internal/External). Relevant information captured by the quote flows through to the order.

You can use quoting to:

- Create, modify and select quotes.
- Configure Complex Products.
- Manually adjust quote prices.
- Perform real time global availability checks.
- Calculate taxes
- Assign sales Credits
- Convert quotes to orders.
- Support E-Business requirements.
- Reduce administration expenses and increase productivity.

Oracle Order Management includes a workflow phase to support the activities that

typically occur within a negotiation process, such as internal approval and customer acceptance. This allows you to create and manage quotes during the negotiation phase and transition the quote to a firm order. Features include:

- A separate menu option for entering Quotes
- Date Expiration
- Pricing and Availability queries
- Copy support
- Defaulting of attributes that can affect a quote
- Display of Related Items, such as up-sell, cross-sell or substitute items, and their price and availability
- Integration with Pricing
- Integration with TCA
- Minimal data entry that can be processed through to Oracle Order Management as a firm order complete with approvals (Internal/External). Relevant information captured by the quote flows through to the order.
- Change Management using Processing Constraints and versioning
- Automated Process definition—workflows can be defined and extended.
- Visibility through the Order Information Portal

Miscellaneous

Both Quotes and SAs use the same seeded Negotiation workflows.

After Customer Acceptance, Quotes transition to a sales order and Sales Agreements become Active.

SAs do not capture an Offer Expiration date and therefore do not leverage this functionality in the Negotiation flow.

Unsupported Features

The functionality supported with Quotes is similar to the level of support for Sales Orders. There are a few Sales Order features that are not available during the negotiation phase of a transaction including:

- Holds

- Scheduling
- Copy a return from a quote.
- Independent line flows
- Cancellations – progress to LOST Status
- Ship and Arrival Sets
- Commitments
- Quotes for returns or Internal Sales Orders
- Sales Agreements - Can specify sales agreement reference on a quote but released quantity and released amount on a sales agreement are updated only when a quote is converted to an order

Setup

Transaction Type

To create a Transaction Type:

1. Set up the transaction type. See Transaction Types, page 7-2 for generic setup instructions. Note that when the transaction type contains both a fulfilment and negotiation phase there are some additional implementation considerations associated with set up. These impact when and how document numbers are generated by document sequencing.

On the transaction type set up form there is a check box for retain Document Number. When an order type is created two categories are created. Depending upon the value of Retain Document Number the following steps need to be taken.

2. If you want to keep the document number from the quote when the transaction moves to fulfilment, use the category appended with "TTXXX-Quote" when creating and assigning document sequencing.
3. If you need to generate a new document number for the transaction in the fulfilment phase, two document sequences need to be set up:
 - One for fulfilment, using the category with no appending text "TTXXX"
 - One for the category appended with "-Quote".

If this is not set up correctly then the document will not transition to fulfilment

because the document cannot be assigned a Sales Order Number.

NOTE: Retain Document Number check box applies only to transaction types with Sales Document Type of Sales Order. Sales Agreements have only one document number, Sales Agreement Number, associated with the transaction irrespective of whether agreement is in negotiation or fulfillment phase.

4. Then optionally assign a default transaction phase. The transaction phase defaults to either Negotiation or Fulfillment based on Order Management defaulting rules when the quick sales or standard sales order form is opened. The transaction phase always defaults to Negotiation independent of the defaulting rules when the form is opened through the Quotes menu option. If the transaction phase defaults to Negotiation, only the transaction types that also have a negotiation workflow associated with it are displayed.

In the absence of a default, the fulfillment phase is automatically populated by the system.

Note: The transaction phase can be changed up to the point of saving the transaction or before lines are entered. Once the transaction is saved or lines are entered, the transaction phase cannot be changed and the transaction phase field is non-updatable.

You can set the transaction phase directly on the sales document; the transaction phase determines where in the workflow the transaction starts. Using a single transaction type you can choose to begin the transaction process in either phase if both fulfillment and negotiation workflow assignments exist on that transaction type. Note: While Sales Orders lines are assigned a line type through which the transaction is processed, quotes and SAs do not use line types and follow a header flow only.

Transaction type designed for use with Sales documents For example in addition to header and line block data:

SA uses the following settings on the transaction types:

Document numbering

Flow assignments

Layout and contract templates.

Transaction phase

Quotes use:

Retain document number

Header flow assignment

Transaction phase

Layout and contract templates.

Workflows

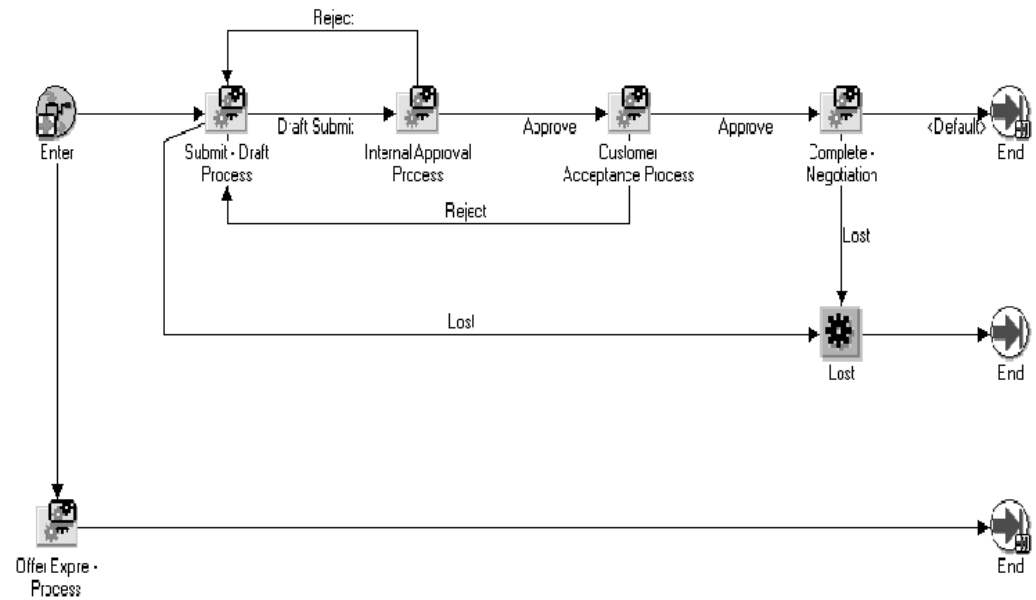
Quotes and Sales Agreements leverage the flexibility of Workflow to manage the quote life cycle. There are two phases for workflow: Negotiation and Fulfillment. Workflow flexibility allows you to tailor your Negotiation and Fulfillment phases to your specific processes. You can choose one of the following generic seeded header-level negotiation flows, these flows can be associated to transaction types for both Sales Orders and Sales Agreements. Both can be converted to an order. Quotes can be converted to sales orders in either the Entered or Booked status (if the booking activity is synchronous). The seeded workflows are as follows:

- **Negotiation Flow - Simple:** This workflow does not require any approvals nor customer acceptance. However the quote can either expire or get lost if it does not progress to being converted to an order.
- **Negotiation Flow—Generic:** Simple negotiation flow, without approval. Prepares quote document, get customer final acceptance, convert quote to the Sales Order.
- **Negotiation Flow—Generic with Approval:** Flow with Approval. Prepare quote document, get management approval, get customer final acceptance, and convert the quote to an order.

In support of a quote the following Status types are predefined:

- Draft
- Pending Internal Approval
- Lost
- Pending Customer Acceptance
- Draft Submitted
- Internal Approved
- Customer Accepted
- Offer Expired - This status does not apply to Sales Agreements.
- Draft - Customer Accepted
- Draft - Customer Rejected

Seeded workflow that incorporates Internal Approval and customer acceptance



After a quote has been put together, it can be submitted for approval. The relevant documents can be routed to various people in the organization, including people from Sales, Business Practice, Legal, or Finance, for review.

The list of approvers is defined at the Transaction Type level. The document must be approved by each participant in the list before the transaction is eligible to move forward in the workflow. If the approver fails to respond within the time limit, the system will re-send the notification. If the approver again fails to respond, the system will either send the notification to the next approver (if the current approver is not the last approver), or reject the notification based on the system parameter setup.

The Approver List can be accessed two ways:

1. From the Transaction Type setup window: (N) > Orders, Returns > Setup > Transaction Type > Define. Select the Approvals button to bring up the Approver List.
2. Navigate directly to the window: (N) > Orders, Returns > Setup > Transaction Type > Approvals.

If an approver is deleted from the list the notifications still need to be processed.

If an approver is added to the list and any transaction is pending approval they will receive a notification.

The user will receive a notification and must approve or reject.

Defaulting

Quotes use same defaulting framework as Sales Orders. Defaulting rules can be set up for following quote attributes -

Transaction Phase

Quote Date

Offer Expiration Date

Customer Location

Seeded defaulting rules for transaction phase on quote are evaluated in following order - 1. Using profile OM: Default Sales Transaction Phase. Seeded profile value is null. 2. Default Transaction Phase from Order Type. If both of these sources do not return a default, system sets transaction phase to Fulfilment.

Sales agreements are not integrated with defaulting rules framework. However transaction phase is automatically defaulted using the same sequence as for seeded rules for sales orders - 1. Using profile OM: Default Sales Agreement Transaction Phase. Seeded profile value is null 2. Default Transaction Phase from the Sales Agreement Transaction Type. For sales agreements also, system sets transaction phase to Fulfilment if no default is returned.

If transaction phase default is to be based on user or responsibility creating the transaction, setup profile values at the appropriate levels. If a more global defaulting strategy is required then it is recommended that it should be defaulted from transaction type.

This profile is an alternative defaulting source for the transaction phase. The default is null.

Processing Constraints

Decide when/who can amend following attributes on the sales document and define processing constraints accordingly -

Quote Number - Not applicable to Sales Agreements)

Quote Date - Not applicable to Sales Agreements

Offer Expiration Date - Not applicable to Sales Agreements

Document Name

Transaction Phase

User Status

Offer Expiration Date

On the constraint, you can optionally specify if constraint applies only while document is in negotiation phase or fulfilment phase.

Validation Templates have also been seeded using the new negotiation workflow statuses. Example of such a validation template is - Pending Customer Acceptance. Use these templates in constraint conditions to restrict changes or to version the sales document while it is in that status. Refer to appendix on constraints for a complete list of seeded templates.

User Status Quick Codes

You can define status codes and capture them in the quote for reference. User statuses can be associated to sales documents for internal tracking purposes by salespeople. These statuses are based on quick codes associated with lookup type of User Status and are user-defined. Note that the user statuses are not validated against the Order/Quote workflow status.

A user status code can be used in a query in conjunction with an additional attribute. See Lookups, page D-1 for more information on setting this up.

Setting the Offer Expiration Date

You can limit the validity of the Quote to a specific period and assign an offer expiration date. The workflow updates status at expiration, and expired transactions may be purged. This date can be manually entered, or defaulted. For example, if you use defaulting rules and select a defaulting condition for negotiation, then select the system variable and enter sysdate+1, the expiration date will default 1 day from the current system date. Notifications can be generated prior to expiration. The expiration date ranges can be used in a search.

An offer expiration date is necessary to ensure successful closure of a Quote in progress. Although this is an optional field, transactions which have not been manually processed to a lost status remain active until an expiration date is assigned. Dates entered are honored by workflow and when the date has passed the Quote automatically moves to a expired status in the workflow and becomes eligible for purge.

When the Quote is due to expire, a notification can be generated that will be sent a variable number of days before the offer expires. Decide when pre-expiration notification should be sent and assign a value accordingly to workflow item attribute for negotiation (OENH) item type e.g. if quote expires in 10 days and notification should be sent 2 days before expiration, Pre-Expiration Time Percentage (PRE_EXPIRE_TIME_PERCENT) attribute should be set to 20% (20% of 10 days => 2 days). This setup is not needed if default of 10% is fine i.e. by default, notification will be sent 1 day prior if quote is to expire in 10 days.

NOTE: Expiration date on sales agreements have a different function, this offer expiration feature is not applicable for sales agreements.

Sales agreement expire only after the document becomes active in fulfilment phase while offer expiration applies to quotes in negotiation phase.

Features include:

- Expiration Dates entered will be honored by workflow and when the date has passed the quote will automatically move to a offer expired status in the work flow and become eligible for purge.
- The offer expiration date can be entered manually or by the defaulting rule framework. The date can be overridden at any time unless processing constraints are defined to manage who and when may amend the date.
- When the quote is due to expire, a notification can be generated to alert the CSR. The user may require the notification to be sent ten days before the offer expires. This duration/notification initiation may vary from transaction type to transaction type.

Customer Location

Oracle Order Management allows the display and capture of a customer location address type. For example, you can use this to show the address a quote needs to be mailed. This is optional.

Considerations

The following table gives a high level comparison of the features and functions available in Order Management Quoting and Oracle Quoting.

Order Management Quoting and Oracle Quoting Comparison

Feature	Quotes in Order Management	Quotes in Oracle Quoting
Collaboration across sales suite		X
Collateral (Web Catalog, Content Manager)		X
Proposals		X
Opportunity Integration		X
iStore Integration		X
Approvals	Basic	Advanced

Feature	Quotes in Order Management	Quotes in Oracle Quoting
What-If Analysis (Gross Margin, Pricing and Compensation)	Basic	Advanced
Printing	X	X
Versioning	X	X
Quote Statuses	X	X
Expiration	X	X
Contract Negotiation	X	X

Note: Oracle Quoting uses the AME (Approval Manager) for approvals and as a result is able to perform hierarchal approvals during the Quoting process.

Related Topics

Versioning, page 10-21

Pricing and Availability, page 8-2

Processing Constraints, page 10-1

Transaction Types, page 7-2

Using Workflow in Order Management, page 7-29

Define Document Sequences for Order Numbering, page 2-93

Define Order Management Transaction Types, page 2-95

Define Processing Constraints, page 2-107

Define Defaulting Rules, page 2-117

Sales Agreements, page 5-22

Sales Orders

Overview

In Oracle Order Management, the Sales Orders window enables you to organize, enter, view, and update order information. Order Management offers line level independence where you can capture regular orders as well as returns using the same window. The Sales Orders window offers you a convenient and quick entry point for creating and editing order information as well as viewing summary information from other subsystems such as Shipping, Receivables, and Purchasing, as well as the status of orders.

Oracle Order Management designed a mechanism called the Process Order API that performs a consistent validation of data manipulation (i.e. changes, deletions etc.) on the Sales Order attributes. This provides a consistent, secure, and valid means for managing sales orders.

Required Setup

To accomplish entering an order from entry to invoicing, the following setups are required:

Order Header/Line Workflow Processes

Order Management comes with seeded Workflow processes. Review the seeded flows, activities and notifications to determine if the seeded data can meet your business needs. To successfully enter a standard order in OM, you can use the Generic - Order and Line Flows. If you need to modify the seeded workflows, it is recommended that you make a copy and modify the copy. You can also determine if you want certain activities to be Synchronous, Deferred, or Manual. The Workflow engine will move the order/line ahead as long as the activities are synchronous activities. The order or line flow will stop at any manual activity which will require a manual task to move the workflow along. The Workflow background engine processes deferred activities, notifications, wait activities and time out activities. You setup the Workflow background engine when setting up Workflow in your environment. You also need to schedule the Workflow Background Process concurrent program to re-submit periodically. When scheduling the concurrent program, please specify Order Management work item types as the parameter so that it will only pick up the activities or notifications for Order Management work items.

Transaction Types

Both order and line transaction types need to be setup in order for an order to process from entry to invoicing. When setting up order types, assign order header and line workflows to the order type. Since each line can go through its own flow process, each line needs to have its own workflow process. Line level workflow processes are assigned based on the order type, line type, and item type combination. For example,

adding Generic Order Type to Generic Line Type and Standard Item gives you a Generic Line Workflow process.

Document Sequence

The document sequence functionality is for numbering orders. The same sequence can then be assigned to all order types. For instance, you could define an automatic sequence beginning with 1 and assign it to all your order types. Then each new order that you enter will receive the next number in the sequence.

Processing Constraints

Order Management ships with seeded constraints that prevent data integrity problems. If your business requires more restrictive rules when processing orders, rules can be set up to control changes or operations of the order process flow. See Processing Constraints, page 2-107 for details on setting up processing constraints.

Scheduling Activity

The Schedule function can be performed anywhere in a process flow according to your business needs. If you want to setup scheduling to run automatically, you can set it as a synchronous function within the workflow process so it will happen automatically. The profile option OM: Autoschedule should be set to Yes. Or the user can schedule manually directly from the sales orders window. See Scheduling for details on scheduling setup.

Shipping Parameters

Set the Shipping Parameters specific to company picking and ship confirmation processes. The Shipping Parameters window consists of the following tabs: General, Pick Release, Shipping Transaction and Delivery Grouping. The General Tab includes percent fill basis, or quantity, and Weight and Volume UOM Class. These parameters are primarily used for the containerization functionality. The Pick Release Tab includes a default Pick Slip Grouping Rule, Release Sequence Rule and a Auto Pick Confirmation flag which confirms your order to be released from Inventory. The Shipping Transactions Tab includes default Shipping Documents at ship confirmation and container packing controls. Finally, the Delivery Grouping Tab includes the criteria for grouping delivery lines. It must have the same ship to location, warehouse, and so forth as the order lines.

Master Items

A standard, finished good item should be defined in the Inventory module, with attributes set appropriately. The key attributes that control the processing of a finished good item are on the Order Management tab in the Master Item setup window. The flag Shippable and Transactable should be selected. The best way to create your items is to copy them from the Finished Good seeded template.

Item Quantity On-Hand

In order to ship an item, there must be sufficient quantity available. In a test environment you can create inventory by executing a miscellaneous receipt in the Inventory module. To generate a miscellaneous receipt, go to the Transactions > Miscellaneous Transactions window. Enter the newly created Item name and specify a subinventory and quantity and save. In a production environment, your inventory will typically come from receipts against purchase orders or completion of work orders. The quantity on hand for the item will be decremented the amount of the order line when pick releasing the order.

Price List Setup

To price the new item when entering the ordered item on the order, the user should add the new item to a price list. The item is added to a price list via the Price List Setup window: Pricing > Lists > Price Lists Setup. Query an existing price list or create a new price list. Add a new line, enter the item name, UOM and price and save. The price and UOM will default when entering the item on the order line.

Install Base Integration

If you are using Oracle Install Base and you have items that are non-shippable but need to be interfaced to the Installed Base (such as PTO Models, PTO Option Classes, and Service Items), then you will need to add the Installed Base Interface activity to your line level workflows. The activity is seeded. It should be added to the line workflow processes following the fulfillment activity.

Process Steps

This section will guide you through a basic sales order flow from entry to invoicing, including:

- Entering a standard sales order
 - Scheduling the order
 - Booking the order
 - Pick release
 - Ship confirm
 - Fulfillment
 - Invoicing interface
1. Enter Order Header information with a standard order type.

Note: There are no seeded transaction types. You will need to create a standard order type which uses the generic order and line workflow to progress the order through to invoicing. Refer to the Required Setup section for Workflow and Transaction Type setup.

Sales Order Information (Header) Window

Order Information		Line Items
<div> <div>Order Information</div> <div>Line Items</div> </div> <div> <div>Main</div> <div>Others</div> </div>		
Customer	Computer Service and Re	Order Number
Customer Number	1006	Order Type
Customer PO		Date Ordered
Customer Contact	Brown, Gerry Mr.	Price List
Ship To Location	Chattanooga (OPS)	Salesperson
	301 Summit Hill Drive	Status
		Currency
	Chattanooga, TN, 37401, L	Subtotal
Bill To Location	Chattanooga (OPS)	Tax
	301 Summit Hill Drive	Charges
		Total
	Chattanooga, TN, 37401, L	

Actions Related Items Configurator Availability Book Order

The Order Information screen is in a single record format. The most commonly used fields by all industries will be displayed by default. You may use the folder tools to add or remove fields which are displayed. Forms can be customized to meet business needs. Field values can be set up to default from a variety of sources such as the Order Type or the customer record. All defaults can be overridden unless the business unit defines constraints preventing update.

Once the Order Header information is entered, you will enter the line information within the Line Items screen. The Line Items window, shown in Figure 2, will display in multi-line format. The overflow region will display Item Description, Line Total and Line Quantity fields. The Line, Ordered Item and Quantity fields are static in the window. Minimum line information required to book an order is item number and quantity. Other line information that can be entered in the Main tab include Schedule Date, Line Type, Source Type, etc. The Line Items window includes five additional tabs to enter detailed line information. These tabs include Pricing, Shipping, Addresses, Returns, Services, and Other.

Sales Orders: Line Items

Line	Ordered Item	ed	Qty Shipped	Reason	Comments	Salesrep
1.1	AS54888					Green, Suzanne
2.1	AS54999					Green, Suzanne

Line Total: 1,900.00 Line Qty: 1 Service Total: 0.00

Description: Sentinel Standard Desktop - Rugged

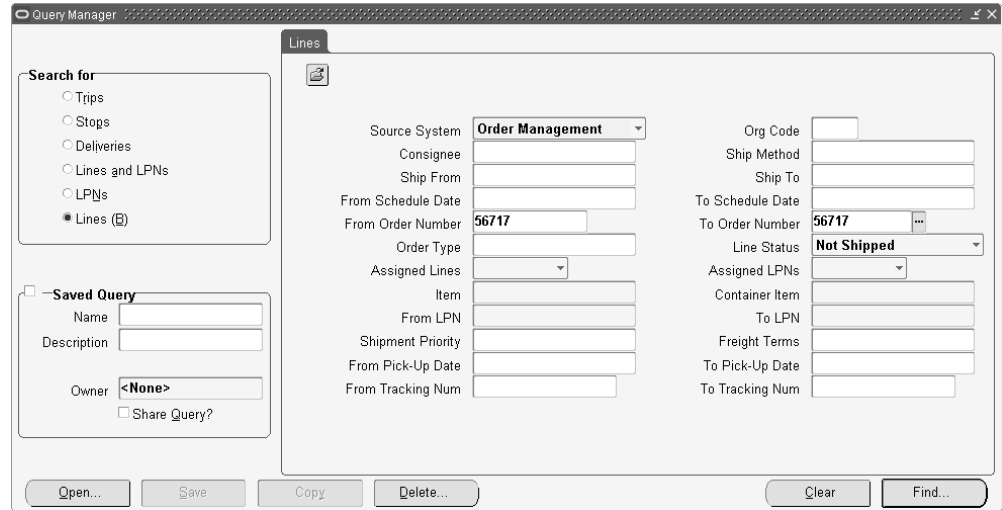
Actions Related Items Configurator Availability Book Order

Other functions are available through the Actions button on both the Order Information and Line Items forms. On the Order Information window, the Actions include functions such as, Copy, Cancel, Apply and Release Holds, Price Order, etc. In the Line Items window, the Actions include additional functions such as, Split Line, ATP, Price Line, Configurator, etc.

- Schedule the order. This can be setup to be performed manually or automatically, depending on the user's needs. The user can schedule orders automatically by setting the Autoscheduling feature via a profile option or from the Special menu. Or the user can schedule orders manually by using the right mouse button or from the Special menu. Refer to the topical essay on Scheduling in this manual for the details of scheduling. Once the order is scheduled, the schedule ship date will be populated on the lines of the order.
- Book the order. You can book an order at either the Order Information tab or Line Items tab via the Book button.
- Pick release the order from the Shipping > Release Sales Orders > Release Sales Orders window. Make sure to include a Release Sequence Rule, a Warehouse, a Pick Slip Grouping Rule and check the Auto Detail and Auto Pick Confirm boxes. Users can also pick release their orders from the Shipping Transaction window. Although, the user will need to setup their Shipping Parameters to ensure the order is released. Refer to the *Required Setup* section below for details.

5. View the Pick Status of the lines. The lines of the order must be in a status Released to proceed to the Ship Confirmation activity in the Workflow process. You can view the status in the Shipping Transaction window. First, the user will query the order number in the Query Manager window. This window will execute your query and populate the order lines in the Shipping Transaction window.

Query Manager Window



To view the status of the lines, use the horizontal scroll bar in the Lines/ Containers tab of the Shipping Transaction window, and scroll to the right to a field called Pick Status. You can also click Detail to open up the window. The status should be Released for all lines.

6. Create a Delivery. This can be performed automatically during Pick Release by selecting AutoCreate Delivery equal to Yes. This can also be performed manually or automatically within the Shipping Transaction window. If you manually create a delivery, you need to use the same ship to address, warehouse etc. based on the setup criteria of the shipping parameters. Refer to the Required Setup section for information on Shipping Parameters. In this example, we will create a delivery automatically within the Shipping Transaction window. Once the order has been queried, the lines will appear in the Shipping Transaction Window. To create a delivery automatically, highlight (Ctrl + mouse click) the lines you want to include in the delivery, select the Actions list and choose Autocreate Deliveries and GO. A system generated delivery name will be populated on all of the lines selected. At this time, you can click on the Delivery Tab to see the delivery name, ship to location and other shipping information.

Note: If you want to use prefixes or suffixes with delivery names, modify the wsh_external_custom.delivery_name package. No profile options exist for specifying prefixes or suffixes.

Shipping Transactions

Query Context

Detail	LPN	Item Name	Delivery	Line Status	Next Step	Exceptions	Order	Requested Qty	S
216155	<input type="checkbox"/>	AS54888	64884	Ready to Release	Pick Release	<input type="checkbox"/>	56717	1	<input type="button" value="+"/>
216156	<input type="checkbox"/>	AS54999		Ready to Release	Pick Release	<input type="checkbox"/>	56717	1	<input type="button" value="+"/>
<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>			<input type="button" value="+"/>
<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>			<input type="button" value="+"/>
<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>			<input type="button" value="+"/>
<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>			<input type="button" value="+"/>
<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>			<input type="button" value="+"/>
<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>			<input type="button" value="+"/>
<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>			<input type="button" value="+"/>
<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>			<input type="button" value="+"/>
<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>			<input type="button" value="+"/>
<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>			<input type="button" value="+"/>
<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>			<input type="button" value="+"/>
<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>			<input type="button" value="+"/>
<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>			<input type="button" value="+"/>
<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>			<input type="button" value="+"/>
<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>			<input type="button" value="+"/>

Lines/LPNs Delivery Path by Stop Path by Trip

Auto-pack Pick and Ship Actions Gg Detail...

- The seeded Line Flow - Generic flow has a Defer activity before the fulfill activity. Fulfill the order. Once the Shipping activity completes, a Background Workflow Process processes the order line(s) to the Fulfillment activity.

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TeleSales eBusiness Center to Sales Orders Window

Overview

The TeleSales eBusiness Center now enables you to view order history and create new orders. The New button on the Order tab can launch either the Sales Orders window or the Quick Sales Orders window, where the relevant Party, Account, Address, and Contact information entered in the eBusiness Center are carried over automatically and populated in the Sales Orders window. If an account does not yet exist in TeleSales, Order Management creates a new account. You can then enter any necessary details and process the Order.

Setup

There are no mandatory setup steps necessary to enable the functionality of this feature. However it is required to enter a value in the Deliver To field in Customer Address (in the Customer window of Order Management). Only if a value is entered in the Deliver To field, will the sales orders window open in Telesales.

Profiles:

OM: Create Account Information

This profile sets permissions to create Accounts, Sites and Contacts. This profile can be modified at the Site, Application, Responsibility, and User levels. The seeded profile values are:

- All: The user is permitted to create Accounts, Account Sites, Account Contacts and related information.
- Account Site and Account Contact Only: The user is permitted to create Account Sites, Account Contacts and related information only.
- None: The user is not permitted to create any of the above.

The default value is None. The profile is visible to the user but not updateable. The profile is visible and updateable at all levels to the system administrator. The Create Account Layer API will check this profile and create the account layer only if the correct permissions are set.

OM: Sales Order Form Preference

This profile defines which sales orders window is evoked from the Telesales e-business center.

Related Topics

Oracle TeleSales Implementation Guide

Order Purge

Overview

Oracle Order Management purges order data that is no longer needed within the operational requirements of the order taken and order administrator. Purging:

- Allows orders to progress on the current order book in an efficient manner, without being distracted or encumbered by obsolete data.
- Frees storage space

Restrictions

Orders must be closed before they can be purged. The order is purged only if there is no open activity for the order including uninvoiced lines or open returns.

Profile

Profile: OM: Transactions Purged Per Commit

This profile determines how many orders can be purged per commit. The default is set to 100.

Considerations during Order Copy

Overview

The Copy Orders function in Order Management is tightly integrated with the Sales Orders window and supports multi-selection of records. In addition to copying orders it facilitates copying lines within an order or across to a new or existing order. This feature solves many functional problems, including the following:

Template Orders

You can use copy to place multiple orders that are very similar or identical. For example: A private Elementary School places a standard Order with a School Supplies Vendor every 2 weeks to meet its Stationery needs. You can set up a source sales order that matches this need and create orders as required based on this source order to minimize data entry time.

Creation of Return Material Authorizations

When a customer returns items against an order, the customer service clerk can copy lines from the original order to create a RMA instead of entering it from scratch.

Setup

1. The following columns for Copied Orders should be set as follows:

Copied Orders

R12 Column	Value
SOURCE_DOCUMENT_TYPE_ID	2
SOURCE_DOCUMENT_ID	SO_HEADERS.ORIGINAL_SYSTEM_REFERENCE

2. All Lines belonging to the Copied Orders that have their original_system_line_reference populated should have their columns set as follows:

Original_system_line_reference Settings

R12 Column	Value
SOURCE_DOCUMENT_TYPE_ID	2
SOURCE_DOCUMENT_ID	Select soh.original_system_reference from so_headers soh where soh.header_id = so_lines.header_id
SOURCE_DOCUMENT_LINE_ID	SO_LINES.ORIGINAL_SYSTEM_LINE_REFERENCE

Copying Descriptive FlexFields

The checkbox Descriptive Flexfields in the Copy Header/Copy Lines tabs of the Copy window is limited in that it cannot provide for Order-to-RMA copies; in addition you are not able to manipulate the DFF attributes. In order to overcome these, an API hook has been provided so that you can control copying of the line level DFF attributes. This API will also have visibility to many other controls like:

- Order Type: Order Type selected on copy
- Line Type: Line Type Selected on copy
- Operation: Order to RMA, Order to Order and RMA to Order

- Copy Flex: True/False, based on the user's decision (On COPY form) to copy or not copy line level DFF.

Using these controls, you can write your own logic to clear, retain or assigning new values to the DFF context and attributes (attribute1..attribute20).

In order to enable this flexible solution, you will first need to set the system parameter "Call line DFF extension API in COPY" to YES. This will enable the callout to the hook. It will also enable the 'Include Descriptive Flex' check box on Lines TAB for Order to RMA copy.

The Hook API will look like:

```
OE_COPY_UTIL_EXT.COPY_LINE_DFF(
p_copy_rec IN OE_Order_Copy_UTIL.Copy_Rec_Type,
p_operation IN VARCHAR2 ,
p_ref_line_rec IN OE_Order_PUB.Line_Rec_Type ,
p_copy_line_rec IN OUT NOCOPY OE_Order_PUB.Line_Rec_Type )
```

where you can derive the following:

- Order Type -> p_copy_rec.hdr_type
- Line Type -> _copy_rec.line_type
- Line Type -> _copy_rec.line_type

If the 'Include Descriptive Flex' is checked then DFF attributes will be populated from the source line and will pass the record (p_copy_line_rec) to the Hook API. Otherwise all DFF attributes will remain blank (G_MISS_CHAR).

When you implement this solution, please ensure that you increase the file versions for Hook API (Spec + Body) to say 1000, so that it never gets overwritten by any future patches.

Sales Agreements

Overview

Sales Agreements are used when you have specific characteristics related to a purchasing agreement between a customer and a supplier. These characteristics include the date range of the agreement, the items included, the price of the items, the quantity of each item that the parties committed to, as well as other attributes, like freight or payment terms. Once a Sales Agreement is entered for a customer, multiple releases (sales orders) against the Sales Agreement are processed over a period of time within Order Management. The order is fulfilled and billed according to the terms of the Sales Agreement. Tracking information will also be accumulated for Sales Agreements, such

as, quantity fulfilled, and dollar value fulfilled of released lines. This information is used to view status of orders executed against a Sales Agreement.

Sales Agreement functionality includes the following:

- New windows: Find Sales Agreements, Sales Agreements Summary, and Sales Agreements windows
- Captures agreement information
- Enforce sales agreements terms such as: price list, shipping method, payment terms, ship to, bill to.
- Ability to secure who can enter Sales Agreements
- Specify defaulting rules for sales agreement attributes for releases
- Ability to create non-customer specific Sales Agreements
- Default information from the Sales Agreement to the release
- Support Standard, ATO items, Kits, Services, and other items
- Support Item Categories and all items
- Ability to create releases by Order Import and Process Order API
- View releases of Sales Agreements
- Process the releases against the Sales Agreement
- Aggregate information about the releases and access that consolidated information from the Sales Agreement
- Integrations with Advanced Pricing and Release Management
- Effectivity dates of the agreement
- Inline Pricing
- Enhanced sales documents with Preview and Print
- Ability to terminate a Sales Agreement
- Workflows:
 - Negotiation and Fulfillment flows
 - Automatically attach Adobe Portable Document Format (PDF) of current SA for

Approvers to reference easily

- Quality Assurance (QA) validation for contractual terms and conditions included in Negotiation flow
- Draft, Internal Approval, Customer Acceptance, Terminate, Expire, Lost, and Close
- Internal Approvals
- Create Internal Approver List
- Processes:
 - Automatic and Manual Versioning
 - Customer Acceptance captured
 - Ability to create customer-specific Price List
 - Ability to add customer items to a Price List
 - Ability to author and negotiate Contract Terms with Oracle Sales Contracts enabled
- Configuration support:
 - Ability to define options and option classes on the Sales Agreement to hold price for configurations on releases
- Attachments
- Contract Documents
- Copy
- Security through Processing Constraints

Profiles

OM: Default Sales Agreement Type

This enables the system to use a common (default) transaction type across Sales Agreements to generate unique sales agreement numbers. There is no default value for this profile option. This profile is seeded as available to setup at the responsibility and site level. In most business processes, the profile option can only be modified by the System Administrator. The profile is visible to the user but not updateable.

OM: Default Agreement Transaction Phase

This profile enables the system to use a common transaction phase across Sales Agreements.

Setup

To set up the Order Management system to enter Sales Agreements:

1. Install Order Management.
2. Define a Sales Agreement type for assigning sales agreement numbers. See Define Document Sequences for Order Numbering, page 2-93 , and Define Order Management Transaction Types, page 2-95 .
3. Set up the profile option OM: Default Sales Agreement Type in order to default the category to generate the sales agreement number.
4. Optionally, set up the profile option OM: Default Sales Agreement Transaction Phase in order to default the transaction phase to Negotiation or Fulfillment.
5. Create folders on a Sales Order or Quick Sales Order and Quote or Quick Quote forms to show SA related fields: At the header: Sales Agreement Number, Sales Agreement Name, on the lines: Sales Agreement Number, Sales Agreement Line Number.

Defining transaction types for Sales Agreements

Navigate to the Transaction Types window to set up transaction types. See Define Order Management Transaction Types, page 2-95 for more information.

The three seeded workflows for Sales Agreements are:

- **Negotiation Flow—Generic:** Simple negotiation flow, without approval. Prepares negotiation, no management approval, get customer final acceptance, converts from negotiation phase to fulfillment phase.
- **Negotiation Flow—Generic with Approval:** Flow with approval. Prepares draft, gets management approval, gets customer final acceptance, converts from negotiation phase to fulfillment phase.
- **Sales Agreement Flow—Generic:** Generic fulfillment flow for Sales Agreements.

Note the following when setting up a transaction type for Sales Agreement:

- **Fulfillment Flow:** Assign the fulfillment flow.
- **Negotiation Flow:** Assign the optional negotiation flow.

- **Default Transaction Phase:** Transaction phase determines where in the workflow the transaction will start. Select either Fulfillment or Negotiation. The profile OM: Default Sales Agreement Transaction Phase is the preferred source for the transaction default on Sales Agreements. If the profile has not been set, the system looks at the transaction phase defined on the transaction type. If neither default is available, the system uses Fulfillment phase as the default. (Optional)
- **Layout Template:** Assign the layout template that you would like to use when generating a customer facing document to be previewed or printed. See Preview and Print Sales Documents, page 5-29. (Optional)
- **Contract Template:** When Oracle Sales Contracts is enabled, assign a Contract Template to the sales agreement type for defaulting purposes. See Authoring and Negotiating Contract Terms, page 20-15. (Optional)

Transaction types can point to the same template or different templates depending on the business process.

There is direct access to the Approval List setup from the transaction type. It can also be accessed from the menu. For more information on setting up Approvals, see Defining Approvals, page 2-105 .

The Negotiation flow offers Internal Approval as well as Customer Acceptance prior to transitioning the Sales Agreement transaction to Active where releases can be placed against the Sales Agreement.

Note: If you want to create an automatic attachment on the workflow notification (to allow approvers to easily view the document), on the transaction itself as a reference in Contract Documents when Oracle Sales Contracts is enabled, or for FND attachments, the workflow must be extended to add the "Sales Agreement/Sales Order Generation" process in between Submit Draft and Internal Approval, and XML Publisher must be installed.

Defining processing constraints for Sales Agreements

The processing constraints framework in Order Management gives the unique ability for user and system to define the conditions and status at which an update can be made to an entity. For example, a Sales Agreement cannot be updated while it is in the "Pending Internal Acceptance" status. This has been seeded as a system constraint to prevent data corruptions. Likewise you can define constraints that suites to your business practices and prevent changes. These constraints can be defined at the entity level and for each attribute.

Sales Agreements use the same constraint framework as Quotes or Sales Orders. This framework can also be used to set up when and what changes trigger automatic versioning for Sales Agreements. Navigate to the Processing Constraint Window. See Define Processing Constraints, page 2-107 for more information on defining processing

constraints.

Note the following when defining processing constraints for Sales Agreement:

- **Entity:** A Sales Agreement Header or Line
- **Assign a workflow phase:** In the Applies To field, select a workflow phase (Negotiation or Fulfillment) to assign to the sales agreement header or line.
- **Assign a validation template:** In the Conditions region, select a validation template in the Validation Template field. See Defining Validation Templates, page 2-113 .

Constraints seeded for Sales Agreements are listed in Appendix E.

Price List Setup/Price Modifier Setup windows open in query only mode if the Not Allowed constraint applies for update operation on the New Price List/New Modifier List setup attribute on the Sales Agreement Header entity.

If Oracle Sales Contracts is enabled and the Not Allowed constraint is applicable for update operations, then attribute Contract Terms, in the Contract Terms window opens in query only mode.

Defining constraints for releases

Determine when Sales Agreement references should be allowed to be changed on releases. For example, if "Cannot change Sales Agreement references on a shipped line" is specified, setup constraints Sales Agreement numbers on the Order Header or the Sales Agreement number/Line number on Order Line.

Defaulting Rules for releases

Determine which terms from Sales Agreements should default to the release. Define defaulting rules for Order Header/Order Line using the source type "Related Record" using source object of Sales Agreement Header/ Line. For example, if you want to ensure that the SA number is always defaulted in the release header and lines, set up a defaulting rule with a source type as "Related Record." You must also

In addition, if you commonly place orders/releases against agreements, create a folder with sales agreement number field on the order header and save this as the default folder. Now when you click on Create Releases button from the Sales Agreement window, the Sales Orders form opens and the cursor goes to the Sales Agreement Number field. When you tab out of this field, customer data will default from the SA to the release order.

This is recommended if a business process also requires a term to be enforced. For example, if enforce price list is checked on the Sales Agreement Line, define a rule to default the price list from Sales Agreement Line to Order Line. Otherwise, a validation error may occur while processing the release line and you will have to update the price list manually. See Defaulting Rules.

Menu entries

Appropriate form functions should be added to provide or restrict access to the Sales Agreement window.

- Contract Documents
- Contract Terms
- Price List Setup
- Price Modifier Setup
- Contract Terms
- Contract Documents
- Price List Setup
- Price Modifier Setup

Query only Mode

The following actions are available when the Sales Agreement is in query only mode:

- Preview and Print
- Release Rules
- Version History
- View Notification Details
- View Reason
- View Releases
- View Workflow Status

Cumulative Range Breaks

With Advanced Pricing, users have the ability to create Cumulative Range Breaks across releases for a particular Sales Agreement. You can create range breaks using the Sales Agreement action, Price Modifier Setup.

There are three Sales Agreement Accumulation Attributes:

- Sales Agreement Amount
- Sales Agreement Line Quantity

- Sales Agreement Line Amount

Related Topics

Define Processing Constraints, page 2-107

Defining Validation Templates, page 2-113

Preview and Print Sales Documents, page 5-29

Oracle Order Management User's Guide

Oracle Advanced Pricing User's Guide and Implementation Manual

Oracle Advanced Pricing Implementation Manual

Preview and Print Sales Documents

Overview

Preview and Print provides the ability to generate a printable Adobe Portable Document Format (PDF) that can meet business layout requirements. Preview and Print is an action available on each sales document, (such as Sales Order, Release Order, Quote, or Sales Agreement), that displays the PDF document to be viewed and printed.

Features include:

- Layout Templates can be easily designed to meet specific formatting requirements
- Ability to print all necessary information of the business document including header, line information, and signature block
- A default Layout Template that can be defined on the Transaction Type
- A field on the business document that displays the Layout Template defined for the Preview and Print
- Automatic attachment of a PDF in Workflow notification to Internal Approvers and attachment of a PDF to the business document in the system

Profiles

OM: Printed Document Extension Class Name

This profile extends the standard functionality of the preview and print feature by providing a hook that will call a specified custom java code class path. The printing API reads the profile class path and executes the java function.

Setup

Create or modify layout templates as needed. Layout templates are created in XML Publisher. Several layout templates are preseeded and can be used or copied to create a new layout template. All Layout Templates must be registered before they can be used. In the OM Transaction Type set up, the layout template can be associated as a default format for the Preview and Print action.

Oracle XML Publisher is required to use Oracle Sales Contracts, so if Sales Contracts is enabled, preview and print is available. However, if Sales Contracts is not enabled, then you must install XML Publisher to generate sales document previews. All users must have Adobe Acrobat installed for preview and print capabilities.

To set up Preview and Print:

1. Set the Responsibility to: XML Publisher Administrator >Layout Templates.
2. Search for an existing Layout template by application and select a template to view. With your responsibility set to Responsibility: XML Publisher Administrator > Layout Templates, search for an existing Layout template by application or create a new template.
3. In the Layout Template select a stylesheet from the list of values to be tied to this Transaction Type. The following are seeded:
 - **Sales Order XSL Template:** This is a XSL-FO Layout Template sample used for defining a Sales Order printing format.
 - **Sales Agreement XSL Template:** This is a XSL-FO Layout Template sample used for defining a Sales Agreement printing format.
 - **Sales Order RTF Template:** This is a standard RTF Layout Template sample used for defining a Sales Order printing format.
 - **Sales Agreement RTF Template:** This is a standard RTF Layout Template sample used for defining a Sales Agreement printing format.
 - **Sales Agreement RTF Extension Template:** This is a template that is imported into the standard RTF Layout Template for Sales Agreements. The RTF Extension Layout Template provides the standard RTF Template with table layout formatting for printing price lists, modifiers, and products within a table.
 - **Sales Order XSL Extension Template:** This is a XSL-FO Extension Layout Template that is imported into the standard RTF Layout Template for Sales Orders. The XSL-FO Extension Layout Template provides the standard RTF Template with global XSL variables, XSL templates returning specific values, XSL templates for article variable substitution, and rich text editor tag support for article text.

- **Sales Agreement XSL Extension Template:** This is a template that is imported into the standard RTF Layout Template for Sales Agreements. The XSL-FO Extension Layout Template provides the standard RTF Template with global XSL variables, XSL templates returning specific values, XSL templates for article variable substitution, and rich text editor tag support for article text.

Note: Seeded stylesheets and RTF templates cannot be modified. You can, however, download a stylesheet and register it as a valid stylesheet with or without modifications.

4. Navigate to N > Setup > Transaction Types > Define. See Define Order Management Transaction Types, page 2-95.
5. Assign a layout template to the appropriate transaction type. In the OM Transaction Type setup, the layout template can be associated as a default format for the Preview and Print action.
6. Save your changes. The stylesheet you selected determines the formatting for a sales document from this transaction type.

Note: It is highly recommended that layout templates associated to a transaction type not be end dated as long as there are open transactions.

To create your own layout template:

You can also create your own stylesheets and register them with the application.

1. Set the Responsibility to: XML Publisher Administrator > Layout Templates.
2. Search for an existing Layout template by application and select a template to view. With your responsibility set to Responsibility: XML Publisher Administrator > Layout Templates, and create a new template.

Sales Agreement Order Generation Workflow Subprocess

The workflow subprocess Sales Agreement Order Generation is available for customers who intend to view the sales document as an attachment from notifications within the OM Approval workflow. The workflow process submits a concurrent request to generate the PDF for the transaction and saves it as an attachment.

This subprocess is included as a part of the OM Negotiation header workflow, but is not seeded in a flow. Insert this subprocess into your Negotiation-Generic with Approval flow before the Approval process to generate the attachments and also view these attachments from the workflow approval notification.

Related Topics

Oracle XML Publisher Report Designer's Guide.

Oracle XML Publisher Administration and Developer's Guide.

XML Publisher Multi-Language Support

Prior to version 5.5, Oracle XML Publisher only supported one language, so you would have to create a different template for each language. Now you can use one template for different translations.

Note: Currently, only the RTF template supports multilingual translations.

The boilerplate text within a template can be extracted, translated, and then merged back into the original template, creating a translated version that preserves the layout. The translated text for each language is stored within database tables so it may be reused or exported later.

To use the Multiple Language Support (MLS) support for RTF templates you must check a check box on the Template Detail page in XML Publisher for XMLP to generate XLIFF files for the boilerplate text. You can download the template and along with it the XLIFF files for each language from ARU.

XML Publisher technology is based on the W3C XSL-FO standard to transform XML data into an GET DEF FO object; this contains both data and formatting information that can then be further transformed to an output format such as PDF.

Using programs like Adobe Acrobat and Microsoft Word you can create and maintain report formats based on development delivered XML extracted data. XML Publisher then converts these documents to the XSL-FO format. Note: When developing a template for multilingual applications, you must avoid any references to area specific information.

You can also obtain 3rd party PDF forms for example government tax forms and merge XML data to populate the forms prior to printing.

Number Formatting

To format a number field correctly, the data type and the number format mask must be specified according to the guidelines described below. Both data type and format mask are set as the properties of a text form field. There are two ways to specify format mask for number:

1. Using Microsoft number format mask
2. Calling format-number function with Oracle number format mask

Only one method above should be used. In the case where format masks are specified in both places, the data will be formatted twice using Oracle format mask and Microsoft format mask and unexpected behavior will occur.

Although the current internationalization library (I18N lib) should work properly with Microsoft format mask listed by MS Word today, I18N development team (IPG) does not have any plan to track them in the future. Also when users specify Microsoft format mask by hand, it is not clear if the I18N lib truly support all masks Microsoft provide.

However, according to XML Publisher product management, the templates will often be customized by customers; thus the recommendation here is still to use Microsoft format mask for ease of use by customers.

Group separator and decimal separator will be set at runtime based on the template locale. This is applicable for both Oracle format mask and Microsoft format mask. Including currency in the Microsoft format mask, e.g. ¥#,##0.00;(¥#,##0.00) is strongly discouraged because data will be based on that currency all the time. In Oracle format mask, eg. L999G999G999D99, L will be replaced by the currency symbol based on the locale at run time.

"%" should not be included in the format mask because it will fix the location of the "%" sign in the number display, while "%" could be at the beginning or at the end of a number depending on the locale.

Please refer to the *Oracle XML Publisher User's Guide* for more information on supported Microsoft Number Format Mask.

Please refer to the *Oracle XML Publisher User's Guide* for more information on supported Oracle Number Format Mask.

Translation

A translation unit is a translatable text paragraph in the template. Some Translation Units are:

- **id:** The id is a hash value of the source string
- **maxbytes:** always set to 4000 (Hyperhub limit)
- **maxwidth:** Value will be 150% more than the number of characters in the source string, or 15 characters more than the source string, whichever is greater.
- **translate:** Will be set to No if:
 1. Source string is empty
 2. Source string contains an underscore character "_"
 3. Source string doesn't contain any alphabets.
- **tokens and prop-group:** If there are untranslatable elements within the source string (code/graphics/etc.), they will be replace with a token with the <source> element.

Their value will be placed in the ora_reconstruction prop-group, which cannot be translated.

Internal Sales Orders

Overview

The Internal Requisition/Internal Orders process is used for requesting and transferring material from one inventory or expense location to another. An Internal Requisition is initiated in Oracle Purchasing. Sourcing rules can automatically determine if the source type is to be Inventory or an external supplier. Order Management receives information from the Purchasing Application to create an Internal Sales Order. When the sales order is shipped (to indicate either intra or inter-organization movement of goods), the requisition can be received to record receipt of goods.

The Source Type attribute on the requisition line controls whether a line will be fulfilled internally or purchased from a supplier. A source type of Inventory indicates an internal order. Order Management is seeded with an Order Source of Internal, to identify lines created from internal requisitions. The internal requisition id is stored in the Original System Reference column on the order header of the Internal Order. It is not possible to manually enter Internal Orders using the Order Management user interface – these orders must come in via Order Import.

The internal order is processed in a similar way as an order that is to be shipped to an external customer. There is close integration between Order Management and Purchasing in the internal order processing functionality.

Setup

The following setup steps are required to process Internal Orders:

Customers

Set up a customer/address in the shipping operating unit to represent the receiving operating unit. Additionally, set up a supplier/site in the receiving operating unit to represent the shipping operating unit.

Because internal orders are processed through the sales orders window, corporate locations that receive product from internal orders must be set up as customers. Create customer records to correspond to internal locations, and link them using location associations on the Customer bill-to site usage.

Items

Set up the items you want to allow on Internal Orders with both the Internal Orders Enabled flag and the Internal Ordered Item flag on. Enable the item in both the source and the destination organizations

Order Transaction Type/Line Transaction Type

You do not have to set up special order transaction types or line transaction types for Internal Orders. You do have to specify in your Purchasing setup what order transaction type you are using for internal orders, however. You can use any generic order transaction type for internal orders.

Shipping Network

You have to set up relationships and accounting information between the Source (From) and the Destination (To) Organization. You must set "Internal Order Required" to "Yes."

Note: If you use a Transfer Type of "Intransit," then you need to explicitly receive using the Enter Receipts screen. This is a standard receipt. If you use a Transfer type of "Direct," then the goods are shipped directly to Inventory. This is Direct delivery. Receipt Routing can be Standard or Direct.

Defaulting Rules

Analyze your business process and define defaulting rules for Internal Order defaults.

Processing Constraints

Seeded processing constraints in Order Management prevent changes to the Customer, Ship To, Invoice To, Warehouse, Request Date, Source Type, and the Ordered Quantity for internal lines. If you want to further restrict what can be changed on internal orders, you can constrain other attributes using the Internal Order validation template.

Order Source

An order source (for Order Import) of Internal is seeded. This should be selected in the Purchasing options setup for Order Source.

Price List

A price list needs to be defaulted during order processing but there is no validation during the internal order process. This price list must be associated with the customer address setup earlier. The items are transferred at their cost as defined in the source organization; this is the value that appears as the unit price on an internal requisition. On the internal sales order the value displayed is the cost as defined in the source organization plus any transfer charges.

Note: General Ledger distributions generated is based on their cost as defined in the source organization.

Process Steps

1. Enter Requisition in Oracle Purchasing. Sourcing Rules may set source type attribute to Inventory, or manually choose Inventory source type.
2. Approve the Internal Requisition.
3. Run the Create Internal Sales Order concurrent program in Purchasing to load the Order Import tables. This can also be scheduled as part of your set up to run periodically to meet business needs.
4. Run Order Import with Order Source = Internal in OM to create the Internal Order. Be sure to run Order Import using a responsibility that corresponds to the operating unit in which the internal order needs to be created. It is possible to create an internal order in an operating unit different from that of the internal requisition. This can also be scheduled as part of your set up to run periodically to meet business needs.
5. After Order Import completes successfully, book, pick and ship the internal order.
6. Receive against the Internal Requisition.

Workflow

There are no special Oracle Workflow implications to processing Internal Orders, the Standard Flows can be used. Even if the workflow contains a step for Invoicing Interface, Internal Order lines will not be invoiced.

Note: RMA functionality is not supported for Internal Sales Orders.

Related Topics

Oracle Purchasing User's Guide for details of Purchasing set up and processing.

Enhanced Intercompany Invoicing for Internal Sales Orders

Setup

You can generate Intercompany Invoices for Internal Sales Orders which have a Transfer Type of "Intransit." In order to use this feature:

- Setup Intercompany Invoicing See the *Oracle Advanced Pricing Implementation Guide* and the *Oracle Inventory User's Guide* for more information.
- Set the profile option INV: Intercompany Invoice for Internal Orders to "Yes." This

profile option can be set at the site level and has a Default value of "No."

If you have Advanced Pricing installed you can derive the intercompany invoice price for an item:

- Set the profile option INV: Intercompany Invoice for Internal Orders to "Yes." This profile option can be set at the site level and has a Default value of "No."
- Set the profile option INV: Advanced Pricing for Intercompany Invoicing to "Yes." This profile option can be set at the site level.

Integration of Advanced Pricing and Intercompany Invoicing

Case 1

- INV: Intercompany Invoice for Internal Sales Orders is set to 'Yes'
- INV: Advanced pricing for Intercompany Invoice is set to 'Yes' and Advanced Pricing is installed

Intercompany Invoicing will look for an external API—a customer/user programmable hook—to return the price for the item included on the Internal sales order. If the API does not return a value then pricing logic gets the price from the price list. If it is able to find the price for that item in one of the price lists then Intercompany Invoicing uses that value. If it is unable to find the correct price for that item then the Intercompany Invoicing process logs an error message.

Case 2

- INV: Intercompany Invoice for Internal Sales Orders is set to "Yes"
- INV: Advanced Pricing for Intercompany Invoice is set to "No"

The pricing logic gets the price for the item from the static transfer price list that has been specified for that customer (Internal) in the Customer setup. If there is no price defined then an error message is logged.

Advanced Pricing setup allows you to define different rules based on which price list should be used to get the invoice price for an item. New Request Type, Global Structure, Context and a new set of Qualifier and Pricing Attributes are seeded.

Implementation Considerations

If you want to use Advanced Pricing feature for Intercompany Invoicing, you have to set the following profiles at the user level with the following values: QP: Pricing Transaction Entity - Intercompany Transaction, QP: Source System Code - Oracle Inventory. This will allow you to see and use the Intercompany context, in addition to

the Order Fulfillment context to define attribute-mapping rules.

Two new mappings/relationships between request type and source system codes have been seeded. One is between request type IC and source system INV, and the second is between request type IC and source system QP. The request type IC and Source system INV are new set of seed data. The above two mappings allow you to have price lists that are common to both inter-company invoicing and sales order invoicing. For trade orders, price lists are created with source system code of "QP," and the mapping between OM (Oracle order management system) and QP (Advanced pricing) is used to pick price lists for trade order invoices. Similarly, inter-company users may decide to create separate price lists for intercompany invoicing, that is with source system code of INV. This can be achieved by setting the profile "QP: Source system code" to INV.

In order to use only these prices lists for inter-company invoicing, the mapping between IC and QP should be disabled, otherwise if pricing engine finds a better fit for the price list defined under QP, it will return use that price list.

A new global structure has been defined that can be used to define mapping rules for qualifier attributes and pricing attributes for price lists. This global structure is based on all the information that is captured and available in a sales order or an internal sales order record. All seeded defaulting rules are defined by using this global structure. Users can use the data in this global structure to define more mapping rules.

Related Topics

Oracle Advanced Pricing Implementation Guide

Oracle Advanced Pricing User's Guide

Setting up Intercompany Invoicing

Oracle Inventory Implementation Guide

Intercompany Invoicing

Process Steps

- **Requesting (Receiving) Operating Unit—Purchasing:** Create Internal Requisition with Source organization and Destination organization. Approve the internal requisition

Note: The destination inventory organization must be a part of a separate operating unit such as the Shipping Operating Unit in order to trigger Intercompany transactions.

- **Requesting (Receiving) Operating Unit—Purchasing:** Launch the Create Internal

Sales Order program

- **Shipping Operating Unit—Order Management:** Import the Internal Sales Order. Pick and Ship confirm the Internal Order
- **Requesting (Receiving) Operating Unit—Purchasing:** Perform a Receiving transaction.
- **Source Organization—Inventory:** Run 'Create Intercompany AR Invoice' for the Shipping operating unit
- **Shipping Operating Unit—Receivables:** Run ' AutoInvoice Master' program for the internal order with Invoice Source as "Intercompany." This generates the accounts receivable invoice for the Shipping Operating Unit.
- **Destination Organization—Inventory:** Run "Create Intercompany AP Invoice" for the Requesting (Receiving) Operating Unit
- **Requesting (Receiving) Operating Unit—Payables:** Run the Expense Import program with source "Intercompany."

Intercompany Invoicing Incoming Cost

When using Intercompany Invoicing for Internal Sales Orders you can allow the Incoming cost for the Destination organization to be based purely on the Transfer price and not the item cost from the Source organization. In order to use this feature you must:

- Setup Intercompany Invoicing for Internal Sales Orders. See the *Oracle Advanced Pricing User's Guide* and the *Oracle Inventory User's Guide*.
- Set the profile option CST: Transfer Pricing Option to "Yes - Price As Incoming Cost"
 - If it is set to "Yes - Price as Incoming cost" or "Yes - Price Not As Incoming Cost," new accounting entries are generated in Costing. When set to 'Yes - Price Not As Incoming Cost' - incoming cost to the Destination organization is the Source organization inventory cost.
 - If it is set to "No" then existing costing entries occur.

Both Inventory Cost of Goods Sold Account and the profile OM: Generate Cost of Goods Sold Account workflow processes must be defined.

Process Steps

Follow the Process Steps, page 5-38 described for Intercompany Invoicing, page 5-38. In

addition you may need to launch the Cost Manager to cost the transactions once you have performed the Receipt transaction in the Requesting (Receiving) Unit.

Related Topics

Oracle Costing Implementation Guide

Returns and Credits

Overview

Oracle Order Management provides Return Materials Authorization (RMA) functionality within the Sales Orders window, where you can enter both standard and return order lines within the same order. RMA is often used interchangeably with Return or Credit Orders and Returned Material. An order can have a mix of outbound (standard) and inbound (return) lines, as restricted by the order type definition. Credit order types can have an order type category as Return or an order with both standard and return lines can have an order type category as Mixed. Each order type and each line type is associated with a workflow process. A return line is indicated by Line Type Category of return negative and highlighted item quantity and negative line total. Return Line types can include flows like Return with Approval, or Return for Credit Only, etc.

There are three ways to create RMA's within Order Management. First, identify a sales order to be returned and query the order lines. After you have selected the sales order or order lines, use the Copy function in the Actions list to generate the return order or line by specifying an RMA line type. Second, reference a sales order, invoice, PO number or serial number of an item directly in the Return Reference field within the Line Items tab of the Sales Orders window. Lastly, for return without originating sales order line, manually enter return line information and choose the appropriate return line type in the Sales Orders window.

Setup

Profile Options

OM: Return Item Mismatch Action

This profile allows a mismatch value between the item on the RMA line and the item on the referenced line. For example, you may need to allow a mismatch when a wrong item is shipped and you want to put the correct item on the RMA line. The seeded value is Allow or no profile option entry will be treated as Allow.

OM: Return Unfulfilled Referenced Line Action

This profile allows non-fulfilled lines to be used as referenced lines. The seeded value is Allow or no profile option entry will be treated as Allow.

OM: Overshipment Invoice Basis

This profile option has been moved to System Parameter. For more information, please refer to the section Profile Options that have been moved to System Parameters, page 2-83.

OM: Credit Memo Transaction Type

This profile option has been moved to a System Parameter. For more information, please refer to the section Profile Options that have been moved to System Parameters, page 2-82.

OM: Over Return Tolerance

This profile option indicates the percentage by which a return line can be over-received. Any value greater than or equal to zero (0) is a valid value. This profile option is set at the site level. The default value is zero (0).

OM: Under Return Tolerance

This profile option indicates the percentage by which a return line can be under-received for it to be considered fulfilled. Any value between zero (0) and 100 (both inclusive) is a valid value. This profile option is set at the site level. The default value is zero (0).

OM: Charges for Back Orders

In previous releases, Calculate Price Flag on the split (back order) lines was set to Freeze Price always. Now in the current release, for return lines that are split, this profile option enables you to control the setting of the Calculate Price Flag to calculate, partially calculate or freeze the price. If the Calculate Price Flag is set to Partial, no repricing is carried out and only charges can be applied for return lines. If the Calculate Price Flag is set to Freeze, the return lines are not priced. For a value of Calculate, the return lines are priced.

Workflow

Order Management comes with seeded Oracle Workflow processes. Review the seeded flows, activities and notifications to determine if the seeded data can meet your business needs. To successfully enter an RMA in OM, you can use the Generic - Order Flow Return with Approval and Line Flow - Return for Credit only.

Note: For Mixed Order types, if the workflow attached is Order Flow Return with Approval, then notifications are sent to the users only if the order contains return lines.

The user can also modify existing seeded workflows or create new workflows to include or exclude inspections and/or invoicing activity. For instance, you can have the Invoicing Activity after the Receiving activity, or you can simply close the line without interfacing data to Receivables. For inspections, a workflow can be setup to process Invoicing once the materials have been received or to wait until inspection has been completed before invoicing is invoked. The seeded workflow will process Invoicing only after the completion of Inspection (delivery) Activity. Also, if any return lines are

flagged as non-shippable or non-transactable, the Receiving workflow activity will complete with a Not Eligible result.

However, fulfillment of ATO/PTO items is required before crediting the ATO/PTO lines. This is achieved by inserting ATO/PTO lines into Fulfillment sets. This means the ATO/PTO line will wait at fulfillment until all its children are received and reach fulfillment. ATO model line workflow waits until the configured line is shipped and then it progresses further no matter whether it is PTO and ATO or only ATO or PTO. With services, OM will use only the seeded "Return for Credit Only" workflow for returning service items when product items are returned. Now, Order Management will use the RMA line to govern full or partial credit to the customer when a product is returned. Install Base will use the information from the RMA product line to determine whether a credit is given.

Transaction Types

Both order and line transaction types need to be setup in order to process an RMA. When setting up order types, you need to assign order header and line workflows to the order type. Since each line can go through its own flow process, you need to setup workflow assignments to let each line assign its own workflow process. Credit order types have an order type category Return. An order with a Mixed order type category can contain both standard and return lines. Line level workflow processes are assigned based on the order type, line type, and item type combination. When you setup a return order type or mixed order type, you have the option to set a default return line type, so that the user doesn't have to manually choose the line type unless they want it to be different. Refer to the topical essay Using Transaction Types in Oracle Order Management at the end of this manual for details on setting up transaction types.

Master Items

You can create a return line only if an item is Returnable. Therefore, a standard, finished good item should be defined in Oracle Inventory with appropriately set attributes. The best way to create your items is to copy them from the Finished Good seeded template and set additional attributes as needed in the Master Item window. The key attributes that control the processing of a returnable item are:

- Order Management Tab: Returnable, Shippable and Transactable = Yes, RMA Inspection Required = Yes or No
- Receiving Tab: Receipt Routing = Inspection (if required)
- Invoicing Tab: Invoicable Item = Yes or No, Invoice Enabled = Yes or No

Note: If the Item is not flagged as Returnable, Shippable and Transactable, you cannot receive in Oracle Purchasing's receiving module and if the item is not flagged as Invoicable the return lines will not interface to Receivables. Also, an item can be returnable

but not orderable. This is commonly used if a company stops selling an item, but they still want to be able to do returns for it.

For lot and/or serial controlled items, Oracle Order Management has the capability to store one or more lot and serial numbers associated with one RMA line. Oracle Order Management does not validate the serial numbers against Inventory serial numbers in the system or against serial numbers associated with the referenced sales order. Receiving captures the serial numbers of the items at delivery. The Credit Order Discrepancy Report can show the difference between actually delivered lot/serial numbers and the numbers on the RMA. The sales orders window can capture lot and serial numbers suggested by the customer for the RMA line.

For ATO/PTO configurations, only the Returnable configuration lines are displayed on the sales orders window. You need to make sure that the item attributes are set correctly for ATO/PTO children items.

Price List Setup

In order to price any new items when entering an ordered item on the sales orders window, add the new item to a price list. The item is added to a price list in the Price List Setup window: Pricing > Lists > Price Lists Setup. Query an existing price list or create a new price list. Add a new line, enter the item name, UOM and price and save. The price and UOM will default when entering the item on the order line. When an RMA line is created and the originating transaction is known, the pricing information is populated from the originating order line. The user can change the pricing if needed. The list of values on the Price List will show all the active price lists on the pricing date. Also, ATO configured items and PTO included items should be included on a price list in order to be received and credited.

Processing Constraints

Order Management has seeded constraints that prevent data integrity problems. For instance, you can prevent change for a line if it has been:

Closed

Canceled

Canceled at order level

Shipped

Invoiced

A return line cannot be canceled after it has been interfaced to Receivables or after it has been received. If your business needs more restrictive rules when processing orders, you can set up rules to control changes or operations of the order process flow. See Processing Constraints, page 10-1 for details on setting up processing constraints.

Return Reason Codes

You can set up your own reason codes in the Receivables QuickCodes window. Navigate to the Order Management responsibility and select the menu: Setup > Quickcodes > Receivables. The Oracle Receivables Lookup window will appear. Query the CREDIT_MEMO_REASON code from the query manager (Flashlight icon). View the existing codes or add a new code. These codes appear in the Return Reason list of values.

Reports

The Returns by Reason report can be used to view all return reasons setup in the system. You can run the report by Return Reason, Credit Order Date, Credit Order or Line Type and/or Item Number.

Freight and Special Charges for Returns

When setting up freight or special charges, you can specify if the charge is returnable, meaning the charge may be refunded. When you create a return line from an original order line, you should copy the refundable invoiced charges. You can also setup special charges to be applied specifically to returns, like restocking fees, return handling, damage etc. You can set this through an attribute called Refundable Flag (Include on Returns field) within the Pricing Modifier setup. See Freight and Special Charges, page 3-101 for more information.

Process Flow

This section will guide you through a basic flow for a Return for Credit with Receipt, from entry to generating a credit memo, including:

- Create an RMA having a single line whose originating transaction is unknown
 - Book the RMA
 - Receive the RMA using the Receipts window of Oracle Purchasing
 - Check the on-hand quantity of the item in Inventory to verify that correct quantity was received
 - Fulfill RMA line
 - Generate a Credit Memo
 - View the Credit Memo in Order Management
 - Check the Shipped and Fulfilled quantity on the RMA line
1. Enter the RMA on the Sales Orders window. Entering a return on the Sales Orders

window is exactly the same as entering an order, except at the line level the user specifies the Line Type as a Return and a negative line quantity. Thus, in the Order Information tab of the Sales Orders window, the user will enter the same information (i.e. Customer Name, Order Type, etc.) as a standard order. The Standard order type is assigned to a Generic Order and Line workflow which allows either an order or return to be entered. Refer to the Workflow section for details on the Generic Order and Line workflow for returns. This is the Sales Orders window for entering the Header information for the RMA:

Sales Orders (Header) window for Returns

The screenshot shows the 'Sales Orders (58943) - Business World' window. The 'Order Information' tab is active, and the 'Standard' icon is selected. The 'Main' sub-tab is also active. The form contains the following data:

Field	Value
Customer	Business World
Customer Number	1000
Blanket Number	0
Ship To Location	San Jose (OPS)
	2391 L Street
Contract Template	
Bill To Location	San Jose (OPS)
	2391 L Street
	San Jose, CA, 95106, US
Order Number	58943
Order Type	Return Only
Date Ordered	26-OCT-2004 05:35:24
Price List	Corporate
Salesperson	Sprague, Mr. Howard
Status	Entered
Currency	USD
Subtotal	<6,550.00>
Tax	0.00
Charges	500.00
Total	<6,050.00>

At the bottom of the window, there are five buttons: Actions, Related Items, Configurator, Availability, and Book Order.

2. Once the Order Header information is entered, you will enter the line information within the Line Items screen:

Line Items Window

Order Information Line Items

SN-FIRM Order Total <6,050.00>

Main Pricing Shipping Addresses **Returns** Services Others

Line	Ordered Item	Qty	Return Reason	Line Type	Reference	Order
1.1	AS54999	5	Damaged Product	Return (Receipt)		

Line Total <6,550.00> Line Qty 5 Service Total 0.00

Description Sentinel Standard Desktop - Rugged

Actions Related Items Configurator Availability Book Order

3. In the Main Tab, enter the Ordered Item and the Quantity to be returned. The user can enter a positive or negative number. You will also see that the negative quantity will be highlighted in another color. Next, in the Returns tab, the user will need to enter the Line Type as a return (i.e. Return for Credit with Receipt of Goods) and enter a Return Reason. A Return Reason is required to be entered (i.e. Product Discontinued). Since we did not reference a sales order, we are entering a single line RMA where the originating transaction is unknown.

If you receive the returns partially, and if the Calculate Price Flag is set to Y (Calculate Price) or P (Partial Price), then freight charges get applied automatically on the partially received lines. However if the Calculate Price Flag is set to N, then the freight charges do not get applied on the partially received lines.

4. Book the RMA. Users are able to book an order or return at either the Order Information Tab or Line Items Tab via the Book button.
5. Receive the RMA using the Receipts window in Oracle Purchasing. Change responsibilities to Purchasing and navigate to the Receiving > Receipts window. In the Find Expected Receipts window, an Organization window will be displayed if this is the first time you have navigated to the Purchasing > Receipts window since your login. The organization you choose should be the same warehouse where your RMA is created. In the Receipt Header window, select the Customer Tab and find your RMA #. Tab through the Header window to the Receipts Line window. Once you are in the Receipts Line window, the RMA number and quantity will populate

the window. Check the box next to the line you wish to receive, enter a Destination Type as Inventory and subinventory. Save this transaction and record the receipt number in the Header window. By choosing the Destination Type as Inventory, the user is creating a transfer to inventory transaction in Purchasing. These items are now considered as supply. Purchasing will communicate the quantity received to Order Management to update the RMA.

Receipt Header Window

The screenshot shows the Oracle Applications interface with the 'Receipts (V1)' window open. The 'Receipt Header (V1)' sub-window is active, displaying a form for creating or adding to a receipt. The form includes fields for Receipt, Shipment, Packing Slip, Freight Carrier, Containers, Customer, and Comments on the left, and Receipt Date, Shipped Date, Waybill/Airbill, Bill of Lading, and Received By on the right. The 'New Receipt' radio button is selected, and the 'Customer' field is populated with 'Computer Service and Rental'. The 'Received By' field is populated with 'Stock, Ms. Pat'. The 'Receipt Date' is set to '22-JAN-2002'.

New Receipt		Add To Receipt	
Receipt		Receipt Date	22-JAN-2002
Shipment		Shipped Date	
Packing Slip		Waybill/Airbill	
Freight Carrier		Bill of Lading	
Containers		Received By	Stock, Ms. Pat
Customer	Computer Service and Rental		
Comments			

Receipts (Line) Window

The screenshot shows the 'Receipts (Line) Window' with the following details:

- Menu Bar:** File, Edit, View, Folder, Tools, Window, Help
- Toolbar:** Standard Oracle application toolbar with icons for file operations and navigation.
- Tabs:** Lines, Details, Currency, Order Information, Outside Processing, Shipment Information
- Table:**

Quantity	UOM	Inventory	Locator	Category	ASN Type	Country of Origin
1	Each	s		PRODUCTN.FINGOOD!		
- Buttons:** + (Add), - (Remove)
- Form Fields:**
 - Order Type: Return with Receipt of Goods
 - Customer: Computer Service and Rentals
 - Item Description: {Sentinel Standard Desktop}
 - Destination: -Stores-
 - Receiver Note:
 - Note for Receiver:
 - Order: 20016
 - Due Date: 18-DEC-2001
 - Hazard:
 - UN Number:
 - Routing: {Standard Receipt}
- Bottom Buttons:** Lot - Serial, Cascade, Express, Header

- Check the on-hand quantity of the item in Inventory to verify that correct quantity was received. Change responsibilities to Inventory and navigate to the Transactions > Material Transactions window. In the Material Transactions window, an Organization window will be displayed if this is the first time you have navigated to the Inventory > Material Transactions window since your login. The organization you choose should be the same warehouse where your RMA is created. Find the item being returned and navigate to the Transaction Type tab. Verify that the source type is RMA and the source is your RMA # for the quantity being returned. This window will show you your item #, the subinventory chosen and the quantity specified to be returned from the Receipts window.

Material Transaction Window

Item	Source Type	Source	Transaction Type	Transaction ID
AS54888	{Sales order	96629.{Standard	{Sales order issue	Issue from
AS54888	{Sales order	96632.{Standard	{Sales order issue	Issue from
AS54888	{Sales order	96629.{Standard	{Sales order issue	Issue from
AS54888	{Sales order	96632.{Standard	{Sales order staging transfer}	Staging t
AS54888	{Sales order	96632.{Standard	{Sales order staging transfer}	Staging t
AS54888	{Sales order	96629.{Standard	{Sales order staging transfer}	Staging t
AS54888	{Sales order	96629.{Standard	{Sales order staging transfer}	Staging t
AS54888	{Sales order	96629.{Standard	{Sales order staging transfer}	Staging t
AS54888	{Sales order	96629.{Standard	{Sales order staging transfer}	Staging t
AS54888	{Sales order	96630.{Standard	{Sales order issue	Issue from

Item Description: {Sentinel Standard Desktop} Date: 14-JAN-2002 17:51:51
 Primary UOM: Ea Primary Quantity: -2

Buttons: Distributions, Lot / Serial, Clear, Find

7. Fulfill RMA line. The fulfillment activity acts as a synchronization point for all lines on the order that are in a fulfillment set. The lines in the fulfillment set will wait at the fulfillment activity until all the lines in the set have reached the activity. Lines that are not in a fulfillment set simply pass through the activity automatically. The user will not have to perform anything during this step. The eligible lines will automatically be put into a fulfillment set.
8. Generate a credit memo for the return. The Workflow process of the return line(s) will be on the Invoice Interface activity, once the Fulfillment activity completes. The invoice interface activity places the information from the return line into the Receivables Interface tables. Once the information is written to the tables, the invoice interface activity is complete, and the line proceeds to the close line activity. However, note that the credit memo is not actually generated until the Autoinvoice program in Receivables has been run. The credit memo will then be viewable in the Sales Orders window. To run the Autoinvoice program, the user needs to change responsibilities to Receivables and navigate to the Interfaces window. Select the Autoinvoice Master program and run the program for your RMA # and specify the invoice source as the one associated with the line type of the RMA line. The Autoinvoice Master program will generate the Autoinvoice Import program which

generates the credit memo. These programs can be setup to run automatically in the background. Just set the programs as 'Deferred.'

9. View the credit memo in Order Management. To view the credit memo in Order Management, the user need to change responsibilities to Order Management > Orders, Returns > Order Organizer window. Query your RMA # in the Order Organizer. Once the RMA is queried, open the RMA order, click Actions and choose Additional Order Information. Once the Additional Order Information window has opened, click on the Receivables tab to view the credit memo. This window will show your the credit memo number and amount.
10. Check the Shipped and Fulfilled quantity on the RMA line. From the above step, navigate in the Sales Orders window to the Line Items tab for the RMA. Scroll to view the Shipped Quantity field. To access the Fulfilled Quantity field, the user needs to use the folder technology to add the field to the sales orders window. To add the field, click on the Warehouse field in the Shipping Tab of the Line Items window. Next, select the Folder menu at the top of the window, select Show Field and choose the Quantity Fulfilled field from the list. The field will populate in the window. The Shipped Quantity means the received quantity for return lines and the Fulfilled Quantity means the delivered quantity for the return lines.

Workflow

In Oracle Order Management, you can have many types of credit order by specifying it's Order Type and Line Type. Each order type and each line type is associated with an Oracle Workflow process. You can customize order types and RMA line types to meet your business needs. For instance, you can use Approvals and Holds with returns in order to manage exceptions when your customer returns more or less than you authorize.

Credit order types have order type category Return'. An order with a Mixed order type category can contain both standard and return lines. But you cannot enter return lines into an order with order type category Regular.

The following is an example of a seeded Order Return Flow process (enter -> book -> approval notification -> close):

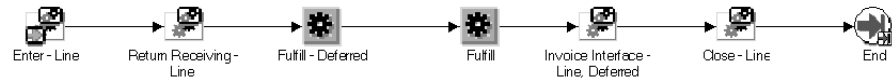
Order Flow - Return with Approval



The following is an example of a seeded Order Return Line Flow process (enter ->

return-> invoice -> close):

Line Flow - Return for Credit with Receipt



The following are other workflow processes that Order Management seeds for Return Line flows:

Line Flow - Return for Credit only

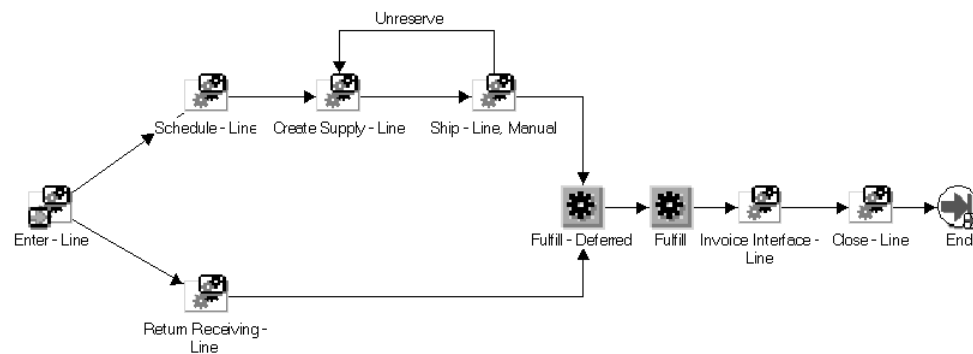


Line Flow - Return for Credit only with Approval



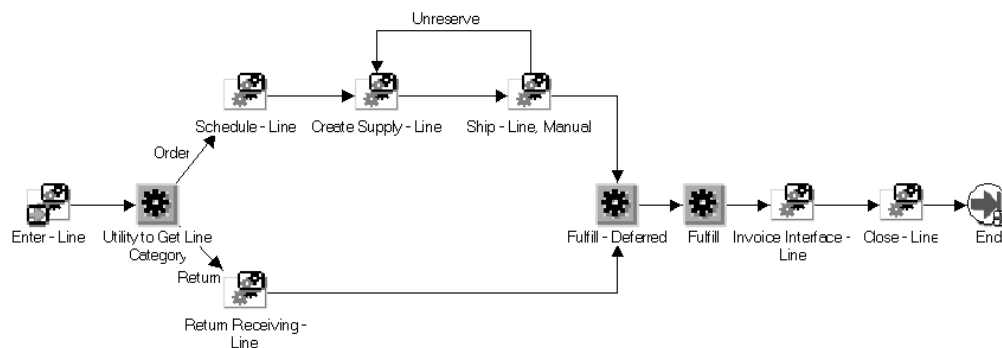
In Oracle Order Management, there are also flows that support both order and return lines (inbound and outbound transactions), however, there are no seeded workflows for these flows. You can create flows that support both Order and Return Lines. For instance, the flow listed below will not work correctly, since once a line is booked, workflow randomly picks which transition to process first. It then processes it all the way till it can go no further. So for an outbound Line using this flow, if the branch 'Returns receiving' is first processed, it will get marked as Not Eligible and hit the Fulfill -Defer activity and stop. Then the WF Engine starts executing the other branch; the line will schedule and hit the Ship - Line, Manual sub-process, where it will stop and wait to get picked and shipped. However the Background Engine could pick up the deferred activity and execute the Fulfill activity. This activity will error out since the fulfilling event for the order line Ship-Confirmation is not yet complete.

INCORRECT Line Flow - Supporting inbound and outbound shipments



For this flow to work **correctly**, the flow ensures that only one transition is executed (Order or Return). The flow needs to be defined as follows:

CORRECT Line Flow - Supporting inbound and outbound shipments



After booking the line flow branches based on the Line Category ensuring **that only one** of the branches are (Order or Return) executed runtime. The activity Utility to get Line Category is seeded OM: Order Line Work Item.

With regard to item inspections, the Order Management system does not process inspection results, and only processes delivery transactions. Based on the users business rules, if an item is rejected, the user can either deliver to inventory (scrap sub-inventory) or return to the customer. Delivering to inventory will give credit to the customer. Returning to the customer will reduce the shipped quantity and credit will be given for only accepted goods. Therefore, receiving transactions drive the flow of the return and what gets credited.

Shipping Execution Setup

This chapter covers the following topics:

- Overview of Setup
- Setup Steps
- Profile Options
- Roles and Users
- Global Parameters
- Defining Global Parameters
- Global Transportation Parameters
- Shipping Parameters
- Defining Shipping Parameters
- Defining Pick Release Parameters
- Defining Shipping Transaction Parameters
- Defining Delivery Parameters
- Transportation Parameters
- Defining Freight Carriers and Ship Methods
- Ship Method
- Defining Freight Costs
- Defining Shipment Transit Times
- Defining Document Sequences
- Defining Document Categories
- Assigning Document Sequences to Document Categories
- Defining Shipping Document Sets
- Choosing Printers for Shipping Documents and Labels

- Defining Pick Slip Grouping Rules
- Defining Release Rules
- Defining Release Sequence Rules
- Defining Transportation Calendars
- Defining Shipping Exceptions
- Defining Containers and Vehicles
- Defining Container-Item Relationships
- Finding Container-Item Relationships
- Using LPNs/Containers in Shipping Execution
- LPN/Container Setup Steps
- Creating LPNs/Containers
- Define Default Containers for Customer Items
- Packing Items into LPNs/Containers
- Additional LPN/Container Functionality
- International Trade Management Partner Integration
- Regions and Zones
- Order Processing
- Setting Up Regions and Zones
- Oracle Shipping Debugger

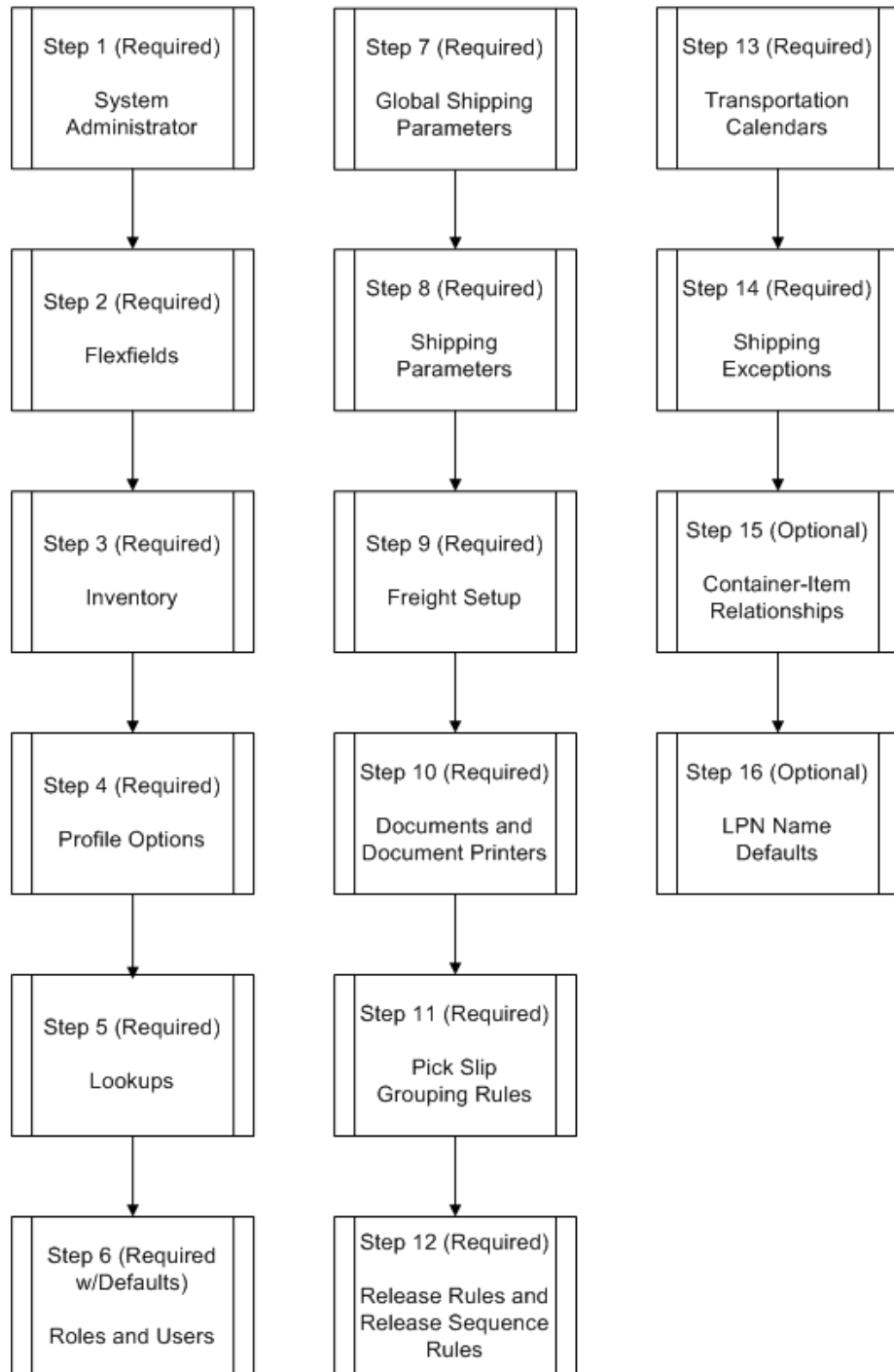
Overview of Setup

Some of the setup steps are required and some are optional:

- The *Required Step With Defaults* refers to setup functionality that comes with pre-seeded, default values in the database; however, you should review those defaults and decide whether to change them to suit your business needs. If you want or need to change them, you should perform the step.
- You need to perform *Optional* steps only if you plan to use the related feature or complete certain business functions.

Oracle Shipping Execution Setup Steps

Oracle Shipping Execution Setup Steps



Setup Steps

Step 1: Set Up System Administrator

This step involves the following tasks:

- Define responsibilities. See: *Oracle Applications System Administrator Guide*
- Set up printers (optional). See *Setting Up Your Printers, Oracle Applications System Administrator Guide*

Step 2: Set Up Flexfields

Define key and descriptive flexfields to capture additional information about orders and transactions. See: *Oracle Application User's Guide*.

Step 3: Perform Oracle Inventory Setup

Perform all setup steps required for Oracle Inventory, then perform the following.

- Set up internal locations for Human Resources for your Inventory Organizations
- Map inventory organizations to internal locations

Organizations

Define at least one of the following:

- Item validation organization
- Organization as inventory source for internal orders
- Organization for receiving purposes, if you use drop ship orders

Your item validation organization can be the same as your inventory source or your logical receiving organization, but you cannot use one organization for all three purposes.

Note: If you change the location of your organization, after delivery details have been created, then the new location will not take effect as the ship from location until new transactions are created. Each delivery detail needs to be updated with the new location if the ship from location needs to be changed on current deliveries.

Pick Confirmation

The Pick Confirmation Required check box affects the behavior of the picking process in Shipping Execution. Navigate: Oracle Shipping > Set up > Organization Parameters >

ATP, Picking, Item- Sourcing tab.

If the Pick Confirmation Required check box is selected, then the system requires you to navigate to Inventory forms or Pick Confirm using a mobile device to perform a manual pick confirmation of the move order that was generated as a result of the Pick Release process. The pick confirmation process acknowledges the transfer of the item being picked from its source location to the default staging location.

If the Pick Confirmation Required check box is deselected (the default) for new installs, the system performs the pick confirmation process automatically based on sourcing rules set up in Oracle Inventory.

Organization Parameters Window - ATP, Pick, Item-Sourcing Tab

The screenshot shows the 'Organization Parameters (M1)' window with the 'ATP, Pick, Item-Sourcing' tab selected. The window contains several sections for configuring parameters:

- ATP Defaults:** A 'Rule' field with the value 'ATP 1156236407' and a dropdown arrow.
- Picking Defaults:** A 'Rule' field, 'Subinventory Order' and 'Locator Order' fields, and four checkboxes: 'Pick Confirmation Required' (unchecked), 'Overpicking For Manufacturing Enabled' (unchecked), 'Overpicking For Transfer Orders Enabled (X)' (checked), and 'Enable Rules Override for Lot-Level Reservations' (unchecked).
- Item-Sourcing Detail:** A 'Type' dropdown menu set to 'Supplier', and 'Organization' and 'Subinventory' fields.
- Distributed Parameters:** Two checkboxes: 'Distributed Organization' (unchecked) and 'Carrier Manifesting Organization' (unchecked).

Staging Subinventory

Create at least one staging subinventory for each organization. Move orders record the movement of pick released material to staging subinventories. Staging subinventories should be reservable.

Step 4: Define Profile Options

Define profile options to specify certain implementation parameters, processing options, and system options. See: Profile Options, page 6-7.

Step 5: Define Lookups

Define lookups that provide custom values for many lists of values throughout Oracle Shipping Execution, including Shipping Workflow specific lookups. See: Shipping Execution Workflows.

Step 6: Define Roles and Users

Assign roles to users that control access (edit or view privileges) to shipping entities in the Shipping Transactions form and Quick Ship window. See: Roles and Users, page 6-14.

Step 7: Define Global Parameters

Define default Global Parameters. See: Defining Global Parameters, page 6-29.

Step 8: Define Shipping Parameters

Define default Shipping Parameters. See: Shipping Parameters, page 6-32.

Step 9: Define Freight Carriers, Cost Types

Define freight carriers, services, and freight costs to specify on orders. Assign carrier services to organizations. See: Defining Freight Carrier Ship Method Relationships.

Define freight costs to specify on orders. See: Defining Freight Cost, page 6-56s.

Step 10: Define Documents and Choose Printers

Define groups of shipping documents that can print to specified printers when you pick release and confirm shipments.

To set up document sequencing perform the following tasks:

- Define document sequences. See: Defining Document Sequences in *Shipping Execution User's Guide*.
- Define document categories. See: Defining Document Categories in *Shipping Execution User's Guide*.
- Assign document sequences to document categories. See: Assigning Document Sequences to Document Categories in *Shipping Execution User's Guide*.
- Define document sets. See: Defining Shipping Document Sets in *Shipping Execution*

User's Guide.

- Choose printers. See: Choosing Printers for Shipping Documents and Labels, page 6-68.

Step 11: Define Pick Slip Grouping Rules

Define pick slip grouping rules to determine how released picking lines are grouped onto pick slips. See: Defining Pick Release Parameters, page 6-35

Step 12: Define Release Rules and Release Sequence Rules

Define the order in which picking lines are allocated to inventory. See: Defining Release Sequence Rules, page 6-79 and Defining Release Rules, page 6-73.

Step 13: Defining Transportation Calendars

Assign a calendar that you created in the Bill of Materials (BOM) application to a shipper, receiver, or carrier. See: *Oracle Bills of Material User's Guide* and Defining Transportation Calendars, page 6-81.

Step 14: Define Shipping Exceptions

You can define exceptions, define processes for exception handling and relate them to appropriate exceptions, log exceptions, associate status with exceptions at various stages in the logging and handling process, start exception handling, and view and track exceptions. See: Defining Shipping Exceptions, page 6-83.

Step 15: Define Container-Item Relationships

Define the relationship between container items and load items to specify the preferred container to use for automated packing and to specify the maximum quantity, weight, or volume of the load item that can be packed into a container item. See: Defining Container-Item Relationships, page 6-90.

Step 16: Define LPN Name Defaults

Define the default naming convention of LPNs for your organization. Specify the Prefix, Suffix, Starting Number, Pad to Width, and UCC-128 Suffix.

Profile Options

During implementation, you set a value for each user profile option to specify how Shipping Execution controls access to and processes data.

Generally, the system administrator sets and updates profile values. See: Setting User Profile Options, *Oracle Applications System Administrator's Guide*.

Implementing Profile Options Summary

The following table 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.

The table also displays if the profile option is optional or required:

- Required: Requires you to provide a value
- Optional: A default value is provided, so you only need to change it if you do not want to accept the default

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

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

Oracle Shipping Execution Profile Options

Profile Option	User	System Admin. User	System Admin. Resp	System Admin. App	System Admin. Site	Required	Default Value
WSH: Bulk Batch Size	Updatable	Updatable	Updatable	Updatable	Updatable	Optional	Null
WSH: DSNO Output File Extension	View Only	View Only	View Only	View Only	Updatable	Optional	Null

Profile Option	User	System Admin. User	System Admin. Resp	System Admin. App	System Admin. Site	Required	Default Value
WSH: Debug Enabled	Updatable	Updatable	Updatable	Updatable	Updatable	Optional	No
WSH: Debug File Prefix	View Only	Updatable	Updatable	Updatable	Updatable	Optional	Null
WSH: Debug Level	View Only	View Only	View Only	Updatable	Updatable	Optional	Null
WSH: Debug Log Directory	View Only	Updatable	Updatable	Updatable	Updatable	Optional	Null
WSH: Debug Module	View Only	Updatable	Updatable	Updatable	Updatable	Optional	%
WSH: Defer Inventory Process	Updatable	Updatable	Updatable	Updatable	Updatable	Optional	No
WSH: Enable Delivery Merge	Updatable	Updatable	Updatable	Updatable	Updatable	Optional	No
WSH: Express Pick	View Only	Updatable	Updatable	Updatable	Updatable	Optional	Null

Profile Option	User	System Admin. User	System Admin. Resp	System Admin. App	System Admin. Site	Required	Default Value
WSH: Ignore Weight/Volume Conversion Errors	View Only	View Only	Updatable	View Only	Updatable	Optional	Yes
WSH: Internet Proxy URL	View Only	View Only	View Only	View Only	Updatable	Optional	<none>
WSH: Number of Pick Release Child Processes	Updatable	Updatable	Updatable	Updatable	Updatable	Optional	<none>
WSH: Overpicking Enabled	Updatable	Updatable	Updatable	View Only	Updatable	Optional	No
WSH: Override Ship to Deliver Workflow	View Only	Updatable	Updatable	Updatable	Updatable	Optional	No
WSH: Pick Release Batch Size	View Only	Updatable	Updatable	Updatable	Updatable	Optional	Null

Profile Option	User	System Admin. User	System Admin. Resp	System Admin. App	System Admin. Site	Required	Default Value
WSH: Populate Latest Ship/Delivery Date	View Only	Updatable	View Only	View Only	View Only	Optional	Null
WSH: Quick Ship Default View	Updatable	Updatable	Updatable	Updatable	Updatable	Optional	Delivery Confirm
WSH: Retain ATO Reservations	Updatable	Updatable	Updatable	Updatable	Updatable	Optional	Null
WSH: Run PL/SQL Profiler	Updatable	Updatable	Updatable	Updatable	Updatable	Optional	No

WSH: Bulk Batch Size

This profile enables you to specify how many lines are to be interfaced to Oracle Order Management per call.

This profile also enables you to specify the batch size that is inserted in the Oracle Inventory tables.

WSH: DSNO Output File Extension

This profile option enables you to select the file extension for your DSNO output file. Select from DOC, TXT, RTF, and DAT.

WSH: Debug Enabled

Select from the Debug Enabled LOV either YES or NO to activate the debug feature. The default is NO.

WSH: Debug File Prefix

The naming convention for the debug file is <Debug File Prefix Profile>_sessionid.dbg. If the value of profile is null, the naming convention is wsh_<username>_<sessionid>.dbg. Where: <username> is Application user name. If application context is not established, it will be defaulted to dbuser: <dbusername>.

<sessionid> is Database session id.

WSH: Debug Level

The value entered for this profile option will determine the level of the Shipping Debugger. Default value: Procedure.

WSH: Debug Log Directory

The value entered for this profile option must be specified as a UTL_FILE parameter value.

WSH: Debug Module

The Module describes where to find the log message within the code. This profile indicates that debug messages from only those modules with names beginning with the profile value will be logged. The naming convention for Module is: <application short name>.<directory>.<package>.<routine>.<label> e.g.

wsh.plsql.WSH_WV_UTILS.convert_uom.

WSH: Defer Inventory Process

When this profile option value is set to YES, then Oracle Inventory's Process Online API call will be deferred. If the value is set to either NULL or NO, then the process online API will be called in online mode.

WSH: Enable Delivery Merge

This profile option is used to enable delivery merge in Shipping Execution.

WSH: Express Pick

If this profile is enabled (YES), then the Pick Release process will skip move order line creation, allocations, and the pick confirm process if the following conditions are met:

- Prior Reservations Only is selected in the Release Sales Orders window before submitting pick release request
- Auto Pick Confirm is set to Yes in the Release Sales Orders window before submitting pick release request

If the above conditions are met then the lines will not be staged if:

- The organization to which the line belongs is WMS enabled OR
- The sales order line does not have detailed reservation OR
- The line is not part of ship set but is part of Model/Kit (which has Ship Model Complete set to Yes) and the shipping parameter Enforce Ship Sets and Ship Models is set to Yes OR
- Reservations are detailed up to the locator level or sub inventory reserved require a locator

No Pick slips can be generated for lines processed as part of Express Pick. The subinventory where reservation was created (before pick release) will be used for storage of material and staging. The Staging subinventory and locator entered on the Release Sales Order window is always ignored.

WSH: Ignore Weight/Volume Conversion Errors

This profile option enables you to determine whether Shipping Execution should ignore weight and volume conversion errors when updating an LPN. Default is Yes.

WSH: Internet Proxy URL

This enables the system to access UPS servers for United Parcel Service integration. If no firewall is installed at your site, you do not need to set the profile. This profile can only be modified by the System Administrator at the site level.

WSH: Number of Pick Release Child Processes

This profile enables you to specify the default number of child processes that are run when pick release is executed.

WSH: Overpicking Enabled

Enter Yes to enable overpicking. Overpicking is using the pick confirm transaction to pick more than the requested quantity of a delivery, up to the overshipment tolerance.

WSH: Override Ship to Deliver Workflow

This profile enables you to specify whether the Ship to Delivery workflow can be overridden or not. If it is set to Yes, then you can override the workflow process if a problem occurs. If set to No, then you cannot override the workflow process.

WSH: Pick Release Batch Size

This profile option enables you to change the batch size from 3 to 1000. Any value less than 3 is interpreted as 3 and any value greater than 1000 is interpreted as 1000.

WSH: Populate Latest Ship/Delivery Date

This profile enables you to determine whether Shipping Execution should populate the Latest Ship Date and Latest Delivery Date.

WSH: Quick Ship Default View

This profile option enables you to determine the default view of the Quick Ship window. The default is the Delivery Confirm view.

WSH: Retain ATO Reservations

This profile option enables you to avoid the redundancy of re-reserving an item. If set to Yes, then the inventory system retains the reservation and the reservation status changes from Staged to Unstage, while the delivery line status changes to Backordered.

WSH: Run PL/SQL Profiler

This profile option enables you to determine whether or not to run the PL/SQL Profiler. Select from YES or NO. The default is NO.

Roles and Users

Shipping Execution provides data access controls called *roles* that control users' access to the Actions list and Tools menu in the Shipping Transactions form and the Quick Ship window. Roles also control ship confirm error and warning messages for breaking ship sets, missing inventory controls, and breaking proportionality of ship model complete. Roles are assigned to users using *grants* that control access to view or edit specific shipping data or actions.

This is useful, for example, if you want to assign a grant to inexperienced users that provides view-only access or assign grants that prevent unwanted actions such as unintentional pick releases across multiple organizations.

Note: Roles provide data access controls for the Shipping Transactions form and the Quick Ship window. If you want to restrict user access to other windows like the Pick Release or setup windows, you can edit the Shipping menus in Shipping Administration.

For each role, select the following data access controls that control Edit and View access to shipping entities:

- Data Access Edit enables you to edit and view the data
- Data Access View enables you to browse the data
- Data Access None prevents you from editing and browsing data and performing

actions

A role can provide either view-only, edit-only, or a combination of view and edit access depending on how you setup the role. You can create customized roles by defining the access controls you want. During the setup for each role, you enable or disable actions by selecting or deselecting the check box next to each action.

Note: If no data access control is selected, the user cannot edit or view the selected action.

Note: Ship confirm error and warning message configuration, on the Message tab, does not use data access.

After you have defined a role you can assign it to a user through a grant. A grant defines both the user's role and related information about the grant including the date, and the organization(s) to which the grant applies.

The system administrator or super user is responsible for defining roles and assigning the grants to users.

Defining a New Role

Shipping Execution enables you to define new roles by selecting the data access controls that you want. You can define a new role by:

- Copying an existing role: An existing role can be copied to create a new role. The copied role has the same data access privileges of the original, but if desired, these privileges can be edited for the new role. Save the new role with a different name than the original.
- Manually defining a new role: You can create a new role in the Shipping Execution Role Definition window by selecting the data access controls to trips, stops, lines, and deliveries. Save the new role with a unique name.

After you have created the new role you can assign it by grant to a user.

Note: In an environment that does not have Oracle Transportation Execution installed, five privileges related to Oracle Transportation Execution are grayed out in the Shipping Execution Role Definition window. The following privileges are strictly related to Oracle Transportation Execution, and therefore, do not apply if this application is not licensed: Send Outbound Message, Select Carrier, Get Freight Costs, Cancel Ship Method, and View Message History.

To define a new role:

1. Navigate to the Shipping Execution Role Definition window.

Shipping Execution Role Definition Window

Name: Upgrade Role

Description: Full Access Role for existing users

Tabs: Trips, Stops, Deliveries, Lines/LPNs, General, Message

Data Access: Edit

Buttons: Disable All, Enable All

Action	Checked
Assign Freight Costs	<input checked="" type="checkbox"/>
Firm Routing	<input checked="" type="checkbox"/>
Firm Routing and Contents	<input checked="" type="checkbox"/>
Ignore For Planning	<input checked="" type="checkbox"/>
Include For Planning	<input checked="" type="checkbox"/>
Launch Pick Release	<input checked="" type="checkbox"/>
Log Exception	<input checked="" type="checkbox"/>
Pick Release Form	<input checked="" type="checkbox"/>
Print Document Set	<input checked="" type="checkbox"/>
Print Master BOL	<input checked="" type="checkbox"/>
Remove Consolidation Delivery	<input type="checkbox"/>
Reset Weight/Vol	<input checked="" type="checkbox"/>
Resolve Exceptions Form	<input checked="" type="checkbox"/>
Ship Confirm	<input checked="" type="checkbox"/>
Unassign All Deliveries	<input type="checkbox"/>

2. Enter the Name of the role.
3. Enter a Description for the role.
4. In the Trips tab, in the Data Access field, select:
 - Edit to provide edit access for the trip records
 - View to provide view-only access for the trip records
 - None to disable access and actions
5. Enable each action that you want the user to have permission to perform.

Note: As a shortcut, choose the Disable Actions button to disable all

the actions or the Enable Actions button to enable all the actions.

6. Select the Stops tab.

Shipping Execution Role Definition Window - Stops Tab

Shipping Execution Role Definition

Name: Upgrade Role

Description: Full Access Role for existing users

Trips Stops Deliveries Lines/LPNs General Message

Data Access: Edit Disable All Enable All

Assign Freight Costs	<input checked="" type="checkbox"/>
Firm Contents	<input checked="" type="checkbox"/>
Launch Pick Release	<input checked="" type="checkbox"/>
Log Exception	<input checked="" type="checkbox"/>
Pick Release Form	<input checked="" type="checkbox"/>
Print Document Set	<input checked="" type="checkbox"/>
Reset Weight/Vol	<input checked="" type="checkbox"/>
Resolve Exceptions	<input checked="" type="checkbox"/>
Unfirm	<input checked="" type="checkbox"/>
Update Status	<input checked="" type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>

7. In the Data Access field, select:
 - Edit to provide edit access to the stop records
 - View to provide view-only access to the stop records
 - None to provide no access to the stop records
8. Enable each action that you want the user to have permission to perform.

Note: As a shortcut, choose the Disable Actions button to disable all the actions or the Enable Actions button to enable all the actions.

9. Select the Deliveries tab.

Shipping Execution Role Definition Window - Deliveries Tab

The screenshot shows the 'Shipping Execution Role Definition' window with the 'Deliveries' tab selected. The 'Name' field is 'Upgrade Role' and the 'Description' is 'Full Access Role for existing users'. The 'Data Access' dropdown is set to 'Edit'. There are 'Disable All' and 'Enable All' buttons. A list of actions is shown with checkboxes for enabling or disabling them. A scrollbar is visible on the right side of the list.

Action	Enabled
Assign Freight Costs	<input checked="" type="checkbox"/>
Assign to Trip	<input checked="" type="checkbox"/>
Auto-create Trip	<input checked="" type="checkbox"/>
Auto-pack	<input checked="" type="checkbox"/>
Auto-pack Master	<input checked="" type="checkbox"/>
Cancel Ship Method	<input checked="" type="checkbox"/>
Close	<input checked="" type="checkbox"/>
Firm Contents	<input checked="" type="checkbox"/>
Firm Routing and Contents	<input checked="" type="checkbox"/>
Generate Loading Seq	<input checked="" type="checkbox"/>
Get Freight Costs	<input checked="" type="checkbox"/>
Ignore For Planning	<input checked="" type="checkbox"/>
Include For Planning	<input checked="" type="checkbox"/>
Launch Pick Release	<input checked="" type="checkbox"/>
Log Exception	<input checked="" type="checkbox"/>

10. In the Data Access field, select:
 - Edit to provide edit access to the delivery records
 - View to provide view-only access to the delivery records
 - None to provide no access to the delivery records
11. Enable each action that you want the user to have permission to perform.

Note: Use the Actions View Message History, Send Outbound Message, Select Carrier, Get Freight Costs, and Cancel Ship Method if you have Oracle Transportation Execution installed.

Note: As a shortcut, choose the Disable Actions button to disable all the actions or the Enable Actions button to enable all the actions.

12. Select the Lines/LPNs tab.

Shipping Execution Role Definition Window - Lines/LPNs Tab

Shipping Execution Role Definition

Name: Upgrade Role
Description: Full Access Role for existing users

Tabs: Trips | Stops | Deliveries | **Lines/LPNs** | General | Message

Data Access: Edit (dropdown) | Disable All (C) | Enable All (G)

Assign Freight Costs	<input checked="" type="checkbox"/>
Assign to Delivery	<input checked="" type="checkbox"/>
Auto-create Deliveries	<input checked="" type="checkbox"/>
Auto-create Trip	<input checked="" type="checkbox"/>
Auto-pack	<input checked="" type="checkbox"/>
Auto-pack Master	<input checked="" type="checkbox"/>
Create LPNs	<input checked="" type="checkbox"/>
Cycle Count	<input checked="" type="checkbox"/>
Ignore For Planning	<input checked="" type="checkbox"/>
Include For Planning	<input checked="" type="checkbox"/>
Launch Pick Release	<input checked="" type="checkbox"/>
Log Exception	<input checked="" type="checkbox"/>
Pack	<input checked="" type="checkbox"/>
Packing Calculator	<input checked="" type="checkbox"/>
Packing Workbench	<input checked="" type="checkbox"/>

13. In the Data Access field, select:

- Edit to provide edit access to the lines/LPNs records
- View to provide view-only access to the lines/LPNs records
- None to provide no access to the lines/LPNs records

Note: The delivery records also include delivery legs and packing slips.

14. Enable each action that you want the user to have permission to perform.

Note: As a shortcut, choose the Disable Actions button to disable all

the actions or the Enable Actions button to enable all the actions.

15. Select the General tab.

Shipping Execution Role Definition Window - General Tab

Shipping Execution Role Definition

Name: Upgrade Role

Description: Full Access Role for existing users

Trips Stops Deliveries Lines/LPNs **General** Message

Disable All (J) Enable All (K)

Configure Buttons	<input type="checkbox"/>
Configure Regions	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>

16. Enable each action that you want the user to have permission to perform.

17. Select the Message tab.

The Message tab enables you to configure ship confirm messages for Breaking Proportionality of Ship Model Complete, Breaking Ship Sets, and Missing Inventory Controls. See: Message Configuration in the Shipping Execution chapter of the *Oracle Order Management Implementation Manual*.

The screenshot shows the 'Shipping Execution Role Definition' window with the 'Message' tab selected. The 'Name' field is 'Upgrade Role' and the 'Description' is 'Full Access Role for existing users'. The 'Activity' dropdown is set to 'Ship Confirm'. Below this is a table for defining message privileges.

Message	Error	Warning
Breaking Proportionality of Ship Model Compl	<input type="radio"/>	<input checked="" type="radio"/>
Breaking Ship Sets	<input type="radio"/>	<input checked="" type="radio"/>
Missing Inventory Controls	<input type="radio"/>	<input checked="" type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>

18. From the Activity list of values, select Ship Confirm.
19. For each Message, select either Error or Warning depending on your business needs.

Note: The System Defaults are Warning for each Message.

20. Save your work.

Copying an Existing Role

Copying a role is useful for creating a new role based on the privileges of an exiting role. Because copying automatically duplicates the original role, it saves you time from manually entering all the control privileges of the original.

You can edit the privileges of the copied role, save the role with a new name, and assign it to users.

To copy an existing role:

1. Navigate to the Shipping Execution Role Definition window.
2. Find the role that you want to copy.
3. Click New Record to create a new record.
4. From the Edit menu, select Duplicate—Record Above to create a new role based on the privileges of the original.
5. Save the new role.

Granting a Role to a User

You can grant a user a role in one organization or all organizations for a period of time. The role is assigned to a user by a *grant*. The grant is specific to a particular user and defines the role(s) assigned to the user, the organization where the grant is effective, the start date and optionally, an end date.

More than one grant can be assigned if the user requires different access controls to more than one organization. The start and end dates for grants can overlap.

For example, if a user requires full-access privileges to three organizations and view-only access to a fourth, the user must be assigned four grants—one for each respective organization (three full-access and one view-only grant). However, if only one grant is assigned, that grant becomes the default grant for the user.

In addition, the grant has the following requirements:

- A grant may or may not have one inventory organization selected.
- Many grants can be assigned for each role.
- A user can have one or more grants. If the user does not have any grant (expired, effective, or future), the default is view-only access to all organizations. If the user has grants, the user's access is controlled by the effective grants. If there are overlapping grants in the same organization or an intersection of grant date ranges, the union of grant privileges controls the user's access.
- A grant cannot be designated as the default grant.

A role can be assigned to a user that spans all organizations instead of granting a unique grant per organization. If an organization is not specified, the grant is applicable to all organizations.

Warehouse Organization

A grant can have one or all inventory organizations. If an organization is not specified, the grant is applicable to all organizations.

For example, you can use grants to prevent a shipping clerk from assigning freight costs

or planning a delivery in one or all organizations.

Note: Use caution when creating grants for all organizations (when no specific organization is selected). For example, if a user has a grant to view all organizations and a grant to perform actions on one organization, the union of these grants will enable the user to perform actions in all organizations.

Changing Organizations in the Shipping Transactions Form

If a user's effective grants are single organization, the user can select an organization when opening the Shipping Transactions form or from the Tools menu—Choose Organization. If all effective grants are in the same organization, the Shipping Transactions form defaults to that organization.

Effective Dates for a Grant

Optionally, in the Start and End Date fields, you can enter a start and end date for the grant to assign it for a specific period. For example, you can assign temporary employees a grant that is effective for the duration of their assignment. The date status for a grant can be endless, future or expired:

- **Endless:** If you enter a start date but no end date, the grant is effective for an indefinite period.
- **Future:** You can specify start and end dates for a grant so that the grant is effective only between those dates. For example, a temporary employee can be assigned a role that is effective for the duration of his/her contract. The start date can be a current or future date. You cannot back-date the date: for example, you cannot enter a start date of yesterday.
- **Expired:** When the end date of the grant expires, the user cannot perform the job duties unless assigned a new grant by the system administrator.

Note: If the user has expired and future grants but no effective grants, the user has no access to the Shipping Transactions form. If required, you can leave a gap between an expired grant and a future grant: for example, one grant can expire in June and another can begin in August.

To grant a role to a user:

1. Navigate to the Shipping Execution Grants window.

Shipping Execution Grants Window

User	Role	Org	Start Date	End Date
ABERTHIE	Upgrade Role		31-MAY-2001	
ABHAGWAT	Upgrade Role		04-AUG-2006	
ABOASE	Upgrade Role		31-MAY-2001	
ABSHUKLA	Upgrade Role		18-OCT-2005	
ACARUSO	Upgrade Role		31-MAY-2001	
ACN	Upgrade Role		31-MAY-2001	
ADB	Upgrade Role		31-MAY-2001	
ADS1	Upgrade Role		31-MAY-2001	
ADVANCED	Upgrade Role		31-MAY-2001	
ADVANTAGE	Upgrade Role		31-MAY-2001	

Edit Role

2. In the User field, select the user's name.
3. In the Role field, select the role that you want assigned to the user.

Note: To view the available privileges for a selected role, click Edit Role to display the Shipping Execution Role Definition window.

4. In the Org field, select the organization to which the grant is assigned (optional). A user can be assigned only role per warehouse (organization). However, you can assign a different role to a different warehouse.
5. In the Start Date field, enter the date that you want the role to start.
6. In the End Date field, enter the date that you want the role to end. If you do not want the role to end, leave the field blank.

Once the grant is saved, only the end date can be updated. However, the date cannot be updated once it has expired.

7. Save your work to activate the role.

Finding Grants and Roles

You can perform a search to find current or expired grants, find users and their

assigned grants, or find active grants for an organization(s).

You can also perform a search to find existing roles.

To find grants and roles:

1. Navigate to the Shipping Execution Grants window.
2. Click the Find icon to display the Find Grants window.

Find Grants Window

The screenshot shows the 'Find Grants' window with the following fields and values:

- User Names: AANDRADE
- Role: (empty)
- Org. Span: (dropdown menu)
- Organization: (empty)
- Effectivity: (dropdown menu)
- Start Dates: (empty) - (empty)
- End Dates: (empty) - (empty)

Buttons at the bottom: Clear, New, Find.

3. Enter the User Names to find the users and their assigned roles.
4. Enter the Role name to find the available roles and the users assigned to them.
5. In the Org Span field, select:
 - Single Organization to find grants in one organization, or
 - All Organizations to find grants in all organizations.
6. Enter the Organization if you selected Single Organization for the Org Span, or leave blank if you left the Org Span blank.
7. Select the Effectivity for the role you are searching for. Select from:
 - Expired: All expired roles.
 - Effective: All current active roles.

- Future: All roles beginning on a future date.

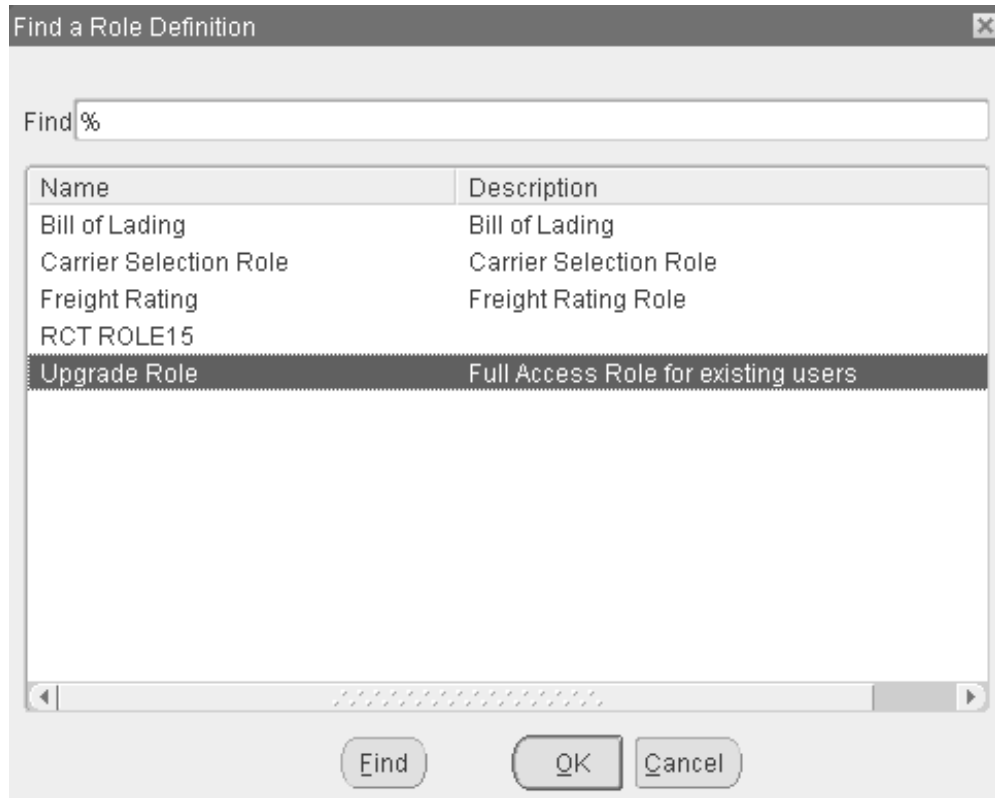
For example, if you wanted to search for expired roles, select Expired.

8. Select the Start dates or a range for the start dates.
9. Select the End dates or a range for the end dates.
10. Click Find to display the search results in the Shipping Execution Grants window.
 - Click Edit Role to see details about the assigned role.
 - Optionally, click Define Role to create a new role.
11. Save your work.

To find a role definition

1. Navigate to the Shipping Execution Role Definition window.
2. Click the Find icon to display the Find a Role Definition window.

Find a Role Definition Window

A screenshot of a software window titled "Find a Role Definition". At the top is a search bar labeled "Find %" with a cursor. Below it is a table with two columns: "Name" and "Description". The table contains five rows of data. The last row, "Upgrade Role", is highlighted with a dark background. At the bottom of the window are three buttons: "Find", "OK", and "Cancel".

Name	Description
Bill of Lading	Bill of Lading
Carrier Selection Role	Carrier Selection Role
Freight Rating	Freight Rating Role
RCT ROLE15	
Upgrade Role	Full Access Role for existing users

3. Enter the name of the role and click Find.
The search results display in the Name column.
4. Select the role and click OK to display the role in the Shipping Execution Role Definition window.

Updating a User's Grant

At times, a user's assigned grant may need to be updated. For example, if the user is promoted and requires a different set of privileges, the assigned role needs to be updated for the user's organization to reflect the changed responsibilities.

To change the role, you must end the user's existing role and assign a new role with the new privileges.

If you want to change the end date for a grant that has not expired, you can update the end date and saving the changes. If the date and grant has expired, the user must be granted a new grant (role).

Note: You cannot change a role by editing the role's parameters and saving the changes.

Updating a user's grant only affects that user, not all users assigned with the role.

To update a user's grant:

1. Navigate to the Shipping Execution Grants window.
2. Find the user whose role you want to update. The user and current role assignments display in the Shipping Execution Grants window.
3. If you are just updating the End Date, enter a new date in the End Date column and save the changes.
4. If you are ending a user's role and assigning another role, enter an end date in the End Date column of the role you want to end.
5. Select the new role, the organization to which the new role is assigned, and the start and end dates of the new role.

The start date must follow the end date of the role that you are updating. The new role is effective when it reaches its start date.

6. Save your work.

Global Parameters

The Global Parameters window enables you to define parameters that impact Oracle Shipping Execution, Oracle Transportation Execution, and Oracle Transportation Planning across all organizations of a particular instance.

The parameters are arranged into the following tabbed regions in the Global Shipping Parameters window:

- **General:** On this tab, you determine whether or not to enforce ship methods, allow future ship dates, defer interface, consolidate backordered lines, determine your global unit of measure (UOM) defaults, and define Oracle Workflow settings, if you choose to use them with Oracle Shipping Execution.
- **Transportation:** On this tab, you determine your transportation global parameters. The Transportation tab will only have impact on instances where Oracle Transportation Execution is installed. For more information, see: *Oracle Transportation Execution Implementation Manual* and *Oracle Transportation Planning User's Guide*.

Defining Global Parameters

Global General parameters enable you to define miscellaneous parameters, Oracle Workflow parameters, and unit of measure (UOM) defaults for all of your organizations.

To define global Miscellaneous parameters and UOM Defaults:

1. Navigate to the Global Shipping Parameters window.

Global Parameters Window

Global Parameters

General Transportation

Miscellaneous

Enforce Ship Methods ☐

Allow Future Ship Date ☒

Defer Interface ☐

Consolidate Backordered Lines ☐

Workflow

Enable Workflows

Raise Business Events ☒

Enable Ship to Deliver Workflow ☒

Global UOM Defaults

Weight Class	<input type="text" value="Weight"/>	UOM	<input type="text" value="Pounds"/>
Volume Class	<input type="text" value="Volume"/>	UOM	<input type="text" value="Cubic foot"/>
Distance Class	<input type="text" value="Length"/>	UOM	<input type="text" value="Mile"/>
Dimension Class	<input type="text" value="Length"/>	UOM	<input type="text" value="Foot"/>
Time Class	<input type="text" value="Time"/>	UOM	<input type="text" value="Hour"/>
Currency	<input type="text" value="USD"/>		

2. Select the Enforce Ship Method check box to enforce that a ship method (carrier) is entered and recorded for each shipment.

This is recommended if your business practices require a record of the ship method/carrier for each shipment.

- **Selected:** During order processing, if a ship method has not been entered, then an error message is displayed at ship confirm and you are prevented from ship confirming until a ship method is entered. You can enter the ship method in the Confirm Delivery window, the Delivery tab of the Shipping Transactions form, or the Sales Order window.
- **Cleared:** The ship method is not enforced at ship confirm and an error message is not displayed. For example, if your organization uses the same ship method (carrier) for all shipments, you may not want to enforce the selection of a ship method.

3. Select or clear Allow Future Ship Date.
 - Selected: You can enter a future date as the Actual Departure Date while ship confirming the delivery
 - Cleared: you should not enter a future date as the Actual Departure Date while ship confirming the delivery because you receive an error
4. Select the Defer Interface check box if you want to defer shipping interfaces from initiating updates to the Oracle Order Management and Oracle Inventory interface tables.
 - Selected: You must manually run the interface to update the interface tables. For example, if you defer the Inventory Interface, the inventory tables are not updated until you manually run the Inventory Interface in the Shipping Interfaces window.
 - Cleared: The interfaces are run automatically at ship confirmation.
5. Select Consolidate Backordered Lines if you want to consolidate a line that was split and subsequently backordered. The line will be automatically consolidated with other backordered lines that it was part of originally.
6. Within the Global UOM Defaults region, define the default Weight Class.

The Weight Class default controls:

 - Default weight UOM in deliveries, stops and containers for their respective weights
 - Default handling UOMs for facilities
 - Default weight UOM in the Carrier/Carrier Services Rating/Mode Limits tab
7. Define the default Volume Class.

The Volume Class default controls:

 - Default volume UOM in deliveries, stops and containers for their respective volumes
 - Default handling UOMs for facilities
 - Default volume UOM in the Carrier/Carrier Services Rating/Mode Limits tab
8. Define the default Distance Class.

The Distance Class default controls the default distance UOM in the Carrier/Carrier Services Rating/Mode Limits tab.

9. Define the default Dimension Class.

The Dimension Class default controls the default dimension UOM in the Carrier/Carrier Services Rating/Mode Limits tab.

10. Define the default Time Class.

The Time Class default controls the default time UOM in the Carrier/Carrier Services Rating/Mode Limits and carrier sites transportation tab.

11. Define the default Currency.

The Currency default controls the default currency used for Carrier Services Rating.

12. Within the Workflow region, use the list of values in the Enable Workflows field to select the Shipping entities for which you want Oracle Workflow to be enabled. These fields are optional and include:

- **Enable Workflows:** Select from Trip, Delivery, Both, or None. Your selection here determines which Shipping entity, if any or both, will utilize Oracle Workflow during your day-to-day business flow.
- **Raise Business Events:** Enabling this option turns business events on.
- **Enable Ship to Delivery Workflow:** Enabling this option enables the Ship to Delivery workflow, which will then be used in your day-to-day business flow.

See: Shipping Execution Workflows and the *Oracle Workflow User's Guide* for more information on using Oracle Workflow with Oracle Shipping Execution.

Global Transportation Parameters

Global Transportation parameters enable you to define Oracle Transportation Execution and Oracle Transportation Planning specific global parameters specific to your business needs. See: *Oracle Transportation Execution Implementation Manual* and *Oracle Transportation Planning User's Guide*.

Shipping Parameters

You define the default values for basic shipping information such as units of measurement, pick release rules, weight and volume calculations, and delivery grouping rules. Shipping parameters are organization specific.

The parameters are arranged into the following tabbed regions in the Shipping Parameters window:

- **General:** You can define the shipping weight and volume unit of measure classes, criteria for calculating percent fill basis like weight, volume, or quantity, and

shipping events at which export compliance screening will be performed. (Screening is only applicable if Oracle Shipping Execution is integrated with a third party ITM partner application).

- **Pick Release:** You can define Release Sequence rules and Pick Slip Grouping rules, limiting the number of lines in the pick slip, printing behavior, document set to be printed at pick release, default staging subinventory, locator, and decision points to autocreate delivery, auto allocation, enforcing ship sets and ship models, and task planning at the time of pick release.
- **Shipping Transaction:** You can define document sets to be printed at the time of ship confirm, ship confirm rule, auto-pack options, goods dispatched (COGS) account and whether to enforce packing in containers.
- **Delivery:** You can define the attributes forming the basis of delivery grouping for the organization. You can also specify if delivery grouping is limited to lines within the same sales order or across orders. For consolidation of deliveries, you specify the event at which appending will stop for the appending of delivery lines to the delivery stops.
- **Transportation:** If Oracle Transportation Execution is installed, you specify whether or not to Apply Routing Rules automatically, define Freight Payment and Audit related parameters, and define Freight Rating parameters.

Defining Shipping Parameters

On the General tab, you define general Shipping Execution parameters such as weight and volume unit of measure (UOM) class parameters, criteria for percent fill basis calculations, International Trade Management (ITM) screening generation, and Oracle Workflow settings.

To define shipping parameters:

1. Navigate to the Shipping Parameters window.

Shipping Parameters Window - General Tab

Shipping Parameters (M1)

General | Pick Release | Shipping Transaction | Delivery | Transportation

Weight UOM Class: Weight

Volume UOM Class: Volume

Percent Fill Basis: Quantity

Export Compliance Screening (Requires ITM Partner Integration): Not Required

Enable Workflows: None

Raise Business Events: ☐

Enable Ship to Deliver Workflow: ☐

[]

2. Select the General tab.
3. Select the default Weight UOM Class from the valid UOM classes.
4. Select the Volume UOM Class from the valid UOM classes.

Note: The seeded values shown in the UOM class are created in Oracle Inventory.

5. Select the default unit of measure for the Percent Fill Basis of a container. You can select Weight, Volume, or Quantity.

Percent Fill Basis is used to determine if containers have met their minimum fill percentage requirements.

If you select Weight or Volume, the calculation uses the item and container physical attributes in Oracle Inventory.

If you select Quantity, the calculation uses the Container Load Relationship details to determine the maximum number of items that will fit into the container.

6. In the Export Compliance Screening field, select one of the following: (Requires ITM Partnership Integration)

- Not Required: Use this option if ITM Partner Integration is not used
 - At Delivery Creation: Use this option if Export Compliance Screening is to be enforced when the delivery is created
 - At Ship Confirm: Use this option if Export Compliance Screening is to be enforced at ship confirm
 - At Delivery Creation and Ship Confirm: Use this option if Export Compliance Screening is to be enforced when the delivery is created and at ship confirm
7. Enable Workflows by selecting whether you want Delivery workflows or None of the workflows enabled.
- Specific tasks and output are enabled through the use of customized business objects. For example, the workflow can be configured so that specific users receive a notification email when an overship or backorder occurs.
8. Depending on your business needs, select the Raise Business Events check box.
- Business events are optional. Individual Business Events can be enabled via the Business Events definition window. See: Shipping Execution Workflows and *Oracle Workflow User's Guide*.
9. Save your work.

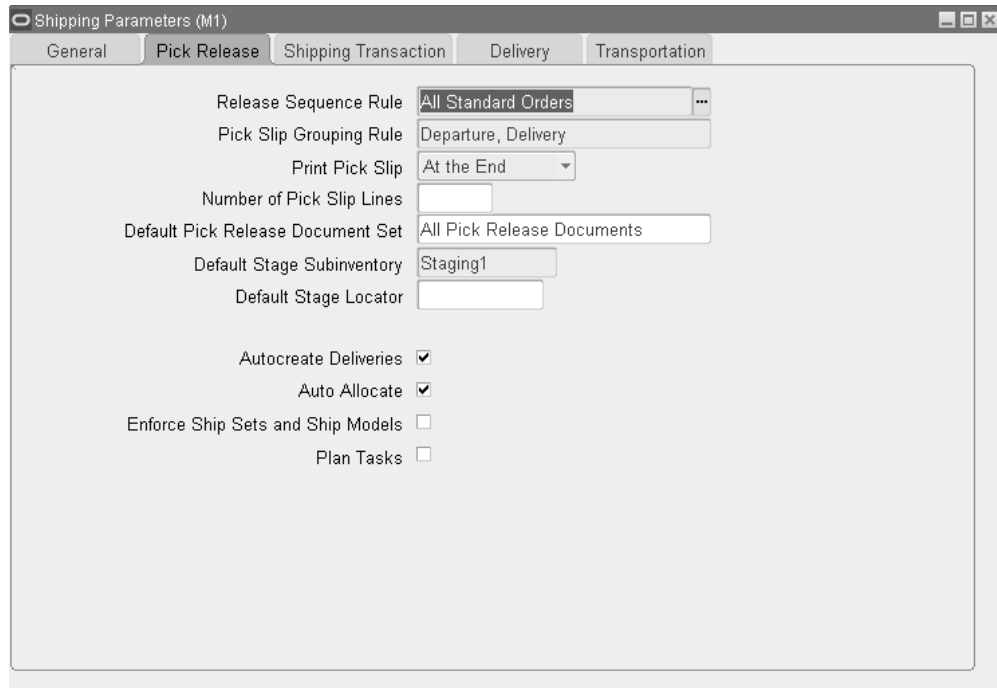
Defining Pick Release Parameters

You can define default picking criteria that is used at pick release. You can also select the default settings for auto-detailing and auto-creating deliveries.

To define pick release parameters:

1. Navigate to the Shipping Parameters window.

Shipping Parameters Window - Pick Release Tab



Shipping Parameters (M1)

General Pick Release Shipping Transaction Delivery Transportation

Release Sequence Rule All Standard Orders ...

Pick Slip Grouping Rule Departure, Delivery

Print Pick Slip At the End

Number of Pick Slip Lines

Default Pick Release Document Set All Pick Release Documents

Default Stage Subinventory Staging1

Default Stage Locator

Autocreate Deliveries ☒

Auto Allocate ☒

Enforce Ship Sets and Ship Models ☐

Plan Tasks ☐

2. Select the Pick Release tab.
3. Select the Release Sequence Rule.

During pick release, this rule determines the order in which delivery lines are allocated to inventory. It appears as the default release sequence rule in the Release Sales Order window.

Note: It is recommended that you select the most frequently used release sequence rule; although it becomes the default, you can change it any time you launch pick release.

4. Select the Pick Slip Grouping Rule.

This rule dictates how the released delivery lines are grouped on pick slips and how the pick slip number is generated by pick release. It appears as the default pick slip grouping rule in the Release Sales Order form.

Note: It is recommended that you select the most frequently used pick slip grouping rule; although it becomes the default, you can change it any time you launch pick release.

5. From the Print Pick Slip list of values, select when you want the pick slips printed.
 - If you select At the End, pick slips will be generated when the pick release process has completed.
 - If you select Immediate, you specify the number of lines per pick slip. Whenever this threshold is reached, a pick slip document is submitted for printing. Every time the threshold is reached, another pick slip document will be submitted for printing. This continues until all lines meeting the release criteria for a batch have been pick released. For example, if there are 20 custom defined lines, all pick slips belonging to these 20 lines are printed in a single pick slip report. The number of pick slips printed depends on the pick slip grouping rule and the custom defined lines. This choice has more impact on system resources.
6. Enter the Number of Pick Slip Lines to print on each pick slip.

If Print Pick Slip is Immediate, enter the maximum Number of Pick Slip Lines to print on each pick slip. For example, if Number of Pick Slip Lines is 25 and pick release selects 40 lines, it prints two pick slips, one with 25 lines and the other with 15 lines.
7. Select the Default Pick Release Document set to be printed at pick release.
8. Select the Default Stage Subinventory.

The process of Pick Confirmation transfers move orders to this staging subinventory. The list of values displays all subinventories in the organization. Staging subinventories should be reservable.
9. Select the Default Stage Locator.

Move orders move material to this locator. The list of values displays all locators in the Default Stage Subinventory.
10. Select the Autocreate Deliveries option to specify your preference for delivery creation. You can override this preference at pick release execution.
 - Selected: Pick release automatically creates deliveries based on the delivery grouping rules and assigns delivery lines to them. When pick releasing, the Autocreate Deliveries check box in the pick release form defaults to this parameter setting if you enter a warehouse. If you do not enter a warehouse, pick release uses this parameter setting from the organization of the warehouse on each sales order line.
 - Cleared: Pick release does not automatically create deliveries.

Note: There are six descriptive flex field defaulting types supported when auto-creating deliveries: SQL Statement (Not having references to:\$FLEX\$.<VALUE_SET_NAME> and:block.field), Constant, Current Date, Current Time, Previous Segment, and Profile Option value.

11. Select Auto Allocate to automatically allocate delivery lines at pick release.
 - Selected: Pick release creates move orders and automatically allocates them.
 - Cleared: Pick release creates move orders. You must manually allocate the order lines using the Inventory Transact Move Orders window.
12. Select Enforce Ship Sets and Ship Models to enforce that all lines in the Ship Set or Ship Model are released together.
 - If you do not select the Enforce Ship Sets and Ship Model's check box, delivery lines for ship sets and ship models are not validated during picking even if the ship set is specified on order lines.

Note: Depending on your business needs, you must set up the Enforce Ship Sets and Ship Models parameter for each warehouse.

- If you select the Enforce Ship Sets and Ship Models check box, delivery lines for ship sets and ship models are validated during picking. All order lines in ship sets are either released completely or auto-backordered during pick release. If any portion is not available, then all lines in the entire ship set are backordered.

When you create the order, you must specify if you want to retain (or not retain) the ship set for the back-ordered lines. You can do this in the Sales Order window in Order Management.

Note: Ship sets for non-transactable delivery lines are validated during ship confirm. However, a ship set for non-transactable delivery lines is not validated during pick release because the item(s) are not picked from inventory.

13. Select Plan Tasks if Oracle Warehouse Management is enabled within your organization. See: *Oracle Warehouse Management User's Guide*.

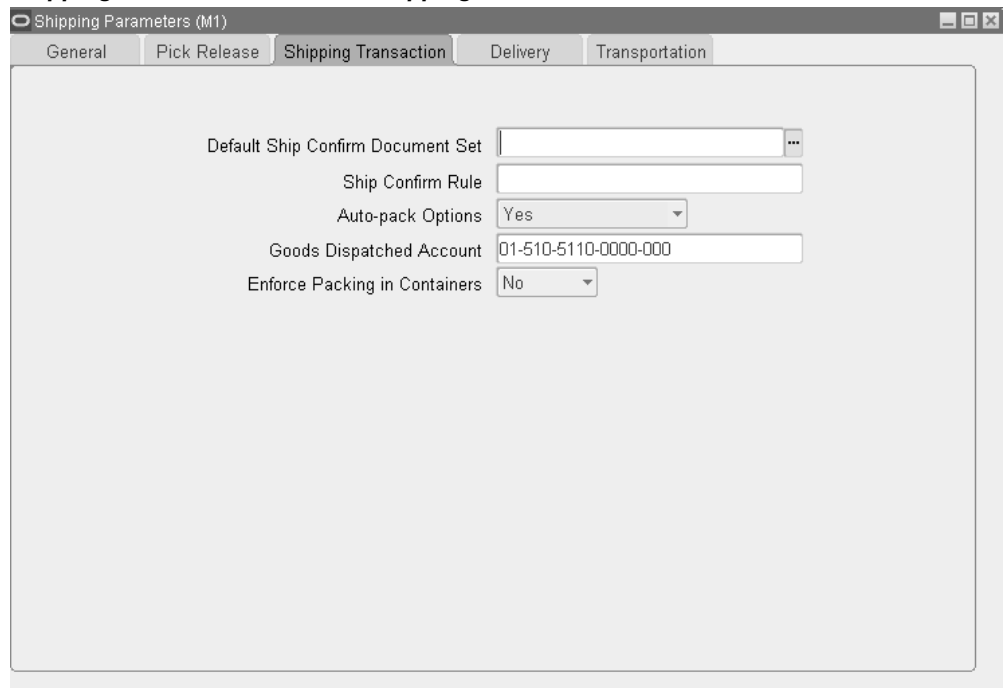
Defining Shipping Transaction Parameters

You can define parameters for your shipping transactions such as default ship confirm document set, ship confirm rule, auto-pack options, goods dispatched account and whether to enforce packing into containers.

To define shipping transaction parameters:

1. Navigate to the Shipping Parameters window.

Shipping Parameters Window - Shipping Transaction Tab



Shipping Parameters (M1)

General Pick Release **Shipping Transaction** Delivery Transportation

Default Ship Confirm Document Set

Ship Confirm Rule

Auto-pack Options Yes

Goods Dispatched Account 01-510-5110-0000-000

Enforce Packing in Containers No

2. Select the Shipping Transaction tab.
3. Select the Default Ship Confirm Document Set that prints as part of the ship confirm process.

The list of values displays the valid delivery document sets. See: Defining Shipping Document Sets .
4. Select a Ship Confirm Rule that your organization will use as a default for auto ship confirming.

Note: If you want to define a default ship confirm rule, then you

must select Ship All as your option when you define your ship confirm rules in the Ship Confirm window.

5. Select your Autopack Options. From the list of values, select either No, Yes, or Autopack Master.
 - No: Autopack will not be enabled
 - Yes: Autopack will be enabled and delivery line items will be systematically packed into LPNs based on container-item relationships
 - Autopack Master: Autopack will be enabled and delivery line items will be systematically packed into LPNs based on container-item relationships and the container will then be packed into another container, such as a freight container for transport.

You can autopack delivery lines for a delivery into LPNs (containers). When you autopack a delivery, the delivery lines are grouped together by shared attributes such as the Ship To location, and are packed into LPNs based on the delivery grouping rules.

Once a delivery is packed, the delivery line information cannot be changed until you unpack the delivery. The weight and volume is calculated at ship confirm automatically.

6. Select a default Goods Dispatched Account.

Use the Cost of Goods Sold (COGS) account for this organization. The sales order issue transaction uses this account if the Oracle Order Management workflow cannot determine one.
7. Select a value for Enforce Packing in Containers:
 - If you select Yes, ship confirm displays a warning when confirming a delivery or trip with unpacked delivery line items. You can bypass the warning and complete the shipment.
 - If you select No, ship confirm does not display the warning.
8. Save your work.

Defining Delivery Parameters

Delivery parameters enable you to define how to group delivery lines for a delivery. The mandatory default attributes are Ship From Location and Ship To Location; however, you can select additional optional grouping parameters that include:

- Customer
- Freight Terms
- FOB Code
- Intermediate Ship To location
- Ship Method

The delivery attributes determine how delivery lines are grouped into deliveries when auto-creating deliveries. For example, if the grouping attribute Customer is selected, the delivery lines are grouped into deliveries by customer: for example, deliveries for Customer A are grouped into Delivery A, deliveries for Customer B are grouped into Delivery B.

You can select more than one grouping attribute to refine your grouping criteria further: for example, if you select Customer and Ship Method as grouping criteria, delivery lines with the same customer and carrier criteria are grouped into deliveries.

If each optional grouping attribute is checked, the delivery's corresponding field cannot be updated if delivery lines are assigned to the delivery. This ensures that the delivery lines' grouping criteria is not broken by a different attribute value: for example, if someone tries to select a different ship method.

If each optional grouping attribute is unchecked, its field in the delivery record can be updated until the ship confirm stage.

For example, if you want to change the Ship Method in the delivery and do not need to enforce it as a grouping attribute, you can deselect Ship Method.

Do not change these options if you have deliveries that are not ship confirmed.

To define delivery parameters:

1. Navigate to the Shipping Parameters window.

Shipping Parameters Window - Delivery Tab

Shipping Parameters (M1)

General Pick Release Shipping Transaction **Delivery** Transportation

Delivery Grouping Attributes

☒ Ship From Location ☒ Ship To Location

☒ Customer ☐ Intermediate Ship To Location

☐ Freight Terms ☒ Ship Method

☐ FOB Code

Autocreate Delivery Criteria Across Orders

Appending Limit Do Not Append

2. Select the Delivery tab.
3. Choose the attributes for grouping the delivery lines.
4. Optionally, select Autocreate Delivery Criteria if you enabled the Autocreate Delivery option on the Pick Release tab.
 - Select Within An Order to autocreate deliveries whose lines all belong to the same sales order and match on the Delivery Grouping Attributes.
 - Select Across Orders to autocreate deliveries across orders. All selected delivery lines that match on the Delivery Grouping Attributes are eligible to appear on one delivery.
5. Select an Appending Limit.

The appending limit enables you to indicate the point at which you want to stop the system from adding lines to a delivery (the point that ends the ability to merge deliveries). You must set the appending limit to a value other than Do Not Append in order to use the Append Deliveries option within Release Rules and the Process Deliveries SRS.

The Appending Limits include:

- Do Not Append

- Start of Staging
 - End of Staging
 - Start of Packing (Oracle WMS enabled organizations only)
 - Start of Shipping (Oracle WMS enabled organizations only)
6. Save your work.

Transportation Parameters

Transportation parameters enable you to define Oracle Transportation Execution parameters specific to your business needs. See: *Oracle Transportation Execution Implementation Manual*.

Defining Freight Carriers and Ship Methods

A freight carrier is a commercial company that transports shipments to and from customers, suppliers, and internal organizations. You must set up each carrier's information as a party in Oracle Shipping Execution before shipping goods; you should assign a carrier to each delivery. You also must associate a general ledger account with each carrier to collect associated costs.

Before you set up the carriers:

- Collect general information about each carrier
- Determine the types of services that your carriers offer and that you use

To define a freight carrier:

1. Navigate to the Carriers window.

Carriers Window

Name Short Name Active ☒ Generic ☐

SCAC Code Default Currency

Services | Addresses/Sites | Contacts | Classification | Vehicle Types | Rating, Payment | Mode Limits

Service Level	Mode	Ship Method
Door to Door	Air	DHL-Air-Door to Door
2nd Day Air	Air	[DHL-Air-2nd Day Air
Worldwide Express	Air	[DHL-Air-Worldwide Express
Express	Parcel	[DHL-Parcel-Express

Define Service Levels | Organization Assignments | Details

2. Enter the Name and Short Name for the carrier.
3. Enable the Active check box and Generic check box, if applicable.

Note: You can only define one generic carrier. The generic carrier is used to quote transit times based on a mode of transportation and service level when the final carrier is not yet assigned. See: Defining a Generic Freight Carrier.
4. Optionally, enter the standard carrier alpha code (SCAC).
5. Optionally, enter the carrier's Default Currency.

Note: The default currency is used in conjunction with Oracle Transportation Execution's freight rating engine, if Oracle Transportation Execution is installed.
6. Within the Services tab, select the Service Level for this carrier.

Examples of service level include: next day air, ground, and next day air early AM.

7. Select the Mode (of transportation) for the carrier.

After you enter each service level and mode combination, Oracle Shipping Execution assigns a ship method and displays it in the Ship Method field. The format of the generated ship method is <carrier short name>-<transportation mode>-<service level>, for example, Truck-LTL-Ground.

Note: You can change the name of the generated Ship Method after it has been generated as long as it is unique.

8. Optionally, enter Service Times.

Certain carriers offer services with time estimates or guarantees. Record this information in the Service Times fields and then use it later for reference when deciding which of this carrier's many services to use for a certain delivery.

Note: Assemble the times so that both of them are in the same unit of time. Enter the best case time in Service Times Min, enter the worst case time in Service Times Max, and select the unit of time of both of them in Service Times Period.

9. Select Enable if you will be assigning this ship method to organizations and to deliveries in Oracle Shipping Execution.

10. Select Web Enable if you will be assigning this ship method in Oracle iStore.

11. Save your work.

12. Click Define Service Levels if you need to define a new Service Level that is not identified.

The Oracle Shipping: Carrier Service Levels Lookup window displays the carrier service levels lookups.

13. Select any line and the New icon on the toolbar.

14. Enter a unique Code for your lookup.

15. Enter a Meaning and Description for your lookup code.

16. Optionally, enter a Tag number.

17. The From Effective Date will default to the current date.

You can modify this field to another future date if needed.

18. Optionally, enter a To Effective Date that will disable your lookup.
19. Verify that the Enabled check box is selected.

Oracle Shipping: Carrier Service Levels Lookups Window

Shipping Execution: Carrier Service Levels Lookups

Type:

Meaning:

Application:

Description:

Access Level:
☐ User
☒ Extensible
☐ System

Effective Dates: _____ Enabled: ☒

Code	Meaning	Description	Tag	From	To	Enabled
1DA	Next Day Air	Next Day Air		16-MAR-2002		<input checked="" type="checkbox"/>
1DAY	1 DAY	1 DAY		17-OCT-2005		<input checked="" type="checkbox"/>
1DM	Next Day Air Early AM	Next Day Air Early AM		16-MAR-2002		<input checked="" type="checkbox"/>
1DP	Next Day Air Saver	Next Day Air Saver		16-MAR-2002		<input checked="" type="checkbox"/>
2DA	2nd Day Air	2nd Day Air		16-MAR-2002		<input checked="" type="checkbox"/>
2DAY	UPS 2nd Day Air	UPS 2nd Day Air		12-NOV-2002		<input checked="" type="checkbox"/>
2DAYS	2 DAYS	2 DAYS		17-OCT-2005		<input checked="" type="checkbox"/>
2DM	2nd Day Air AM	2nd Day Air AM		16-MAR-2002		<input checked="" type="checkbox"/>
2FX	FedEx 2Day	FedEx 2Day		16-DEC-2002		<input checked="" type="checkbox"/>
3DAY	UPS 3 Day Select	UPS 3 Day Select		12-NOV-2002		<input checked="" type="checkbox"/>

20. Save your work and return to the Carriers window, Services tab.
21. From the Services tab, click Details to view, update, or define the service level attributes specific to your carrier.

Note: If the value is set differently at the carrier and service levels, then service level values take precedence. The carrier level attributes will take precedence only if something is undefined (blank/null) at the service level.

Service Attributes Window

The screenshot shows the 'Service Attributes Window' for the 'Door to Door - Air' service level. The window has a title bar with standard OS controls. Below the title bar, there are two rows of labels and text boxes: 'Service Level' with 'Door to Door' and 'Ship Method' with 'DHL-Air-Door to Door'. To the right of these, there is a 'Mode' dropdown set to 'Air' and an 'Enabled' checkbox that is checked. Below these fields are three tabs: 'General', 'Rating', and 'Mode Limits'. The 'General' tab is selected, showing a large text area with the following fields: 'Service Time UOM', 'Service Min Time', and 'Service Max Time', each followed by a text box. Below these is a 'Web Enabled' checkbox that is checked, followed by a small square icon. At the bottom right of the window are two buttons: 'Define Service Levels' and 'Organization Assignment'.

22. The General tab displays the following:

- Service Time UOM
- Service Min Time
- Service Max Time
- Web Enabled

Note: You must enable the service level in the Carrier Service Levels Lookup window when you define the service level. You cannot enable it from within the Service Attributes window.

23. Navigate to the Rating tab.

Service Attributes Window - Rating Tab

Service Attributes - Door to Door - Air

Service Level: Door to Door Mode: Air

Ship Method: DHL-Air-Door to Door Enabled: ☒

General Rating Mode Limits

UOMs

Weight: [] Time: [] Dimension: []

Volume: [] Distance: []

TL Rating Attributes

Surcharge Level: []

Distance Calculation: []

Max Out of Route %: []

Unit Rate Basis: []

Continuous Move: ☐

First Load Discount: ☐

Free Deadhead Distance: [] Min Distance: []

Rate Variant: [] Min Time: []

Define Service Levels Organization Assignment

24. Within the UOMs region, the following fields are displayed:

- Weight
- Volume
- Time
- Distance
- Dimension

25. Within the TL Rating Attributes region, the following fields are displayed:

- Surcharge Level
- Unit Rate Basis
- Distance Calculation
- Max Out of Route%

- First Load Discount
- Free Deadhead Distance
- Rate Variant
- Min Distance
- Min Time

Note: The Mode Limits tab is specific to those organizations with Oracle Transportation Execution installed. See: *Oracle Transportation Execution Implementation Manual*.

26. Click Organization Assignments.

Organization Assignments-Carrier Service Window

Code	Name	Assigned
001	North America	<input checked="" type="checkbox"/> [List Icon]
002	South America	<input type="checkbox"/> [List Icon]
003	Central America	<input type="checkbox"/> [List Icon]
004	Asia Pacific	<input type="checkbox"/> [List Icon]
005	Europe	<input type="checkbox"/> [List Icon]
1FS	FS01: FMSEC	<input type="checkbox"/> [List Icon]
2FS	FS02: FMSEC	<input type="checkbox"/> [List Icon]
AAA	TestOrg	<input type="checkbox"/> [List Icon]
AB	AB	<input type="checkbox"/> [List Icon]
AB1	AB1	<input type="checkbox"/> [List Icon]

Unassign All Assign All Done

27. Select Assigned to assign the ship method to the organization(s) that use it.

You can assign the ship method to more than one organization.

Note: If you want to assign the ship method to all of your organizations, click Assign All to have all organizations' Assigned field selected. If you want to begin again with your assignments, click Unassign All to have all organizations' Assigned field cleared.

28. Click Done.
29. Save your work.

To define and edit carrier address/site:

1. From the Carriers window, select the Addresses/Sites tab.

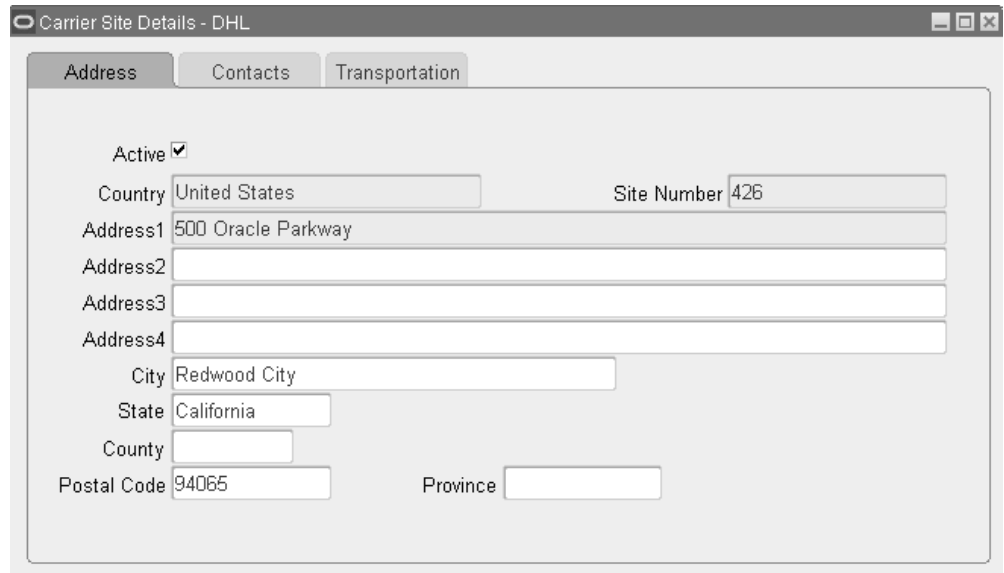
The information on the Addresses/Sites tab pertains to contacts at the local carrier site, such as a dispatch center. Existing addresses and contacts will be displayed if they exist. You can edit an existing site using the Edit button, or you can create a new Address/Site by clicking New.

2. Click New to create a site or Edit to edit an existing site, depending on your business needs.

Note: This documentation covers the details of creating a new carrier address/site. To edit an existing address/site, you edit the fields that require an update.

3. Select the Country from the list of values.
4. Enter a unique Site Number.
5. Enter the Address, City, State, County, Postal Code, and Province as required.

Carrier Site Details Window - Address Tab



Carrier Site Details - DHL

Address Contacts Transportation

Active ☒

Country United States Site Number 426

Address1 500 Oracle Parkway

Address2

Address3

Address4

City Redwood City

State California

County

Postal Code 94065 Province

6. Select the Contacts tab.

The information on the Contacts tab pertains to contacts at the local carrier site, such as a dispatch center.

7. Optionally, enter a contact Number.

8. Enter the Last Name, First Name, Title, Job Title, and Email Address as needed.

9. Select the Active check box to indicate whether or not the contact is a current employee.

10. Under Contact Telephones, enter the Country Code, Area Code, Telephone Number, Extension, and Type as needed.

Note: Contacts cannot be deleted.

Carrier Site Details Window - Contacts Tab

Carrier Site Details - DHL

Address Contacts Transportation

— Contact Details —

Number	Last Name	First Name	Title	Job Title	Email Address	Active	Accepts Load Tender
22	Evans	Dave	MR.	Manager	devans@truckingco.com	<input checked="" type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

— Contact Telephones —

Country Code	Area Code	Telephone Number	Extension	Type
1	650	555-5555		Mobile
	...			

11. Save your work.

Note: If you are using Oracle Transportation Execution, you can select Accepts Load Tender if this contact is the person who is expected to receive all load tender messages.

12. Select the Transportation tab.

The information in the Transportation tab is used exclusively by Oracle Transportation Execution to support load tendering functionality. If you do not have Oracle Transportation Execution installed, it is not necessary to perform any setup here. If you do have Oracle Transportation Execution installed, and the Transportation tab is being used, see: *Oracle Transportation Execution Implementation Manual and Oracle Transportation Execution User's Guide*.

13. To enter distribution accounts, return to the Carriers window, place your cursor in the Name field and, from the Tools menu, select Distribution Accounts.

Freight Carriers - Distribution Accounts Window

Carrier Short Name	Carrier Name	Organization	Distribution Account	Inactive After	Active ()
DHL	DHL	E53		02-AUG-2006	<input type="checkbox"/> <input type="radio"/>
DHL	DHL	E51		02-AUG-2006	<input type="checkbox"/> <input type="radio"/>
DHL	DHL	E55		02-AUG-2006	<input type="checkbox"/> <input type="radio"/>
DHL	DHL	UTG	10.131.9330.131.0000.00	02-AUG-2006	<input type="checkbox"/> <input type="radio"/>
DHL	DHL	E56		02-AUG-2006	<input type="checkbox"/> <input type="radio"/>
DHL	DHL	AD1		02-AUG-2006	<input type="checkbox"/> <input type="radio"/>
DHL	DHL	VA	01.510.6420.0000.000	02-AUG-2006	<input type="checkbox"/> <input type="radio"/>

- For each organization to which the carrier is assigned, enter the Distribution Account.

If the Inactive After field displays a date, then it is the date that the carrier became inactive in the organization (the Organization Assignments form, Active checkbox is cleared).

- Save your work and close the Distribution window.

To define carrier contacts:

- From the Carriers window, select the Contacts tab.
- Enter the contact information for the carrier's centralized corporate contracts, such as, sales representative, pricing manager, and customer service rep.
- Mark the current contact as Active, mark the current telephone numbers of each contact as Active, and select one telephone number for each contact as the Primary.

To define carrier classifications:

- From the Carriers window, select the Classification tab.
- Select the class Category that the carrier belongs to.
- Save your work.

Note: The Vehicle Types tab, Rating, Payment tab, and Mode Limits tab are specific to organizations that have Oracle Transportation Execution installed. The Mode Limits tab also has Oracle Transportation Planning specific fields.

See: *Oracle Transportation Execution Implementation Manual* and the

To define a generic carrier:

1. Navigate to the Carriers window.
2. Enter the Name of the generic carrier.

Note: A generic carrier cannot be an existing carrier. You must define a new carrier to be the generic carrier.

3. Enter a Short Name for the generic carrier.
4. Select the Active check box.
5. Select the Generic check box.

Note: Each organization can have only one generic carrier. If a generic carrier has already been defined for your organization, an error will display notifying you that a generic carrier has been defined.

Note: The Services tab is the only tab that is active for a generic carrier.

6. Enter a Service Level.
7. Enter a Mode.
8. Save your work.

Ship Method

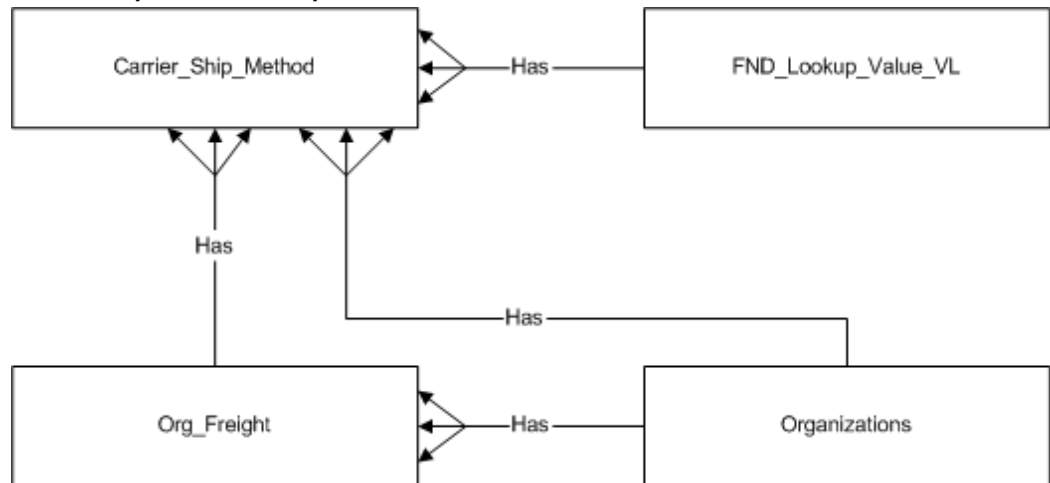
Upgrade Processing

At upgrade, the information in ORG_FREIGHT will be upgraded to FND_LOOKUP_VALUES. You should not have to maintain freight carrier and ship method information immediately after the upgrade; you can then begin to maintain any changes after this point.

Ship Method Defaulting Rule

For the ship method to pass from the sales order to the Shipping Transactions form, it must appear at the line level. To accomplish this, create a defaulting rule such that ship method defaults automatically from the sales order header to all sales order lines. The procedure appears later in this section.

Default Ship Method Example



To create a ship method defaulting rule:

1. Navigate to the Defaulting Setup - Entity Attributes window.
2. Choose the flashlight icon to display the Entity window.
3. Select Order Line as the entity and click OK.
4. From the attribute list, select Shipping Method.
5. Click Defaulting Rules.
6. In the Defaulting Conditions section, enter 1 as the precedence and select Always as the defaulting condition.
7. In the Default Sourcing Rules section, enter 1 as the sequence and select Related Record as the source type.
8. In the Default Source/Value section, select Order Header.Shipping Method.
9. Save your work.
10. Enter a sales order to verify that the defaulting rule is working properly. Select a

ship method in the order header, enter a sales order line, then verify that the line ship method matches the header ship method.

Defining Freight Costs

You can define allowable freight costs and suggested amounts for shipments. These amounts are applied at ship confirm or once a delivery line is planned. You can add multiple freight costs to a shipment from the list of allowable freight cost types that you define.

Note: If necessary, you can override the freight costs and suggested freight amounts at ship confirm.

You can also define multiple freight costs for a specific freight cost type. For example, if you want to track different types of insurance, you can create different insurance costs under the insurance freight cost type such as liability insurance or shipping insurance.

When you add freight costs at ship confirmation for a foreign currency order, you can use either your functional currency or the order's foreign currency. If you use your functional currency, the freight charges are converted to the order currency through Oracle Receivables.

Note: You should define all your freight costs in your functional currency for uniformity. You can then modify the currency to match the order, and modify the amount on the Confirm Shipments window, as necessary.

Prerequisites

- Define your Freight Cost Type Lookups.
- To pass freight costs to Order Management and Accounts Receivable so that the customer is invoiced (for example, freight terms = Prepay and Add), then a pricing modifier and pricing formula are required.

To define freight costs:

1. Navigate to the Freight Cost Types window.

Freight Cost Types Window

Freight Cost Types

Name	Type	Currency	Amount	From	To	Effective
FREIGHT FOR IC	Freight Costs	USD	10,00	08-FEB-2006		
UPS Freight Costs	Freight Costs	USD	0,00	11-AUG-2006		
Transportation KF	Freight Costs	KRW	10.000	07-NOV-2003		
Handling	Handling Costs	USD	7,50	06-SEP-2000		
Handling KR	Handling Costs	KRW	1.000	07-NOV-2003		
TIME RATE	Transportation Rate	USD	0,00	13-JUL-2006		
PRICE	Transportation Rate	USD	0,00	13-JUL-2006		
UNIT VOLUME RA	Transportation Rate	USD	0,00	13-JUL-2006		
UNIT WEIGHT RA	Transportation Rate	USD	0,00	13-JUL-2006		
LOADED DISTANC	Transportation Rate	USD	0,00	13-JUL-2006		

Description

2. Enter a Name for the freight cost.
3. Select the Type of freight cost.
4. Select a Currency for the freight cost.
5. Enter the Amount for the freight cost.

You can change this amount during ship confirmation. You can enter 0 as the amount.

6. Optionally, enter Effective dates for the freight cost.
7. Save your work.

Related Topics

Oracle Pricing User's Guide

Defining Shipment Transit Times

Within the Inter-Org Shipping Methods window, you can specify the ship method, intransit times, load weight and the volume capacity for any movement between two location types.

Note: Within Oracle Inventory, you must set up the relationship between organizations before using this window. You must also specify the Ship Method and other associated parameters for the interlocation movement of the goods.

To enter ship methods:

1. Navigate to the Transit Times window.

Transit Times Window

Origin Type	Origin	Description	Destination Type	Destination	Description
Internal L...	M1- Seattle	M1- Seattle : 3455 108th Avenue-Seattle-WA	Internal L...	M2- Boston	M2- Boston : 393 Berkeley Street-Boston-MA
Internal L...	D2- Miami	D2- Miami : 3456 Blue Lagoon Drive-Miami-FL	Internal L...	HR- San Jose	HR- San Jose : 2391 L. Street-San Jose-CA
Internal L...	D1- Singapore	D1- Singapore : 6555 Lucky Street-Singapore-	Internal L...	M3- Dallas	M3- Dallas : 222 West Las Colinas Blvd-Irving-
Internal L...	D1- Singapore	D1- Singapore : 6555 Lucky Street-Singapore-	Internal L...	M2- Boston	M2- Boston : 393 Berkeley Street-Boston-MA
Internal L...	GBL BP4 Proj	GBL BP4 Proj Location : Dummy--	Internal L...	GBL OE5 Proj	GBL OE5 Proj Location : Dummy--

Ship Method	Intransit Time	Daily Capacity	Load Weight UOM	Cost Per Unit	Currency	Volume Daily Capacity
Air Freight	1					
Rail Road	5					

2. Click the New icon in the tool bar.
3. In the Origin Type column, select one of the following:
 - Internal Location
 - External Location
 - Region
 - Zone
4. In the From Location column, select where the shipment will ship from.
5. In the Destination Type column, select Internal Location, External Location, Region, or Zone depending on the scenario for which you are defining the transit times and other information.

Note: The destination type you select will determine the outcome in the Destination column. For example, if you select Internal Location, then the Destination list of values will contain only internal organizations. If you select Region as the Destination Type, then click the Destination field and the Select Regions window displays to enable you to find a defined region.

6. In the Destination column, select a location that the shipment is destined for.

7. Within the Ship Methods region, select a Ship Method.

Note: If a ship method is not defined for an internal location, then the lead-time will not be taken into consideration for internal requisitions.

8. Enter an Intransit Time.

Note: For a given ship method, ASCP/GOP will use the transit time to calculate ship or arrival date.

9. Enter Daily Capacity to define the maximum allowable daily load weight capacity that may be transported via this ship method.

Note: Daily Capacity serves as a parameter in Oracle Advance Planning applications and a penalty factor may be associated with exceeding the daily capacity.

10. Enter UOM for the weight unit of measure used for daily capacity, for example pounds, tons, or kilograms.

11. Enter Cost Per Unit for goods transported using this ship method for the specified From Location and Destination Type.

12. Enter the Currency associated with the cost per unit.

13. Enter the Daily Capacity to define the maximum allowable daily volume capacity that may be transported using this ship method.

Note: Daily capacity serves as a parameter in Oracle Advance Planning applications and a penalty factor may be associated with exceeding the daily capacity.

14. Enter UOM for the volume unit of measure used for daily capacity, for example cubic feet or cubic meter.
15. Select Default Method if you want this ship method to default into the Sales Order pad for this combination of From Location and Destination Type when Oracle Advanced Planning and Scheduling is installed.

Global Order Promising will use the default ship method and its associated transit time if no shipment is specified on the sales order.
16. Save your work.

To find and modify information related to ship methods:

1. Navigate to the Transit Times window.
2. Click the Find icon in the tool bar.
3. Enter the From and To criteria and click Find.
4. Within the Ship Methods region, add another Ship Method and the supporting information or modify the information for an existing ship method.

Defining Document Sequences

You can define document sequences to generate a unique numbering sequence for documents in an Oracle Applications product. For example, document sequencing can be used to uniquely number invoices generated by Oracle Receivables and bills of lading and packing slips in Oracle Shipping Execution.

Using the Sequence Assignments window, you assign your sequence to number only those documents that satisfy rules you define. Document sequences ensure that every document your users create can be accounted for.

To define document sequences:

1. Navigate to the Document Sequences window.

Document Sequences Window

Effective						Message		Initial
Name	Application	From	To	Type			Value	[]
ACH	Receivables	01-JAN-1990		Automatic	<input type="checkbox"/>		1	
ACHDE	Receivables	01-JAN-1990		Automatic	<input type="checkbox"/>		1	
ACHNL	Receivables	01-JAN-1990		Automatic	<input type="checkbox"/>		1	
AP-INV-2006	Oracle Payables	06-FEB-2004		Automatic	<input type="checkbox"/>		600000	
AR-01	Order Management	06-FEB-2006		Automatic	<input type="checkbox"/>		15555	
AR-02	Order Management	06-FEB-2006		Automatic	<input type="checkbox"/>		5663	
AR-03	Order Management	06-FEB-2006		Automatic	<input type="checkbox"/>		522	
AR_GL_Journals	General Ledger	01-JAN-2002		Automatic	<input type="checkbox"/>		1	
AU-STANDARD	Order Management	21-JUN-2000		Automatic	<input checked="" type="checkbox"/>		777777	
AUDIT_10_DIG	Order Management	03-AUG-2006		Automatic	<input type="checkbox"/>		325647895700	

2. Define the document sequence Name and Application.

Note: Once the sequence name and application are selected, they cannot be changed.

3. Select an Effective From and To date.

The From field automatically defaults to the current date, and once a sequence is defined, the start date cannot be changed. If you leave the To field blank, your document sequence does not expire; and if you enter an end date and define your sequence, the end date cannot be modified later. If there is no end date defined and there are no active assignments for a sequence, you can disable the sequence by entering the current date as the end date.

4. In the Type field, select Automatic. If you have certain localizations, select Gapless only under the direction of Oracle Support.
5. Enable the Message box to have each document display a message to inform the user of the sequence name and value (number).

The message displays in the message line near the bottom of the window.

Note: This check box only applies to sequences with the automatic type of numbering. Messages appear only on form displays, and are not written to a request's log file. Once a sequence is defined, the message choice cannot be changed.

6. Enter an Initial Value for the first document in your sequence. This field only applies to sequences with automatic or gapless numbering type.

If you leave this field blank, the first document is automatically assigned a value of 1. Once a sequence is defined, this initial value cannot be changed.

You can assign valid operating dates for document sequences, and set them to run manually or automatically during ship confirm and pick release. See: *Application Object Library*.

Defining Document Categories

You can create a document category for shipping documents such as a bill of lading (BOL) and assign it to a location or all locations. You can create more than one document category for a document, for example, if you want each carrier to have its own bill of lading number series, you can set up a unique document category to accommodate this requirement.

You must define a category for each bill of lading and packing slip that you want to create. You can create a bill of lading category for each ship method/carrier or define a single bill of lading category for all. When you use a different bill of lading sequence for each carrier, you can easily identify the carrier by looking at the bill of lading number.

In addition, you can tie a category to a specific location and have a different BOL sequence for the same carrier departing from a different location. For example:

- For a Trucking Co. Freight shipment departing from warehouse 1, the bill of lading number is WH1-12345-Trucking Co
- For a Trucking Co. Freight shipment departing from warehouse 2, the bill of lading number is WH2-55466-Trucking Co

When defining a document sequence for the packing slip, you can create a category for every location or one category for all locations. The document category is specific to a document type and location. The document category is also specific to the application and responsibility from which you accessed the form. If you create a document category called Viking BOL for WH1 in responsibility Oracle Order Management Super User, you must be working as Oracle Order Management Super User to have visibility of this category when assigning document sequences to it.

To view existing document categories:

1. Navigate to the Document Categories - Summary window.

Document Categories - Summary Window

Category Name	Document Type	Document Type/ Ship Method/ Carrier	Location
BOL	Bill of Lading		

New Open

2. Click the Find icon to display the list of existing document categories.
3. Select the document category, and click OK to display it in the Document Categories Summary window.
4. Select the document category and click Open.

To define a document category:

1. Navigate to the Document Categories window.

Document Categories Window

2. Enter a Category Name and Description.
3. Select the Document assigned to the category; for example, Bill of Lading or Packing Slip.

Note: You can override this selection when you create documents; however, selecting a default here provides faster document definitions.

4. Within the Category Includes region, select the Ship Methods and Locations for the document types:
 - All: All ship methods and inventory locations are included.
 - One: Only the selected ship method and inventory location are included.

Decide at the initial setup whether to set up document categories and locations for All or One (individual) ship method and location. For example, you initially set up document category name SEQ3204 for bills of lading on deliveries shipped via carrier Viking. Then, you select One in the Ship Methods region. Later, you decide to enter a setup for All ship methods for the document bill of lading. The individual bill of lading setup information is overridden by the All ship methods setup.

5. In the Sequence region, enter the Prefix, Suffix, and Delimiter for the sequence number to be printed on the document.
6. Preview the sequence name in Default Appearance.

Note: Enter any alphanumeric values for Prefix and Suffix. Typically, enter a value that identifies the location, carrier, or date in which document is generated. The delimiter separates the prefix and suffix from the generated number and can be any character.

7. Save your work.

Assigning Document Sequences to Document Categories

After defining document sequences and categories, assign document sequences to document categories. Assigning sequences is application and category specific.

You cannot change a document category definition. If you find incorrect information, create a new category with the correct information, re-assign document sequences to the new category, and disable the old category.

Either leave alone the existing Category or Disable it cautiously since it may affect other documents using the setting. For that reason disabling cannot be undone.

To assign document sequences to document categories:

1. Navigate to the Sequence Assignments window.
2. Select Oracle Shipping as Application.
3. Select the Document Category.
4. Select the ledger.
5. Select the Method:
 - Null
 - Manual
 - Automatic

Within the Assignment tab:

6. Enter the Start and End Dates.
7. Choose the Document Sequence.

Defining Shipping Document Sets

You can group related shipping documents and other reports in a set that can be

printed at pick release or ship confirm. You can include a variety of shipping documents in a set such as a Bill of Lading and Packing Slip Report and determine the print sequence.

Shipping Execution provides three pre-defined (seeded) document sets:

- All Pick Release documents: You can set the default Pick Release Document Set in the Pick Release tab of the Shipping Parameters window
- Ship Confirm documents: You can set the default in the Document Set field of the ship confirm window
- Pack Slip only (at ship confirm): You can set the default in the Document Set field of the ship confirm window

Note: You can create additional document sets based on your business needs.

To define document sets:

1. Navigate to the Shipping Document Sets window.

Shipping Document Sets Window

Document Set: All Pick Release Documents

Description: Pick Release

Usage: Pick Release

Effective Dates:

From: 12-AUG-1997

To:

Printing Method:

☒ Parallel

☐ Sequential

Seq	Application	Report Name	Description	Layout Template	Copies
1	Shipping Execution	Pick Slip Report	Pick Slip Report		0
2	Shipping Execution	Shipping Exceptions Re	Shipping Exceptions Re		1

2. Enter a Name and Description for the new document set.
3. Select the Usage for the document set:
 - Pick Release: For printing at pick release
 - Ship Confirm: For printing at ship confirm
4. Optionally, enter the Effective Dates for the document set.
5. The default Printing Method is parallel. This submits the reports for printing separately, each with a different request ID. If one of the reports in the document set fails to print, the other reports will print.
6. Enter a Sequence number.
7. Select Shipping Execution as the Application.
8. Select the Report Name to be included in the document set.
 Selecting a report with PDF Output enables you to select a layout template. If you select a report without PDF Output, then the Layout Template field is not updatable.
9. If you selected a report with PDF Output, then use the list of vales to select a Layout Template for your report.

Oracle XML Publisher enables you to extend various Oracle Shipping Execution reports to suit your business needs. The following list represents those seeded Oracle Shipping Execution report layout templates within Oracle XML Publisher:

- Bill of Lading
- Commercial Invoice
- Mailing Label
- Master Bill of Lading
- Packing Slip
- Pick Slip
- Vehicle Load Sheet Summary

10. Enter the number of Copies that you want.

If number of copies for a document is specified in the document set form, then copy count is used. If it is not specified (that is, it is null), then the profile option Concurrent: Report Copies is used. If the profile option Concurrent: Report Copies is also null, then 1 copy is printed.

11. Save your work.

To edit document sets:

1. Navigate to the Shipping Document Sets window.
2. Query an existing document set.
3. Edit the existing Effective Dates, Sequence of documents, or documents contained within the document set.
4. Save your work.

Choosing Printers for Shipping Documents and Labels

You can assign shipping documents and selected reports to specific printers for multiple levels. The levels are:

- User
- Responsibility

- Application
- Site
- Zone/Subinventory
- Format
- Organization

Note: Oracle Shipping will look for a printer at the User level first. If one exists, then it is selected, if one does not exist at the User level, then the system will look for a printer at the Responsibility level. This pattern will continue until a printer is found at one of the levels. If more than one printer is setup at a level, then you must use the Default check box to specify the preferred printer at that level. You should only have one default printer at each level.

If the document to be printed is a Pick Slip report, the system will look at the Subinventory level first. If a printer exists at the Subinventory level, then it will select that printer, but if a printer does not exist, then the system will look at the Organization level and then through the rest of the levels.

For example, you can assign pick slips and pack slips to your warehouse tractor feed printer, your mailing labels to a tractor feed printer stocked with blank labels, and other documents to a laser printer in your order entry office.

The window consists of a Document and a Printer tab: the Documents tab displays all the documents assigned to a printer, while the Printers tab displays all printers assigned to a document.

If a user or responsibility is not specified, Shipping Execution uses the printer assigned to the application.

To assign documents to a printer:

1. Navigate to the Choose Document and Label Printers window.

Choose Document and Label Printers Window

Printer	Level	Value
noprint	Application	Warehouse Manager
noprint	Application	Inventory
noprint	Application	Mobile Applications f

Additional Information

Document: Shipping

Application: Inventory

2. Choose the Documents icon to display documents currently assigned to printers.

3. Select the document from the Documents list.

If the document is not listed, select New from the File menu to display documents not yet assigned to a printer. Select the document and click OK. The document is added to the Documents list and you can start assigning printers to it.

4. In the Printer field, select the printer that you want assigned to the document.

5. In the Level field, select the operational level for the printer. You can choose from the following:

- User
- Responsibility
- Application
- Site
- Zone/Subinventory
- Organization
- Format

Format is used for Radio Frequency Identification (RFID) and Electronic Product Code (EPC) compliant label printing. EPC information is also included on the Departure Shipment Notice Outbound (DSNO) file. This option is used with Oracle Warehouse Management only.

RFID EPC compliance enables the recognition and tracking of products using the RFID EPC label. Customers would use this feature before ship confirm at the line, box, or pallet level. The benefit is the ability to track the shipment before and after it leaves the shipper.

See *Oracle Warehouse Management User's Guide* for more information on RFID EPC usage.

Note: You must assign the shipping document to at least one printer at the Application level.

Note: Use Zone/Subinventory and Format when Oracle Warehouse Management is installed.

Note: There is one document printing exception. Pick Slip can be printed at the Subinventory level.

6. Optionally, enter any comments.
7. Click Enabled to activate the printer assignment.
8. Enable the Default box if you want this printer as the default.

Only one printer can be used as the default. For example, if a document is printed in multiple printers by one user, only one printer should be assigned as the default.

Note: The default printer check box is visible only in the Document tab.

9. Save your work.

To assign printers to documents:

1. Navigate to the Choose Document and Label Printers window.

Choose Document and Label Printers Window - Printers Tab

Document	Level	Value
Flow Contents	Application	Warehouse Manager
LPN Summary	Application	Warehouse Manager
Location	Application	Warehouse Manager
WIP Contents	Application	Warehouse Manager
Material	Application	Warehouse Manager
Shipping Contents	Application	Warehouse Manager
Serial	Application	Warehouse Manager
LPN	Application	Warehouse Manager
Shipping	Application	Warehouse Manager
LPN Content	Application	Warehouse Manager

Additional Information

Document: Flow Contents
Application: Inventory

2. Choose the Printers icon to display printers currently assigned to documents.
3. Select the printer from the list.
If the printer is not listed, select New from the File menu to display new printers. Select the printer and click OK. The printer is added to the Printers list and you can start assigning documents to it.
4. In the Document field, select the document to be assigned to the printer.
5. In the Level field, select the operational level for the printer. You can choose from Application, Site, Responsibility, User, Zone/Subinventory (with Oracle Warehouse Management), Organization, and Format (with Oracle Warehouse Management).
See: *Oracle Warehouse Management User's Guide*
6. Optionally, enter any comments.
7. Enable the Enabled box to activate the document/printer assignment.
8. Save your work.

Defining Pick Slip Grouping Rules

You can create grouping rules to organize how picking lines for released sales orders

are grouped on to pick slips. For example, if you select Delivery as a grouping criteria, all picking lines for the same delivery are grouped together on a pick slip. If there are multiple deliveries, multiple pick slips are created.

You can also define your grouping criteria further by selecting additional grouping attributes. For example, if you select Delivery and Carrier as grouping criteria, picking lines for the same delivery and carrier are grouped together on a pick slip.

Related Topics

Oracle Inventory User's Guide.

Defining Release Rules

You can create default pick release rules that are applied at pick release in the Release Sales Orders window. Each rule can be set up with its own set of unique pick release parameters depending on the pick release criteria required.

When pick release is run, the pick release is performed based on the parameters set up in the selected pick release rule. For example, you can create a specific rule that pick releases only backordered lines.

Note: Although you can also enter the pick release criteria at pick release time without creating a rule, creating a rule is more efficient if you frequently run the same pick release. Also, note that it is required when releasing using SRS or when using the Auto Pick Pack and Ship features.

To define release rules:

1. Navigate to the Release Rules window.

Release Rules Window - Order Tab

Rule: Standard Effective: 22-AUG-1997

Release Criteria

Order Shipping Inventory

Orders: Unreleased Order Type: Order Number: Ship Set: Prior Reservations Only: Destination Type: Ship-To Location Customer: Ship-To: Item: Category Set: Category: Number: Scheduled Ship Dates: Start Within: End Within: Days: Time: Requested Dates: Start Within: End Within: Days: Time:

2. Enter a Rule name and the Effective dates.

Within the Order tab, select one or more of the following criteria for your query. Select only the criteria that you want for the pick release:

3. Select the Orders and Order Types that you want included in the pick release:
 - Unreleased: The rule is applied to unreleased lines.
 - All: The rule applies to all lines not pick released.
 - Backordered: The rule applies only to backordered lines.
4. Enter the Order Number.
5. Select the Ship Set.
6. Optionally, select the Prior Reservations Only check box if you only want to pick release already reserved quantity for lines. This is allowed only for the allocation method of Inventory Only.
7. Select the Destination Type:
 - Region
 - Zone

- Ship-To Location
8. Select the Customer and the Ship-To location for the customer.
 9. Within the Item region select a Category Set, Category, and Item Number
 10. Select the range of Scheduled Ship Dates and/or Requested Dates.

You can indicate whether you want the system to look at the scheduled ship date or the requested date. You can then enter the number of days in the past or future, as well as the time, relative to current system date that you want included in the release criteria. This means that it is possible to set up a desired release window in terms of number of days rather than only static dates. If your organization has a calendar assigned, then the release rule will honor non-working days (for example, Saturday, Sunday) to select delivery lines for pick release. If the rule shown were applied to Organization V1 and that Organization has Saturday and Sunday as non-working days on their organization calendar, then the following would occur: If pick release is run on Thursday, the delivery lines for Thursday, Friday, Monday, and Tuesday (system date + 3 working days) are selected for pick release. A negative value may be used in the Days field to include past dates which enables backordered lines to be considered for pick release.

Alternatively, you can create a pick release rule using static dates by selecting the options Start On and End On in the Scheduled Ship Dates region and the Requested Dates region.

Release Rules Window - Shipping Tab

11. Select the Ship Method to pick release by a certain ship method.
12. Select the Shipment Priority, and Ship From location.
13. Enable the Include Assigned Lines box if you want to include assigned lines in the pick release.
14. Select a Document Set to be printed during pick release.
15. Select a Release Sequence Rule if required.
16. From the list of values, select either Yes or No to Autocreate Deliveries.
17. If you selected Yes to Autocreate Deliveries, then in the Autocreate Delivery Criteria field select either Across Orders or Within an Order.
18. Select either Yes or No in the Auto Pick Confirm field. Auto pick confirm is not allowed for the allocation method of Cross Dock.
19. From the Autopack Deliveries list of values, select No if you do not want to utilize autopacking, select Yes to enable autopacking, or select Auto Pack Master if you want to utilize autopacking the item into its primary container and additionally automatically packing the primary container into a defined master container.

You must setup container-item relationships to support the functionality for auto pack or auto pack master. See: *Oracle Inventory User's Guide*.

20. Select a Ship Confirm Rule, if you want to utilize auto ship confirming.
21. Select Yes or No to Append Deliveries (consolidate delivery lines.)

Note: The appending limit must be defined as a value other than Do Not Append in the Shipping Parameters window before you can append deliveries within a release rule. Additional prerequisites for setting Append Deliveries flag include:

- Oracle Transportation Planning is not installed
- Organization must be specified
- Autocreate Delivery Criteria must be Across Orders
- Autocreate Delivery must be Yes
- Auto Pick Confirm must be No

Release Rules Window - Inventory Tab

Release Rules

Rule: Standard Effective: 22-AUG-1997

Release Criteria

Order Shipping **Inventory**

Pick Slip Grouping Rule: Customer, Ship To, Carri

Warehouse: M1 Subinventory: Project: Task:

Allocation Method: Inventory Only Cross Dock Criteria: Auto Allocate: Yes Plan Tasks: Task Priority:

Pick From: Subinventory: Locator: Default Stage: Subinventory: Locator:

22. Select the Warehouse (organization code) and default Pick Slip Grouping Rule for grouping the pick slips.
23. Optionally, enter a specific Subinventory for your rule.

This value determines which lines are considered for picking based on the

subinventory name assigned to the sales order line.

24. If Oracle Project Manufacturing is installed, specify a Project and Task for your rule.
25. If Oracle Warehouse Management is installed, then you can select an Allocation Method to be used:
 - Inventory Only: (Default) If you select this allocation method, then pick release allocates inventory materials only.
 - Cross Dock Only: If you select this allocation method, then pick release allocates cross docking materials only.
 - Prioritize Inventory: If you select this allocation method, then pick release checks for inventory availability before all other sources, then allocates material from other sources if needed.
 - Prioritize Cross Dock: If you select this allocation method, then pick release checks for material available for cross docking from all other sources other than Inventory, then allocates materials from Inventory if needed.

The Allocation Method field cannot be updated unless Oracle Warehouse Management is installed.

See: *Oracle Warehouse Management User's Guide* and *Oracle Warehouse Management Implementation Guide* for more information.

26. If Oracle Warehouse Management is installed and if you selected Cross Dock Only or Prioritize Cross Dock in the Allocation Method, then select a Cross Dock Criteria.

Enables a rule to be named, which limits the cross docking criteria. This field is disabled if the organization is not WMS Enabled, or the Allocation Method is Inventory Only.

See: *Oracle Warehouse Management User's Guide* and *Oracle Warehouse Management Implementation Guide* for more information.

27. Select Auto Allocate if you want to allocate the order lines automatically at pick release.

If Auto Allocate is selected, order lines are automatically allocated and reserved. If not selected, you must allocate the lines and create reservations using the Inventory Transact Move Orders window.
28. Select either Yes or No to Enable Plan Tasks if Oracle Warehouse Management is installed and you choose to utilize the Plan Tasks feature.
29. Enter a Task Priority.
30. In the Pick From region, select the Subinventory and Locator of the default picking

location.

Pick From Subinventory determines where the line items are picked/allocated from.

31. In the Default Stage region, select the Subinventory and Locator of the default staging area.
32. Save your work.

Defining Release Sequence Rules

You can define release sequence rules to specify the order in which eligible picking lines are allocated to Inventory during pick release. You can release the picking lines by:

- Order number
- Outstanding Invoice Value
- Scheduled Date
- Departure Date
- Shipment Priority

You can assign a priority level to one or more attributes with 1 being the highest priority and 5 being the lowest. You can also define whether you want the picking lines released in ascending or descending order.

For example, if you select the Ascending button for Order, picking lines are released by ascending order number--Order 1 is released first, then Order 2, Order 3, and so on. If the Descending button is selected, the picking lines are released by descending Order number from highest to lowest--Order 4 is released first, then Order 3, Order 2, and Order 1.

Note: You can define either the Outstanding Invoice Value attribute or the Order attribute for the release sequence rule, but you cannot select both for the same rule. No two attributes can be given the same priority.

You can edit existing release sequence rules, but you cannot change the name of an existing release sequence rule.

To define release sequence rules:

1. Navigate to the Release Sequence Rules window.

Release Sequence Rules Window

	Priority	Ascending	Descending
Order	1	<input checked="" type="radio"/>	<input type="radio"/>
Outstanding Invoice Value		<input checked="" type="radio"/>	<input type="radio"/>
Schedule Date		<input checked="" type="radio"/>	<input type="radio"/>
Departure Date		<input checked="" type="radio"/>	<input type="radio"/>
Shipment Priority		<input checked="" type="radio"/>	<input type="radio"/>

2. In the Rule field, enter a name for your rule.
3. Enter a Description.
4. Enter the Effective Dates for the rule.
5. Within the Release Priority region, specify a Priority (1, 2, 3, 4, or 5 where 1 is the highest priority and 5 is the lowest) for one or all of the following attributes:
 - Order Number: Releases picking lines based on order number. If you define a priority for the Order Number attribute, you cannot define a priority for the Outstanding Invoice Value attribute.
 - Outstanding Invoice Value: Releases picking lines based on the outstanding invoice value. If you define a priority for the Outstanding Invoice Value attribute, you cannot define a priority for the Order Number attribute.
 - Scheduled Date: Releases picking lines based on scheduled date.
 - Departure Date: Releases picking lines based on departure date.
 - Shipment Priority: Releases picking lines based on shipment priority.
6. Select the Ascending or Descending toggle next to each attribute.

If you select the Ascending toggle next to the Scheduled Date attribute, for example, the picking lines with the earliest Scheduled Date are released first. If you select the

Descending toggle, the picking lines with the most recent Scheduled Date are released last.

7. Save your work.

Defining Transportation Calendars

You can use a transportation calendar to define valid shipping days and hours for a shipper, receiver, and carrier. Using these calendars is optional.

The shipping and receiving calendars are used to designate when your customers, customer sites, suppliers, supplier sites, and internal organizations can ship and receive.

Note: The ship confirm process uses these calendars to warn you of invalid shipping days and hours.

The calendars do not affect scheduling performed by Oracle Advanced Planning and Scheduling.

For example, if you are shipping a delivery on Tuesday to arrive at your customer's site on Wednesday, ship confirm checks the calendars to confirm the following:

- Your warehouse can ship on Tuesday
- Your customer can receive goods on Wednesday
- Your carrier is able to pick up and drop off the deliveries on those days

Note: If the transportation calendars are not defined, every day and time is assumed to be valid for shipping and receiving.

Prerequisites

A calendar must be created and defined in the Oracle Bills of Material (BOM) application as a Workday calendar before it can be assigned to a shipper, receiver, or carrier.

Note: The start and end dates for the calendar and the location's shipping and non-shipping patterns must be defined.

To define a transportation calendar:

1. Navigate to the Assign Calendars window.

Assign Calendars Window

Trading Partner

Type

Name

Calendar Usage

Calendar Code

Used for Carrier ☐

Site Calendars

Site Name	Calendar Code	Enabled	
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>

2. Select the role of the Trading Partner: Supplier, Customer, Organization, or Carrier. For example, if the trading partner is a customer, then click Customer.

If you selected Carrier as the trading partner, you must select whether the carrier is used for pick up/delivery to a supplier, customer, or organization and then select the name of the supplier, customer, or organization in the Used For fields.
3. Select the Trading Partner Name to whom you are assigning the calendar.
4. Select the Calendar Usage.

The calendar usage depends on the trading partner you selected. For example, if the trading partner is receiving your goods, create a Receiving Calendar.
5. Select the Default Calendar Code.

You can override the default calendar code by selecting a new calendar code for each site as described below.
6. Click Show Candidates to display the sites for the selected trading partner.
7. If you want to override the default calendar code, then select the new calendar code in the Calendar Code field.
8. Select the Enabled box to activate the calendar for that site.

9. Save your work.

Defining Shipping Exceptions

During the shipping and transportation of goods, unforeseen shipping exceptions can occur that conflict with the actual requirements of the shipper, transportation carrier, or customer.

If these exceptions are not handled promptly or properly, it could result in reduced customer satisfaction and loss of business and revenue for a company. Tracking exceptions can also be helpful to identify and correct defects in the business process.

The seeded exceptions are logged automatically against delivery lines, LPNs, deliveries, and trip stops when specific events occur. The events are shown in the descriptions below:

Seeded Exceptions

Exception Name	Description
WSH_BATCH_MESSAGE	Logged against a delivery, trip stop, or batch to store the messages generated during the automated shipping processes such as auto-pack and ship-confirm. The seeded value is INFO. If this is changed to ERROR, the exceptions generated, even though they are coded as ERROR, will not stop a shipment. It is suggested that you leave this exception as INFO to avoid any confusion.
WSH_CARRIER_CREATE_DEL	Failed to auto apply routing rules at delivery creation.
WSH_CHANGED_QUANTITY	Logged when quantity is changed and line is staged OR packed OR a planned delivery. Reasons can be: WSH_CANCELED_PACKED WSH_CANCELED_PLANNED WSH_CANCELED_RELEASED Exception can be logged against delivery or container or line itself. If the line is packed, then the exception is logged against the LPN record.

Exception Name	Description
WSH_CHANGED_SHIP_METHOD	Logged if the Document Category for generating a bill of lading is defined so that a different document numbering sequence is established for each ship method (i.e. Ship Method radio button for One is selected). If so, the exceptions is logged against trip when changing ship method of trip causes delivery legs' BOL numbers to become deleted.
WSH_CHANGE_DEL_GROUP	Logged against delivery or LPN when a delivery grouping attribute (mandatory or enforced) is changed that causes the delivery line to become unpacked from its LPN or unassigned from delivery or both.
WSH_CHANGE_SCHEDULE	Logged against delivery or LPN when the organization is changed or when order line is unscheduled and the delivery line is released to warehouse or staged and is assigned to delivery or LPN or both.
WSH_CHANGE_SCHED_DATE	Logged against delivery line when order line's scheduled date is moved into future. Rationale: we do not want to ship the line early.
WSH_CUSTOMER_MERGE_CHANGE	Logged against delivery when a customer merge occurs that affects delivery details within the delivery for one of the merge customers. The exception could be caused by a change in Ship To address.
WSH_DELIVERY_APPENDED	Logged if an appending delivery takes place. This exception is logged only if appending has taken place on a delivery created in a previous batch.
WSH_DEL_SCPD_PURGED	Logged when the Ship to Delivery workflow has been purged.
WSH_EXPORT_COMPL_FAILED	Logged when the export compliance screening failed for the delivery.

Exception Name	Description
WSH_EXPORT_COMPL_SKIP	Logged when the export compliance screening is skipped for the delivery.
WSH_HONOR_PICK_FROM	Logged when pick release completes with a Warning.
WSH_IB_DELIVERY_CHANGE	Logged whenever ship to location is changed on the purchase order and the delivery details are assigned to a delivery, or whenever shipping control is changed from Buyer to Supplier on the purchase order and the Routing Response has not been sent, or whenever the requested quantity for assigned delivery detail is changed on the purchase order and the Routing Response has been sent and the delivery firm status is Contents Firm.
WSH_IB_DEL_ATT_CHANGE	Logged against a delivery, whenever the exception WSH_IB_DETAIL_CHANGE is logged against an assigned delivery detail line.
WSH_IB_DEL_DATE_EXCP	Logged against a delivery whenever the earliest delivery detail line date is greater than the ultimate drop off date of the delivery, or the latest delivery detail line date is less than the ultimate drop off date of the delivery.
WSH_IB_DETAIL_CHANGE	Logged against delivery details whenever Ship To location is changed and Routing Response has been sent, or whenever request date is changed on the purchase order and Routing Response has been sent, or whenever Requested Quantity is changed on the purchase order and Routing Response has been sent.
WSH_IB_RR_NUMBER_CHG	Logged when a routing request number has changed during Vendor Merge.
WSH_IB_SF_LOCN_CODE_CHG	Logged when Ship From Location code has changed during Vendor Merge.

Exception Name	Description
WSH_IB_TS_DATE_EXCP	Logged against Trip Stops whenever the earliest delivery detail line date is greater than the planned arrival date of the trip stop or the latest delivery detail line date is less than the planned arrivals date of the trip stops.
WSH_INVALID_DELIVERY_PLANNING	Logged if WSH cancels/deletes delivery line that is in a planned delivery (This could happen because order line is canceled, or its quantity is reduced).
WSH_INVALID_PACKING	Logged against LPN when a delivery grouping attribute (mandatory or enforced) is changed that causes the delivery line to become unpacked from its LPN.
WSH_INVALID_PACKING_PLANNING	Invalid Packing Contents Firming: Contents Firmed packing has changes.
WSH_INVALID_TPDATES	Logged against the delivery or the LPN when Oracle Transportation Planning is installed to alert the shipper that their earliest/latest dates had to be corrected by the system: when its latest ship date would precede its earliest ship date or when its latest delivery date would precede its earliest delivery date as a result of assignment changes, these dates become equal.
WSH_INV_EXPECTED_ERROR	Logged from Pick Release when Inventory returns error.
WSH_LAUNCH_WF_FAILED	Logged when Ship to Deliver workflow could not be launched for the entity.
WSH_LOCATION_REGIONS_1	Location regions mapping failure - no non-country regions mapped to location.
WHS_LOCATION_REGIONS_2	Location regions mapping - number of regions mapped to locations has changed.
WSH_PARTY_MERGE_CHANGE	Logged when there are changes to a delivery detail due to party merge.

Exception Name	Description
WSH_PICK_BACKORDER	<p>Logged against batch during Pick Release for any of these cases:</p> <p>Other lines in Ship Set/SMC being backordered due to one line being backordered.</p> <p>Other lines in Ship Set/SMC being backordered due to insufficient quantities for one line.</p> <p>Normal line being backordered.</p>
WSH_PICK_HOLD	<p>Logged against the concurrent request ID or the batch during Pick Release when holds are found.</p>
WSH_PICK_PRIOR_RSV	<p>Logged against the delivery lines if Prior Reservations is specified during Pick Release but quantity is not reserved or Ship Set or Ship Model Complete line is partially reserved.</p>
WSH_PICK_XDOCK	<p>Logged when supply is not found at picking time.</p>
WSH_PICK_XDOCK_NR	<p>Logged when a non-reservable line is skipped for cross-docking.</p>
WSH_PLAN_DELIVERY_FAIL	<p>Logged when the system failed to firm contents of the delivery at end of append delivery.</p>
WSH_PR_REQ_EXPORT_COMPL	<p>Delivery requires export compliance screening before ship confirmation.</p>
WSH_PR_SUB_EXPORT_COMPL	<p>Delivery submitted for export compliance screening before ship confirmation.</p>
WSH_RATE_CREATE_DEL	<p>Logged when the system failed to calculate the freight rate at delivery creation.</p>

Exception Name	Description
WSH_RATE_DELIVERY_FAIL	Logged when the system failed to auto calculate the freight rate at the end of append delivery. Occurs given this situation if Oracle Transportation Execution is installed.
WSH_RATE_MIXED_TRIP	Logged when a trip has deliveries both eligible and ineligible for freight rating.
WSH_ROUTE_TRIP_FAIL	Logged when there are no routing guide rules found for the trip.
WSH_SC_REQ_EXPORT_COMPL	Delivery requires export compliance screening at ship confirmation.
WSH_SC_SUB_EXPORT_COMPL	Delivery submitted for export compliance screening at ship confirmation.
WSH_SELECT_CARRIER_FAIL	Logged when the system failed to auto apply routing rules at the end of append delivery. Occurs given this situation if Oracle Transportation Execution is installed.
WSH_SHPST_IGNRE_FR_PLNG	Logged when Ignore for Planning status for the line is different than other ship set lines.
WSH_TP_EARLY_PICKUP	Logged against the delivery line by the Oracle Transportation Planning release process to alert the shipper that a line has been assigned to the initial pick up stop even though the stop's planned departure date is before the line's earliest ship date.
WSH_TP_LATE_DROPOFF	Logged against the delivery line by the Oracle Transportation Planning release process to alert the shipper that a line has been assigned to the ultimate drop off stop even though the stop's planned arrival date is after the line's latest delivery date.

Exception Name	Description
WSH_TP_WV_FROZEN	Logged against the delivery or stop by the Oracle Transportation Planning release process to alert the shipper that the weight/volume of delivery or stop needs to be re-entered because the delivery or stop's weight/volume was frozen at time of release and its contents or load had been changed.
WSH_UNPACK_ITEM	This is a packing exception.

You can also define unique exceptions and processes for exception handling in the Define Shipping Exceptions window.

To define shipping exceptions:

1. Navigate to the Define Shipping Exceptions window.

Define Shipping Exceptions Window

2. Enter a unique Exception Name to identify the exception.
3. Enter a Description.
4. Select the Exception Type that you want to create: Batch, Delivery, Picking, or Trip exception.
5. Select one of the following default Exception Behavior settings:
 - Error: The exception must be handled before the entity can be closed.
 - Information Only: The exception must be handled before the task can be completed. However, you can override it so that the entity (for example, delivery, trip, trip stop) can be closed.

- Warning: A warning is given but the entity can be closed.
6. Enable the exception.
 7. Select Raise Business Events to use Oracle Workflow for notification and exception handling.
 8. Save your work.

Defining Containers and Vehicles

You define containers and vehicles in Oracle Inventory, as inventory items.

To define containers and vehicles in Oracle Inventory:

1. Navigate to the Items window.
2. In the Inventory tabbed region, select Transactable.
3. Within the Physical Attributes tab, Container region, complete the following:
 - Select either Container or Vehicle
 - Enter Container Type
 - Enter the container's Internal Volume
 - Enter the container's Maximum Load Weight
 - Enter the container's Minimum Fill Percent
4. Within the Physical Attributes tab, Weight region and Volume region, enter the Unit of Measure and Unit Weight of the empty container.

Defining Container-Item Relationships

When setting up container-item relationships, you define the maximum quantity of load items (delivery lines) that can be packed into a container: for example, defining that a maximum of 12 items can be packed into a small box. These relationships are used to:

- Calculate/estimate the number of containers required for delivery lines in a delivery or trip. This enables you to use the auto-pack function to auto-pack delivery line items into new containers. The number of containers required to pack the delivery lines is automatically calculated based on the container-item relationships.

- Calculate the fill percentage for containers when the Fill Percentage Shipping parameter is set to Quantity. See: Defining Shipping Transaction Parameters.

In addition to packing delivery lines in containers, Oracle Shipping Execution features an Auto-pack Master function that enables you to auto-pack delivery line items into containers, and then auto-pack these containers into master containers such as pallets or railway boxcars.

The innermost container is considered the detail container item, and the pallet or boxcar is the master (outermost) container. If you want to use the auto-pack master feature, you must set up a relationship that relates the container (the load item) to a master container such as a pallet (the container item).

In the following example, auto-pack master would create one box for up to five engines and pack up to four boxes onto a pallet.

Auto-Pack Master Example

Load Item	Container Item	Max Load Qty	Preferred
Engine	Box	5	Y
Container	Pallet	4	Y

To define container-item relationships:

1. Navigate to the Container-Item Relationships window.
2. Select the Container Item from the list of values.
3. Select the load item that you want to place in the container item.
4. Define the maximum quantity of items that can be placed in the container item.
5. If the container-item relationship is a common shipping configuration in that inventory organization, then select the Preferred flag.
6. Save your work.

Related Topics

Auto-packing delivery Lines into Containers, *Oracle Shipping Execution User's Guide*.

Finding Container-Item Relationships

You can search existing container-item relationships to find:

- Load items associated with a container (LPN) or container type
- Containers (LPNs) associated with a particular load item

For example, a shipper may search for container-item relationships to find what load items packed in a certain type of container, or the type of container used to pack a particular load item.

If one or more relationships for the selected item, container, or container type are found, the relationships display in the Container-Item Relationships window.

The Preferred Flag box in the Container-Item Relationships window indicates the preferred relationship that is used when auto-packing LPNs. See: *Auto-packing delivery Lines into Containers, Oracle Shipping Execution User's Guide*.

To find container-item relationships:

1. Navigate to the Container-Item Relationships window.
2. Click the Find icon to display the Find Customer-Item Relationships window.
3. Enter only the criteria required for your search:
 - Container Item: Enter the name of the container item to find container-load relationships for that container
 - Load Item: Enter the name of the load item to find container-load relationships for that load item
 - Container Type: Enter the name of the container type to find all relationships for that container type and the related load items
4. Click Find to display the relationships in the Container-Item Relationships window.
5. Optionally, click New to create a new container-load relationship.

Using LPNs/Containers in Shipping Execution

There are a number of ways that you can pack items into License Plate Numbers (LPNs)/containers. Auto-Pack enables you to automatically pack items into specific types of containers. Auto-Pack Master enables you to automatically pack items into a specific LPN/container type and automatically pack the LPN/container into another type of LPN/container. You can manually pack items into previously created containers.

You can also pack items into previously created LPNs/containers using the Packing Workbench, that allows for packing equal quantities of lines into multiple containers and also for packing full quantities of lines into one LPN/container at a time.

Aside from the actual packing of line items into LPNs/containers, you can also:

- Create multiple LPNs/containers using a specified prefix, numeric string, and a suffix
- Assign serial numbers to LPNs/containers
- Define the order that you want to place items into LPNs/containers

Oracle Warehouse Management (WMS) handles other LPN/container functionality not available in Shipping Execution, including:

- Transactable Containers out of Inventory: Treat LPNs/containers as a subinventory/storage location within your warehouse
- Receiving Full Containers: Receive LPNs/containers from a shipment and automatically receive all items within the LPNs/containers into inventory
- Dimensions: Specify height, width, and length of LPNs/containers and items

LPN/Container Setup Steps

Before you can begin packing lines into LPNs/containers, you need to perform the following setup steps, in the following sequence:

1. Weights and volumes for the items that will be involved in the packing process. See: *Oracle Inventory User's Guide*.
2. Container types See: *Oracle Inventory User's Guide*
3. Vehicle types See: *Oracle Inventory User's Guide*
4. Container-load relationships
5. Shipping parameters
6. Optionally define default Master and Detail containers for customer items
7. Optionally, define LPN name defaults.

Defining LPN Name Defaults

You define LPN name defaults in Oracle Inventory organization parameters. See *Oracle Inventory User's Guide* for more information.

To define LPN name defaults:

1. Navigate to the Oracle Inventory Organization Parameters window, Revision, Lot, Serial and LPN tab.
2. Within the LPN Generating Option region, enter the following:
 - Total Length: Enter the total length of your defaulting LPNs.
 - Prefix: The prefix entered here will be the default prefix for your LPNs.
 - Starting LPN Number: Enter the number that you want your LPNs to start with.

The numbering starts from the base number and increments by 1. For example, if you enter 100 as the base number for the first instance of a container, the second is numbered 101, the third 102, and so on. The Base Number is defaulted if you specify it in the Starting LPN Number field within the Organization Parameters window/Revision, Lot, Serial and LPN tab.

- Suffix: Enter a Name Suffix for the container name.

The Name Suffix is defaulted if you specify it in the Suffix field within the Organization Parameters window/Revision, Lot, Serial and LPN tab.

- UCC-128 Suffix (Modulo-10): Select the UCC-128 Suffix option if you want to enable the Uniform Code Council, 128 ASCII character set suffix functionality.

If you select the UCC-128 Suffix option (checked is Yes, unchecked is No), then you will not be able to specify the Name Suffix. The default suffix for UCC-128 is "No." The UCC-238 Suffix is defaulted if you enable it by selecting the UCC-128 Suffix (Modulo-10) check box within the Organization Parameters window/Revision, Lot, Serial and LPN tab.

- Enter the Pad to Width.

The default Pad to Width is the total number of digits in the base number. For example, the default Pad to Width for the container name VIS100BOX is 3.

Setup Container-Load Relationships for Containers and Items

You set up Container-Load Relationships if you intend to use auto-pack functionality. The relationship determines the product items that can be automatically packed into specified containers, and in what quantity.

To setup container-load relationships for containers and items:

1. Navigate to the Container-Item Relationships window.

Note: The purpose of setting the container-load relationship is to establish a link between item and container type, or container and container. This allows the Auto-Pack and Auto-Pack Master functionality to perform automatic packing.

Container Item Relationships

Container-Item Relationships (M1)

Container		Load		Maximum	Preferred
Item	Type	Item	UOM	Quantity	Flag
LD3 DOM	Airline Containe		...		<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

Item Description

Container LD3 Domestic Airline Container

Load

2. Select the Container Item.
3. Select the Load Item.
4. Define the Maximum Quantity of the of the Load Item that should be placed in the Container Item.

Note: You can specify container-item relationships or container-container relationships.

Continue creating container-load relationships for all containers and items you plan to use. Container-load relationships are used for packing whenever the Percent Fill Basis Shipping Parameter is set to Quantity and also when you use the Auto-Pack and Auto-Pack Master features to pack items into containers.

5. Select the Preferred Flag toggle to use the container-load relationship as the preferred relationship between items and containers (and containers and

containers).

You could potentially have multiple load-relationships between items and different containers. When you select the Preferred Flag toggle for a container-load relationship, Auto-Pack and Auto-Pack Master will use the Preferred relationship when packing that item. For example, if you have two container-load relationships for Item A—one with Container A, which is the preferred LPN/container, and one with Container B—the maximum load defined in the relationship with Container A will be used when you select Auto-Pack or Auto-Pack Master for packing Item A. You must set the Preferred Flag for one of the Container-Load Relationships you have for an item in order to use Auto-Pack or Auto-Pack Master for that item. If you do not set the Preferred Flag for one of the relationships for an item, you will receive an error message.

6. Save your work.

To define LPN/container related shipping parameters:

1. Navigate to the Shipping Parameters window.

Shipping Parameters

Shipping Parameters (M1)

General | Pick Release | Shipping Transaction | Delivery | Transportation

Weight UOM Class: Weight

Volume UOM Class: Volume

Percent Fill Basis: Quantity

Export Compliance Screening (Requires ITM Partner Integration): Not Required

Enable Workflows: None

Raise Business Events: ☐

Enable Ship to Deliver Workflow: ☐

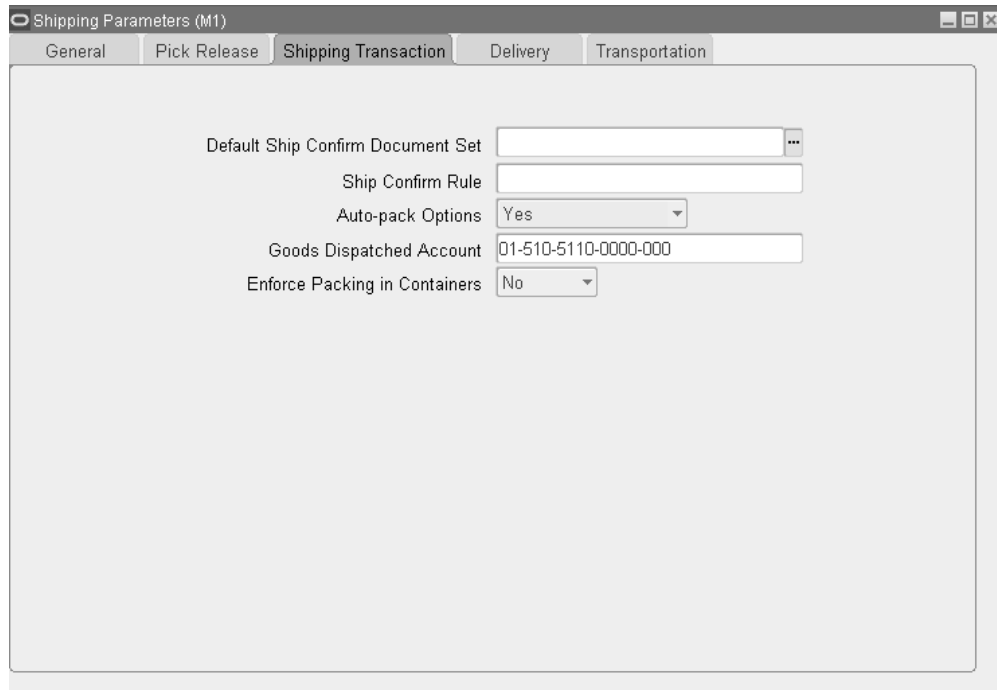
[]

2. Select the Percent Fill Basis. Select from Quantity, Weight, or Volume.

This is used to determine whether or not containers have met their minimum fill percentage and also used to determine how autopack should work based on quantity, weight, or volume.

For example, if you define a container-load relationship in which CONTAINER A can hold quantity 5 of ITEM A, you select Quantity in this field, and you define the minimum fill percentage for CONTAINER A to be 75 percent, you must have at least quantity 4 of ITEM A in CONTAINER A to meet your minimum fill percentage. If you select Weight or Volume, the Percent Fill is calculated based on the weight or volume (physical attributes) you have defined for your items.

Shipping Parameters: Shipping Transaction



Shipping Parameters (M1)

General Pick Release **Shipping Transaction** Delivery Transportation

Default Ship Confirm Document Set

Ship Confirm Rule

Auto-pack Options Yes

Goods Dispatched Account 01-510-5110-0000-000

Enforce Packing in Containers No

3. From the Shipping Transaction tab, set the Enforce Packing in Containers display list to Yes if you want Shipping Execution to display an error message during Ship Confirm when you try to ship a delivery that contains unpacked delivery lines.

Note: You must define shipping parameters for each warehouse.

4. Save your work.

See: *Oracle Shipping Execution User's Guide*

Oracle Inventory User's Guide

Defining Shipping Parameters, page 6-32

Creating LPNs/Containers

You can automatically or manually create containers. Containers are created automatically when using the Auto-Pack and Auto-Pack Master functionality by using a defined Container-Load Relationship between a type of LPN/container and an item. Shipping Execution uses the container type, the item, and the defined maximum quantity of the item that will fit in the LPN/container and then automatically creates the required number of containers with automatically generated names. Grouping attributes are also taken into consideration when packing. See: Defining Delivery

Parameters, page 6-40.

However, to manually pack items into LPNs/containers using the Pack and Packing Workbench functionality, you must manually create LPNs/containers.

To manually create LPNs:

1. Navigate to the Shipping Transactions form and find your Lines.
2. Select the action Create LPNs.

Create LPNs Window

Organization M1 Seattle Manufacturing

Container Item Pallet

Item Description Standard Pallet for Shipping

Count 1

Name Generation

Name Prefix

Base Number

Pad to Width

☐ UCC-128 Suffix

Name Suffix

OK Cancel

3. Enter your Organization.
4. From the list of values, select the Container Item.
The Container Item is the container itself. Container items are created in Oracle Inventory.
5. Enter a Count for the number of container instances you want to create.
6. Within the Name Generation region, enter your Name Prefix.
The Prefix is defaulted if you specify it in the Prefix field within the Organization Parameters window/Revision, Lot, Serial and LPN tab.

7. Enter a Base Number.

The numbering starts from the base number and increments by 1. For example, if you enter 100 as the base number for the first instance of a container, the second is numbered 101, the third 102, and so on. The Base Number is defaulted if you specify it in the Starting LPN Number field within the Organization Parameters window/Revision, Lot, Serial and LPN tab.

8. Enter the Pad to Width.

The default Pad to Width is the total number of digits in the base number. For example, the default Pad to Width for the container name VIS100BOX is 3.

9. Select the UCC-128 Suffix option if you want to enable the Uniform Code Council, 128 ASCII character set suffix functionality.

If you select the UCC-128 Suffix option (selected is Yes, deselected is No), then you will not be able to specify the Name Suffix. The default suffix for UCC-128 is "No." The UCC-238 Suffix is defaulted if you enable it by selecting the UCC-128 Suffix (Modulo-10) check box within the Organization Parameters window/Revision, Lot, Serial and LPN tab.

10. Enter a Name Suffix for the container name.

The Name Suffix is defaulted if you specify it in the Suffix field within the Organization Parameters window/Revision, Lot, Serial and LPN tab.

11. Click OK to create the container instances.

12. Save your work.

Once created, you can select the containers from a list of values that displays when you choose the Pack option in the Shipping Transactions form. You can also query up existing (created) containers using the Query Manager (via the LPNs or Lines and LPNs options).

Define Default Containers for Customer Items

This section does not apply to standard items. Use the information in this section if you are using customer items.

To define default containers for customer items:

1. Navigate to the Customer Items Summary window.

Customer Items Summary

Customer Items Summary (V1)

Commodity Container Model, Departure Planning Demand Tolerances, Active

Customer Name	Customer Item	Address Category	Address	Customer	Level	Master	Detail	Mir
Computer Service and R	CD-CUST-ITEM1					Box01		

Address Category:

Address:

Customer Item Desc:

Set Defaults... Cross Reference Automotive New Open

2. Query your customer item and define default Master and Detail containers in the Containers tab.

These containers will default in the Master and Detail fields in the Shipping Transactions form when you query the item associated with your customer item. When you Auto-Pack, these containers will be used to pack the items. If a container-load relationship is defined for the item and the detail LPN/container (and for the detail and master containers) and the Percent Fill Basis is set to Quantity, Shipping Execution will use the Container-Load Relationship to determine the required number of containers. If no relationship is defined, the weight and volume of the items and the maximum load weight or volume for the LPN/container will determine how the items are packed into containers (and containers into containers.)

3. Save your work.

Packing Items into LPNs/Containers

You can pack items into LPNs/containers in the following ways:

- You can manually pack items into an existing LPN/container (Pack option)
- You can automatically pack an item into a LPN/container (Auto-Pack)

- You can automatically pack an item into a LPN/container using Pick/Pack/Ship
- You can automatically pack an item into a LPN/container, and pack that LPN/container into another (parent/Master) LPN/container (Auto-Pack Master)
- You can automatically pack equal quantities of multiple items into multiple LPNs/containers (Equal Packing in the Packing Workbench)
- You can automatically pack line items into a LPN/container until you fill the LPN/container or use all of the items, and then continue packing the next line into the next LPN/container (Full Packing in the Packing Workbench)
- Concurrently using the Auto Pack concurrent process.

Manual Packing

Manual packing involves packing items into LPNs/containers that have already been created using the Create LPN action in the Lines and LPNs tab in the Shipping Transactions form. Manual packing can be accomplished by selecting the line (in the Lines and LPNs tab in the Shipping Transactions form) that you want to pack into the LPN/container and selecting the Pack option from the Actions list, which displays a list of values containing previously created LPNs/containers.

Manual packing does not use a container-load relationship when packing, but the weight, volume, and percent fill (based on the setting for the Percent Fill Basis Shipping parameter) are calculated to determine whether or not the items will fit into the LPN/container. A warning message will display if the total weight and volume of the items is greater than the available capacity of the LPN/container. A warning will also display if the minimum fill percentage is not attained.

You might want to use this method of packing if you have several items (maybe pencils, paper clips, and pads of paper) that are heading to the same customer and the customer does not care about what type of LPN/container is used. So, you could query up your delivery lines in the Shipping Transactions form (using the Query Manager), multi-select your lines, choose Pack from the Actions list, and then select the LPN/container you have created from the resulting list of values.

Auto-Packing Standard Items

Auto-Pack is an option on the Actions list in the Lines and LPNs tab in the Shipping Transactions form that will automatically calculate and create the number of LPNs/containers required to pack all of the items and then pack all of the items into the created LPNs/containers.

Auto-Pack Master behaves identically to Auto-Pack except that it goes one step further and packs the created detail LPNs/containers into one or more parent (master) LPN/container. If you have multiple container-load relationships set up for the same item (with different LPNs/containers), Auto-Pack will look at the Preferred toggle on

the Container-Item Relationships window to determine which relationship to use. You must define one of the container-load relationships for your items as the preferred relationship. If you do not toggle on the Preferred Flag for one of your container-load relationships, then you will receive an error when you try to use Auto-Pack or Auto-Pack Master for that item.

For any other type of item you are Auto-Packing, you must have a container-load relationship set up. If you try to Auto-Pack items into a LPN/container and no container-load relationship is established, then you will receive an error message. Auto-Pack will use the container-load relationship to determine the type of LPN/container needed to pack the item. The setting of the Percent Fill Basis Shipping parameter is used to determine how many containers are going to be needed to pack all of the items. If the Percent Fill Basis Shipping parameter is set to Quantity, then the Maximum Quantity defined for the container-load relationship (being used to determine the type of LPN/container) will be used to calculate the necessary number of LPNs/containers. If the Percent Fill Basis is set to Weight or Volume, then the physical attributes (weight or volume) that are defined for the item and LPN/container are used to calculate the total number of required LPNs/containers. Once the type of LPN/container is determined and the required number of LPNs/containers are calculated, Auto-Pack/Auto-Pack Master creates those LPNs/containers and systematically packs the items into the LPNs/containers. For example, let's say you had a Container-Load Relationship set up so that 6 of Item A fit into Container A and Percent Fill Basis was set to Quantity. If you have a delivery line with a quantity of 12 of Item A and you run Auto-Pack, Shipping Execution will create two LPNs/containers, split the line into two lines with a requested quantity of 6, and pack the first split line into the first container and pack the second split line into the second LPN/container.

Auto-Pack Master packs not only an item into a LPN/container (detail container in this scenario), but it will also pack the detail container into a master container. For example, you have a delivery line with a quantity of 12 of Item A and a container-load relationship set up so that 6 of Item A will fit into Container A and 2 of Container A will fit into Container B (and Percent Fill Basis is set to Quantity). If you run Auto-Pack Master, the line will be split into 2 lines of 6, the first line will be packed into the first LPN/container, the second line will be packed into the second LPN/container, and the two Detail Containers (2 Container As) will be packed into Container B.

Auto-Packing Customer Items

There are two different ways to specify the type of LPN/container to be used when using Auto-Pack or Auto-Pack Master: specify a Master and/or Detail LPN/container for a customer item, or set up a Container-Load Relationship between the item(s) and LPN(s)/container(s).

If you are Auto-Packing a customer item with a pre-defined Master and/or Detail association (set up in the Customer Item Summary window), then Auto-Pack will use those container types to create the LPNs/containers required and pack the customer item. To determine how many LPNs/containers are needed, Auto-Pack will use the Percent Fill Basis Shipping Parameter. If Percent Fill Basis is set to Quantity, Auto-Pack

will look for Container-Load Relationships set up for the item and the Detail Container, as well as for the Detail Container and the Master Container. If these Container-Load Relationships are not set up, then Auto-Pack will use the weights and volumes for the item and the available capacities defined for the LPNs/containers.

For example, your customer preferred that you pack the monitors that you make into a cardboard box (one in each box) and that you pack twelve cardboard boxes (containing the monitors) on a pallet for shipment. You can assign the specific cardboard box (type of container) as the detail LPN/container for the customer item and the pallet as the Master Container for the customer item in the Customer Item Summary window. When the order is booked and the line is pulled into (imported into) Shipping Execution and viewed in the Lines and LPNs tab in the Shipping Transactions form, the cardboard box and the pallet container types will default into the Master and Detail fields for the line. When you run Auto-Pack for this line and Percent Fill Basis set to Quantity, Auto-Pack uses the Container-Load Relationship set up for the item and the LPN/container. If no Container-Load Relationship is set up, Auto-Pack uses the weight and volume and LPN/container capacity for the item and LPN/container to calculate the required number of LPNs/containers. Once the number of LPNs/containers is calculated, the LPNs/containers are created and the items are packed into the LPNs/containers. Then, the total number of Master LPNs/containers are calculated based on the number of Detail containers created, and the appropriate number of Detail LPNs/containers are systematically placed into the appropriate Master LPN/container. So, if you set up a Container-Load Relationship where a maximum of 1 monitor fit in 1 cardboard box and 12 cardboard boxes fit on one pallet and your customer ordered 24 monitors, the 24 monitors would be placed in 24 cardboard boxes (1 in each box) and then 12 cardboard boxes would be placed on each of the 2 pallets that were created.

Packing Workbench

The Packing Workbench allows for two different methods of packing:

1. Equal Packing
2. Full Packing

Equal Packing involves packing equal amounts of items from one or many lines into one or many LPNs/containers. Full Packing involves packing the entire quantity of one delivery line into one or many LPNs/containers, and then packing the entire quantity of the next delivery line into one or many LPNs/containers. If the entire quantity of the first line does not fill a LPN/container, items from the next delivery line will be added to the LPN/container with available space until it is filled.

To use the Packing Workbench, you must select the delivery lines and the LPNs/containers in the Lines and LPNs tab in the Shipping Transactions form that you want to pack and then select Packing Workbench from the Actions list. You must have queried up lines and previously created LPNs/containers or you must have queried up lines and then created new LPNs/containers. When selecting lines in the Shipping Transactions form to use in the Packing Workbench, you can use the Packing Calculator

(accessed by clicking on the bar on the far right hand side of the Shipping Transactions Form or by selecting Packing Calculator from the Tools menu) to determine whether or not the lines might be able to fit in the LPNs/containers that you have selected. The Available Capacity region shows how much weight and volume the LPNs/containers that you have selected can hold and the Item Total region shows the total weight and volume for all of the lines you have selected.

Once you have selected your lines and LPNs/containers and have selected Packing Workbench from the Actions list, the Packing Workbench displays containing your selected LPNs/containers on one tab and your selected lines on the other tab. The total Available Capacity for the LPNs/containers and the weights and volumes for the items are displayed on the left side of the Packing Workbench. By default, the Pack toggle is next to your lines and LPNs/containers that are selected. If you turn the Pack toggle off for a LPN/container or line, then that line or LPN/container will not be used for packing and, hence, the Available Capacity and Item Total regions will be updated accordingly.

Equal Packing

The first method of packing within the Packing Workbench is Equal Packing. Equal Packing is explained using the following example: Your customer ordered 10 computer monitors and 10 keyboards. The order consists of two lines, one for 10 monitors and one for 10 keyboards. Once the order is booked, you can query your lines in the Shipping Transactions form. If you wanted to pack one of each item into a LPN/container, you would create 10 LPNs/containers (using a container type that was large enough to hold one of each item.) You would then select your two lines and your ten LPNs/containers and pull them into the Packing Workbench. Once in the Packing Workbench, select the Equal Packing Method and choose the Pack button. The Packing Workbench will split the two lines into ten lines for each item and pack 1 monitor and 1 keyboard into each LPN/container. So you will end up with 10 LPNs/containers that have 1 monitor and 1 keyboard in each.

There is a potential drawback to using Equal Packing. When you use Equal Packing, lines are split evenly so that equal quantities will be packed into the selected LPNs/containers. Container-Load Relationships and weight and volume limitations within containers are not used when packing the items equally into LPNs/containers. In other words, the lines are split and packed into the LPNs/containers prior to performing weight and volume validations. Validations based on weight and volume do take place to determine whether or not the LPNs/containers are over-packed (weight or volume exceeds maximum weight or volume for a LPN/container), resulting in the display of Warning messages, but not until after the lines are split. Once the lines are split, you cannot return the lines to their original status (if one line for quantity of 6 was split into two lines for quantity of 3, you cannot return the two lines into one line for quantity of 6). So, if you split the lines and find out that you really want to pack them differently, you will have to pack the resulting split lines rather than the initial pre-split lines.

Full Packing

Full Packing involves taking items in a delivery line and packing them completely into one LPN/container, then taking the next line and packing its entire quantity. If the items in the first delivery line do not completely fill the first LPN/container, the items in the

second delivery line will be added to the first LPN/container until it is filled. If all of the items in the second delivery line were not used to fill the first LPN/container, then the remaining items are packed into the second LPN/container.

For example, you have two delivery lines, one consisting of 10 of Item A and one consisting of 10 of Item B, and you wanted to pack them into three LPNs/containers. If the Percent Fill Basis Shipping Parameter was set to Quantity, the Packing Workbench would use the Container-Load Relationship set up to determine the maximum number of items that could fit in the first LPN/container. If Percent Fill Basis was set to Weight or Volume, the Packing Workbench would use the weight and volume defined for the item and the maximum load weight or volume defined for the LPN/container to calculate the total number of items that could fit in the first LPN/container. Let's say Percent Fill Basis is set to Quantity and a Container-Load Relationship is established that says that 5 of Item A will fit in the first LPN/container. Five of Item A will be placed in the first LPN/container, then the Packing Workbench calculates the total number of Item As that will fit into the second LPN/container. If a Container-Load Relationship is set up so that 10 of Item A will fit in the second LPN/container, the Packing Workbench will place the remaining 5 of Item A in the second LPN/container. The Packing Workbench then calculates that the LPN/container is only fifty percent filled, so the Packing Workbench will look at a Container-Load Relationship set up for Item B and the second LPN/container. If the Container-Load Relationship for Item B and the second LPN/container was defined so that 4 of Item B will fit, the Packing Workbench takes fifty percent of the total defined Container-Load Relationship (2 of Item B) and packs that quantity into the second LPN/container. This leaves us with 8 of Item B. The Packing Workbench then looks at the Container-Load Relationship between Item B and the third LPN/container. If 10 of Item B fits into the third LPN/container, the Packing Workbench will pack the remaining 8 in the third LPN/container.

Additional LPN/Container Functionality

Assigning Serial Numbers to LPNs/Containers

You can assign serial numbers to your LPNs/containers. When you create your LPNs/containers in the Master Items window, you can define your LPNs/containers as requiring serial numbers by navigating to the Inventory tab and choosing At Sales Order Issue in the Generation field in the Serial region. Once you create your LPNs/containers in the Shipping Transactions form, you can assign serial numbers to your LPNs/containers. Since LPNs/containers are not transacted items (LPNs/containers are not stored in inventory), you are not required to enter a serial number even though the LPN/container is serialized.

If you assign a LPN/container (Detail Container) to another LPN/container (Master Container), the serial number of the Master Container will automatically default into the Master Serial Number field for the Detail Container. If you change the serial number for the Master Container, which will automatically change the Master Serial Number for the Master Container, Shipping Execution will automatically update the Master Serial

Numbers for all Detail Containers assigned to that Master Container.

Generating a Loading Sequence for Deliveries/Containers

You must have imported order lines with a defined Production Sequence Number or you must have entered a Customer Production Sequence Number in Others tab in the Lines region of the Sales Orders window. Generating a loading sequence is optional. You would only generate a loading sequence when you wanted to place items in a LPN/container or on a delivery in a certain order. For example, if an automotive manufacturer's assembly line needed specific items in a certain order, they might want to have items shipped to them placed in a certain order in the LPN/container or delivery so that they could remove the items in the most efficient order for their assembly line. The loading sequence is printed on the Vehicle Load Sheet Detail report.

To generate a loading sequence for deliveries/containers:

1. Navigate to the Shipping Transactions form.
2. Select the Delivery tab (a delivery must exist).
3. Click Details.
4. In the Lines Loading field, select a loading pattern.

You can select from Forward (1, 2, 3, 4), Reverse (4, 3, 2, 1), Forward Inverted (2, 1, 4, 3), and Reverse Inverted (3, 4, 1, 2).

Loading sequence determines the order in which the delivery lines are placed in the LPN/container or the delivery, depending on whether or not you have defined a Detail Container for the delivery line. If you have specified a Detail Container, the loading sequence determines the order in which the delivery line is placed into the LPN/container. If you have specified a Master Container or if you have not specified any LPN/container for the delivery line, the loading sequence will determine the order in which the delivery line will be placed in the vehicle.

5. Select the action Generate Loading Seq.

If you have ITEM A with a Production Sequence Number of 1 and ITEM B with a Production Sequence Number of 2 and you select Reverse as your Lines Loading order, ITEM B would have a Loading Order Number of 1 and ITEM A would have a Loading Order Number of 2 (ITEM B would be loaded first and ITEM A would be loaded second).

If a Customer Production Sequence Number is not assigned to the delivery line, you can enter a Loading Sequence to determine the order in which the delivery line will be loaded into the LPN/container or delivery.

International Trade Management Partner Integration

You use the International Trade Management (ITM) application if you conduct business across international borders and need to ensure that your cross-border trade complies with the export and import rules, regulations, and duties of all countries involved in the transaction (trade compliance).

To provide export compliance and resolve regulatory screening issues, Oracle Applications enables you to use International Trade Management Adapter to communicate with ITM applications that are skilled in the laws of import/export and in acquiring and maintaining this information. With the ITM integration, there is global trade functionality in the standard business transactions. For example, if a partner application detects a customer who is a denied party, the Oracle Order Management application places their sales order on hold.

Oracle Order Management provides a workflow subprocess called Export Compliance Screening - Line that you can insert into your workflows to execute the ITM functions. This workflow subprocess is part of the seeded Line Flow - Generic, With Export Compliance workflow process.

ITM Partner Integration Enhancements Oracle Order Management introduces Generic Export Compliance Request via XML for all the export related compliance checks. These include Restricted Party Screening, Embargo Country Screening, License Determination, Document Generation as well as other partner supported screening such as EPCI.

The partner ITM application evaluates the transaction for export compliance and responds to Oracle Applications with the overall compliance pass or fail status for each of the order lines. The audit trail of the compliance checks is maintained in the partner ITM application.

Setting Up Constraints

There is a constraint that does not allow user-splits if the line is interfaced to the ITM adapter (Export Compliance Screening activity notified) and is waiting for response. This constraint is seeded by default and cannot be removed in order to prevent the second line split from hanging in Workflow.

Additional constraints at the line level do not allow changes to ship-from, ship-to and all other parties such as Sold to, Bill to, or Deliver to. These constraints are non-system constraints that can be disabled.

Setting Up Workflows

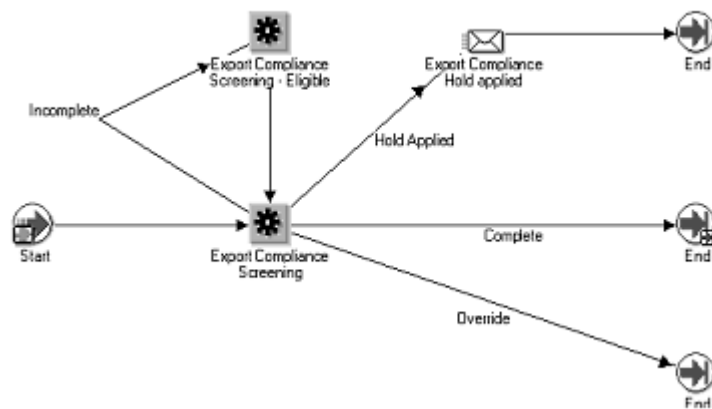
If you plan to use the Generic Export Screening feature, then complete one of the following:

To set up workflows:

1. For the Order Types and Line Types that you want to perform export screening, assign the line level export screening workflow process Line Flow-Generic, With Export Compliance.
2. Enable the Export Compliance Screening – Line sub-process into existing line level workflows.

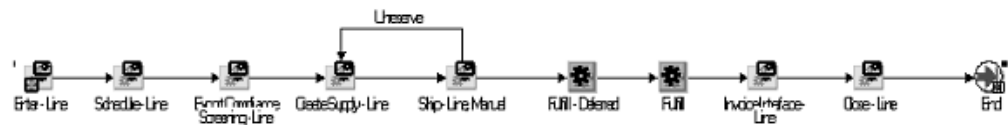
See: *Oracle Shipping Execution Implementation Manual* for information on setting up the ITM Adapter.

Export Compliance Screening Line



Export Compliance Screening—Line subprocess can be used in the line level workflow process to perform Export Screening. The subprocess should be placed after scheduling so that the Ship from Organization (warehouse) is already determined. You can plug-in the subprocess based on your business needs.

Line Flow: Generic, With Export Compliance



Line Flow-Generic, With Export Compliance" is a seeded line flow with the "Export Compliance Screening - Line" activity placed after Scheduling. You can plug in the Export Compliance Screening —Line subprocess into existing line workflows.

Services

- **Denied Party Screening:** The process of validating if the transaction party names and addresses to parties that are denied import/export privileges. For example, those guilty of trade violations. Denied Party Screening service in Oracle Application enables you to communicate key sales order attributes to the partner ITM application. The partner ITM application performs the screening and responds back to the ITM adapter with the results synchronously.
- **Item Synchronization:** The Oracle ITM Adapter provides the party synchronization service for facilitating the item definition in partner ITM applications by utilizing item synchronization request XML. The Item Synchronization request XML contains all of the necessary data elements required to classify items. The partner ITM application provides country specific rules and regulations to help you assign the right classification (for example, HS code, ECCN for exports from US) for your items.
- **Party Synchronization:** The Oracle ITM Adapter supports an XML service request to communicate the international trade entities to the partner ITM application. The Party Synchronization XML Request contains all of the necessary data elements required for performing export screenings like Restricted Party Screening, Embargo Country Screening, and other country specific export screenings.
- **Order Export Compliance:** The ITM adapter supports one combined request, Order Compliance Request XML, for all the export related compliance checks for a sales order. These might include Restricted Party Screening, Embargo Country Screening, License Determination, Document Generation, and other partner supported screening like EPCI. The combined request XML contains all of the necessary data elements required for these screenings. The partner ITM application evaluates the sales order line for export compliance and responds to Oracle Applications with the overall compliance pass or fail status for each order line, asynchronously.
- **Delivery Export Compliance:** Oracle Shipping Execution features export compliance screening for deliveries. The ITM Adapter's Delivery Compliance Request XML is utilized to communicate key delivery attributes to the ITM application. The ITM application responds with overall compliance Pass or Fail result in the Export Compliance Response XML asynchronously.

Concurrent Processing

The concurrent processes submit transactions to the Oracle ITM Adapter. The Oracle ITM Adapter then communicates the transactions to the partner ITM application.

- **Item Synchronization concurrent process:** The Oracle ITM Adapter communicates key item information to the partner ITM application for export classification using the Item Synchronization Request XML. The parameters for Item Synchronization

include the following:

- Organization From: Select the organization range.
- Organization To: Select the organization range. (Defaults to Organization From).
- Item From: Select the item range. (This parameter is entered in an automatic pop up box after the Organization To field is populated).
- Item To: Select the item range. (This parameter is entered in an automatic pop up box after the Organization To field is populated).
- User Item Type: Select the item type.
- Created in Last N Days: Enter a number of days.
- Updated in Last N Days: Enter a number of days.
- Party Synchronization concurrent process: The Oracle ITM Adapter communicates key party definition information to the partner ITM application for export screening using the Party Synchronization Request XML. The parameters for Party Synchronization include the following:
 - Party Type: Select the party type.
 - Party From: Enter a party range. (This field is available after you have determined the party type).
 - Party To: Enter a party range. (This field is available after you have determined the party type).
 - Business Purpose: Select a business purpose.
 - Created in Last N Days: Enter a number of days.
 - Updated in Last N Days: Enter a number of days.
- Submit Deliveries for Screening concurrent process: This process selects all of the deliveries with the exception Require Export Screening and populates the Oracle ITM Adapter interface tables to send the deliveries to the partner ITM application. It logs the exception Submitted for Export Screening for the delivery along with handling Require Export Screening exception. The parameters for Submit Deliveries for Screening include the following:
 - Organization: Select the organization.
 - Delivery From: Enter a delivery range. (This field is available after you have

determined the organization).

- Delivery To: Enter a delivery range. (This field is available after you have determined the organization).
- Carrier: Select a carrier.
- Pickup Date (From): Enter a pickup date range.
- Pickup Date (To): Enter a pickup date range.
- Resubmit Errored Requests: This process re-submits those export screening requests that errored during submission. The parameters for Resubmit Errored Requests include the following:
 - Application: Select the Oracle application.
 - Resubmit Type: Select the resubmit type. (This field is available after you have selected the application).
 - Reference Number: Select the reference number of the program that you want to resubmit. (This field is available after you have selected the application).
 - Error Type: Select an error type.
 - Error Code: Select an error code.
 - Vendor: Select an ITM partner.
 - Reference Line Number: Enter a reference line number (if applicable).
 - Party Type: Enter a party type (if applicable).
 - Party Name: Enter a party name (if applicable).
- Skip Screening: This process is run to cancel existing screening requests. The parameters for Skip Screening include the following:
 - Application: Select the Oracle application.
 - Override Type: Select the override type. (This field is available after you have selected the application).
 - Reference Number: Select the reference number of the program that you want to resubmit. (This field is available after you have selected the application).
 - Reference Line Number: Enter a reference line number (if applicable).

- Error Type: Select an error type.
- Error Code: Select an error code.
- Vendor: Select an ITM partner.
- Party Type: Enter a party type (if applicable).
- Party Name: Enter a party name (if applicable).

Note: You can customize the criteria for Denied Party Screening, Item Synchronization, Party Synchronization, and Delivery Export Compliance using the PL/SQL package WSH_ITM_QUERY_CUSTOM and WSH_ITM_CUSTOMIZE. These packages enable you to filter what is being sent to your ITM partner application. For example, you may have a specific item type that does not need to be sent to the ITM partner application. You customize the criteria in the WSH_ITM_CUSTOMIZE package that will be executed as part of the standard Item Synchronization process.

Processing

Oracle's ITM adapter provides a common infrastructure between Oracle e-Business Suite Applications and International Trade Management partner applications.

To use the ITM adapter, populate the adapter interface tables through an API that submits a service request to the adapter. The adapter generates XML transactions for submission to a partner at the appropriate time in your business process.

The adapter can also use your custom processing logic after it performs its usual transaction processing. You can group requests by assigning them to the same request set; the Adapter performs your custom process after it processes all transactions in each request set.

The partner:

- Validates the XML transactions
- Performs the services
- For each transaction, sends a success/fail status and a response to each XML transaction to Oracle Applications.

The adapter receives the statuses and responses and places them in the response interface tables.

The response processor API interprets the messages and takes actions. It sets the request

status based on the highest level message that it finds. The hierarchy of message levels, from highest to lowest, is SYSTEM, DATA, ON_HOLD, and SUCCESS. The error type is always ITM Adapter.

After analyzing the error responses in a report, you can:

- Run a concurrent process (Skip Screening) to skip adapter screening for certain requests and maintain the workflow activity. Then, you correct the errors and submit the request again.
- Run a concurrent process (Resubmit Errored Requests) to resubmit requests to the ITM Adapter.

Setup Process

Prior to performing international trade management setup, decide:

- Whether you will need lookup codes in addition to those seeded
- Which ITM partner you use for which services
- Which current Oracle Applications users will process international trade management information
- The master organizations in which they will work
- Whether to restrict any users to only one organization
- How Oracle Applications should respond to error conditions from the partners

To set up for international trade management functions, you must:

- Define international trade management partners
- Define international trade management users
- Specify your preferred partners for the ITM services
- Specify adapter parameters
- Specify the actions to take with the partner responses (you need response rules only if you are using Denied Party Screening Service).

ITM Lookup Codes

You define lookups, in addition to the seeded ITM lookups, that provide custom values for lists of values within the Oracle ITM Adapter setup windows. ITM lookup codes provide a way to include additional attributes on the outbound compliance request XML messages. For example, if your partner ITM application requires a certain element

on the message, you can define a value in lookup code at the appropriate level. The seeded lookups for the Oracle ITM Adapter include the following:

- WSH_ITM_COMMUNICATION_MODE: The various modes in which communication is established in ITM
- WSH_ITM_ERROR_INTERPRETATION: Lookups for LOV in Interpreted Values Field in Response Error Classification Form
- WSH_ITM_OVERRIDE_TYPES: Lookups for LOV in Override Types Parameter in Skip Screening Concurrent Program
- WSH_ITM_PROTOCOLS: Lookups for LOV in Protocol Field in Vendor Setup Form
- WSH_ITM_RESUBMIT_TYPES: Lookups for LOV in Resubmit Types Parameter in Resubmit Errored Requests Concurrent Program
- WSH_ITM_SERVICE_COMMUNICATION: Service type along with acknowledgement and response
- WSH_ITM_SERVICE_COMM_MODE: Communication Mode for ITM Partners
- WSH_ITM_SERVICE_TYPE: Lookups for LOV in Service Type Field in Vendor Setup Form
- WSH_ITM_SITE_USE_CODE: Not used
- WSH_ITM_SYNC_PARTY_TYPE: ITM Synchronization Party Types

To add additional ITM lookups:

1. Navigate to the Oracle Shipping Lookups window.
2. Enter a lookup Type and Meaning.
3. Use the list of values to select the Application Oracle Shipping.
4. Optionally, enter a Description.
5. Enter a unique Code for your lookup.
6. Enter a Meaning and Description for your lookup code.
7. Optionally, enter a Tag number.
8. The From Effective Date will default to the current date.
You can modify this field to another future date if needed.

9. Optionally, enter a To Effective Date that will disable your lookup.
10. Verify that the Enabled check box is selected.
11. Save your work.

International Trade Management Partners

Use this form to master information about international trade management partners. You enter three types of information about a partner:

- Master information
- Services offered and parameter information about the services
- Parameters about the partner

To set up international trade management partners

1. Navigate to the ITM Partners window.

ITM Partners Window

The screenshot shows the 'ITM Partners' window. At the top, there are four input fields: 'ITM Partner' (containing 'Quaster'), 'Website', 'Contact Person', and 'Email'. Below these are two tabs: 'Services' (selected) and 'Partner Parameters'. The 'Services' tab contains a table with the following data:

Service Type	URL	Port	Protocol	Acknowledgement	Response
Item Synchroniz	http://152.69.202.219:8080/a	8080	HTTP	Synchronous	None
Party Synchroniz	http://152.69.202.219:8080/a	8080	HTTP	Synchronous	None
Order Export Cor	http://152.69.202.219:8080/a	8080	HTTP	Synchronous	Asynchron
Delivery Export C	http://152.69.202.219:8080/a	8080	HTTP	Synchronous	Asynchron

At the bottom right of the 'Services' tab is a button labeled 'Service Parameters'.

2. Enter your ITM Partner.
3. In the Website field, enter the uniform resource locator of the partner's web site.
4. Enter the name of your Contact Person.
5. Enter the Email address of your contact person.
6. Save your work.
7. Within the Services tab, select a service that the partner provides in the Service Type column.
8. In URL, enter the uniform resource locator (web site address) of the site to which you post the request.
9. In Port, enter the web server listener port number of the uniform resource locator to which you post the request.
10. Select the Protocol.
11. If the protocol is HTTPS:

- In Certificate Name, enter the certificate name.
- In Certificate Store, enter the certificate storage location.
- In Certificate Password, enter the certificate password.

12. Save your work

13. For each service, click Service Parameters.

ITM Service Parameters Window

Name	Value

Done

14. Enter the Name of the service parameters.

15. Enter the Value for each service parameter.

International Trade Management partner may specify the additional service parameters that they need in the compliance request XML that you submit to them.

16. Click Done and navigate to the Partner Parameters tabbed region.

ITM Partners Window

ITM Partner	Quaster
Website	
Contact Person	
Email	

Name	Value

17. Enter the Name of the partner parameters.

18. Enter the Value for each partner parameter.

Each International Trade Management partner specifies the additional partner parameters that they need in the requests that you submit to them.

19. Save your work.


International Trade Management Users

Use this window to set up the login information for the partners. You can set up a user for an Application User ID, for a master organization, for an individual organization. A more specific setup overrides a more general setup. For example, a request from an organization with a specific setup uses that specific setup while a request from an organization without a specific setup uses the setup of the master organization to which it belongs.

To set up international trade management users:

1. Navigate to the ITM Application Users window.

ITM Application Users Window



The screenshot shows a window titled "ITM Application Users". Inside the window, there are seven input fields arranged vertically, each with a label to its left: "ITM Partner" (with a dropdown arrow), "Application", "Master Organization", "Organization", "Application User", "ITM User Name", and "Password". The fields are empty, and the window has a standard operating system title bar with minimize, maximize, and close buttons.

2. Select the ITM Partner.
3. Select the Application that sends requests to this partner (the calling application), for example, Oracle Order Management.
4. Enter the Master Organization whose organizations send requests to this partner. For Oracle Exchange, enter Operator ID.
5. Enter an Organization that sends requests to this partner. For Oracle Exchange, enter Party ID.
6. In Application User, enter an existing Oracle Applications user name that sends requests to this partner.
7. In ITM User Name, enter the user name that the partner provides for your access to the partner system. The user name can be up to 35 characters and numbers.
8. In Password, enter, twice, the password that the partner provides for your access to the partner system. The password should be at least five characters.
9. Save your work.

International Trade Management Partner Service Types

Use this window to specify your preference of partners who provide international trade management services to you.

To set up international trade management partner service types:

1. Navigate to the ITM Partner Service Types window.

ITM Partner Service Types Window

ITM Partner	Service Type	Active	Priority
		<input type="checkbox"/>	
		<input type="checkbox"/>	
		<input type="checkbox"/>	
		<input type="checkbox"/>	
		<input type="checkbox"/>	

2. Select an Application from which you make service requests.
3. Select a Master Organization from which you make service requests. For Oracle Exchange, enter Operator ID.
4. In ITM Partner, select a partner that provides a service.
5. In Service Type, select a service that the partner provides.

Enter one line of information for each service and partner that you use. If you use more than one partner for a service, enter each partner-service combination on a separate line.

6. Select Active to indicate that you can submit this type of service request to this partner.

Note: Clear Active to indicate that you do not want to submit this type of service request to this partner. You can have only one Active partner for each service at one time.

7. In Priority, indicate the processing priority of this service type with this partner in relation to other partners and services. Select a number from one (highest priority) through five.

For example, you specify that ITM partner A's denied party transactions are priority 1 in the Operations organization and priority 2 in the Geneva Manufacturing organization. The ITM Adapter processes ITM partner A's denied party transactions from the Operations organization before those from the Geneva Manufacturing

organization.

International Trade Management Adapter Parameters

Use this window to set up adapter parameters. After you set up or change parameters, stop and start the Adapter (ShutDown ITM Adapter concurrent process and StartUp ITM Adapter concurrent process).

To set up international trade management adapter parameters

1. Navigate to the ITM Parameter Setup window.

ITM Parameter Setup Window

Name	System Defined	Override Allowed	User Defined
ITM Root Directory		<input checked="" type="checkbox"/>	/sqlcom/log
Output Directory	output	<input checked="" type="checkbox"/>	scm12st1
Save XML Response	OFF	<input checked="" type="checkbox"/>	OFF
Save XML Request	OFF	<input checked="" type="checkbox"/>	OFF
Log File Directory	log	<input checked="" type="checkbox"/>	scm12st1
Log Severity	3	<input checked="" type="checkbox"/>	3
Set Proxy	TRUE	<input checked="" type="checkbox"/>	TRUE
Proxy Host		<input checked="" type="checkbox"/>	www-proxy.us.oracle
Proxy Port		<input checked="" type="checkbox"/>	80
Polling Frequency	5000	<input checked="" type="checkbox"/>	5000

Description: The Root Directory for all the ITM related files.

2. The valid values are seeded, you cannot create new parameters. You can change the parameters whose Override Allowed checkbox is selected.
3. Highlight the parameter that you want to change.
4. In Description, read instructions for the parameter.
5. In User Defined, enter your changed information.
6. Save your work.

Adapter Parameters

The Oracle ITM Adapter functions based on parameters. The parameters include the following:

- ITM Root Directory: The root directory for all the ITM Adapter related files, for example: d:\ITM.
- Output Directory (Default = output): The directory under the ITM Application Root Directory where all the request and response XML files are stored. For example, if the parameter value is output, then all the request and response XML Files will be stored in the d:\ITM\output directory. If this directory structure does not exist then the Adapter Startup Concurrent Program errors out.
- Save XML Response (Default = OFF): This option enables all the response XML Files sent by ITM partner to be stored in the Output Directory. Please contact your ITM partner for further information on the naming convention for their XML response.
- Save XML Request (Default = OFF): This option enables all the request XML Files generated by the ITM Adapter to be stored in the Output Directory. Please contact your ITM partner for further information on the naming convention for their XML response.
- Log File Directory (Default = log): The directory under the ITM Application Root Directory where all the log files generated by ITM Adapter are stored. For example, if the parameter value is log, then all the log files will be stored in the d:\ITM\log directory. If this directory structure does not exist then the Adapter Startup concurrent program errors out.
- Log Severity (Default = 3): The log severity values are:
 - 1: Debug. If the log severity is 1, the log files generated by ITM Adapter print all types of messages; recommended for heavy debugging.
 - 2: Information
 - 3: Warning
 - 4: Error. If the log severity is 4, the log files generated by ITM Adapter print only the error messages.
- Set Proxy (Default = True): Set this value to True if proxy settings are required.
- Proxy Host: If the parameter Set Proxy is True then Proxy Host should be not null.
- Proxy Port: If the parameter Set Proxy is True then Proxy Port should be not null.
- Polling Frequency (Default = 3000): This is the time interval for polling the interface table in milliseconds. For example, if this value is 500 milliseconds, the interface tables are checked for new requests after every 500 milliseconds. Based on the frequency of requests submitted, this parameter has to be set so that the Adapter immediately picks up by the requests.

- Task Size (Default = 2): The number of requests which will be grouped and sent as one request to the ITM partner Application. Task Size of 2 is recommended for better performance.
- Maximum DB Connection (Default = 7): Based on the load, the ITM Adapter can increase the number of connections in the Connection Pool to this value. This parameter should be ideally set to (Maximum threads) +1.
- Minimum DB Connections (Default = 4): The minimum number of database connections which the ITM Adapter could get during startup. The minimum number of connections should be at least (Minimum threads) +1. Ideally this parameter can be set to say (Minimum threads) + 2.
- DB Connection Timeout (Default = 5): Maximum wait time while getting a database connection (in milliseconds).
- DB Connection Idle Time (Default = 300): Maximum time for which a database connection can be idle. If the number of connections in the connection pool is greater than Minimum DB Connection, a connection will be dropped if the idle time exceeds this parameter. The idle timeout should be large enough so that connections are not too frequently dropped. But it should not be so large as to hold on to costly connection resources. This parameter can be set to 5 minutes so that we are not holding the resource for a longer time.
- Maximum Threads (Default = 5): The maximum number of threads ITM Adapter can create.
- Minimum Threads (Default = 2): The number of worker threads that the ITM Adapter creates initially. For example, if there are 500 requests submitted each hour, you can have a minimum of three threads running so that no extra time is spent in creating new threads when a request is submitted.
- Maximum Resubmits on Error (Default = 2): If a request errors out with Error Code 100, 101, 106, 108, 109, or 110, the Adapter tries to resubmit these requests. This parameter limits the number of times these requests can be resubmitted. We recommend an initial value of 2.
- Thread Maximum Idle Time (Default = 100000): The maximum time a thread can be idle. After this interval that thread is ended.
- Queue Polling Interval (Default = 7000)
- XSL Transform URL (Default = <http://www.w3.org/1999/XSL/Transform>): W3C XSL transform URL.
- Request Stylesheet: The stylesheet used for producing the request root of the XML request document.

- Weight of Priority 1 Queue (Default = 33): Weight attached to the Priority 1 queue.
- Weight of Priority 2 Queue (Default = 27): Weight attached to the Priority 2 queue.
- Weight of Priority 3 Queue (Default = 20): Weight attached to the Priority 3 queue.
- Weight of Priority 4 Queue (Default = 13): Weight attached to the Priority 4 queue.
- Weight of Priority 5 Queue (Default = 7): Weight attached to the Priority 5 queue.

International Trade Management Response Rules

The partner ITM application evaluates the delivery for export compliance and responds to Oracle Applications with the overall compliance Pass or Fail status for the delivery. The export compliance is evaluated for delivery as a whole. If a delivery is found to be compliant by the partner application, it responds back to Oracle Application with compliant (Pass) status. The asynchronous response is received by the Oracle XML Gateway and a synchronous acknowledgement is provided to the partner application.

If a delivery is determined to be non-compliant (Fail), then the ITM adapter logs the exception Not Compliant for Export against the delivery. You need to manually cancel these deliveries depending upon your business processes. In case, the ITM application is unable to evaluate the compliance of a delivery programmatically, the ITM application notifies the compliance users for a manual compliance review. No response is communicated back to Oracle Application until a final compliance determination is made by the compliance user.

Use response rules to translate error types and error codes from the partner responses.

To set up international trade management response rules

1. Navigate to the ITM Response Errors Classification window.

ITM Error Classification Window

ITM Partner	Error Type	Error Code	Interpreted Value

2. In ITM Partner, enter a partner.
3. Enter an Error Type and Error Code.
4. In Interpreted Value, select the interpreted value for the combination of the error code and error type:
 - DATA: Data error
 - FAILURE: Compliance failed
 - SUCCESS: Compliance passed
 - SYSTEM: System error
5. Save your work.

Regions and Zones

If you have the Oracle Advanced Planning and Scheduling Suite installed, use regions and zones to group by geographical areas and save the effort of setting up point-to-point transit times.

You can perform the following:

- Group geographical areas into regions and set transit times from your warehouses to the regions. For example:

- Create a region for San Francisco Bay U.S.A. and specify that it consists of the cities San Francisco, Oakland, and Berkeley
- Set up a transit time of two days from your New York U.S.A. warehouse to the San Francisco Bay U.S.A. region
- Group regions into zones and set transit times from your warehouses to the zones to encompass a larger geographic area.

The Oracle Advanced Planning and Scheduling Suite uses this origin-destination information to plan and schedule shipment departure dates, arrival dates, and sourcing.

Region and zone terms are:

- **Region:** A geographical area, for example, a group of cities, states, provinces, or a country. Region information is hierarchical (postal codes belong to cities which belong to provinces which belong to countries), standard (defined by political and geographical boards), and is usually available through third-party vendors and standards agencies.

You can model regions at different levels of scale. A region can consist of countries, provinces/states, cities, or postal codes.

- **Sub-region:** A child of a region. For example, the sub-regions of the region Canada can be its provinces; the sub region of the region London can be its postal codes.
- **Zone:** A collection of regions, for example, a western zone. Zone information is unique to your business.
- **Regional transit times:** In-transit times specified between ship-from locations and locations, zones, and regions based on shipping methods. You can specify cost and load to track specifics of each shipping method.

When the Oracle Advanced Planning and Scheduling Suite plans shipments, it assumes that the transit time from your facility to all locations within the zone is the same. For example:

- You ship from Tokyo, Japan to customers in Manila, Philippines and Taipei, Taiwan
- You place Manila and Taipei in zone A
- You specify the regional transit time between your Tokyo facility and zone A as two days
- Oracle Applications plans shipments from Tokyo to Manila for two days and shipments from Tokyo to Taipei for two days also

The advantages of planning shipments in terms of regions and zones are:

- You enter and maintain in-transit and sourcing rules information between zones rather than between every ship-from/ship-to address combination
- With less in-transit information, Oracle Shipping Execution finds the information that you need faster
- The in-transit information automatically applies to new customers
- For shipping quotes, you can match your inter-zone shipment requirements to service provider shipping lanes

Order Processing

When calculating available-to-promise, the Oracle Advanced Planning and Scheduling Suite uses regional transit times.

When scheduling shipments using zones and regions, the Oracle Advanced Planning and Scheduling Suite:

- Consults the sales order line ship-from location, ship-to country, ship-to postal code, ship method, and customer request date.
- Determines the ship-from and ship-to zones.
- Determines the regional transit time between the zones. If you specify a shipping method, it determines that transit time. If you do not specify a shipping method in the sales order line, it determines the transit time of the default shipping method.
- Calculates the scheduled ship date from the available to promise date and the regional transit time.
- If you have specified an in-transit time and shipping method for the specific ship-to location, the Oracle Advanced Planning and Scheduling Suite uses that information instead of the regional information.

Setting Up Regions and Zones

If you ship to multiple locations that are near to each other and you want to plan shipments by regions and zones:

- Determine the regions and sub-regions that support your the Oracle Advanced Planning and Scheduling Suite shipment planning, create them, and map address locations to them
- Determine the zones that support your the Oracle Advanced Planning and Scheduling Suite shipment planning, create them, and assign regions to them

- Specify the in-transit times between zones (regional transit time) and preferred ship method between zones

Use two concurrent processes to map and load bulk geographical information. Use the forms for individual data entry and data correction.

Setting Up Region and Zone Information

Use the following procedures to set up region and zone information through forms and through concurrent processes.

To set up region and zone information:

1. Navigate to the Regions and Zones window, Regions tabbed region.

Regions and Zones Window

Country	Country Code	State/Province	State/Province Code	City	City Code	Postal Code From	Postal Code To	Default Consolidation Ship To
United States	US	...						

Sub-Regions Locations

2. Enter the following information as available.

Note: The Sub-Regions button is active only after you have saved a new region or when you are querying an existing region.

3. When you enter a region, you can specify only one new component.

For example, if you enter country China, province/state Guangdong, and city Guangzhou, you must already have entered the region country China, province/state Guangdong. Use the list of values if you are unsure about existing information for each field.

Note: After you query previously created regions, you can use the Locations button to view all locations for a selected region. With the cursor on the selected region, click the Locations button to display locations for that region.

4. Save your work.

To update regions:

1. Navigate to the Regions and Zones window, Regions tabbed region.
2. From the menu bar, select Query > Enter.
3. Enter search criteria.
4. From the menu bar, select Query > Run and view regions that match your search criteria.
5. Select one of the regions that displays and update the information.
6. Save your work. If you have changed a parent region, the region becomes assigned to a new parent.

To add and update sub-regions:

1. Navigate to the Regions and Zones window, Regions tabbed region.
2. From the menu bar, select Query > Enter.
3. Enter your search criteria.
4. From the menu bar, select Query > Run and view regions that match your search criteria.
5. Select one of the regions that displays and click Sub-regions.

Sub-Regions Window

Sub-Regions

Parent Region: United States,Georgia

Default Consolidation Ship To: ☒

State	State/Province Code	City	City Code	Postal Code From	Postal Code To	Default Consolidation Ship To
Georgia	GA	Atlanta				<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>

6. View existing sub-region information and add or change information

When you enter a sub-region, you can enter only one component and the region must exist. For example, you cannot change the region country United States and province/state California and the sub-region city San Diego in one entry. Instead:

- Enter region country United States, province/state California
- Query region country United States, province/state California and enter sub-region city San Diego

To add zones:

1. Navigate to the Regions and Zones window, Zones tabbed region.

Regions and Zones Window - Zones Tab

Regions and Zones

Regions Zones Locations

Zone: East USA Zone Level: [Fo]

Default Consolidation Ship To: ...

Zone Components

Country	Country Code	State/Province	State/Province Code	City	City Code	Postal Code From	Postal Code To

2. Enter a Zone name.
3. In the Zone Components region, enter information about the regions that you are assigning to the zone. You cannot assign a region and its parent regions to the same zone.
4. Save your work.
5. Select the Locations tab.

The Regions and Zones - Locations Tab window is a view only window used to find previously entered information for locations and the locations, regions, and zones to which they are mapped.

To query existing information, in the Locations area, use the View pull down menu and select Query by Example, and Enter. Input your query criteria and select the View pull down menu and Query by Example and Run.

You can also query for a particular location, region, and zone. Place the cursor in the lower area of the window, select the View pull down menu and Query by Example and Enter. Input your query criteria, such as, a city and select the View pull down menu and Query by Example and Run.

To update zones:

1. Navigate to the Regions and Zones window, Zones tabbed region.
2. From the menu bar, select Query > Enter
3. Enter search criteria.

4. From the menu bar, select Query > Run and view zones that match your search criteria.
5. Update the zone name and components information.
6. Save your work.

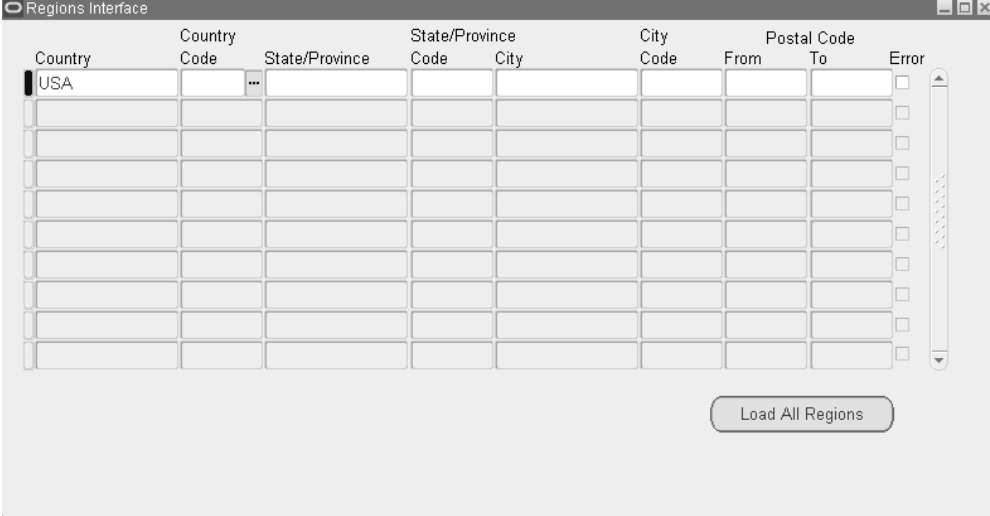
To search for regions and zones:

1. Navigate to the Regions and Zones window, and select a tabbed region.
2. From the menu bar, select Query > Enter.
3. Enter values or partial values for the elements that you want to search.
4. From the menu bar, select Query > Execute.
5. View information about the regions or zones that match the search criteria.
6. Navigate to the Regions Interface window and query the region information that you have mapped and verify it; remove any that you do not want to load.

To load regions from locations:

1. Execute the Location to Region Mapping concurrent process. After it completes, check the log to verify the number of regions loaded and that there are no errors. For additional information, see *Oracle Shipping Execution User's Guide*, Reports, Documents, and Processes chapter.
2. Navigate to the Regions Interface window.
3. Query the region information that you have mapped and verify it; remove any that you do not want to load.

Regions Interface Window

The screenshot shows a window titled "Regions Interface". Inside, there is a table with the following columns: Country, Country Code, State/Province, State/Province Code, City, City Code, Postal Code (split into From and To), and Error. The first row is pre-filled with "USA" in the Country field. Below the table is a button labeled "Load All Regions".

Country	Country Code	State/Province	State/Province Code	City	City Code	Postal Code From	Postal Code To	Error
USA								<input type="checkbox"/>
								<input type="checkbox"/>
								<input type="checkbox"/>
								<input type="checkbox"/>
								<input type="checkbox"/>
								<input type="checkbox"/>
								<input type="checkbox"/>
								<input type="checkbox"/>
								<input type="checkbox"/>
								<input type="checkbox"/>

Load All Regions

4. Execute the Region Interface concurrent process by clicking Load All Regions and clicking OK. For additional information, see *Oracle Shipping Execution User's Guide*, Reports, Documents, and Processes chapter.

Oracle Shipping Debugger

The Oracle Shipping Debugger is a package (WSH_DEBUG_SV) and set of profiles that enable you to debug the Oracle Shipping Execution application with the help of Oracle Support.

Calls are made to these APIs from various places in the code:

- Entering an API
- Exiting an API
- Calling another API
- Any other places, as required

The Oracle Shipping Debugger enables you to do the following:

- Print messages in a concurrent log file or debug log file
- Print timing information for API calls
- Run PL/SQL profiler
- Start Order Management and Inventory debuggers and print Order Management

and Inventory messages to same debug file along with Shipping Execution debug messages

- Start and stop the debugger for each session or action in the following ways:
 - Within the Shipping Transactions form or Quick Ship window, Tools menu, select Debug
 - Within the Release Sales Orders for Picking (Pick Release) window, Tools menu, select Debug
 - Log Level parameter on Oracle Shipping Execution concurrent programs

The Oracle Shipping Debugger enables you to debug certain areas of Code Flow.

Logging is enabled or disabled in two dimensions:

- Level: A scale specifying the priority of a log message
- Module: Describes which part of the code the log message is in

The level and module of any given log message are defined by the programmer who makes the logging API call to log the message.

Shipping Debugger Profile Options

There are six profile options specific to the Oracle Shipping Debugger:

1. WSH: Debug File Prefix: Naming Convention for Debug File is <Debug File Prefix Profile>_sessionid.dbg If value of profile is null, naming convention is wsh_<username>_<sessionid>.dbg Where: <username> is Application user name. If application context is not established, it will be defaulted to dbuser: <dbusername>. <sessionid> is Database session id.
2. WSH: Debug Enabled: Select from the Debug Enabled LOV either YES or NO to activate the debug feature. The default is NO.
3. WSH: Debug Module: The Module describes where to find the log message within the code. This profile indicates that debug messages from only those modules with names beginning with the profile value will be logged. The naming convention for Module is: <application short name>.<directory>.<package>.<routine>. <label> e.g. wsh.plsql.WSH_WV_UTILS.convert_uom.
4. WSH: Debug Log Directory: The value entered for this profile option must be specified as a UTL_FILE parameter value.
5. WSH: Debug Level: The level is a scale specifying the priority of a log message. The level is the lowest level for which the user wants to see messages. Select from the Debug Level LOV one of the following.

Valid Values are (in increasing order of priority):

- Performance
- Statement
- Procedure (Default)
- Event
- Exception
- Error
- Unexpected Error

To obtain the most information within the debug file, set the Debug Level to Statement.

6. WSH: Run PL/SQL Profiler: If this profile option is turned on and you are using PL/SQL, then it collects the performance statistics for the PL/SQL code.

Order Entry Tools

This chapter covers the following topics:

- Transaction Types
- Overview
- Introduction
- Functionality
- Terminology
- Defining Line (Transaction) Types
- Defining Order Transaction Types
- Assigning Workflows to Transaction Types
- Workflow Validation
- Creating a Document Sequence
- Assign a Document Sequence
- Reports
- Example
- Using Workflow in Order Management
- Overview
- Workflow
- Fulfillment with Wait
- Line Flow: Generic, Performance
- Defaulting Rules
- Key Enhancements
- Terminology
- Attributes and Entities in Order Management

- Conditions
- Sequence of Defaulting
- Sources of Values
- Dependencies
- Examples
- Controlling Changes
- Reports
- Implementation Considerations
- New Defaulting Features
- Order Management Defaulting Rules
- Cascading

Transaction Types

Overview

Definition of transaction types is required in Oracle Order Management. Transaction Types provide default information for sales documents such as orders, quotes, and sales agreements, and establish process controls with Oracle Workflow.

Introduction

In this chapter, we will discuss the setup of Order Management Transaction Types and provide detailed examples. The setup steps required to create a new transaction type are described, including creating the order transaction type, the line transaction type, assigning the document sequence and associating the appropriate workflows. A detailed example is provided at the end of the chapter.

Some of the features of Transaction Types/Workflow are:

- Each line in a sales order has its own workflow so each line may follow a different flow. This allows you to have both order and return lines on the same order.
- You can create new workflow activities from custom PL/SQL code. This makes it very easy to extend OM.
- Each quote is assigned a header flow only. Please note that line flows are not assigned for quotes.
- A workflow process can have subprocesses.

- Control of how Document numbers are generated as a document moves through the negotiation phase to the fulfillment phase.
- Retain the same document number as the quote or generate a new document number when the transition to fulfillment occurs.
- A workflow process can have an unlimited number of activities
- There is no limit to the number of custom workflow activities that can be defined in Order Management.
- You can view the status of the workflow on an order or order line in either tabular or graphical format. In graphical format you can see not only the activities that the workflow has completed but also the activities that still require completion.
- Assign and sequence approvers for notifications.

Functionality

There are transaction types associated with both order types and line types. Order numbers are now controlled by assigning a unique document sequence to your order transaction type. Creating document sequences and assigning them to order transaction types are two separate steps in Order Management, and neither can be done directly from the transaction types window. Setup is discussed later in this chapter.

Note: Sales Agreements only use automatic numbering.

Terminology

Transaction type is the generic term that refers to transaction types for sales documents in Order Management. This is not to be confused with the Receivables Transaction Type, which is a completely different object.

The **transaction type code** may have values of Order or Line and determines whether the transaction type is an order transaction type or a line transaction type. In this document, order type is used synonymously with order transaction type and line type is used synonymously with line transaction type.

A **document sequence** is a range of numbers used for an order type and is defined by a numbering method (automatic, manual or gapless). This sequence is the beginning order number.

A **document category** is a specific type of document such as a sales order or a purchase order. These are used in many Oracle applications for key entities. In Order Management when you create an order transaction type the system automatically creates a document category with the same name attached to it, then two document sequence categories are created:

one, with the same name as that of the transaction type and the other with the same name as transaction type but appended with the string '-quote'. This is used to assign the numbering sequence to the order type.

Defining Line (Transaction) Types

The Define Transaction Types window is used to define transaction types for sales documents, including both order and line types. Define your line types first. You should define line types for both order lines and return lines. Navigate to the Transaction Types window to define a line type. See Define Order Management Transaction Types, page 2-95 for more information.

Note the following when defining a line using transaction type:

- Enter a name for the line type in the Transaction Type field. This name must be unique; you cannot create an order type and a line type with the same name.
- For the Transaction Type Code, enter "line."
- Select the operating unit from the list of values.
- Enter either Order or Return for the Order Category depending on whether your new line type is for sales lines or return lines.
- Many of the other fields on this window as well as the assign line flows button are not applicable to line types so when you enter the transaction type code they will become inaccessible. The inaccessible fields include Order Workflow, Default Return Line Type, Default Order Line Type, Agreement Required, Purchase Order Required, and all the Credit Check rule fields.
- The Agreement Type field is used for validation on the order line. If you enter an agreement type here, you can only use agreements of this type on sales order lines. If the field is blank you may enter agreements of any type.
- If you want to use the line type for a defaulting source, you may enter a Price List on the Main tab and this will default your Price List on every order with this transaction type. The Enforce List Price flag will determine whether a user can apply a manual discount to the line at the time of order entry.
- On the Shipping tab the autoschedule flag is inaccessible because it only applies to order types. The inspection required flag determines whether inspection is required when return lines are received.

There are five Scheduling level choices to control the way scheduling works at the time of order entry for lines of this type: ATP Only, Allow all scheduling actions, No reservations, Inactive Demand with Reservations and Inactive Demand without Reservations. The remainder of the fields can be used for defaulting.

Two values on the Schedule Level LOV on the Shipping tab support different requirements for reservations: Inactive Demand with Reservations and Inactive Demand without Reservations. These levels can be set on the transaction types, which would mean that the line will not be scheduled and will not be seen as demand in APS. When this level is set, Schedule Ship Date entered by the user will be accepted and no scheduling is done. If scheduling is done as an action or through WF, Request Date will be copied to the Schedule Ship Date if it is already not there. The values are:

Inactive Demand with Reservations

- Meaning: The line is not visible to APS demand
 - Manually enter schedule date but the system will not schedule
 - The line can be reserved
 - This is for standard items and does not support Ship or Arrival Sets

Inactive Demand without Reservations

- Meaning: The line is not visible to APS demand
 - Manually enter schedule date but the system will not schedule
 - The line cannot be reserved
 - This is for standard items and does not support Ship or Arrival Sets

The Finance tab fields contain information which affects the interfaces with the financial applications. The Invoicing Rule and Accounting Rule fields are used as defaulting sources for the sales order, and this information is passed to Autoinvoicing. For the fields Invoice Source, Non-Delivery Invoice Source, and Receivables Transaction Type these values are required for interfacing to Receivables but they are not on the sales order header or line. When the invoice interface activity in the workflow is executed the system will look for a value in the following order: line transaction type, order transaction type, profile option. The invoice interface activity fails if no value is found. The Cost of Goods Sold Account can be used by the Account Generator function of the inventory interface when a line is ship confirmed.

Order Management Line Transaction Types

The following table displays the various column controls that are available for Order Management Line transaction types.

Column Controls Available for Order Management Line Transaction Types

Column	Purpose	Usable on Line Type	Required for Line TYPe	Defaulting Source for Line
NAME	Unique within the table for a given language.	Yes	No	
TRANSACTION_TYPE_CODE	Distinguish between order and line types. Valid values for Line types: Order/Line.	Yes	Yes	No
ORDER_CATEGORY_CODE	Defaulting for order or line; If used on Order Type, restricts line types. Valid values for Line Types: Order/Return	Yes	Yes	Yes
CURRENCY_CODE	Defaulting Source	No	No	No
CONVERSION_TYPE_CODE	Defaulting Source	No	No	No
CUST_TRANSACTION_ID	Used by Invoicing	Yes	No	No
COST_OF_GOODS_SOLD_ACCOUNT	Used by Inventory Interface	No	No	No
COST_OF_GOODS_SOLD_ACCOUNT	Used by Inventory Interface	No	No	No
ENTRY_CREDIT_CHECK_RULE_ID	Used by Credit Checking	No	No	No

Column	Purpose	Usable on Line Type	Required for Line TType	Defaulting Source for Line
SHIPPING_CREDIT_CHECK_RULE_ID	Used by Credit Checking	No	No	No
PRICE_LIST_ID	Defaulting Source	Yes	No	Yes
ENFORCE_LINE_PRICES_FLAG	Used for validating discount application on Order/Lines	No	No	No
WAREHOUSE_ID	Defaulting Source	Yes	No	Yes
DEMAND_CLASS_CODE	Defaulting Source	Yes	No	Yes
SHIPMENT_PRIORITY_CODE	Defaulting Source	Yes	No	Yes
SHIPPING_METHOD_CODE	Defaulting Source	Yes	No	Yes
FREIGHT_TERMS_CODE	Defaulting Source	Yes	No	Yes
FOB_POINT_CODE	Defaulting Source	Yes	No	Yes
SHIP_SOURCE_TYPE_CODE	Defaulting source. Valid values: Internal/External	Yes	No	Yes
AUTO_SCHEDULE_FLAG	Used by Scheduling. Valid values: Yes/No	No	No	No

Column	Purpose	Usable on Line Type	Required for Line TType	Defaulting Source for Line
SCHEDULING_LEVEL_CODE	Used by Scheduling. Valid values: ONE, TWO, THREE	Yes	No	No
AGREEMENT_TYPE_CODE	Validation on Header	No	No	No
AGREEMENT_REQUIRED_FLAG	Validation on Header	No	No	No
PO_REQUIRED_FLAG	Validation on Header	No	No	No
INVOICING_RULE_ID	Defaulting Source	Yes	No	Yes
INVOICING_CREDIT_METHOD_CODE	Defaulting Source	Yes	No	Yes
ACCOUNTING_RULE_ID	Defaulting Source	Yes	No	Yes
ACCOUNTING_CREDIT_METHOD_CODE	Defaulting Source	Yes	No	Yes
INVOICE_SOURCE_ID	Used by Invoicing	Yes	No	No
NON_DELIVERY_INVOICE_SOURCE_ID	Used by Invoicing	Yes	No	No

When you define OM line transaction types, you can define the line flow that lines of this type will follow. A line transaction type can be coupled with different OM order transaction types. For example, a return transaction type can be used with a standard

order type or an international order type. However, you need to specify the flow couplings for the permitted transaction type combinations.

Defining Order Transaction Types

Navigate to the Transaction Types window to define an order type.

Order Management Transaction Types

Note the following when defining an order transaction type:

- Select the operating unit from the list of values that will capture this information. If Multi-Org Access Control is enabled, you can manage Transaction Types across all Operating Units accessible to you via your MO: Security Profile.
- Enter a name for the order type in the Transaction Type field. This name must be unique; you cannot create an order type and/or a line type with the same name.
- Description (optional).
- Enter Sales Document (optional).
- Enter the value Mixed, Order or Return for the Order Category. If you enter Order the order type can only have lines with transaction type of "order." If you enter

Return the order type can only have lines with transaction type of "return." If you enter "mixed" the order can have lines with either Order or Return transaction types. For SAs, select 'Order' for Order Category and Sales Document Type. Note: As quotes and SAs do not support return as a type of 'order' should be selected.

- Select a Transaction Type code either Order or Line.
- Assign a fulfillment flow for the transaction type. This indicates that orders are processing using this transaction type. Quotes are Sales Orders that start with Negotiation phase - there are no line level WF in the Negotiation phase but the tabs can be used for defaulting information Assign lines only applies to the Fulfilment phase.
- Assign a negotiation phase if you are processing quotes using the same transaction type. Note: Negotiation flows are applicable for SA.
- Enter an effective date and, optionally, select a default transaction phase for use by the defaulting framework.
- Layout Template (optional) refer to the transaction type section of the setup chapter.
- Contract Template (optional) refer to the transaction type section of the setup chapter.
- Optionally, select the Retain Document Number check box. If the transaction type is associated with both a negotiation flow and fulfillment flow, the document number can be retained when the document transitions to fulfillment.
- Select the Approvals button if you want to assign a list of approvers for the transaction flow.
- Assign Line Flows button to assign the appropriate line workflows. Note: SA only uses the header flow and it does not take advantage of defaulting rules - there are no line level workflows for SAs.

Main Tab

- The Agreement Type field is used for validation on the order. If you enter an agreement type here, you can only use agreements of this agreement type on sales orders of this order type. If the field is blank you may enter agreements of any type. The Agreement Required and Purchase Order Required are used for validation. If the box is checked then these fields will be required on all orders of this type when the order is booked. If you want to use the order type as a defaulting source for Price List on the order you may enter a Price List on the Main tab. The Credit Check rules for ordering and shipping determine whether credit check will occur for this order type. If the fields are blank, no credit checking will occur for orders of this

type, the Minimum Margin Percent field lets you input the minimum acceptable margin that you want to allow for orders of this order type. If an order has an overall margin less than this minimum, it is put on a Margin Hold at Booking so that it can be reviewed. You must have the Calculate Margin feature enabled in the OM Parameters to use this attribute.

- The Approval and Assign Line Flow buttons Return Line Type field and the Default Order Line Type field; those will be filled in later. This applies only to quotes.
- Pricing section has optional fields for defaulting pricing information.
- Credit Check rule section has optional fields for defaulting credit check information.

Shipping Tab

- On the Shipping tab the autoschedule flag determines whether scheduling will try to autoschedule the lines on orders of this type. The inspection required flag is not accessible (it only applies to lines). The rest of the fields can be used for defaulting purposes.

Finance Tab

- The Finance tab fields are used for information which affects the interfaces with the financial applications. The Currency and Currency Conversion Type can be used as defaulting sources for the order header. The Invoicing Rule and Accounting Rule fields are used as defaulting sources for the sales order line, and this information on the sales order is passed to Autoinvoicing. For the fields Invoice Source, Non-Delivery Invoice Source, and Receivables Transaction Type these values are required for interfacing to Receivables but they are not on the sales order header or line. When the invoice interface activity in the workflow is executed the system will look for a value in the following order: line transaction type, order transaction type, profile option. If no value is found the invoice interface activity will fail. The Cost of Goods Sold Account is used by the inventory interface when a line is ship confirmed.

Note: Normally the credit memo transaction type is defaulted from the following in the order in which they are written: Line Transaction Type, Order Transaction Type, and Profile option (Credit Memo Transaction Type). However if multiple operating units are being used, then the profile option value is not considered.

Enforce Price List Flag

The Enforce List Price flag determines whether a user can apply a manual discount to the order at the time of order entry. However this flag will not work on Pricing and Availability and Order Import windows. Please make sure this check box (Enforce List Price) is unchecked if you want to use Pricing and Availability or Order Import.

At the order type and line type levels, you can check the Enforce List Price flag so that modifiers are not applied on the lines during pricing. However Freight Charges will be applied even if the flag is checked as Freight Charges do not change the selling price.

Pricing does not support the Enforce List Price flag, so in order to ensure that modifiers are not applied, the following actions take place: The Calculate Price Flag is set to Y at the Price Event. For subsequent events (like Save and Book), the Calculate Price Flag is set to P (Partial) so that only the Freight Charges are calculated and no modifiers are applied.

Order and Line Level Controls

You can define order controls that apply to the order as a whole and are not overridable at the line level. For example, order numbering is controlled at the order level. An order can be numbered differently based on the order type, such as an order or return.

You can also define line controls that affect the line type level. You can set up certain controls that default from the order level and can be overridden at the line level. For example, you can have both return and order lines on a single order, however, the return and order lines process differently. The individual line processing is controlled at a higher line type level. You need to specify the workflow couplings for the permitted transaction type combinations. If a combination has notifications or workflow activities at the header flow which need to be completed before the line can proceed, then the header flow needs to have a Continue-flow activity. The line flow needs to have the appropriate Wait-for-flow activity.

The following table displays the various column controls that are available for Order Management Order transaction types.

Column Controls Available for Order Management Transaction Types

Column Name	Purpose	Define for Order Transaction Type	Required on Order Transaction Type	Defaulting Source for Header
NAME	Unique within the table for a given language.	Yes	Yes	No
TRANSACTION_TYPE_CODE	Distinguishes between order and line types. Line types are Order and Line.	Yes	Yes	No

Column Name	Purpose	Define for Order Transaction Type	Required on Order Transaction Type	Defaulting Source for Header
ORDER_CATEGORY_CODE	Defaulting on the order or line. Restricts the types of lines on an Order. Mixed, Order, or Return. Line types are Order or Return.	Yes	Yes	Yes
CURRENCY_CODE	Defaulting Source	Yes	No	Yes
CONVERSION_TYPE_CODE	Defaulting Source	Yes	No	Yes
CUST_TRX_TYPE_ID	Invoicing Interface./Tax	Yes	No	No
COST_OF_GOODS_SOLD_AMOUNT	Invoicing Interface	Yes	No	No
ENTRY_CREDIT_CHECK_RULE_ID	Credit Checking	Yes	No	No
SHIPPING_CREDIT_CHECK_RULE_ID	Credit Checking	Yes	No	No
PRICE_LIST_ID	Defaulting Source	Yes	No	No
ENFORCE_LINE_PRICES_FLAG	Used for validating discount application on order and lines	Yes	Yes	No
WAREHOUSE_ID	Defaulting Source	Yes	No	Yes

Column Name	Purpose	Define for Order Transaction Type	Required on Order Transaction Type	Defaulting Source for Header
DEMAND_CLASS_CODE	Defaulting source	Yes	No	Yes
SHIPMENT_PRIORITY_CODE	Defaulting Source	Yes	No	Yes
SHIPPING_METHOD_CODE	Defaulting Source	Yes	No	Yes
FREIGHT_TERMS_CODE	Defaulting Source	Yes	No	Yes
FOB_POINT_CODE	Defaulting Source	Yes	No	Yes
SHIP_SOURCE_TYPE_CODE	Defaulting source. The values are Internal, External	No	No	No
AUTO_SCHEDULE_FLAG	Used by Scheduling. The values are Yes, No	Yes	No	No
SCHEDULING_LEVEL_CODE	Used by Scheduling. The values are 0, 1, 2	Yes	No	No
AGREEMENT_TYPE_CODE	Validation at header level	Yes	No	No
AGREEMENT_REQUIRED_FLAG	Validation on Header	Yes	Yes	No
PO_REQUIRED_FLAG	Validation at header level	Yes	Yes	No

Column Name	Purpose	Define for Order Transaction Type	Required on Order Transaction Type	Defaulting Source for Header
INVOICING_RULE_ID	Defaulting Source	Yes	No	Yes
INVOICING_CREDIT_METHOD_CODE	Defaulting Source	Yes	No	Yes
ACCOUNTING_RULE_ID	Defaulting Source	Yes	No	Yes
ACCOUNTING_CREDIT_METHOD_CODE	Defaulting Source	Yes	No	Yes
INVOICE_SOURCE_ID	Invoicing Interface	Yes	No	No
NON_DELIVERY_INVOICE_SOURCE_ID	Invoicing Interface	Yes	No	No
DEFAULT_INBOUND_LINE_TYPE_ID	Defaulting source for inbound lines. Use this value as Source for defaulting Line type on Line	Yes	No	No
DEFAULT_OUTBOUND_LINE_TYPE_ID	Defaulting source for outbound lines. Use this value as Source for defaulting Line type on Line	Yes	No	No

Defaulting source for inbound lines. Use this value as Source for defaulting Line type on Line.

Note: The transaction type name for the base language cannot be changed once there are orders or lines referenced.

Line Flow Assignments

The Line Flow Assignments window is available only for OM order transaction types only. Use this window to assign line flows to the various line types that can be used with an order type.

A line flow can be assigned to an order type, line type and item type combination. Order Management enables you to define only one effective assignment for a given combination. If the item type is left blank, then that assignment will apply to all item types that do not have a specific assignment. If you plan to use a line type for ATO models then Order Management requires that you specify an assignment for the item type of configured item. Refer to Overview of Workflows and Setting up Workflow.

The following table displays sample Order Line types and associated Order line workflow assignments.

Sample Order Line Types and Associated Order Line Workflow Assignments

Line Type	Order Types used with	For Item Type	Line Flow Assignments	Comments
Standard	Domestic		Outbound Domestic	For all item types (except configured items)
Standard	Domestic	Configured Item	Outbound Domestic Configuration	Workflow specific to configured items.
Standard	International		Outbound International	This has the appropriate <i>Wait-for Flow</i> defined for the notification activity on the International Header flow. The workflow is for all item types (except configured items).

Line Type	Order Types used with	For Item Type	Line Flow Assignments	Comments
Standard	International	Configured Item	Outbound Domestic - Configuration	This workflow is specifically for configured items.
Return	Domestic		Inbound Domestic	For all item types.
Return	International		Inbound International	This has the appropriate <i>Wait-for-Flow</i> defined for the notification activity on the International Header flow. This workflow is for all item types.

Assigning Workflows to Transaction Types

Select appropriate workflows for your order type and line types. Several header and line workflows are seeded. You can perform all standard OM processing including orders, returns, drop ship orders, orders for configured items and orders for assemble to order items using only seeded workflows. You can also assign a new negotiation flow for quotes. You may also define your own workflows if you need additional steps (such as notifications) or additional processes. Not all order workflows can be used with all line workflows. Some workflow steps between an order and line are dependent on each other. For example, the order flow with header level invoicing has a step which waits for a continue activity in the line flow with header level invoicing to complete. If you do not use order and line flows which are designed to work together you can have orders or lines that either complete activities when you are not ready for them to complete or which will never complete.

The order type alone determines the order workflow. In the define transaction types window for the order type, enter the order workflow that you have selected. This is the name of the process in the workflow builder. Save the order type and/or the negotiation flow. You cannot select the order type in the next step if you do not save.

The combination of the order type, the line type and the item type determine the workflow that a line will have. For this reason, you define the line workflows from the order type workflow definition window. Press the Assign Line Flows button. Enter the

order type. For each combination of line type and item type that you want to use with this order enter a line in the Assign Workflow processes window. The line types are the ones that you defined in the first step. The item types are based on the definition of the items in the inventory module and include values such as standard item, kit, and PTO model. If you leave the item type blank the workflow process that you define will be used for all item types. (Exception: If you use the configure to order process, you must specifically assign a workflow to the configured item type; the configured item will not use a workflow where the item type field is blank.) The process name is the name of the workflow process as defined in the workflow builder. You must enter a start date for each line flow definition. Note: Once documents have been created using an order type you cannot change the associated workflow assignments. Therefore if you need to change the workflows assigned to a transaction or disable a transaction you must enter an end date for the existing assignment, and if appropriate enter a new assignment for the for the new workflow.

Finally you may enter a Default Order Line Type and a Default Return Line Type on the order transaction window. These values can be used as sources for defaulting the line type to orders of this order type.

Quotes

The Order Management framework includes a workflow phase to support the activities that typically occur within a negotiation phase, such as internal approval and customer acceptance. A document in the negotiation phase is called a Quote. This allows you to create and manage quotes during the negotiation phase and transition the quote to a firm order.

In order to use approvals with negotiations, you must first assign the "Negotiation Flow - Generic with Approval" with the transaction type you are using. Negotiation can apply to SA as well. It uses the same workflow as quotes, the difference is that a SA is still a SA whether in the Negotiation or Fulfillment phase.

See:

Approvals

Order Management provides the ability to define an approval hierarchy and associate it with a transaction type. The OM Approvals form enables setup of a list of approvers who will receive the approval notification. To access the form go to: Setup -> Transaction Type -> Approvals or you can set it up from the Transaction Types form from the Approvals button. Assign the list of members who will receive the approval notification and set the active flag for each. Make sure to specify the transaction type.

See:

Approvals.

Workflow Assignments

The order type determines the order workflow. The combination of the order type, the line type, and the item type determines the line workflow.

Select appropriate workflows for order types, line types and item types:

You can perform all standard processing including orders, returns, drop ship orders, orders for configured items, and orders for assemble-to-order items using seeded workflows. You can also create your own workflows if you need additional steps, for example, additional notifications or processes.

You cannot select any order workflow to be used with a line workflow. Some workflow steps between an order and line are interdependent based on how Continue-flow and Wait-for-flow activities are paired. Therefore, the same line transaction type needs to follow a different line flow when used with a different order transaction type.

For example, the order flow with header level invoicing waits for an activity in the line flow to complete. If you do not use order and line flows which are designed to work together you can have orders or lines which either complete activities too early or which never complete.

The inventory item that a line is processing may have specific flow requirements. For example, a configuration needs to have a BOM and work order created before it can be picked and shipped. The standard item can be picked from stock and shipped. Therefore, the workflow for a configuration item is different than a standard item. However, both types of order lines can be use the same line type. The Workflow Assignments window displays the following item types for which a workflow can be assigned for a given order or order line type assignment:

- ATO Models, Classes, Options, Items
- Configured Item
- Kits
- Included Items
- PTO Models, Classes, Options
- Standard Items
- Service Items

If the item type code is left blank, the specified workflow assignment applies to all item types for which there is no specific assignment. However, you should specify an assignment for the configured item type, if you plan to use the line type for ATO models.

Note: A workflow assignment is required for a given line type to support creation of lines using that line type.

The service details region in the Quick Sales Order window is used to view the Service information for a line rather than creating a Service line. The window does allow the

creation of the Service Line in the service details region but assumes that the Transaction Setup is defined correct so that defaulting happens. Line Type is not a folder item in this region and you cannot choose a value for it. You require to associate a Line Workflow to Items of type Service. Please refer to the *Oracle Order Management User's Guide* for more information on defining Transaction Types.

The following table displays sample Order types and associated Order Header workflow assignments.

Sample Order Types and Associated Order Header Workflow Assignments

Order Type	Header Flow Assignment
Domestic	Header - Standard
International	Header - International (This has a post-booking approval.)

Workflow Validation

Oracle Workflow drives Order Management. You can use the Oracle Workflow Builder to customize and extend your Order Management workflows, so that they meet your specific Order Management needs.

Sometimes customizations and modifications can bring in exceptions that cause data corruption and degrade performance. In order to ensure that a workflow process does not error out during run-time , you can use the Order Management workflow validation feature to validate the workflow process before it is actually used. The Order Management workflow validation, provides additional validation over and above the basic validation performed by the Oracle Workflow Builder.

In Order Management, you can validate workflow processes in the Transaction Types window.

While saving your transaction type definition, implied or mandatory validation takes places for most workflow processes. However if you need to validate a specific workflow process, you can use one of the following three options:

- Validate Workflow button in Transaction Types window – this calls the Validate OM Workflow concurrent program.
- Validate OM Workflow concurrent program - you can run for specific parameters.
- OE_Validate_WF.validate() Public API – you can call this a custom program/UI to validate your workflow definitions.

The screenshot shows the 'Transaction Types' window with the following fields and values:

- Operating Unit: **Vision Operations**
- Description: **Standard Order Type fo**
- Order Category: **Order**
- Fulfillment Flow: **Order Flow - Generic**
- Effective Dates: **01-JAN-95 - 01-MAY-05**
- Layout Template: **Sales Order RTF Templ**
- Contract Template: **Vision Operations Sales**
- Transaction Type: **Order Only**
- Sales Document Type: **Sales Order**
- Transaction Type Code: **ORDER**
- Negotiation Flow: **Negotiation Flow - Sim**
- Default Transaction Phase: **Negotiation**
- ☒ Retain Document Number

Buttons: **Validate Workflow**, **Assign Line Flows**

Below the main fields are sections for **Document**, **Pricing**, and **Credit Check Rule**.

A **Note** dialog box is overlaid in the center, displaying: "Request submitted. Your request ID is 10250902".

Below are the events where implied (mandatory) workflow validations take place:

Transaction Types Main Window

- When you create a new order type or assign a workflow process to an existing order type, implied (mandatory) validation will take place on saving the record. When applicable, assigned blanket and negotiation workflows are also validated against fatal errors.
- When a header workflow is updated, and it had previously assigned line flows, then implied (mandatory) validation will determine whether the new header workflow is compatible with all the existing line workflows or not. This occurs when the changes are saved

Transaction Types - Line Workflow Assignments Window

Implied mandatory validation takes place when you create a new line flow and save the record. Some other considerations for line workflow assignments:

- You can perform workflow validation in two modes: 'Errors Only' and 'Errors and Warnings'. Please note that the Transaction Types window and the Line Workflow Assignments window enables you to perform implied or mandatory validation checks for Errors only, and not for Warnings, on saving. However when you run the concurrent program, both errors and warnings are shown.

- While saving the record, implied (mandatory) validation for the errors occurs only after the existing form level validations and complements the existing error reporting functionality.
- Validations take place for Error and Warnings. Order Header, Order Line, Sales Agreement and Negotiation workflows.

A complete list of errors and warnings is in the section below.

Errors

- Activities with no OUT transitions.
- FULFILL_LINE activity not preceded in the workflow by the activity specified by its Fulfillment Activity Name item attribute: This is a two-step check. If the Fulfillment Activity (for example, SHIP_LINE) is not present in the workflow at all, it's treated as an error at workflow assignment time (during the implied (mandatory) validation). Otherwise, a message is displayed advising another validation using the validation button. If the validation can detect that the Fulfillment Activity does not come before FULFILL_LINE, it is an error. Otherwise, a warning is displayed to verify this manually.
- Header Level Invoice Interface defined only for the line flow or its corresponding header flow, or vice versa, instead of both.
- BOOK_WAIT_FOR_H present in line flow, but no BOOK_CONT_L in the header flow, or vice versa.
- CLOSE_WAIT_FOR_L present in header flow, but no CLOSE_CONT_H in the line flow, or vice versa.
- Seeded ATO Model, ATO Item, configuration item or education item workflow processes (R_ATO_ITEM_LINE, R_ATO_MODEL_LINE, R_CONFIGURATION_LINE and R_OTA_LINE) assigned to OM item types to which they are not applicable.

Warnings

- WFSTD: WAIT (Standard Wait activity) has Wait Mode of Relative Time, but the time specified is 0: It is an error if it is in a loop, otherwise it displays a warning. Due to performance issues, however, this check should not be done at workflow assignment time.
- WFSTD: WAIT (Standard Wait activity) has Wait Mode of Relative Time, and the activity is in a loop. A warning is displayed stating that the wait time specified should be longer than the longest expected running time of the Workflow Background Process, otherwise performance issues with the Workflow Background process may occur.
- WFSTD: DEFER (Standard Defer activity) is in a loop. This can also cause issues

with WFBG performance.

- WFSTD: WAIT (Standard Wait activity) has Wait Mode of Absolute Time: Warning to alert the user to check if the time specified is appropriate.
- No FULFILL_LINE in a line flow.
- Header flows without BOOK_ORDER or CLOSE_HEADER activity.
- Line flows without CLOSE_LINE activity.
- INVOICE_INTERFACE coming before SHIP_LINE.
- Custom workflow processes which were likely derived from the seeded ATO Model, ATO Item, configuration item or education item workflow processes (R_ATO_ITEM_LINE, R_ATO_MODEL_LINE, R_CONFIGURATION_LINE and R_OTA_LINE) assigned to OM item types to which they are not applicable.
- Performance allowing, validate all other cases of master-detail workflow synchronization besides the one mentioned above, would practically involve searching the header flow and all line flows for all activities assigned wf_standard.waitforflow() standard workflow API and checking if there exists a continuation activity in the assigned header/line workflow. Similarly, every activity assigned wf_standard.continueflow() should be matched by the specified waiting activity in the assigned header/line workflow. This should be reported as an error, but due to performance concerns, the concurrent program can only do the validation.

Creating a Document Sequence

Order Management uses the AOL document sequence functionality for numbering orders. You must define at least one document sequence to be used for your order types, unless you are upgrading from a previous release of Order Entry in which case your document sequences will be upgraded. You may use this sequence for all your order types. For instance, you could define an automatic sequence beginning with 1 and assign it to all your order types. Then each new order that you enter will receive the next number in the sequence. Alternatively, you may define multiple document sequences and use different ones with different order types. One sequence could be used with your domestic orders which begins with 1 and another sequence could be used for your international orders which begins with 10000. The number ranges would be separate and order types easily identifiable.

Assign a Document Sequence

Assign your order type to a document sequence. Navigate to Order Management > Setup > Documents -> Assign. On the Document tab enter Oracle Order Management in

the Application field and the order type in the Category field. Select the ledger. Enter Manual in the method field if the number sequence is manual, otherwise enter Null. On the assignment tab enter the start date and the sequence that you defined for your order type in the previous step. Note that you cannot change the assignment for an order type and ledger. To change the assignment you must assign an end date to the existing assignment and create a new one for the new assignment. You cannot have more than one assignment for the same date range, document type and ledger.

There are additional controls to be considered when a quote transitions to a sales order in reference to the document number and how the number is generated.

If a gapless numbering type is a requirement, then the Retain Document Number check box should not be selected when using a transaction type for negotiation and fulfillment.

See Negotiation in Order Management, page 5-2 for more information about assigning negotiation flows to transaction types.

Define Document Sequences for Order Numbering, page 2-93

Sales Document Numbering

Define your order numbering options using the Oracle Application Object Library (AOL) Document Sequence functionary. You can set up various OM order transaction types and different document sequences. Both OM transaction types and document sequences can control which types of orders are numbered automatically or manually.

For example, you can have all your outbound orders numbered in a certain sequence and all your returns in a different sequence. When an OM order transaction type is created, a document category with the same name is automatically created. You can define sequences and assign them to the respective document category.

Reports

There is a report available which will print the setup information for your transaction types. It is called the Transaction Type Listing Report and you can print for one transaction type by name, a range of transaction types by name, only order transaction types, only line transaction types or any combination of these parameters.

Example

This example creates a new order type with associated line types, assigns the workflow processes, and creates and assigns a document sequence. After completing those steps, you can enter an order.

Create a line type for your order lines. Navigate to Setup -> Transaction Types -> Define. Create a new transaction type with the following information. Leave fields not in this table blank.

Create Order Lines Line Type

Region	Field	Value
Header	Operating Unit	Default
	Transaction Type	Standard
	Description	Standard Order Line
	Order Category	Order
	Transaction Type Code	Line
	Effective Dates	[Today's Date
Shipping	Scheduling Level	Allow all scheduling actions
Finance	Credit Method For Invoices with Rules	Prorate
	Credit Method for Split Term Invoices	Prorate

Next, create a line type for your return lines. On the same window create a new transaction type with the following information. Leave fields not in this table blank.

Create Return Lines Line Type

Region	Field	Value
Header	Operating Unit	Default
	Transaction Type	Return with Receipt and Credit
	Description	Standard Return Line
	Order Category	Return
	Transaction Type Code	Line

Region	Field	Value
	Effective Dates	[Today's Date]
Shipping	Scheduling Level	Allow all scheduling actions
Finance	Credit Method For Invoices with Rules	Prorate
	Credit Method for Split Term Invoices	Prorate

The last transaction type that you need to create is the order transaction type. On the same window create a new transaction type with the following information. Leave fields not in this table blank.

Create Order Transaction Type

Region	Field	Value
Header	Operating Unit	Default
	Transaction Type	Mixed
	Description	Standard Order with both Order and Return Lines
	Order Category	Mixed
	Transaction Type Code	Order
	Effective Dates	[Today's Date]
Shipping	Scheduling Level	Allow all scheduling actions
Finance	Invoicing Rule	ADVANCE INVOICE
	Accounting Rule	IMMEDIATE
	Credit Method For Invoices with Rules	Prorate

Region	Field	Value
	Credit Method for Split Term Invoices	Prorate
	Receivables Transaction Type	Invoice

Now assign your workflows to your transaction types. You should still be on the define transaction type window for the Mixed order type. Add the following information to this window:

Added Information

Tab	Field	Value
Main		
	Fulfillment Flow	Order Flow - Generic
	Default Return Line Type	Return with Receipt and Credit
	Default Order Line type	Standard

Save your order transaction type so that you will be able to use it in the next step.

Click Assign Line Flows and enter the following information on the Line Workflow Assignments window:

Line Workflow Assignments Window Information

	Field	Value
	Order Type	Mixed
Line 1		
	Line Type	Standard
	Item Type	[Blank]

	Field	Value
Line 2	Process Name	Line Flow - Generic
	Start Date	[Today's Date]
	Line Type	Return with Receipt and Credit
	Item Type	[Blank]
	Process Name	Line Flow - Return for Credit with Receipt
	Start Date	[Today's Date]

Create a document sequence for Orders. Navigate to Order Management > Setup > Documents > Define. Enter the following information:

Document Sequence for Orders Information

	Field	Value
	Name	Mixed Orders Sequence
	Application	Oracle Order Management
	Effective From Date	[Today's Date]
	Type	Automatic
	Initial Value	1
	Start Date	[Today's Date]

Finally, assign the order type to the document sequence. Navigate to Order Management Setup > Documents > Assign. Enter the following information:

Order Type to the Document Sequence Information

Tab	Field	Value
Document	Application	Oracle Order Management
	Category	Mixed [This is the name of the order type]
	Ledger	[The ledger for the order type]
Assignment	Start Date	[Today's Date]
	Sequence	Mixed Orders Sequence

You should now be able to enter an order of type Mixed and process both order and return lines through invoicing.

Using Workflow in Order Management

Overview

Workflow technology supports automation and continuous improvement of business processes. It supports routing information of any type according to user-defined business rules. Business transactions, such as order placements or purchase requests that involve various controls, routings, and approvals, can be managed more efficiently by leveraging Workflow technology. This is the primary reason why Oracle Order Management integrates with Oracle Workflow: to provide you with a comprehensive order processing and fulfillment system.

Oracle Order Management uses Oracle Workflow to control the sequence of events that occurs in the processing of orders, returns, order lines, and return lines. Oracle Workflow manages activities, executes functions, sends notifications, maintains completed activity history, detects errors, and initiates error processes. Oracle Order Management also uses Oracle Workflow to enable you to track the history of orders. Oracle Order Management enables you to model your business processes in terms of generic order processes. When defining a new workflow, you can begin with the basic activities of order processing. You can extend your business processes copying and

editing seeded flows, or by using seeded and custom activities as components. *Oracle Workflow in Oracle Order Management* provides details about how to extend Oracle Workflow in Oracle Order Management to best meet your business needs. This guide also provides detailed information regarding the workflow processes that come seeded with Oracle Order Management.

Using Oracle Workflow in Oracle Order Management

Workflow

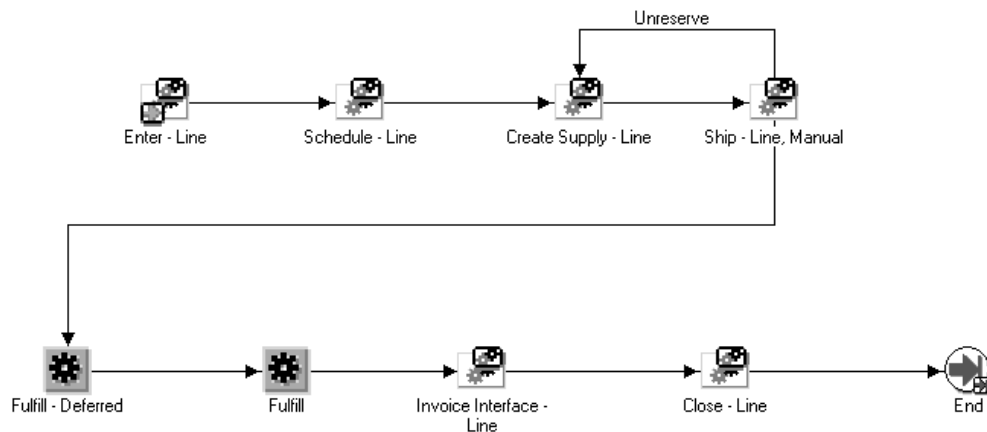
A basic order flow, from entry to invoicing, will most commonly use the Generic Order and Line flows which are assigned to a Generic order type. Figure 5 is an example of a Generic Order Workflow process (enter > book > close):

Order Flow - Generic Workflow Process



Figure 6 is an example of a Generic Order Line Workflow process (enter > schedule > ship > bill > close):

Line Flow - Generic Workflow Process



Fulfillment with Wait

Oracle Order Management has enhanced the Fulfillment Workflow activity to provide a

new seeded workflow subprocess "Wait to Fulfill Line." You can add this subprocess before the existing "defer fulfillment" and/or "fulfill line" subprocesses.

With the Wait to Fulfill Line subprocess, Order Management enables more flexibility on order changes and cancellation. This subprocess can be used for shippable, non-shippable and bill only lines alike to defer the fulfillment activity thus creating an opportunity to make changes or corrections before fulfillment.

The timeout activity is set to Fulfill-Wait for Line activity in the Header workflow. You can open OEOH (Order Header Workflow) in the workflow builder and check the Order Flow - Generic with Header Level Invoice Interface process. The timeout for the above activity is set to 1 day, which would mean that the activity would be retried after a day. You can modify this value to suit your requirement.

Note: You can copy the "Wait to Fulfill Line" subprocess and write a procedure to handle the copied `check_wait_to_fulfill_line` function such that it returns a value of Yes for order lines eligible to delayed fulfillment specific to their business requirement.

Note: The default logic in the `OE_Fulfill_WF.check_wait_to_fulfill_line` procedure will hold non-shippable order lines at the `Fulfill_Line_Eligible` block. The following type of non-shippable order lines will not be held at the block:

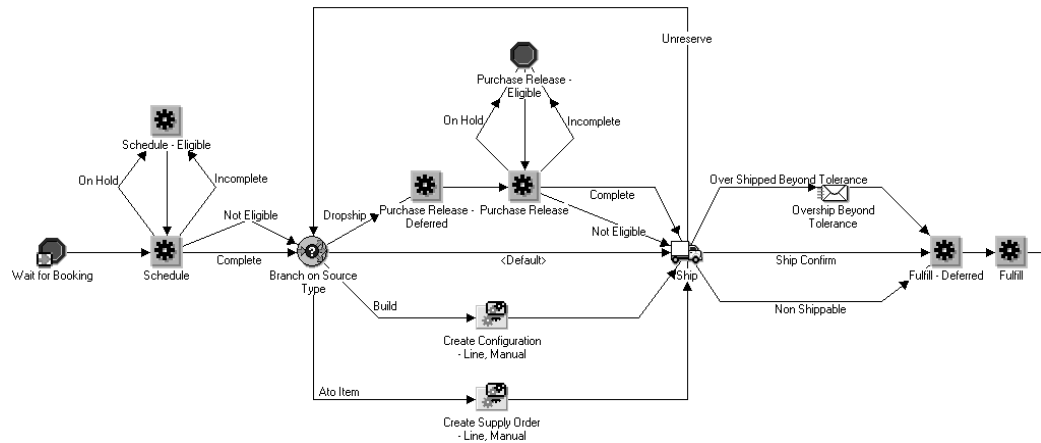
- lines part of a configuration
- service lines referencing a shippable order line in the same order.

See: Using Oracle Workflow in Oracle Order Management

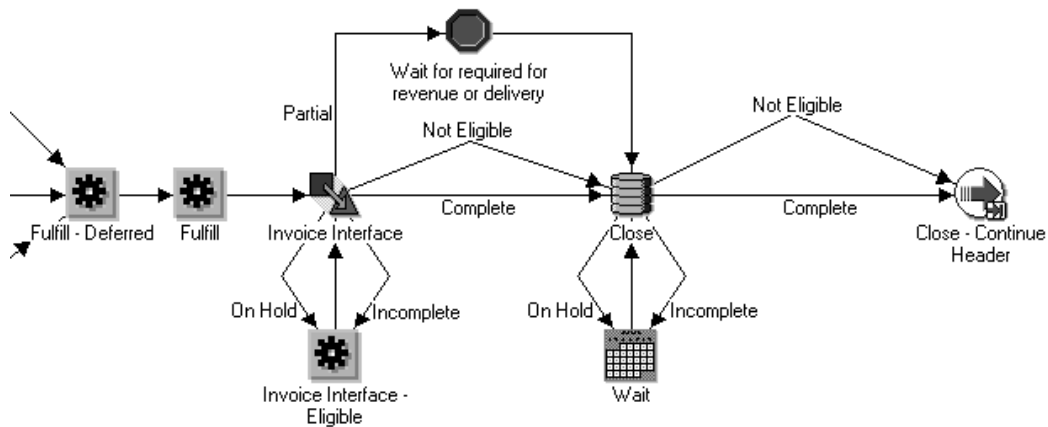
Line Flow: Generic, Performance

This seeded workflow process is designed to improve workflow performance by eliminating workflow subprocesses. It contains all the activities in the Line Flow — Generic process, but most of the activities are included directly in the main flow instead of being decomposed into subprocesses.

Line Flow: Generic, Performance



Line Flow: Generic, Performance (Continued)



This process is optimized for performance and/or high volume users and is recommended when you do not need to make changes to the Generic Flow to suit their business needs. This flow is also intended as an example for process streamlining. It is not recommended to use this flow to create a customized workflow process because after the application of any patch containing workflow changes, the entire customized workflow must be compared to the seeded workflow to check if any changes need to be copied over.

Defaulting Rules

Order Management Defaulting Rules reduce the amount of data input required when entering orders or returns. You can define business rules for defaulting values, and

prioritize how conditions and validation rules are implemented. If a defaulting rule definition fails to default desired values for orders or returns, you can choose to define additional defaulting rules for most attributes (fields) within Entities such as Order or Line.

Order Management provides seeded defaulting rules, and you can create additional Defaulting Rules by either:

- Defining a new defaulting rule, either with a new Condition you create or using an existing Condition
- Disabling a seeded defaulting rule and creating your own. You can not change seeded defaulting rules but you can disable the defaulting rule's condition

Note: You cannot update defaulting rules marked as seeded. However, you can create additional rules based upon seeded rule definitions and consequently disable the seeded rule.

Note: Depending on your release level, if you wish to default the Item Identifier type attribute for an order line, select either *INT* or *Internal Item*.

You can use defaulting rules to default values into fields (attributes) in both the Header and Lines Entities

- Entities include groups of related attributes such as Order or Line
- Attributes are the individual fields within a particular entity, such as Warehouse, Ship To Location, or Agreement

A default is a value that Order Management automatically places in an order or line field.

If the Attribute name is the same on both the Order and the Line, you can initially default the value from the Header to the Line.

For example, you can default Purchase Order at the Header to Purchase Order at the Line when you first create a PO number

Note: The initial value will default, but if you change the PO the new value will not default automatically from the header to the line unless Cascading has been enabled and all the lines can be updated.

- You can also default the value of an attribute from another attribute within the same entity. For example, you could default Promise Date on the Line from Request Date within the Line Entity.

A defaulting condition is evaluated at run time to select the appropriate default source assignments for all the object attributes. You can define defaulting conditions that control defaulting of object attributes of an object (data object) in given mode of functionality. For example, you may have set up a condition for defaulting to occur one way if the Payment Terms are A, and another way if the Payment Terms are B.

Defaulting conditions created for an Entity must be based on attributes within that Entity.

A defaulting rule includes the following components:

- Defaulting Source/Value (Entity and Attribute, Source Type)
- Defaulting Condition
- Precedence of Defaulting Condition (if multiple defaulting conditions exist, precedence determines the condition to use)
- Sequence (in what order is the rule applied if multiple rules exist)
- Source Type and Defaulting Source/Value: (how the attribute value is derived)

Defaulting Rules

You can define several different rules to use in different order processing situations.

Sequence of Initial Attribute Defaulting

When attributes have equal sequence numbers, defaulting takes place alphabetically. You can change these sequences, if you need defaulting to happen in some different order. For example, you might define a sourcing rule that says default attribute A on the line from attribute B on the same line. For better performance, change defaulting sequence such that attribute B defaults before attribute A.

Attribute A must also be setup to be dependent on attribute B for rule to work correctly in all scenarios. Refer to 'Dependencies' section for further details on how to set this up.

Defaulting Rule Sequences

Specify the priority sequence in which you want to search for a field's defaulting value. Order Management looks at the lowest sequence number initially to begin searching for a default value, and continues to the next highest sequence number until it finds a value. For example, if your first and second sources are null, but your third source contains a value, Order Management uses your third source as the source.

Defaulting Sources

A defaulting rule source is the location from which you obtain a defaulting value; usually the location is another entity and attribute. For most attributes, you can assign at least one entity/attribute defaulting source, in addition to using other defaulting sources.

Defaulting Sources include:

- Same Record
- Related Record
- System Variable
- Constant Value
- Application Profile
- PL/SQL API.

For example, you may want to define a rule to default the Price List to the order header based upon a variety of different sources. Potential defaulting sources include customer agreement, customer, and order type; the potential attribute for all three of these entities would be Price List. You can choose any of the three source entities. Your choice may depend on your business practices, whether those sources exist for a particular order, and whether those sources have a price list defined for them. For the customer, you may have defined separate price lists for the Bill To and Ship To addresses in addition to the customer itself. All three of these fields are available as sources.

Examples of Defaulting Sources

Application Profile

The profile option source enables you to use a profile option, either system- or user-defined, as a default value source. You must indicate the name of the profile option to be used as the default value in your rule. Profile options sources enable for flexible default value tailoring without complex customizations.

Note: If you intend to use a profile option as a defaulting source, be certain that it is defined before attempting to reference it in a defaulting rule.

Constant Value

The constant value source option enables you to specify a constant value instead of a field that contains a value. This is especially useful if you want your default to be the same value or to be used if no other sources you have defined for your rule can provide a value.

For example, if all items in your organization are sold with the unit of measure, you could define a defaulting rule to default the value of Each for the Unit of Measure attribute within the Order Line entity.

System Variable

This system variable source option enables you to default system variables or functions of system variables for a field. This is commonly used to default date fields where SYSDATE expression or functions on SYSDATE can be used to default the current date

or a function of the current date.

For example if the policy of your organization is to ship all items on the next day, you can setup the Request Date defaulting rule with System Variable as sysdate + 1

Same Record

Using same record as a source, you can default an attribute from another attribute on the same entity record.

For example a common requirement is to compute tax for an order line based on the scheduled ship date for that line. Set up a defaulting rule for tax date with Same Record source and Source Attribute as Schedule Ship Date.

Related Record

The Related Record is one of the most frequently used defaulting sources. Defaults for certain attributes can be setup when defining related object records such as Customer, Ship To, Bill To and Item.

For each attribute that you can use as a default, related record source objects/ source attributes are pre-defined in the system.

PL/SQL API

If you have a complex defaulting rule that cannot be defined using any other defaulting source, you can use the API source. Your logic to derive default values can be coded into your custom PL/SQL API, enabling you to reference you API within a defaulting rule.

Dependencies

Some attributes are dependent upon the value of other attributes on the same record. Dependencies can be established only among attributes on the same entity, not across entities. The list of available Source Attribute and Dependent attributes is pre-defined; most attributes are available but some are not.

If an attribute is changed, either by the user or by the system, any attributes that are dependent on it will be cleared and then re-defaulted.

For example, the Freight Terms for the Header Entity is dependent on Agreement. If the Header Agreement is changed, the Freight Terms for the Header entity will be cleared and re-defaulted.

If you create a rule for attribute X based on a condition using attribute Y, ensure that attribute Y is defaulted (not manually entered) before attribute X. Please note that if you manually enter Y and want to default X based upon the current value of Y, you will need to define a dependency where the source attribute is Y and the dependent attribute is X.

For example, if you define a Condition for defaulting the Unit of Measure by using the Customer, ensure that Customer is defaulted before the UOM. If you were to enter the Customer and you want Unit of Measure to re-default based on this new Customer value, you must define a dependency for Unit of Measure on Customer.

If you wish to create additional dependencies or disable existing dependencies, you can update a dependency extension API.

For additional details on dependencies and usage of the APIs within Defaulting Rules, refer to the Order Management white paper Defaulting Rules Setup, available on Oracle *MetaLink*, <http://www.oracle.com/support/metalink/>.

Effects of Modifications to Orders and Rules

Modifications to orders may cause Order Management to re-apply defaulting values from your defaulting rules. This reapplication of defaults also may lead to changes that trigger another default.

If re-application changes a value and results in inconsistent information on the order, Order Management prevents users from committing the order and provides messages to assist in correcting the data. For example, depending on the defaulting rules, changing the line type on the order line could change the price list on the line. If the line items are not in the new price list, Order Management prevents you from committing the order and issues instructions.

Modifications to defaulting rules take effect for any new orders that use the modified defaulting rules when you open the Sales Order Header or Lines windows or if you update an attribute (field) on an order. If you do not or query an order or make a change to an existing order that uses the modified defaulting rules, thus activating validations for defaulting, then the order is not affected by the modification.

During order and line defaulting, Order Management does not replicate the value of defaulted attributes to all common lower level entities (cascading) when performing updates to existing orders. If you want to change the value of lower level entities for defaulting attributes on existing order or line records, you should utilize Mass Change functionality.

For example, assume you have a defaulting rule set up to default the line-level attribute Ship Method from the order header to all order line. You create an order using Ship Method A, and then add several lines. Since you are using Ship Method A for the order header, each subsequent order line created will use the default, Ship Method A. Now, you decide to change the Ship Method for the order header to Ship Method B.

Changing this attribute at the order header will result in any subsequent new order lines created to use Ship Method B as a default. Existing order lines that have Ship Method A are not updated to Ship Method B as a result of your changing the header attribute.

Use mass change to update order lines to Ship Method B.

Generating Defaulting Packages for Rules and Conditions

To generate or update defaulting rules or defaulting conditions, you must submit the Defaulting Generator concurrent program. When you submit the Defaulting Generator concurrent program, a defaulting handler package is generated for each attribute on each entity. The creation of new rules or conditions, as well as modified rules and conditions are not effective until the defaulting package for the attribute is successfully

generated.

The concurrent program must be submitted if you perform either of the following:

- Update an existing defaulting rule
- Update a defaulting condition: When validation rules for a defaulting condition are updated, defaulting packages need to be re-generated for all attributes of the entity
- Disable a defaulting condition

Key Enhancements

Some of the great new enhancements that this framework allows are:

- the ability to define defaulting rules for returns and return lines - they used to be hard-coded.
- the ability to define formulas to create the defaulted data - see the Sources of Values section below.
- a clear distinction between 'defaulting' behavior and 'cascading'.

Terminology

Since Defaulting Rules are now generic, and potentially can be used by other Oracle applications, generic names are used. You default to attributes and entities and default from sources.

See: Sources of Values, page 7-40

Attributes and Entities in Order Management

An Entity in this context is a group of related attributes that roughly correspond to a table or a form in Order Management. There are entities of Order Header, Order Line.

An Attribute is a field or column that belongs to that entity. Therefore, the ordered unit of measure is an attribute of the Order Line entity. When you query up the Defaulting Setup window for a particular entity, a list of all the attributes for which you can define defaulting rules display.

You will not be able to define defaulting rules for descriptive flexfields, since their defaulting is controlled by AOL's flexfield routines.

Conditions

Defaulting Condition Validation Templates

Condition Name	Description	Seeded
Always	Generic Condition	<input checked="" type="checkbox"/>
In Negotiation Phase	Order is in Negotiation Phase	<input checked="" type="checkbox"/>
Payment Type	Payment Type = 'Credit Card'	<input checked="" type="checkbox"/>
XC		<input type="checkbox"/>

Group #	Attribute	Validation Operation	Value String
1	Transaction Phase	=	Negotiation

Conditions are rules set up that control when a particular group of default sources will be looked at. Define one or more condition validation templates *per entity* based on common business rules to meet your business needs. Then you can use them over and over for the attributes of that entity. For example, you might set up a condition template for all return lines, or another one for all internal order lines. The ALWAYS condition is seeded for each entity. When defining a set of Conditions and using them in rules, be sure to place the ALWAYS condition last in the Precedence for Defaulting Conditions.

Defining Condition Validation Templates

Once you query up the entity that you want to work with in the Defaulting Setup window (use the flashlight icon to get the LOV of available entities), press the Defaulting Condition Template button to get to the window to define the conditions. A window that lists all the conditions already defined for this entity displays. To add a new condition, go to a blank line (or use the green + icon to create a blank line) and key in a name and description for your new condition.

- The lower half of the window is where you enter the details of the condition you are defining or viewing.
- The Group Number is an arbitrary number used to control AND and OR

conditions. Indicate that rules are to be connected by an AND rule by giving them the same group number. Rules to be connected with OR should be given different group numbers.

- In the Attribute column, choose from the list of attributes on which a condition can be based. Available attributes that show up here are ones **from this entity** that have the 'Include in Building Defaulting Conditions' check box checked on the Defaulting Setup - Entity Attributes window. The only attributes that have this check box checked are ones that are the source for a dependency relationship. See section on Dependencies below. You cannot add to this list of attributes.
- In the Operator column, choose an operator from equal, not equal, greater than, less than, not greater than or not less than.
- In the Value String column, key in (or choose from the LOV) the actual value you want to compare to.

Sequence of Defaulting

On the main Defaulting Setup screen, where all the attributes of the entity are listed, there is a column called Defaulting Sequence. This number determines the order in which attribute defaulting takes place. When attributes have equal sequence numbers, defaulting takes place alphabetically. All the attributes are seeded with a sequence of 50. You can change these sequences, if you need defaulting to happen in some different order. For example, you might define a sourcing rule that says default attribute A on the line from attribute B on the same line.

Sources of Values

Sources are places where values can be defaulted from. Defaulting Rules provide a variety of sources that can be used in building your defaults. Most of them will be familiar to users of Oracle Order Entry.

- Constant Value: A fixed value that will be used.
- Application Profile: is the value of a profile option. This can be a system provided profile option, or a new profile option that you've defined just to provide a defaulting value.
- Same Record: The value of another attribute on the same entity (or record) as the attribute you are defining the rule. For example, you might set up the Promise Date to default from the Request Date on the same line.
- Related Record: The value of another attribute on a related entity (or record). For example, you might set up the Ship Method on the line to default from the Ship Method on the header. Similarly, an attribute on the order header might default

from an attribute on the related customer record.

- **System Variable:** The value of a system (server) variable, such as System Date. For this type of source (and this type only), you can use an expression containing a formula, for example, sysdate + 7.
- **PL/SQL API:** Define your own routine to provide the default. There are a few seeded defaulting rules that use this - for example, defaulting of the currency on the order header from the ledger is seeded this way.
- **Others:** there are several esoteric source types relating to the Web App Dictionary definitions for this attribute.

Defining Sourcing Rules

Default Sourcing Rules

Application **Oracle Order Management**

Entity **Order Header** Attribute **Ship To**

☒

— **Defaulting Conditions** —

Precedence	Defaulting Condition	Enabled	Seeded
1	Always	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

— **Default Sourcing Rules** —

Sequence	Source Type	Default Source/ Value
1	Related Record	Customer.Ship To

Once you query up the entity that you want to work with in the Defaulting Setup window and have defined your Conditions, you are ready to define your Sourcing Rules. Select the attribute you want to work on, and then click on the Defaulting Rules button to get to a window called Attribute Defaulting Rules. This window lists all the conditions and rules that have been previously defined for this attribute. To add a new condition and its rules, go to a blank line in the Defaulting Conditions section of the window (or use the green + icon to create a blank line), key in a precedence and choose

from conditions you have already defined. (The precedence controls the sequence in which the conditions are evaluated.)

The lower half of the window is where you enter the details of the rule you are defining or viewing for this condition. This set of defaulting rules will be used if its corresponding Defaulting Condition is TRUE.

- The Sequence here controls the order in which the system attempts to locate a default.
- In the Source Type column, choose from the list of Source Types as described above.
- In the Default Source Value column, specify the attribute or value you want to use for the source. Selection choices here depends on the Source Type you have selected. What you'll see in this field is a flexfield whose context is based on the Source Type. Then you can choose among pre-seeded possible source attributes.

There are similar restrictions to defaults. The data type has to match that of the attribute you are defaulting, and the source relationship has to be pre-defined.

Dependencies

Some attributes are dependent upon the value of other attributes on the same record. If an attribute is changed, either by the user or by the system, only other attributes that are dependent on it will be cleared and then re-defaulted. As of September 2000, functionality was changed for certain fields such that if re-defaulting did not come up with a default for the dependent field, the old value would be retained instead of clearing that value. These fields are: price list, salesperson, customer po number, order type.

For example, the Price List is dependent on Agreement. If the Agreement is changed, the Price List will be cleared and re-defaulted. If re-defaulting does not come up with a default for the dependent field, the old value is retained instead of clearing that value.

In the initial implementation of Defaulting Rules, dependencies are hard-coded. You can also check current code in the hard coded dependencies package - OE_Dependencies (file: \$ONT_TOP/patch/115/sql/OEXUDEPB.pls) to get the latest list.

If you need to create additional dependencies or disable existing dependencies that you do not need, you can use an API hook: package OE_Dependencies_Extn (\$ONT_TOP/patch/115/sql/OEXEDEPB.pls).

Adding dependencies via this hook is SUPPORTED as long as the guidelines documented in the file are followed. Following the guidelines would also ensure that patches do not over-write the changes introduced by customers.

However, please note that:

- The list of source/dependent attributes that can be used to setup the dependencies is restricted. Refer to comments in file - OEXEDEPB.pls - for the complete list.

- Dependencies can be established only among attributes on the same entity, not across entities such as changing an attribute on order header will NOT result in a change to attributes on order line.

Examples

There is an updated Ship To on the order but this results in Invoice To being cleared/updated. Deleted/disabled defaulting rule to default Invoice To from Ship To and still the behavior does not change. The reason is that there is a hard coded dependency of Invoice To on the Ship To field. In order to ensure that Invoice To is not affected by a change to Ship To, dependency should be disabled via this new hook.

Source Attribute: Ship To, Dependent Attribute: Invoice To.

```
IF p_entity_code = OE_GLOBALS.G_ENTITY_HEADER THEN
x_extn_dep_tbl(l_index).source_attribute :=
OE_HEADER_UTIL.G_SHIP_TO_ORG;

x_extn_dep_tbl(l_index).dependent_attribute :=
OE_HEADER_UTIL.G_INVOICE_TO_ORG;

x_extn_dep_tbl(l_index).enabled_flag := 'Y';
l_index := l_index + 1;
```

If it is required that updating of Ship To should not change the value of Invoice To on the order line either, dependency should be separately disabled for line also.

```
ELSF p_entity_code = OE_GLOBALS.G_ENTITY_LINE THEN
x_extn_dep_tbl(l_index).source_attribute := OE_LINE_UTIL.G_SHIP_TO_ORG;
x_extn_dep_tbl(l_index).dependent_attribute :=
OE_LINE_UTIL.G_INVOICE_TO_ORG;

x_extn_dep_tbl(l_index).enabled_flag := 'Y';
l_index := l_index + 1;
```

It is somewhat more involved if you want to create a dependency for a source or dependent attribute that is not listed in OEXEDEPB.pl. This requires CUSTOMIZATION of existing packages, and patches in the future might over-write your changes.

1. Adding a new Source Attribute. You want to make Shipping Method on the header dependent on Shipment Priority.
 - Add a dependency in OEXDEPB.pls as above with Source Attribute: Shipment Priority, Dependent Attribute: Shipping Method.
 - Customize another entity specific utility package, because Shipment Priority is not listed as one of the source attributes available on Order Header.

Add the following statement in OE_Header_Util.Clear_Dependent_Attr

(file: OEXUHDB.pls). If you're want a change in the Shipment Priority on the order line to also affect Shipping Method on the order line entity, code similar to the

following needs to be added to OE_Line_Util_Ext.

```
IF NOT OE_GLOBALS.Equal(p_x_header_rec.shipment_priority_code
,p_old_header_rec.shipment_priority_code)
THEN
l_index := l_index + 1.0;
l_src_attr_tbl(l_index) := OE_HEADER_UTIL.G_SHIPMENT_PRIORITY;
END IF;
```

1. Adding a new Dependent Attribute: You want to make Planning Priority on the line to be defaulted based on Demand Class. You need to add a dependency in OEXDEPB.pls as shown above with Source Attribute: Demand Class, Dependent Attribute: Planning Priority. If Demand Class is not listed as one of the source attributes available on Order Line entity, you need to go through the steps outlined above to add it as a source attribute. And if Planning Priority is not listed as one of the dependent attributes for order line entity, you also need to CUSTOMIZE another section of the entity specific utility package.

Add the following sub-procedure in OE_Line_Util_Ext.Clear_Dependents (file: OEXULXTB.pls).

```
PROCEDURE PLANNING_PRIORITY IS
BEGIN
IF (p_initial_line_rec.PLANNING_PRIORITY = FND_API.G_MISS_CHAR
OR OE_GLOBALS.Equal(p_initial_line_rec.PLANNING_PRIORITY
, p_old_line_rec.PLANNING_PRIORITY))
THEN
p_x_line_rec.PLANNING_PRIORITY := FND_API.G_MISS_NUM;
END IF;
END PLANNING_PRIORITY;
```

Note that for VARCHAR2 fields, you must replace G_MISS_NUM with G_MISS_CHAR. For DATE fields, it should be G_MISS_DATE. Also, add a statement in the big IF loop in the main procedure to call this new sub-procedure:

```
ELSIF l_dep_attr_tbl(i) = OE_LINE_UTIL.G_AGREEMENT THEN
AGREEMENT;
```

For adding dependent fields on Order Header entity, follow the above steps & add similar code in header utility package: OE_Header_Util (file: OEXUHDRB.pls).

Controlling Changes

Order Management's Defaulting Rules controls who can change data and when using the Processing Constraints framework regardless of how or whether an attribute was defaulted. In addition, when defining Processing Constraints you have the ability to indicate that you want the system to be able to update an attribute, but limit your other

others privileges to make changes.

The only time that Defaulting Rules result in a change to an existing attribute on an entity is when that attribute has a dependency on another attribute that has been changed.

Reports

There is a new report in Order Management that lists the Defaulting Rules you have set up. It replaces the old OE Standard Value Rules Listing. The report is called Defaulting Rules Listing, and it has parameters to allow you to limit the listing to a specific object (entity), attribute or condition. One more parameter is the option to specify if it is: Seeded (yes or No).

Order Management seeded defaulting rules that defaulted Order Type and Salesrep from the customer have been deleted. A report has been provided to enable you to view the deleted defaulting rule list. The report is ontkexc01.lst generated by ontkexc01.sql and is available from the patch log..

Implementation Considerations

Creating Conditions

As stated previously, conditions give you powerful flexibility in designing how you will implement defaulting rules for your company. However, there are a few behaviors to take into consideration when creating Conditions.

What Attributes can you use?

Be aware that Conditions you create for an entity can only be based on attributes that belong to that entity. Therefore, for example, you cannot set up a Condition for a line attribute based on Contact because Contact is a header attribute. You'll have to examine carefully your business rules so you can state Conditions in terms of attributes on the same level. Fortunately, in Order Management, most attributes (with few exceptions such as Price List and Currency) at the header are also present at the line level. Even the sold-to customer is present as a line-level attribute, even though the software enforces that the customer is the same throughout an order. This way, the customer can be used in a condition template for the line.

Sequencing of Attributes Used in Conditions

Sequencing of defaulting of attributes plays an important role in the correct design of Conditions and Sourcing Rules. If you create a rule for attribute X based on a Condition using attribute Y, you must be sure that attribute Y gets defaulted before attribute X, or your Condition will not evaluate true. For example, if you define a Condition for defaulting the Unit of Measure by using the Customer, it will only work if you ensure Customer gets defaulted before UOM, and even then, it will only work for the initial defaulting of the UOM field. That is because of Dependencies.

Dependencies of Attributes Used in Conditions

So you must also regard dependencies when you are building Conditions. If a Condition involving attribute Y is used to setup the defaulting rule for attribute X, then the rule will work during subsequent updates of attribute Y only if attribute X is dependent on attribute Y. So in the UOM and Customer example above, if you later change the Customer on the order, the UOM will not re-default based on the new customer, because UOM is not dependent on Customer.

Defaulting vs. Cascading

In Order Management, a clear and unambiguous distinction has been made between defaulting and cascading, that will cause data to populate in the windows in different ways. In Order Entry, defaulting and cascading were intermixed, making it sometimes difficult to predict what might happen when an attribute at one level was changed. In Order Management, the defaulting logic will come into play only when the record is initially created (when you click on a new record on the window), or when an attribute upon which this attribute is dependent is changed. Cascading, on the other hand, means that if the header attributes change, the corresponding line attributes change. During Cascading either all the lines are updated or if there is a failure, none of the lines are updated. Again, this is different from the new mass change capability, where you multi-select the rows you want to change, and then they are updated on clicking Ok in the Order Mass Change window.

How are these concepts applied? Assume you have a defaulting rule set up to default an attribute such as Shipping Method from the header to the line. Create an order with several lines and use Shipping Method A for the header and the line values get defaulted to Shipping Method A. Then you want to change the shipping method to Shipping Method B at the header level. Changing this attribute at the header will result in any subsequent new lines getting Shipping Method B defaulted onto them. The existing lines that have Shipping Method A will not get changed to B as a result of your changing the header attribute unless Cascading for the Shipping Method attribute is enabled. In such a situation, the Shipping Method attributes at the line level will automatically update to Shipping Method B. Apart from the Shipping Method, other related fields will also be updated automatically due to Cascading.

New Defaulting Features

Now, End Customer functionality allows defaulting for Install Base information for better accuracy. You can optionally default values for Install Base Owner, Current Location and Installed At Location at the header and line levels. The End Customer fields are located on the Others Tab of the Sales Orders form.

Also with the new Pricing and Availability functionality, you can setup to default pricing & availability attributes including, demand class, item identifier type, warehouse and price list.

Because of the magnitude of the changes to the fundamental architecture between SVRS and Defaulting Rules, the decision was made to not upgrade any user-defined SVRS. Defaulting Rules have been seeded that provide equivalent functionality to the R12

seeded SVRS.

Users of Order Entry who created their own Standard Value Rules or customized the seeded rule sets will need to carefully review the logic behind their changes or customizations, and create equivalent Defaulting Rules for the attributes affected. Typically a user will need to create Conditions corresponding to their particular business need, and then create Defaulting Rules using those Conditions for the necessary attributes.

Order Management Defaulting Rules

The Defaulting Rules Listing Report shows the possible entities and attributes for which you can define defaulting rules. Entities like Order Header, Order Line, Line Payment, Order Payment.

Cascading

In previous releases, the number of attributes that cascaded to the lines on update were limited. The cascading feature introduced in the current release expands on the number of attributes that may be cascaded to the order lines if required and can be determined at set up. Cascading will occur for either all or none of the lines. If there is an update failure for one line, then the cascade processing will fail for the other lines. For example, if there is a processing constraint in place at the line level that restricts update and that attribute is updated at the header, which subsequently fails for the line, cascading will fail for all other lines.

Note: Cascading should not be used as a substitute for or an extension of masschange/multi-select.

The existing profile OM: Sales Order Form: Cascade Header Changes to Line determines what choices the user has when using this feature, but does not enforce cascading.. The attributes need to be enabled in the quick code lookup before Cascading will take place. The attributes can be enabled or disabled and the profile will determine the manner in which they cascade, for example, you can either confirm cascade to lines or set it to be done automatically.

The profile has the three modes: If the value is set to Automatic, the system will cascade the header attributes to lines whenever a header attribute is cascaded. If the value is set to Askme, you are given a choice to cascade or not. If the value is set to Manual, you should manually change the values for the attributes on the lines and the system does not cascade the changes from header to lines.

Profiles

Name: **OM_UI_CASCADE_HEADER_ATTRIBUTES**

Application: **Order Management**

User Profile Name: **OM: Sales Order Form: Cascade Header Changes to Line**

Description: **Cascade Header Attributes to Lines in Sales Order Form**

Hierarchy Type: **Security**

Hierarchy Type Access Level

	Visible	Updatable
Site	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Responsibility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Server	<input type="checkbox"/>	<input type="checkbox"/>
Server+Responsibility	<input type="checkbox"/>	<input type="checkbox"/>
Organization	<input type="checkbox"/>	<input type="checkbox"/>
User	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Active Dates

Start: **29-JUL-2001**

End:

User Access

☐ Visible

☐ Updatable

SQL Validation used for the Profile Option's List of Values

```
SQL="SELECT MEANING \"Default Cascade Options\", LOOKUP_CODE
INTO :VISIBLE_OPTION_VALUE, :PROFILE_OPTION_VALUE
FROM OE_LOOKUPS
WHERE LOOKUP_TYPE = 'UI_CASCADE_PRIVILEGE'
COLUMN = \"\"Default Cascade Options\"(40)\"
HEADING= \"\"Cascade Options\"(7)\""
```

When the profile has been set, the attributes need to be enabled to complete the set up. Cascading in this manner is supported via the user interface but is not supported for APIs.

The lookup OM: Header To Line Cascade Attributes has the list of the attributes that can act as a defaulting source from the order header to its lines. This lookup is used to determine which of the attributes should be cascaded from the header to the lines whenever the attribute is updated on the order header. You can choose to disable the attributes in the lookup if you prefer not to have changes to the value of a header attribute to cascade from the header to its lines. Quickcodes/ the lookup is set at the user level and is not extensible.

Order Management Lookups

Type: **OM_HEADER_TO_LINE_CASCADE**

Meaning: **OM: Header To Line Cascade Attributes**

Application: **Order Management**

Description: **To decide whether the cascading feature for a attribute**

Access Level:

- ☒ User
- ☐ Extensible
- ☐ System

Effective Dates: From To Enabled

Code	Meaning	Description	Tag	From	To	Enabled
ACCOUNTING	Accounting Rule	Accounting Rule		19-MAY-2005		<input type="checkbox"/>
AGREEMENT	Agreement	Agreement		19-MAY-2005		<input checked="" type="checkbox"/>
BILL_TO	Bill To	Bill To		20-MAY-2005		<input type="checkbox"/>
BILL_TO_CO	Bill To Contact	Bill To Contact		19-MAY-2005		<input type="checkbox"/>
BLANKET_NL	Sales Agreement Nu	Sales Agreement Nunn		19-MAY-2005		<input type="checkbox"/>
CUSTOMER	Customer	Customer		20-MAY-2005		<input type="checkbox"/>
CUSTOMER	Customer PO	Customer PO		19-MAY-2005		<input checked="" type="checkbox"/>
DELIVER_TO	Deliver To	Deliver To		19-MAY-2005		<input type="checkbox"/>
DELIVER_TO	Deliver To Contact	Deliver To Contact		19-MAY-2005		<input type="checkbox"/>
DEMAND_CL	Demand Class	Demand Class		19-MAY-2005		<input type="checkbox"/>

For a list of line attributes that change due to Cascading please refer to the Appendix, Header to Line Cascade Attributes Lookup, page D-16.

Order Inquiry and Status

This chapter covers the following topics:

- Pricing and Availability
- Profiles and Parameters
- Setup
- Order Organizer
- Profiles
- Creating & Managing Folders in Oracle Applications
- Order Information
- Setup
- Oracle Applications Framework (OAF) Overview
- Menus and Responsibilities
- FND Messages and Lookups
- UI Definition Overlays with the OA Personalization Framework
- OA Personalization Framework
- Personalization Levels
- Admin-Level Personalizations
- Create/Update View Page
- General Properties
- Column or Attribute Properties
- Search Query to Filter Data in Table
- Saving Your Personalized View
- Personalizing the Order Information Portal
- Advanced Settings

- Adding New Items With OA Personalization Framework
- Add a New Region Item
- Add a Link in the What's New Region

Pricing and Availability

Overview

Pricing and Availability provides item prices and displays the availability of items priced, across all organizations. The Pricing and Availability window enables you to:

- Check price and availability
- Check price and availability by item cross-reference, customer item, or item description.
- View both the Selling Price and List Price of a product.
- View price list breaks, automatic discounts, and available surcharges for a particular product or customer.
- What-if analysis of price based upon an Agreement, Price List, Pricing Attribute, Order Quantity, Customer, Currency, Ship To, Bill To, OrderType, Pricing Date, or Request Date.
- Check price by specific currency and select the currency type the Selling Price is calculated and displayed.
- View a limited set of item attribute details.
- Validate your Pricing Setup by ensuring your selling price is correctly returned by the pricing engine prior to placing an order; the selling price will include any eligible qualifiers, modifier, or discounts you have defined.
- The Pricing & Availability form allows quick price and/or availability checking of an item without entering an order, and includes:
- Automatic conversion of an queried item or item in the saved selection area into a Quote or a Sales Order.
- Demand class, line type search criteria, well as the ability to enter "ask for" promotions and coupons.
- Pricing and Availability checks of ATO items.
- Enhanced defaulting of attributes that can affect Pricing and Availability, including

demand class, item identifier type, order type, warehouse and price list.

- A results tab that displays Related Items, such as up-sell, cross-sell or substitute items, and their price and availability.
- A sub-tab of Pricing results tab displays additional benefits modifiers that are applicable but that do not affect the selling price, such as terms substitution, promotional goods, other item discounts, item upgrade, or coupons.
- Display of modifier price breaks in addition to existing price list price breaks.
- Ability to apply manual discounts to items having price checked.
- Ability to store a selected group of items being checked to allow simultaneous ordering.

Profiles and Parameters

The following profiles control the look and feel of the Pricing and Availability form:

OM: Display Current Selections in Pricing and Availability

This profile controls whether or not the multiline area at the bottom of the window displays where you can save items before ordering them. The default is No. Leave this set to No if you want a simple form and want to operate on one item at a time. If you set it to Yes, a scratch pad area called Current Selections appears.

OM: Sales Order Navigation From Pricing and Availability

This profile controls how items are added to an order or quote. The options are Always, Never, or Ask. This determines if the Sales Order or Quick Sales Order form opens with the new order or quote displayed. If the value is Ask, you are asked if you want to open the window.

The following profiles also affect form behavior:

OM: Sales Order Form Preference

The profile controls the window that displays after the create order or create quote button is selected. The options are the Sales Orders window or the Quick Sales Orders window.

OM: Discounting Privilege

This profile controls the availability of manual discount.

OM: Unit Price Precision Type

This profile controls the precision of the pricing display. Choices are standard or extended precision.

OM: Add Customer

This profile controls whether the user can add new customers from this form.

ONT_PRC_AVA_DEFAULT_HINT

This seeded parameter enables you to enter the text that displays on the first line of the Hints region of the Pricing and Availability window.

Setup

To set up Pricing & Availability:

1. Set the appropriate profile options, as specified in Profiles and Parameters, page 8-3 .
2. Set appropriate user responsibilities for Function Security. Function Security controls the visibility of buttons for creating an order or quote. These buttons are not visible in the pricing and availability window. Function security also controls whether or not you can display cost and gross margin.

Note: Advanced Pricing must be fully installed to use the additional benefits features in the results area. You can still use Pricing & Availability with Basic Pricing but you not see any additional benefits or price list price breaks information.

Order Organizer

Overview

The Sales Order Organizer has a Navigator tree view and a Summary information view. The tree view consists of a set of user-defined folders, or queries, that you use to access most commonly used orders/lines.

Tree View

The tree view consists of:

- **Today's Orders:** Displays new orders for the session.

- **Search Results:** Displays the search results from Find Window.
- **Personal Folders:** Displays user-named queries.
- **Public Folders:** Displays folders created as public

Summary Information View

Summary information consists of Summary and lines tabs. The information in Summary and Lines tabs is view only. The information shown in these tabs changes based on the selection in the tree nodes. You can access other functions through the Actions List/Special Menu or context menu.

Find in the Order Organizer

To run saved queries, use the find function in the Order Organizer or go straight to the summary form.

The find window in the Order Organizer form has the following advantages:

- You can create different folders for the types of queries you most commonly perform and save these queries within the Order Organizer.
- The organizer is extensible using folder technology and supports search fields specific to user requirements. You can determine how and where to display them.

Profiles

OM: Show Line Details

This profile allows you to optionally specify whether model details such as options, classes, or included items display in the Lines summary. Controlled at the user level, user preference is shown as an entry in the Tools menu. This preference can be changed for the forms session. Every form is opened in a separate session, and a forms session ends once it is closed. Once you change the selection, a lines summary block is re-queried with the new preferences.

The profile option value must be set to not display line details. By default, only standard lines, shipment lines, service lines and models display. Details of the model are not displayed.

OM: Administer Public Queries

This profile determines who can create/update public queries in the order organizer Tree.

Creating & Managing Folders in Oracle Applications

See *Oracle Applications User's Guide* for information on customizing the layout of data in various forms by creating and managing folders in Oracle Applications.

Setup

There is no specific setup associated with the organizer other than setting the profiles mentioned above and the definition of any required folders or queries.

Order Information

Overview

The purpose of Order Information is to provide an industry leading and competitively differentiating self-service order management offering to improve the accessibility of service to customers, improve customer satisfaction, and limit expensive calls to the support center.

The View Sales Orders Inquiry window allows you to search for Sales Orders and view their details. It also contains links to related information like deliveries, AR and Quality. Order Information can be personalized for the requirements of different self-service users. For example, Sales representatives may define various views on each of the customers they are responsible. A warehouse manager may want to only look at recently shipped deliveries. Such views can be defaulted for each responsibility.

Order Information can be used for internal and external users. View for the external user is secured by Customer, which you can assign. User can be assigned in the Define users window in System Administration responsibility in Oracle Applications. A user without a customer assigned to it is treated as an internal customer.

Implementation Requirements

You can use a browser to access the Order Information web page with a sign on and password. Request an account through your system administrator.

Profiles

OM: Customer Service Feedback

This profile option indicates the internal contact designated to receive the workflow notifications for RMA requests entered from Order Information. The list of values for this profile include all users, defined Oracle Applications through System Administrator responsibility, with no customer contacts. The default for this profile option is Null and optional.

OM: Customer Service Report Defect

This profile option indicates the internal contact who will receive a workflow notification for any Report Defects submitted from customers from Order Information. The list of values for this profile include all users, defined Oracle Applications through System Administrator responsibility, with no customer contacts. The default for this profile option is Null and optional.

OM: Records on Summary Page for External Users

This profile option determines if the system executes the default query for external users. The values are Y or N. Set to Y to run the default query. If the query is very long, you may want to set to N.

Personalize Self Service Defn

This profile option enables the global Personalize Page link on every page to allow personalizing any page or region of an OA Framework application. This profile must be set to Yes to allow users to personalize a region.

FND: Personalize Region Link Enabled

Every OA Framework-based application contains a global Personalize Page link. In addition, users can personalize regions. To personalize regions, set the value of this profile option to Yes. If this profile is set to No, users will not be able to personalize regions within Order Information.

Personalize Self-Service Defn

FND_CUSTOM_OA_DEFINITION

Set this profile option to Yes or No at the user level for an administrator or at the responsibility level for the system administrator. When you set this profile option to Yes, and log on as an Admin-level user or responsibility:

- A global Personalize button appears on each self-service web application page. When you select the global Personalize button on any page, the personalization user interface prompts you for the administrative level at which you wish to create your personalizations. A navigation tree then lets you navigate to the region or nested region to personalize.

- Personalize Region links appear for every personalizable region on each self-service web application page. When you select a Personalize Region link, the personalization user interface first prompts you for the administrative level at which you wish to create your personalization, then takes you directly to the page to personalize.

You can choose the Personalize button or Personalize Region links to create your personalizations.

Disable Self-Service Personal

FND_DISABLE_OA_CUSTOMIZATIONS

You can set this profile option to Yes or No at the site or application level. If this system profile option is set to Yes, any personalizations you make, regardless of the level at which you make the personalizations, will not be applied. Only the original base definition of each self-service web application page is ever displayed.

Note: Additionally, you may set the FND: Personalize Region Link Enabled profile to Yes to enable the "Personalize Region" links above each region on a page.

Related Topics

Oracle Self Service Web Applications Implementation Manual

Overview and the Oracle Applications System Administrators Guide

Setup

To setup an external user:

1. Create a Customer Contact. Include Last Name, First Name, Title, and Job.
2. Navigate to N: System Administrator > Define Users. The external user can be set up by assigning a customer contact to the user in the Customer Field. Select the customer contact from the list of values. When this is set up, the external user sees only his or her data.

Personalization allows you to tailor the user interface to suit your preferences. Personalization refers to the ability to tailor the following to suit a business need:

- Look and feel of the user interface
- Layout of the user interface
- Visibility of built-in content

Oracle Applications Framework (OAF) Overview

Oracle Applications Framework (OA Framework) is designed to provide rich and upgradable personalization capabilities.

Menus and Responsibilities

You can use the Menu and Responsibility forms to personalize and maintain security for Oracle Self-Service Web Applications. You can use the forms to assign specific responsibilities to your users and designate the menus that are available to the users of a given responsibility.

Related Topics

Managing Oracle Applications Security, Oracle Applications System Administrator's Guide

FND Messages and Lookups

You can similarly use the Messages and Lookups forms to modify existing, or define new messages and lookups, respectively. For example, you may have a need to create additional messages for display within an application that is pertinent to your users or you may want to add new lookup values to a lookup type that are applicable to your site.

Related Topics

Message Dictionary, *Oracle Applications Developer's Guide* and Application Utilities Lookups and Application Object Library Lookups in the *Oracle Applications Developer's Guide*

UI Definition Overlays with the OA Personalization Framework

Finally, you can use the functionality of OA Personalization Framework to personalize the UI of an application page. Administrators can create personalizations that overlay the existing UI and are targeted to specific audiences.

OA Personalization Framework

OA Framework includes the OA Personalization Framework which allows you to personalize your user interface (UI) of Oracle Self-Service Web Applications without modifying any underlying code. Personalizing the appearance of or the data displayed in an Oracle Self-Service Web Application page is as easy as changing your web browser preferences.

All personalizations you make through the OA Personalization Framework are added on top of the base product meta data at runtime. These personalizations never overwrite the existing base product UI and are therefore preserved during upgrades and patches and can also be translated. This means you can create your personalizations on a test system first and easily load your finalized personalizations to your production system with little interruption.

Common types of personalizations you can accomplish with OA Personalization Framework:

- Change the prompt for a field or other text on a page
- Hide or show a field on a page
- Reorder fields or items on a page
- Restrict data that a user can access
- Add new buttons, links, text items, images, etc.
- Restrict query results in a table

With OA Personalization Framework, your personalizations are reflected immediately on the page.

Personalization Levels

OA Personalization Framework supports localization, verticalization, and customization teams in their efforts to tailor self-service web applications. OA Personalization Framework accomplishes this by allowing you to make personalizations at distinct levels so that you may target those personalizations to specific audiences.

There are different personalization levels available from the administrative stand-point: Localization, Site, Organization, and Responsibility. When you make personalizations at any of these levels, the personalizations are available only to the audience defined by that level. Since personalizations should only be made at these levels by a system administrator, these are collectively referred to as Administrator-level (or Admin-level) personalizations. Admin-level personalizations can be performed on any component in a page.

Admin-Level Personalizations

To Personalize a Region at an Admin level:

1. Sign-on to Oracle Self-Service Web Applications as a user who has Admin-level personalization access.

2. Select a responsibility.
3. Navigate to the application page that contains the region you wish to personalize.
4. Choose the Personalize... link above the region you wish to personalize or select the Personalize Region global button.

Note: If the region is a table, the Personalize Region link appears below the table.

5. In the Personalization Level field, select the administrative level at which you wish to personalize the region.
6. On the next page, enter a value appropriate for the Personalization level you selected. The Site level does not require any value as the personalization applies to all users of the current site. Other levels, such as Responsibility or Function, for example, require a specific responsibility or function name, respectively.
7. If you initially selected the Personalize Region link for a specific region, the Create View or Update View page for that region should appear. Use the Create View or Update View page to create a new view or update the existing personalized view of the region.
8. If you initially selected the global Personalize Region button, a navigation tree appears to the left of the Create View or Update View page. The tree displays the hierarchy of all the regions that make up the current application page and allows you to navigate to any region within the page. Select the region you wish to personalize from the navigation tree to display the Create View or Update View page for that region.

Create/Update View Page

The Create View page is identical to the Update View page, except that the fields in the latter page are pre-populated with settings from a prior personalization.

Note: In OA Framework 5.7 and above, the following restriction applies for pages developed in MDS or migrated to MDS from AK. When you personalize a parent region, you can no longer change any of the properties of its nested regions through the Advanced Settings page. You must select the Personalize Region link for the nested region and personalize the nested region itself. Only the properties of region items (such as individual fields) can be changed in the Advanced Settings page when you personalize a parent region.

General Properties

You may edit the General Properties of your region. Note that some of the properties discussed below do not appear if they are not relevant to the region you are personalizing.

- The page always shows the personalization level and personalization level value, if any, at which you are making personalizations.
- If the region has a header or label, you can update the value in the New Label field.
- If your selected region is a table, select the number of rows of data you wish to display.
- If the region has a corporate-branding image file or product-branding image file defined, you can specify your own GIF image files to replace either of these files. If the region you are personalizing is not nested within other regions, that is, it is a page layout region, the image in your custom product-branding image file replaces the product-branding image that appears beneath the Corporate logo. If your region is a nested region, such as a header level region, the image in your custom product-branding image file replaces the icon that appears next to the header.
- If you are creating a personalization at an Admin-level that is higher than Localization, you have the option of associating a different controller class name with the region. This is useful if you are creating Localization-level personalizations and want to associate different controller classes with different localizations.

Note: You cannot change the controller class name associated with a region if you are creating an Org-or Site-level personalization, that is, a personalization at an Admin-level lower than Localization.

Column or Attribute Properties

If the region you are editing is a table, this part of the Create or Update View page is called Column Properties. If the region is not a table, this part of the page is called Attribute properties. Edit the Column/Attributes Properties section to specify the items you wish to display in the region and the order in which to display them.

1. Select an item from the Available Columns/Attributes or Columns/Attributes Displayed list and use the buttons between these lists to either move the selected item to or remove the selected item from the Columns/Attributes Displayed list.

Note: Items that are required fields in a page appear with an asterisk (*) and cannot be removed from the Columns/Attributes Displayed list.

2. Once you are satisfied with the items to display, use the buttons to the right of the list to reorder their sequence.

Note: You can hide or reorder the display of specific regions in a page by personalizing the region items of the top level region, that is, the parent container or page layout region.

3. Choose Advanced Settings to alter other settings for your items or add new items your region.

Sort Settings

If the region you are personalizing is a table, the Sort Settings section appears in the Create View or Update View page.

- You can specify up to three levels of sorting for your data. Select a column from the Column Name context menu for each level of sorting you wish to perform.
- For each sort column, you must specify whether to sort in ascending or descending order.

Search Query to Filter Data in Table

If the region you are personalizing is a table, then the Search Query to Filter Data in Table section appears in the Create View or Update View page. You can filter the data that is displayed in the table based on criteria that you specify.

1. Indicate how you want the filter to match your search conditions by selecting one of the following radio buttons:
2. Show table data when all conditions are met.
3. Show table data when any condition is met.
4. The first four columns of the table are listed for you to specify search criteria. Using the context menu following the column name, choose a search condition and enter a value to search for in that column.
5. Select a column from the Add column context menu and choose Add to add more search criteria to your filter.

6. If you leave the search criteria blank for a column, the filter will not search on that column.

Saving Your Personalized View

To save your personalized view:

1. When you are done personalizing your view of the region, choose Apply to apply your personalizations to the region.
2. If you choose Revert to revert to default settings, the following occurs depending on the page you are using:
 - Create View page: the page defaults to the preseeded display settings. Also, if the region is a table, no query options are set.
 - Update View page: the page defaults to the display settings of the saved existing view. If the region is a table, the page also defaults to the query options of the saved existing view.

Personalizing the Order Information Portal

You can perform the following personalizations in Order Information Portal for all the four tabs:

Home Tab

You can personalize the What's New region by changing the prompt and Destination URL attribute in the personalization page.

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Order Information

[Diagnostics](#)
[Home](#)
[Logout](#)
[Preferences](#)
[Help](#)
[Personalize Page](#)

Personalize Page: Home

Choose Context

Manage Levels

Personalization Context

Scope

Page: Home

Document Name

/oracle/apps/ont/homepage/webui/ICP_HOME_PAGE

Site

Include

Organization

Vision Operations

Responsibility

Order Information Super User, Vision Operations (USA)

Search

Personalization Structure

Simple View

Complete View

TIP

In simple view mode, some items or regions may not be visible in the page structure and the reorder or create icon may be disabled for certain nodes. Please switch to complete view mode if you need full personalization capabilities over all items and regions.

Expand All

Collapse All

Focus Name	User Shown	Personalizable	Personalize	Reorder	Create Item	Update Item	Delete Item	Seeded User Views	Customize Look And Feel	Show in Complete View
Page Layout: Home	Yes									
Copyright										
Message Styled Text: Copyright (c) 2006, Oracle. All rights reserved.	Yes									
Privacy										

Order Status Tab

You can customize the search (Simple and Advanced) results pages by hiding/displaying columns like Operating Unit and End Customer.

Personalize the Order Detail Page – Header General Section. You can display/hide attributes like Operating Unit, Sales Agreement Number (for SA users), End Customer, End Customer Location, End Customer Address, End Customer Contact, Owner, Current Location, Install Base Current Address, Installed at Location, Install Base Installed At Address. The Descriptive Flexfields - Additional Header Information, Additional Header Global Information and Header Level Trading Partner Information are customizable too.

Customize the Order Detail Page - Header Shipping Section. You can display/hide defaulted attributes like Shipping Method & Partial Shipments Allowed.

Customize Order Detail Page - Header Billing Section. You can use personalization to display/hide fields like Tax Handling, Subtotal, Tax, Charges, Discount.

Customize Order Detail Page - Line Table Region. You can display/hide attributes like Sales Agreement, Dual UOM, Preferred Grade, Acceptance Status, Acceptance Date, Accepted By, Acceptance Reference, Acceptance Comments, Acceptance Signature, Ordered Quantity, Ship To Location, Actual Shipment Date, Schedule Arrival Date, Promise Date, End Customer Name, End Customer Location, End Customer Contact, Install Base Owner, Install Base Current Location, Install base Installed At Location.

Customize the Line Detail Page (this page is displayed by clicking the Detail icon in a line (row) of the Order Detail Page). You can display/hide the following attributes:

1. Descriptive Flexfield region and the underlying DFFs. They are: Additional Line Pricing Information, Additional Line Pricing Information, Additional Line Return Information, Additional Line Industry Information, Additional Line Attribute Information, Trading Partner Flexfield, Additional Line Global Information.
2. In the Quality Information region, you can unhide Item Description attribute.
3. In the Price Adjustment Details region, you can unhide List Line, Pricing Phase attributes.



Delivery Tab

In the Delivery tab, you can personalize the attributes/regions described below:

- Customize the search results for both Simple and Advanced Search pages by hiding/displaying attributes like Vehicle Type, Vehicle Number and Customer Name.
- Customize Advanced Search page by displaying hidden attributes like Operating Unit.
- Customize the Delivery Detail Page - Vehicle Type and Vehicle Number in Header: Shipping Information region are hidden attributes that can be displayed by personalization.
- Customize the Delivery Detail Page- delivery line table region. Operating Unit is a hidden attribute which can be displayed using admin personalization.

2. Use the Updatable check box to mark whether the data for an item is updatable.
3. If you are personalizing a table, the Show Total column appears. You may check Show Total to turn on totaling for a specific item/column in your table, if it is applicable to the underlying data.

Note: If you choose to display a column with totaling capabilities, you may want to display this column as the last column of the table. You can reorder the columns in the Columns Displayed list located on the Create/Update View page.
4. Specify a default value for an item. This is optional.
5. You can display a static text message or tip for a column or region item. For example, suppose you need to add a tip on how to enter data into a specific column for your users in Japan.
6. If a column or attribute has a URL associated with it, you can edit the URL in the URL field. Columns/attributes such as buttons, images or links may have an associated URL that the application navigates to when a user clicks the button, image or link.
7. Choose Apply to accept your changes and return to the Create View or Update View page.
8. If the region you are personalizing is not a table, you may add a new item to the region. Choose the Add New Item button to add new items to your region with OA Personalization Framework.

Note: OA Personalization Framework does not currently support adding a new item to a table. All items in a table must be set to the same BC4J view usage name.
9. Use the Edit Item or Delete Item columns to edit or delete any of the items you create with OA Personalization Framework.
10. A column called Attachment Categories appears in the Advanced Settings screen. If an item within the region is an attachment item, an Categories button appears in the column for that item.

Adding New Items With OA Personalization Framework

You can add new items or fields in OA Framework-based pages in Oracle Self-Service Web Applications. You can only add new items to a self-service application page at the

Admin-level.

To add new items:

1. Enable Admin-Level personalizations for your application by setting the Personalize Self-Service Defn profile option to Yes.
2. Navigate to the Create/Update View for the page you wish to personalize, and then choose Advance Settings.
3. The Advanced Settings page includes an Add New Item button.
4. When you select Add New Item from the Advanced Settings screen, a new screen called Extended Region Item appears, that lets you define a new region item.

Add a New Region Item

The region application ID identifies the application for which the current region applies and is owned. The region code identifies the region for which you are adding a new region item.

1. Select an application ID that identifies the application for which this attribute applies and is owned. OA Personalization Framework creates an attribute based on the information you specify in this page and creates a usage of that attribute as the new region item.
2. Enter a name for the new region item.
3. Use the Item Style poplist to select the type of HTML User Interface object that represents the data for the new item. The item styles that you may choose are:
 - Button: A button represents an action that you can perform on a region. OA Framework generates buttons as images that represent the underlying function.
 - Images: An image can be a plain image that simply appears on the page, or can have a URL associated with it so that the user can click on it to navigate elsewhere. Although icon images are generally used as global buttons in Oracle Self-Service Web Applications, an icon image may also be used next to text to visually quantify its content, as in the case of tips, or in line messages
 - Raw Text: Any type of text. For example, the raw text style allows you to enter HTML tags to display text in bold.
 - Reset Button: A button that resets the values in a page.
 - Separator: A line to separate portions of a region. By default, the separator is rendered as a blue dotted line.

- Spacer: A space that you can include in a region to improve the appearance of its layout.
 - Static Text: Text that is for display only and not for editing purposes. For example, if you wish to create a URL link, you would define its item style as static text.
 - Text: A text field that can be updated and have a default value.
 - Tip: Text that provides a tip about the contents of the region. When you select Tip as the Item Style, and then select Apply after completing the remainder of the Extended Region Item page, you return to Advanced Settings. In the Advanced Settings page, you can then specify the Tip Type and Tip Message name for the Tip region item.
4. Enter a label for the new region item. The value you enter gets displayed as the label of the region item.
 5. Specify the horizontal and vertical alignment of the region item. A horizontal alignment of Start results in left alignment for languages that read left to right or in right alignment for languages that read right to left.
 6. Specify a URL if your region item style is an Image, and you want to navigate to another URL when your user clicks on the image.
 7. If your region item style is Image, specify filename of your image file. Do not include any path information, as all image files must reside in OA_MEDIA.
 8. Enter a description for your region item.
 9. Choose Apply to create the new region item. The new region item should now appear in the Advanced Settings screen.
 10. If you are the creator of the new region item, you can select the Edit Item or Delete Item column icons in the Advanced Settings page to edit or delete the region item. If you are not the owner of the new region item, or the region item is not created from OA Personalization Framework, the Edit Item and Delete Item icons are disabled.

Add a Link in the What's New Region

To modify links in the "What's New" region:

The What's New region is configurable. From this region, administrators can link to other pages in Order Information, or to external URLs. This is done using the personalization framework.

Items

This chapter covers the following topics:

- Item Usage in Order Management
- Related Items and Manual Substitution

Item Usage in Order Management

Advanced Item Search

Overview

Advanced Item Search provides an additional, expanded item search capability within the Sales Order form and the Quick Sales Order window. You can search for items using criteria such as item description, category, catalog information, etc. This enables the user to select items by characteristics that vary frequently. For example a distributor of CDs, DVDs or Videos may take orders by Current Chart Position as well as Catalogue number, Artist, Title, etc. Once the search is complete and the item selected, that item is added to the sales order. Note that this search does not replace the current Item LOV, but adds the ability to search for items based upon item attributes.

Catch Weight Support

Catch weight support allows the user to specify a secondary quantity and secondary UOM at the time of shipping and to reprice and invoice the order based on that quantity. Catch weight support in Oracle Order Management has been available only for Inventory Organizations which are enabled for Process Manufacturing.

Now any catch weight enabled item, which is shipped from a Warehouse Management System (WMS) inventory organization, can capture the secondary quantity and secondary UOM at time of shipping. This actual quantity is used to determine the extended price for the order line and this price is prorated to determine the selling price

for the primary quantity.

Setup

To use catch weight, you must define the item as a catch weight item in Oracle Inventory. Otherwise, the secondary quantity and secondary UOM is not used for pricing. The Pricing UOM is an additional field on the Item Master used in pricing calculations for catch weight items. You can specify which unit of measure is used for pricing these items. Unit of measure conversions must be established if they do not already exist between the two units of measure for the catch weight item.

The discrete inventory organizations needing catch weight functionality must be flagged as WMS enabled.

Related Items and Manual Substitution

Overview

Related Items and Manual Substitutions defines relationships between sales items which enable you to perform, in part, up-selling, manual substitution, and cross-selling of items. These item relationships are defined within Oracle Inventory. The Related Items window shows you the item relationships of the ordered item. This feature enables:

Cross-selling

Enables you to suggest additional items to a customer who is placing an order.

Manual Substitution

Substitution is the capability to suggest equivalent items.

Supercession

This occurs when a product is replaced (superseded) by another product.

Up-selling

Allows the user to suggest a better item to a customer who is placing an order.

Usability features included in this release include:

- The ability to optionally show Selling Price and Availability for Related Items.
- The ability to view the Original Ordered Item and the Relationship Type used on sales order line.
- Notification of the existence of related items by a color change on the ordered item

and a message hint.

- The ability to have the Related Items window open automatically if desired.

Setup

You must ensure that the appropriate item relationships are set up in Oracle Inventory to enable Manual Substitution functionality.

Profile Options

OM: Enable Related Items and Manual Substitutions

This profile option enables the Related Items and Manual Substitution feature. Set to Yes, Related Items and Manual Substitution is enabled. The default value is set to No, which disables this feature.

OM: Automatically open Related Items Window

This profile option enables automatic opening of the Related Items Window from a quantity field on the Sales Order window and Quick Sales Order window. Set to Yes, the Related Items Window will automatically open. The default value is set to No, which disables this feature. This profile is viewable and updateable at all levels.

OM: View Pricing/Availability Information in Related Items

This profile option sets the detail of information displayed in the Related Items Window. Available options are Pricing Information Only, Availability Information Only, Both, None. The default value is set to None. If the Related Items Window causes a negative performance impact, this profile can turn off the display. This profile can also be used to determine if you have viewing authority for the Pricing and Availability Information on Related Items window. This profile is viewable and updateable at all levels.

Related Topics

Oracle Inventory Users Guide

Change Management

This chapter covers the following topics:

- Processing Constraints
- Versioning
- Setup
- Open Interface Considerations
- Audit Trail
- Setup

Processing Constraints

Overview

Processing Constraints enable you to control changes to sales documents in Oracle Order Management. This chapter describes the Processing Constraints framework in detail.

Introduction

Processing constraints are rules that control who can change what and when they can change it. Processing constraints can prevent certain changes, but can also be set up to perform actions based on those changes. They can define actions that can result from these changes, such as requiring a reason for the change, triggering an action in Audit Trail or Versioning, or raising an Integration Event.

With processing constraints, you can control:

- Who can make changes based on responsibility. A constraint (rule) may apply to all responsibilities, to only a list of constrained responsibilities or to all except a list of authorized responsibilities.

- More than just what can be updated. The following operations can be controlled: Create, update, delete, cancel, and split all at the entity level. For example, given a set of conditions you may not want to allow a user to create a new order line. You can also control the update operation down to the attribute level. For example, given a set of conditions, you could choose to allow update to the warehouse field of an order line but not to the price list field.
- Changes to entities. An entity roughly corresponds to a table or window. The entities you can control in Order Management are:
 - Order Header
 - Order Line
 - Order Sales Credit
 - Line Sales Credit
 - Order Price Adjustment
 - Line Price Adjustment
 - Order Payment
 - Line Payment
 - Sales Agreement Header
 - Sales Agreement Line
- Changes based on a group of conditions. The conditions must be collectively true for the constraint to fire or prevent the changes. The conditions may be based on either the state of a workflow activity (where the entity is in the flow) or a value in a table. A condition may also be based on a custom API, which means that you can call your own PL/SQL code to evaluate the condition.

Multiple conditions can be combined using either AND logic (all the conditions must be true) or OR logic (at least one of the conditions must be true.)

A custom message can display when an attempt is made to violate a constraint.

This chapter details the differences between Processing Constraints and the functionality in Order Entry that it replaced - Security Rules. It describes in detail the implications of selected values in the following forms: Processing Constraints, Validation Templates and Record Sets. Finally, set up for processing constraints is demonstrated using the following business examples:

- No one can change the customer purchase order at the line level; your company requires that one sales order can relate to only one customer purchase order.

- No one can add a line to an order after any of the lines on the order have been invoice interfaced.
- A reason is required to cancel an order line after it has been booked.
- Only the Customer Service Manager can change the discount percentage on an order line after the line has been shipped.
- Require all return orders, identified by order type = Return, to be shipped to a central returns processing facility.

Constraints for drop ship functionality enable you to control changes within the drop ship flow between Oracle Order Management and Oracle Purchasing. See Processing Constraints, page 10-1 for details on these constraints.

Versioning in Order Management uses constraints to enable automatic versioning. You can use validation templates for example to drive versioning by transaction type as a condition. By using the processing constraints and workflow activity, you can increment the version and determine the statuses available to version, which give you complete flexibility setting up versioning.

See: Versioning, page 10-21

Background

Security Rules provide functionality to control changes to orders. However, they have certain limitations both in the philosophy and in implementation. In Order Management there is a processing constraints framework usable by other products.

This framework provides to you the ability to:

- Control changes based on who is trying to make them (by responsibility)
- Define constraining conditions based on the state of related objects (for example, define a constraint on a line based on the state of the order)
- Control changes based on the value of a field - see Validation Templates section below
- Call custom PL/SQL code to determine whether a condition is true
- Constrain operations at any point in the process flow. In prior releases you could only control operations for certain hardcoded cycle actions.

Terminology

Processing Constraints are very powerful and setting them up is not difficult; however, knowledge of the following terms is helpful:

Entity

A group of related attributes that roughly correspond to a table or a window in Order Management. The entities that can be managed using processing constraints are Order Header, Order Line, Order Price Adjustment, Line Price Adjustment, Order Sales Credit, Line Sales Credit, Order Payment, Line Payment, Sales Agreement Header, and Sales Agreement Line. Entities correspond to 'objects' in the old security rules.

Attribute

A field or column that belongs to an entity. For example, the ordered unit of measure is an attribute of the Order Line entity. Attributes correspond to fields in the old security rules.

Operation

An action that you can take on an entity. The operations that can be controlled by processing constraints are Create, Update, Delete, Cancel and Split.

Processing Constraints Framework

A generic facility that will enable you to define processing constraints for application entities and attributes. It includes the set of APIs that will enable you to query the existence of any constraint against the operations you wish to perform on that entity or its attributes.

Seeded constraints have the System box checked and cannot be modified.

Validation Template

Names a condition and defines the semantics of how to validate that condition. These validation templates can be used in the processing constraints framework to specify the conditions for a given constraint.

Record Set

A record set is a set of records that are bound by some common attribute values (for example all lines on an order). In the processing constraints framework, when you define constraining conditions, you may specify a record set to be validated for a given condition as defined by its validation template.

Scope

Given a record set and a condition, the scope (Any/All) defines how the validation should be performed on records of the record set. "All" requires the validation to be TRUE for every record in the set. "Any" requires the validation to be TRUE for at least one record in the set.

Conditions

The test(s) which must be passed for a constraint to be active. For example, a condition for a constraint might be that the order is booked.

Defining Processing Constraints

Processing Constraints Window Conditions Tab

Application: **Oracle Order Management**
Entity: **Order Header**

Constraints

Operation	Attribute	User Action	Applies To	System Changes	User Changes	Enabled	System
Delete		Not Allowed				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Delete		Not Allowed	Negotiation			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Update	Bill To	Not Allowed				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Conditions | Applicable To

Group #	Scope	Validation Entity	Record Set	Not	Validation Template	Enabled	System
1	Any	Order Header	Order	<input type="checkbox"/>	Is gapless	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2	Any	Order Header	Order	<input type="checkbox"/>	Booked	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
				<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

User Message: **Gapless Orders should be cancelled**

Navigate to the Processing Constraints window. Order Management > Setup > Rules > Security > Processing Constraints.

Note that the window is divided into several regions. The top region has fields for the Application and the Entity. Any one of the OM entities are the valid values for the entity field. This is used for querying—you cannot create new entities. When you query an entity you will see all the constraints defined against that entity.

Constraints

The Constraints region is where most of the details of a processing constraint are defined. The region enables you to view the seeded constraints, view, or update the constraints that were created for your company. You can create new constraints, but you cannot change the seeded constraints with the system check box marked.

Operation Field

The Operation field can have the values of Create, Update, and Delete for any of the entities, Cancel for Order Header and Order Line entities only, and Split for the Order Line Entity only.

Attribute Field

The Attribute field can only be used if the operation selected is UPDATE. You may enter a value here, and the constraint will only apply to that field. For instance you may define a constraint that affects only the warehouse field on the order line. If the

Attribute field is left blank the constraint will be in effect for all the attributes of the entity. For instance, you may define a constraint which prevents updates to any of the fields of an order line. Please note that only when constrainable attributes are updated, processing constraints execute. All attributes are not constrainable, therefore processing constraints will not execute for such attributes, even though the operation selected is UPDATE.

Action Field

The Action field allows you to select the action to be taken if the constraining conditions are met.

Note: There is no unique Require Reason action; it must be used in conjunction with Versioning or Audit.

Processing Constraints Window with User Action Menu Displayed

The screenshot shows the 'Processing Constraints' window. At the top, 'Application' is set to 'Oracle Order Management' and 'Entity' is 'Order Header'. Below this is a table of constraints. The first two rows show 'Delete' operations with 'Not Allowed' as the user action. A third row shows a 'Negotiation' operation. A dropdown menu is open for the 'User Action' field of the 'Negotiation' row, displaying a list of actions: 'Not Allowed', 'Generate Version, Require Reason and Raise Integration Event', 'Generate Version and Require Reason', 'Generate Version', 'Require Reason, History and Raise Integration Event', 'Require Reason and Require History', 'Require History', and 'Raise Integration Event'. Below the table, there are checkboxes for 'Not', 'Validation Template', 'Enabled', and 'System'. At the bottom, there is a 'User Message' field.

Operation	Attribute	User Action	Applies To	System Changes	User Changes	Enabled	System
Delete		Not Allowed				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Delete		Not Allowed				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
			Negotiation			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Not Allowed
Generate Version, Require Reason and Raise Integration Event
Generate Version and Require Reason
Generate Version
Require Reason, History and Raise Integration Event
Require Reason and Require History
Require History
Raise Integration Event

Not ☐ Validation Template ☐ Enabled ☒ System ☐

User Message

The combination of Actions that can be selected are:

- Generate Version, Require Reason and Raise Integration Event
- Generate Version and Require Reason
- Generate Version
- Require Reason, History and Raise Integration Event
- Require Reason and Require History

- Require History
- Raise Integration Event

Actions of Require Reason and Require Reasons and Require History for audit history are supported only for the UPDATE operation.

Constraints are evaluated in the following order (Only one constraint may take effect for a change):

- User Action
 - Not Allowed.
 - Generate Version, Require Reason and Raise Integration Event. This activates automatic versioning.
 - Generate Version and Require Reason. This activates automatic versioning.
 - Generate Version. This activates automatic versioning.
 - Require Reason, History, and Raise Integration Event. This activates Audit Trail to capture changes.
 - Require Reason and Require History. This activates Audit Trail to capture changes.
 - Require History. This activates Audit Trail to capture changes.
 - Raise Integration Event. This can be used with versioning.

During implementation any action which includes "Raise Integration Event" may be selected. This event is presently used by XML processing and can be used by any other product.

Actions that Require Reason take precedence over actions that do not.

Example

Assume that both versioning and audit constraints apply to update of price list. Only version is captured as it takes precedence and audit history is not available for this update. However, if audit constraint is on a different attribute like update of payment term and you change the payment term and price list, both version and audit history are captured.

Applies To Field

The Applies To field is used to define whether the constraint is applicable in the Negotiation or Fulfillment transaction phase. If the field is blank, then it is applicable to both phases.

Enabled Field

The Enabled field indicates whether the current Constraint is active. This allows constraints to be temporarily disabled if necessary.

System Changes Field

Use the System Changes field to indicate if system changes are allowed even if the constraining conditions are met. The system changes here refer to an attribute initially getting a default value or being re-defaulted when a source attribute changes. This is applicable only for attribute or field level UPDATE operations. The possible values are:

- Never after Insert: System changes are allowed to this field only if the entity has not yet been saved to the database. This is the default value.
- Always: System changes are always allowed on the attribute

User Changes Field

Use the User Changes field to indicate when the user performing the operation is constrained. This is applicable only for attribute or field level UPDATE operations. The possible values are:

- Never after Insert: You can change this field only if the entity has not yet been saved to the database. This is the default value.
- Always: You can never enter a value for this attribute, even if the entity (for example an order) is being created for the first time.

System Field

The System Field indicates if a constraint included with the OM system is user updateable. System constraints help prevent data integrity problems and cannot be updated. Any operation, field, action, or list of responsibilities attached to these constraints cannot be modified. However, additional validation conditions can be included as long as they do not have the same group number.

Enabled Field

The Enabled field indicates whether the current Condition is active. This allows conditions to be temporarily disabled if necessary. Note that if all conditions are disabled and the constraint itself is not disabled, the constraint always applies for that change. Care must be taken to ensure that the disabling of conditions does not introduce problems in the business flow.

The bottom section of the window has two tabbed regions - the Conditions region and the Applicable to region.

Conditions

The Conditions region allows you to define the condition(s) that must be true for the constraint to fire. Unless the group of conditions are true, the constraint will not be active.

Group Number Field

The Group Number field determines whether AND or OR logic is used to combine conditions. For conditions that should together evaluate to TRUE (AND conditions), enter the same group number. Define OR conditions by using different numbers.

Scope Field

The Scope field is evaluated with the Record Set field to determine if the condition is true. The possible values are:

- **ANY:** If the record set on this validation condition can select multiple records, then this condition should be TRUE for AT LEAST ONE of the records. For example you can evaluate a condition against any line on an order: If ANY line on the order is canceled.
- **ALL:** If the record set on this validation condition can select multiple records, then this condition should be TRUE for ALL the records. For example you can evaluate a condition against all lines on an order: If ALL lines on the order are canceled.

Validation Entity

The Validation Entity is the one for which the condition is evaluated. The validation entity can be the constrained entity (displayed in the Entity region) or any related entity. For example, the constrained entity could be an order line and the constraint could be evaluated based on characteristics of the validation entity order header.

Select the Record Set and based on the selected scope, the conditions will be evaluated for any or all of the records in the set. An example of a seeded Record Set is a ship set. You may define additional record sets as needed.

Note: If the validation entity on the condition is different from the constrained entity, then only the record set based on the primary key for the validation entity will be available in the LOV

Check the NOT Box to create a NOT condition. For example if the condition is Booked, checking this flag will evaluate the condition NOT Booked.

System Field

The System field is checked for the conditions that were included with the OM system and are not user updateable. You cannot define new AND conditions with the same group number as a system condition.

User Message Field

The User Message field displays when an attempt is made to violate a constraint. The message is specific not just to the constraint but also to the specific condition that was violated. For example, you can create a user message that states: "line has been booked." If the constraint is set up to prevent any update to the item field on the order line if the line had been booked, the complete error message displayed at run time is: "You are not allowed to update the item; line has been booked."

The following screen shows the Processing Constraints window again, this time with

the Applicable To tab selected. Use this tab to define the responsibilities the constraint applies to.

Processing Constraints Window, Applicable Tab

Application

Entity

Constraints

Operation	Attribute	User Action	Applies To	System Changes	User Changes	Enabled	System
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

Conditions **Applicable To**

☐ All responsibilities
☐ Authorized responsibilities
☐ Constrained responsibilities

If the button for *All Responsibilities* is selected, then the constraint will apply to all users. No one will be able to perform the constrained action. All seeded constraints are applicable to all responsibilities.

If you select the *Authorized Responsibilities* button, then only the responsibilities that you list will be allowed to perform the action. All other users will be stopped from performing the action by the constraint.

If you select the *Constrained Responsibilities* button, then all users except for the responsibilities defined will be able to perform the action. The users that you list will be stopped from performing the action by the constraint.

There are two other forms that are used in setting up processing constraints. These are the *Validation Templates* window and the *Record Sets* window. The validation templates and record sets you create, as well as the seeded ones can be used in the Processing Constraints window as described above.

Note: After updating constraints and/or conditions, close and reopen the sales document windows for the updated constraints to apply correctly.

Defining Validation Templates

Validation Templates Window

Validation Templates					
Application: Order Management					
Validation Templates					
Entity	Template Name	Seeded?	Short Name	Description	Validation Type
		Short			WF API TBL
Booked	Booked	<input checked="" type="checkbox"/>	Booked	Booked	WF API TBL
		<input type="checkbox"/>			WF API TBL
		<input type="checkbox"/>			WF API TBL
		<input type="checkbox"/>			WF API TBL
		<input type="checkbox"/>			WF API TBL
		<input type="checkbox"/>			WF API TBL

Validation Semantics

Item Type:

Activity:

Status:

Result:

Navigate to the Validation Templates window. Order Management > Setup > Rules > Security > Validation Templates.

This window is divided into several regions. The top region displays the Application field. The Validation Templates region has one row for each validation template, and each row has several fields. The Entity field is one of the ten OM entities. Check this entity to determine if the condition is true. Give the validation template a name in the Template Name field, a short name in the Short Name field and a description in the Description field. These are user defined. The short name cannot be changed once the validation template is saved. The box is checked if the validation template is seeded by Oracle development. Seeded validation templates cannot be modified.

The Validation Type field is a group of radio buttons with the possible values of WF, API and TBL. The available fields in the Validation Semantics region of the window change depending on the selection that you make from this group. If you select WF, then the validation is based on the status of a workflow activity. An example of this is the seeded validation template Booked that is based on the status of the Booked activity of the order header workflow. If you select API, then PL/SQL code is called to evaluate whether the validation template is true. There are several seeded validation templates that call APIs including the Lines Exist template that determines if lines have been entered for an order. If you select TBL then validation is based on the value of a field. For example, the condition will be true if the field order type has a value of Standard.

Note: When the validation template has an activity Booked, and the processing constraint operation is Cancel, if the user tries to cancel the line before booking, the Ordered Quantity decreases to 0, but the line status displays as Entered and not Cancelled.

Validation Semantics for Validation Type WF

The screenshot shows the 'Validation Templates' window for 'Oracle Order Management'. The 'Validation Semantics' section is expanded, showing the following fields:

- Item Type: OM Order Header
- Activity: Book
- Status: Active (dropdown menu)
- Result: (empty text field)

Below the 'Validation Semantics' section, there is a table of validation templates. The table has columns for Entity, Template Name, Seeded?, Short Name, Description, and Validation Type (WF, API, TBL). The first row is highlighted.

Entity	Template Name	Seeded?	Short Name	Description	Validation Type
					WF API TBL
Order Header	OM Order Header	<input checked="" type="checkbox"/>	WFHEAD		<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>
		<input type="checkbox"/>			<input type="radio"/> <input type="radio"/> <input type="radio"/>
		<input type="checkbox"/>			<input type="radio"/> <input type="radio"/> <input type="radio"/>
		<input type="checkbox"/>			<input type="radio"/> <input type="radio"/> <input type="radio"/>
		<input type="checkbox"/>			<input type="radio"/> <input type="radio"/> <input type="radio"/>

This graphic depicts the Validation Semantics for Validation Type WF. The Item Type field can be used to define the workflow item type associated with the entity, such as "OM Negotiation Header" or "OM Order Header for the Order Header entity." The Activity field is the name of the workflow activity for which you are checking the status. The Status and Result fields are the attributes of the workflow activity that will make the validation template return a true value. In this graphic, the validation template would be true if the order header had an activity called Invoice Interface - Header Level which had completed with any result.

Validation Semantics for Validation Type API

Application: **Oracle Order Management**

Validation Templates

Entity	Template Name	Seeded?	Short Name	Description	Validation Type
					WF API TBL
Order Header	OM Order Header	<input type="checkbox"/>	WFHEAD		<input type="radio"/> <input checked="" type="radio"/> <input type="radio"/>
		<input type="checkbox"/>			<input type="radio"/> <input type="radio"/> <input type="radio"/>
		<input type="checkbox"/>			<input type="radio"/> <input type="radio"/> <input type="radio"/>
		<input type="checkbox"/>			<input type="radio"/> <input type="radio"/> <input type="radio"/>
		<input type="checkbox"/>			<input type="radio"/> <input type="radio"/> <input type="radio"/>

Validation Semantics

PL/SQL Package:

Procedure:

This depicts the Validation Semantics for Validation type API. Enter the validation semantics for validating the API for return value TRUE. (This may be used for complex validations.)

- Database Package: Enter name of the data package
- Procedure Name: Enter the name of the API

All validation APIs should be written with a framework defined signature format

PROCEDURE YourValidationAPI

```
(p_application_id in number,

p_entity_short_name in varchar2,

p_validation_entity_short_name in varchar2,

p_validation_tmplt_short_name in varchar2,

p_record_set_short_name in varchar2,

p_scope in varchar2,

x_result out number);
```

x_result returned should be 1 if the condition is valid and should be 0 if condition is

NOT valid.

The procedure should push all error messages (if any) into OE_MSG_PUB Stack. It can reference the record being constrained by referring to the global record variable in the entity's constraint API package. The naming conventions are as follows.

Entity's constraint API package Name:

ApplicationShortName_Entity_Short_Name_PCFWK

(e.g. OE_HEADER_PCFWK)

global record variable name: g_record

(e.g. for the entity HEADER, the variable name will be
OE_HEADER_PCFWK.g_record)

Validation Semantics for Validation Type TBL

The screenshot shows a window titled "Validation Templates" for the application "Oracle Order Management". It contains two main sections: "Validation Templates" and "Validation Semantics".

Validation Templates Section:

Entity	Template Name	Seeded?	Short Name	Description	Validation Type		
					WF	API	TBL
Order Header	OM Order Header	<input type="checkbox"/>	WFHEAD		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
		<input type="checkbox"/>			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		<input type="checkbox"/>			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		<input type="checkbox"/>			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		<input type="checkbox"/>			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Validation Semantics Section:

Column	Validation Operation	Value String
Customer	= (Equal To)	Business World

This graphic depicts the Validation Semantics for Validation Type TBL. Enter the Column Name in the Column field. The Validation operation can be one of the following:

= (Equal To)

<> (Not Equal To)

Is Null

Is Not Null

The Value String can be any value. An example of validation semantics for a column is:

Column - Order Type

Validation - = (Equal To)

Value String - Standard

This would return TRUE for all orders with type Standard. Note that it wouldn't work if you typed a value string of STANDARD (it must match exactly).

Defining Record Sets

The window for creating record sets is depicted below. This window is also divided into several regions.

Record Sets

Application					
Oracle Order Management					
Record Sets					
Entity	Seeded?	Record Set	Short Name	Description	Based On Primary Key?
Order Header	<input type="checkbox"/>	OrdHeader	OHDR	Order Header record set	<input type="checkbox"/>
	<input type="checkbox"/>				<input type="checkbox"/>
	<input type="checkbox"/>				<input type="checkbox"/>
	<input type="checkbox"/>				<input type="checkbox"/>
	<input type="checkbox"/>				<input type="checkbox"/>

Matched Columns For Record Selection	
Column	
Customer	...

The top region has the name of the application, Oracle Order Management.

The Record Sets region has a row for each record set. The Entity field will be one of the ten OM entities. Each record in the record set will be of this entity. For example you can make a record set of lines or orders. The box is checked if the record set is seeded. This flag is not modifiable by the user, and the seeded record sets cannot be modified by the user.

Give the record set a name in the Record Set field, a short name in the Short Name field and a description in the Description field. These are user defined. You cannot change the short name once the record set has been saved. Select the Based On Primary Key Box if this record set is selected using the primary key. There can be only one primary record set for a given entity.

At the bottom of the window is the Matched Columns for Record Selection region. Enter the name of the columns that match from the validated record so that multiple rows can

be selected from the validated entity's table. For example, matching the Header ID and Ship Set Number of the order lines entity will select all order lines in the same ship set.

Concurrent Program

In order to create or update new processing constraints, you must run the Create Validation Packages concurrent program, which is required for creation of new validation templates or record sets. Run this program from the Tools option on the menu bar of either the Validation Templates or Record Sets window or from the navigation menu by selecting Setup > Rules > Security > Generate Constraints Package. Run this program anytime you create, update, or modify your processing constraints.

Report

A report, Processing Constraints Listing, lists defined Processing Constraints. It replaces the old OE Security Rules Listing. It has the following parameters:

Entity

The entity that is constrained.

Attribute

The attribute that is constrained. Enabled only if an entity is selected for the previous parameter.

Operation

The operation that is constrained. Enabled only if the attribute parameter is not selected.

Validation Entity

Only include constraints that have conditions based on this validation entity. Enabled only if the entity parameter is selected.

Record Set

Only include constraints that have conditions set up for this record set. Enabled only if the validation entity parameter is selected.

Validation Template

Only include constraints that have conditions using this validation template. Enabled only if the validation entity parameter is selected.

Seeded

If this field is left blank, both seeded and non-seeded constraint conditions are listed. If you select Yes only seeded conditions are listed. If you select No only non-seeded conditions are listed.

All of these parameters are optional. If none are specified, the report will include all values in the report.

Migration/Upgrade from Security Rules

Because of the magnitude of the changes to the fundamental architecture between Security Rules and Processing Constraints, the decision was made to not upgrade any user-defined Security Rules. Because of the inherent differences between Processing Constraints and Security Rules, the seeded processing constraints do not mimic the seeded OE Security Rules. The only processing constraints that are seeded are those required to ensure data integrity.

Companies that are implementing Order Management will need to spend more time evaluating their Processing Constraints setup than companies that implemented Order Entry. Companies that are upgrading from Order Entry to Order Management should include some time in their upgrade project plan for setting up the Processing Constraints.

Examples

This example shows how you can use Processing Constraints to meet real business needs. Here are the setup steps and results for five business scenarios.

1. No one can change the customer purchase order at the line level; your company requires that one sales order can relate to only one customer purchase order.

Navigate to the processing constraints window. Find the constraints for the application Oracle Order Management and the entity Order Line. Add a new line in the constraints region with the following values:

Operation	Attribute	User Action
UPDATE	Customer PO	Not Allowed

Save the constraint. This is the simplest type of constraint to create. It applies to all responsibilities in all conditions. The user will receive a message when they try to change the purchase order number for a line.

2. No one can add a line to an order after any of the lines on the order have been invoice interfaced.

Navigate to the processing constraints window. Find the constraints for the application Oracle Order Management and the entity Order Line. Add a new line in the constraints region with the following values:

Operation	Attribute	User Action
CREATE	[Blank]	Not Allowed

In the Conditions region, enter a line with the following information:

Order Line Conditions

Group #	Scope	Validation Entity	Record Set	Validation Template
[Any Number]	Any	Order Line	Order	Invoice Interfaced

For the user messages enter: "A line on the order has been invoiced." Save the constraint. This constraint has a condition, so it will only be activated if the condition is true. The condition will be true if any of the lines on the order have been invoice interfaced. This constraint is a good example of a using a record set. It applies to all responsibilities. The user will receive a message when they try to create a new line for an order with lines which have been invoice interfaced. The message will say: The order line cannot be created because: A line on the order has been invoiced. Notice that the error message includes the user message that you entered for the condition.

3. A reason is required to cancel an order line after it has been booked. Navigate to the processing constraints window. Find the constraints for the application Oracle Order Management and the entity Order Line. Add a new line in the constraints region with the following values:

Operation	Attribute	User Action
CANCEL	[Blank]	Require Reason and Require History

In the Conditions region, enter a line with the following information:

Group #	Scope	Validation Entity	Record Set	Validation Template
[Any Number]	Any	Order Line	Line	Booked

For the user messages enter "The order has been booked." Save the constraint. This constraint has a condition, so it will only be activated if the condition is true. The condition will be true if the order has been booked. It applies to all responsibilities. All users will be required to enter a reason when they cancel a line which has been booked.

- Only the Customer Service Manager can change the discount percentage on an order line after the line has been shipped. Navigate to the processing constraints window. Find the constraints for the application Oracle Order Management and the entity Line Price Adjustment. Add a new line in the constraints region with the following values:

Operation	Attribute	User Action
UPDATE	Operand	Not Allowed

In the Conditions region, enter a line with the following information:

Group #	Scope	Validation Entity	Record Set	Validation Template
[Any Number]	Any	Order Line	Line	Ship Confirm

For the user messages enter "This line has been shipped." Go to the Applicable To tab and select the Authorized Responsibilities radio button. Enter Customer Service Manager in the table below the radio buttons.

Save the constraint. This constraint has a condition, so it will only be activated if the condition is true. The condition will be true if this line has been shipped. Note that this is not a seeded responsibility. This example assumes the responsibility was created using the System Administrator Define Responsibility functionality. Any user not logged in under the Customer Service Manager responsibility will receive a message when they try to change a discount percentage for a line which has been shipped. The message will say "The percent cannot be updated because: This line has been shipped."

- Your company requires that all return orders, identified by order type = Return, are shipped to a central returns processing facility.

This example assumes that you have used the defaulting rules framework to create a rule that will default the warehouse to Wichita for all the lines on orders of type Return. For details on how to create a defaulting rule, see the white paper Using Defaulting Rules in Oracle Order Management.

To create the constraint, first create a new validation template for orders with an order type of Return. Navigate to the validation templates window. Find the validation templates for the application Oracle Order Management. Enter a new line in the validation templates region with the following information:

Entity	Template Name	Short Name	Description	Validation Type
Order Header	Return Order	RETURN	Order of type Return	TBL

In the validation semantics region enter the following:

Column	Validation Op	Value String
Order Type	= (Equal To)	Return

Navigate to the constraints window to create a constraint using the new validation template. Find the constraints for the application Oracle Order Management and the entity Order Line. Add a new line in the constraints region with the following values:

Operation	Attribute	User Action
UPDATE	Warehouse	Not Allowed

In the Conditions region, enter a line with the following information

Group #	Scope	Validation Entity	Record Set	Validation Template
[Any Number]	Any	Order Header	Order	Return

For the user messages enter "All returns are processed in Wichita."

Save the constraint. This constraint has a condition, so it will only be activated if the condition is true. The condition will be true if the order type is Return, because this is the way you created the validation template. This assumes that your company has created a Transaction Type for an order with a name of Return. It applies to all responsibilities. Any user who tries to change the warehouse on an order line will receive a message which states: The warehouse cannot be updated because: All returns are processed in Wichita.

Oracle Order Management Open Interfaces, API, & Electronic Messaging Guide

Versioning

Overview

Versioning is a method to capture changes and updates made to a transaction. Versioning is currently available for sales orders, quotes and Sales agreements. There is support for both manual versioning as well as automatic versioning.

Versioning includes the following:

- Version Control: Capture of changes and updates made to Sales Orders, Quotes and Sales Agreements. This feature offers:
 - Version generation
 - Validation of version number
 - Version history maintenance and comparison
 - Searching prior versions
 - Reasons and comments for versioning
 - Tracking modifications to contract terms on Sales Agreements, Orders or Quotes
 - API's and Order Import: Versioning support for sales transactions created or updated from multiple modes
- Versions can be created, managed, viewed and compared, providing comprehensive information about a given transaction
- Assists during the negotiation phase of a sales transaction by maintaining a history of the transaction cycle

Note: Price Lists and Modifiers are not versioned on a Sales Agreement.

Version Generation

Versioning is manual by default. If you want to enable automatic versioning, you must set up the appropriate processing constraints. For example, you can use validation templates to drive versioning by transaction type as a condition. By using the processing constraints and workflow activity, you can determine when to increment the version and which statuses are available to version.

For example, you can increment a version only when specific attributes of the transaction are changed/updated. You can increment the version number whenever there is a change in order quantity, payment terms, price list, required date, or other

attributes.

You can link versioning control to workflow activities statuses. Version generation functionality includes:

- Manual / Automatic option
- Version number as a whole number and as separate field, following the document number
- Update manually at any time, provided the setup allows amendment in a specific status
- Option to retain the document number during the transition to a Sales Order
- Specify the required conditions for automatic versioning

Version History

Version history maintenance is useful for reference and comparison. This is particularly true of quotes and Sale Agreements (SAs) with a negotiation phase where the transaction document changes a number of times before it is approved. This may occur with complex products that are frequently redesigned to meet customer requirements, or with a loyal customer who negotiates for a long time for the best price with the promise of higher order quantities over an extended period of time.

Versioning maintains the history of previous versions, when the active version is changed. However, one can use the previous versions as templates for creating new sales order, quotes or sales agreements at any time with the copy feature.

Version history maintenance and comparison enables:

- Maintenance of transaction history of previous versions
- Ability to amend the current version of the transaction
- Tracking changes over a period of time and view those changes
- Comparison of changes made to transactions across versions
- Copy any version of a Quote to a Sales Order

Deciding Priorities for Audit Trail versus Versioning in a Processing Constraints Framework

Constraints are evaluated in the following order (Only one constraint may take effect for a change):

- User Action
 - Not Allowed
 - Generate Version, Require Reason and Raise Integration Event (Version

Activation)

- Generate Version and Require Reason (Version Activation)
- Generate Version (Version Activation)
- Require Reason, History and Raise Integration Event (Audit Trail)
- Require Reason and Require History—only for Fulfillment phase (Audit Trail)
- Require History—only for Fulfillment phase (Audit Trail)
- Raise Integration Event (Electronic Messaging)

During implementation any action which includes "Raise Integration Event" may be selected. This event is presently used by XML processing and can be used by any other product.

See: *Oracle Order Management Open Interfaces, API, & Electronic Messaging Guide*

Note: If multiple constraints are set up for an attribute and the conditions for both versioning and audit constraint apply, only versioning is captured. To improve system performance, limit the number of processing constraints to key updates during setup. The entire transaction is saved in history and increased save times result for large orders where version is activated.

Setup

To use versioning, set up the appropriate attributes with a processing constraint.

Restrictions

To set up Versioning in Order Management:

1. Navigate to the Order Management Processing Constraints window. Navigate to Order Management > Setup > Rules > Security > Processing Constraints.

Processing Constraints Window with User Action Menu Displayed

The screenshot shows the 'Processing Constraints' window. At the top, 'Application' is set to 'Oracle Order Management' and 'Entity' is 'Order Header'. Below this is a table of constraints. The first two rows show 'Delete' operations with 'Not Allowed' user actions. The third row shows a 'Delete' operation with a 'Negotiation' user action. A dropdown menu for 'User Action' is open, showing options: 'Not Allowed', 'Generate Version, Require Reason and Raise Integration Event', 'Generate Version and Require Reason', 'Generate Version', 'Require Reason, History and Raise Integration Event', 'Require Reason and Require History', 'Require History', and 'Raise Integration Event'. Below the table, there are checkboxes for 'Not', 'Validation Template', 'Enabled', and 'System'. At the bottom, there is a 'User Message' field.

Operation	Attribute	User Action	Applies To	System Changes	User Changes	Enabled	System
Delete		Not Allowed				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Delete		Not Allowed	Negotiation			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
						<input checked="" type="checkbox"/>	<input type="checkbox"/>

2. Set up a processing constraint for versioning. See Define Processing Constraints, page 2-107 . Select the desired user action from the User Action field. Options are:
 - Generate Version, Require Reason and Raise Integration Event
 - Generate Version and Require Reason
 - Generate Version
 - Require Reason, History and Raise Integration Event
 - Require Reason and Require History
 - Require History
 - Raise Integration Event
3. Optionally, apply any necessary validation templates. Navigate to the Validation Template window. Order Management > Setup > Rules > Security > Validation Templates.

Setting up Versioning in Validation Templates

Application:

Validation Templates

Entity	Template Name	Seeded?	Short Name	Description	WF	API	TBL
Order Header	Versioning Control	<input checked="" type="checkbox"/>	QVERNO		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
		<input type="checkbox"/>			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		<input type="checkbox"/>			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		<input type="checkbox"/>			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		<input type="checkbox"/>			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Validation Semantics

Column	Validation Operation	Value String
Order Type	<> (NOT Equal To)	Repair/Return**Not OE**
Order Type	<> (NOT Equal To)	No-Bill
Order Type	<> (NOT Equal To)	AU-STANDARD

Note: If conditions are applied you must use a validation template.

Open Interface Considerations

Public Process Order API / Order Import

Manual Versioning

Pass Update Operation with change to version number. Specify a reason if required on change_reason parameter on p_header_rec parameter or change_reason column on the interface tables for order import.

Automatic Versioning

Any other transaction change through API/Order Import rolls the version based on the constraints setup. The reason should also be passed if the constraint action includes the require reason.

Troubleshooting

Audit is not captured even though Require History constraint is defined?

Check if there is a versioning constraint for the same operation. Versioning takes precedence and version is captured instead of the audit record.

Example:

You have processing constraints defined for:

- Update of price list on booked order with action Require History
- Update of price list on booked order with action Generate Version

System Behavior

A version is generated when price list is updated on booked order but no audit is captured. This change is not visible on the audit history form.

The version rolls even though there were no changes that required versioning?

Check if there were any system updates due to the user change.

Example

Example:

Update to request date triggers a schedule date change that in turn has a versioning constraint. The reason stored for such versions is "SYSTEM."

Line splits generate two versions?

The processing constraint exists on a split operation and update of other attributes updated during split, for example, the warehouse.

See:

Defining Processing Constraints, page 2-107

Defining Validation Templates, page 2-113

Processing Constraints, page 10-1 for more information see: *Oracle Order Management User's Guide*

Audit Trail

Overview

Audit Trail records and tracks updates to specified order attributes as they occur. Reports of comprehensive audit trail updates of Oracle Order Management are generated using Processing Constraints, Lookups, a system parameter, and the Audit Trail Consolidator concurrent program. Current Processing Constraints functionality enables you to specify exactly what business functions, by entity you wish to control when performing order modifications. You can define new processing constraints that specify when, and for what attributes of an order, audit trail updates are recorded. The Order Management system parameter Audit Trail must be enabled to use this feature.

Process Flow

Oracle Order Management gives businesses the flexibility to audit as much or as little of their order process as they require. Each business can decide what order attributes are so critical that an audit needs to be maintained and then set up the processing constraints accordingly. Once the constraints are defined, users can enter and change orders as they always have. If a change is made to an attribute that has been defined as

requiring a reason to change it, then the user is prompted to select a reason code from a user-defined list.

Finally, queries can be run or reports produced to show what actual changes have been made to auditable attributes, who made the changes and when.

Now, versioning works in conjunction with audit trail only when the transaction enters the fulfillment phase, not during the negotiation phase. The audit trail may track all sales order changes that may not necessarily constitute revising the sales order to a new version. You cannot track a single change with both Versioning and Audit Trail. The user must decide what method they wish to use to track the change history. The differences between Version Control and Audit Trail include:

Version Control records the entire business object, allowing users to view the changes to the document real time and online. Whereas, Audit Trail records a single change in order to capture who made the change and what the change was.

Version Control can be viewed on line whereas, audit trail can be viewed on line once a report has been generated. Version control can compare against previous versions where audit trail cannot. Audit trail captures changes within a version but version control captures changes that increment a version. And finally, version control applies to all sales documents including Sales Orders, Quotes and Sales Agreements but audit trail is ONLY applicable to Sales Orders.

New Forms:

Audit History window can be invoked from Orders, Returns/Audit History menu path.

The query window will be used to show the audit history for all the user changeable attributes of all entities related to Order.

This form consists of a Find window and a Results window. The Find window will take history date range, entity name, attribute) and order number range, userid and responsibility as input. All input parameters are optional.

Audit History Find Window

Find Audit History

Order Number To

History Date To

Entity Attribute

User Responsibility

Order Type

The Results window shows the history records based on the query criteria entered. The window has tabs for each entity that can have audit records. The format of each tab is similar, showing all the data. The tabs for the lines entities shows the line number as well as all the rest of the data. This window is not a folder form, since all data can be seen without much scrolling. The reason code and comments are shown in the overflow region for the selected row.

Audit History Results

The screenshot shows a window titled "Audit History" with several tabs: "Orders", "Lines", "Order Sales Credits", "Order Price Adjustments", "Line Sales Credits", and "Line Price Adjustments". The "Orders" tab is selected. Below the tabs is a table with the following columns: "History Date", "Order Number", "Attribute Name", "Old Value", "New Value", and "User". The table contains three rows of data, all from "OPERATIONS" on "17-NOV-2004". The first row shows a change from "Net 60" to "IMMEDIATE". The second row shows a change from "IMMEDIATE" to "Net 60". The third row shows a change from "30 Net" to "IMMEDIATE". Below the table is a "Reason" dropdown menu with "Administrative Reason" selected, and a "Comments" text area.

History Date	Order Number	Attribute Name	Old Value	New Value	User
17-NOV-2004 05:0	56717	Payment Term	Net 60	IMMEDIATE	OPERATIONS
17-NOV-2004 04:3	56717	Payment Term	IMMEDIATE	Net 60	OPERATIONS
17-NOV-2004 04:3	56717	Payment Term	30 Net	IMMEDIATE	OPERATIONS

Reason: **Administrative Reason**

Comments:

A new pop up window is added to this form to allow the user to input a change reason code and comments. If a change reason must be entered for an update, based on Processing Constraints setup, then this little window will popup to allow for entry. Users can also invoke this window from the Tools menu to record an audit reason even if it's not required.

Audit History Change Reason window

Enter Reason for.....

Reason **Administrative Reason**

Comments **change to capture Audit History**

OK **Exit**

Setup

Restrictions

To set up Audit Trail:

1. Add "View Audit History" menu option to the Order Management menu for those responsibilities that need to be able to view the new Audit History forms - this menu option will be created through seed data.
2. Set up Processing Constraints to indicate which attributes on the order you want to have audit trail recorded for. See Define Processing Constraints, page 2-107.
3. Create some new Validation Templates if you have specific conditions to control whether or not to record audit information. See Defining Validation Templates, page 2-113.
4. Set the OM System Parameter Audit Trail.
Navigate to Order Management > Setup > System Parameters > Values.
 1. Select your Operating Unit.
 2. Select Generic Parameters from the list of values.
 3. For the Audit Trail Parameter, select from the list of values: "Enable when Order is Booked," "Enable when Order is Entered," or "Disabled."

See Setting OM System Parameters, page 2-74.

5. Enter and process orders as usual.
6. Schedule the Consolidator program to run periodically to make audit information available to query and report.
7. Run report or execute queries to view audit information.

Note: Based on the processing constraints that have been set up, users will sometimes be required to input reasons when they make changes to orders.

Different scenarios in which Audit History is captured

System Parameter	Processing Constraint	Order Status	History Captured?
Disabled	Entered/Booked	Entered/Booked	No history captured
Entered	Entered	Entered	Yes
Entered	Booked	Entered	No
Entered	Booked	Booked	Yes
Booked	Entered	Entered	No
Booked	Entered	Booked	Yes
Booked	Booked	Booked	Yes

Audit History Report:

This report enables users to retrieve audit information by different parameters. The report parameters include: start/end dates, entity, attribute, order number, user and responsibility of who made the change.

To run this report, navigate to Reports -> Requests -> Audit History Report.

Processing Constraints, page 10-1

Define Processing Constraints, page 2-107

Defining Validation Templates, page 2-113

Setting OM System Parameters, page 2-74

Holds and Approval Management

This chapter covers the following topics:

- Holds and Releases
- Process Flow
- Workflow
- Honor Holds in Repricing at Shipment
- Approvals
- Setup

Holds and Releases

Overview

In Oracle Order Management, applying and releasing holds can be performed directly from the Sales Order window. You can create holds based on a combination of two criteria, such as customer and item, or item and warehouse. You can manually send a notification through Oracle Workflow to specific individuals when an order hold is applied. A concurrent program can automatically release holds based on the Hold Until date. Additionally, you can track and view history information on holds at the order and/or line level.

When you prevent further processing on an order through an exception, you are placing a hold on the order. However, you can arbitrarily hold all orders for a specific customer or customer site, an individual order, or all order lines for a specific item. Furthermore, you can define holds that affect existing orders, future orders, or both. Holds can be placed automatically when certain metrics, such as credit limits, are violated. Holds can be automatically released by using Oracle Workflow once the order or line no longer violates the business metric. Oracle Order Management manages exposure to these various types of risks through this holds and releases functionality.

Setup

Profile Options and System Parameters

OM: Notification Approver

This profile enables you to send approval or FYI notifications to a role. It can be set at any level—Site, Application, Responsibility, or User. The value for this profile is retrieved based on the application context (user, responsibility, application) that was in place when the order or line was created. Notifications generated by OM flows can be sent to this role via a seeded WF item attribute (Notification Approver). This item attribute is used as a place holder for storing role information. When the Header or line is created, the item attribute Notification Approver is set based on the profile option setting. If all approvals need to go to this role, you do not need to use the Utility - Set Notification Approver. If they do not then you can use this seeded utility to set the value of the item attribute Notification Approver to various values.

Note: The Negotiation phase of a sales transaction does not support holds.

Note: Notifications can be sent via the workflow FYI Notification framework when an Order/line goes on hold. Release of the hold has to occur from an action selection on the Sales Order Pad. If a user places an order or line on hold manually and subsequently releases the hold they must perform Progress Order to move the order/line on in the workflow to the next activity.

OM: Prevent Booking for Line Generic Holds

This profile controls whether a transaction will fail booking if a generic hold has been applied.

OM: Schedule Line on Hold

This profile option has been changed to a system parameter and it controls whether scheduling should attempt to schedule lines that are on hold. The default is set to No.

OM: Promotion Limit Violation Action

This profile controls how and where holds are placed on order lines and headers when promotion limits are exceeded in Advanced Pricing or Trade Management.

Available options are: Place holds where violated, place order on hold when any violation occurs, or no holds applied. No holds applied is the default.

Workflow

Order Management comes with seeded Oracle Workflow approval processes. Review the seeded flows, activities and notifications to determine if the seeded data can meet

your business needs. Typically, the Generic - Order Flow and Line Flows are used for standard orders. The user can modify this existing seeded workflows or create new workflows to include approval activities or wait-for-flow activities in order to safeguard processing orders that are on hold. Refer to the topical essay on Workflow at the end of this manual for details on setting up workflow processes.

Hold Lookup Codes

Set up your own codes for Hold Types, Holdable Header, and Line Activities for workflow in the Order Management Quickcodes window. To do this, navigate to the Order Management Lookup window: N: Order Management > Setup > Quickcodes > Order Management. Select the query manager (Flashlight icon) to view the existing codes or add a new code.

Reports

There are some seeded reports in Order Management for Holds. They include: Hold Source Activity Report, Lines on Credit Check Hold Report, Orders on Credit Check Hold Report and Outstanding Holds Report. You can run these reports by a variety of parameters, including, customer name, hold name, item, order, order type, etc.

Credit Check Rules & Profiles

When setting up credit checking rules, you have the ability to specify if you want to include orders currently on hold in the exposure calculation when the order flow performs a credit check. To set this option, Navigate: Setup > Credit > Credit Check Rules and check the box for Include orders currently on hold.

Customers

In Receivables, when setting up a Customer, you can specify whether or not to perform credit checking for this customer by checking the Credit Check box in the profile. When you process orders for that particular customer and if you use an order type and payment terms that also call for credit checking, the credit check process will run and if they do not pass based on their credit limits, the orders will go on hold automatically. In addition, there is a Credit Hold check box on the Customer window and at the address level. When you check the Credit Hold box at the Customer level, the application creates customer based hold sources in all Operating Units that have either addresses or orders for that customer. This puts all existing and future orders for that customer on hold in all those Operating Units.

When you check the Credit Hold box at the Address level, the application creates an address (account site use) based hold sources in that Operating Unit. This puts all existing and future orders for that address (account site use) on hold in all that Operating Unit.

To activate credit check holds on a customer or customer site, navigate to the Order Management or Receivables responsibility, and select Customers > Standard. This opens an HTML page called Customers. Enter a new customer by clicking the Create

button. You can also search for an existing customer, select the Account Profile tab and then select the Credit Check and Credit Hold boxes. To perform credit checking, you will also need to set the credit limits for the customer in the Profile: Amounts Tab of the Customer page.

The hold source can be released by deselecting the Credit Hold box. However individual holds can be released in Order Management using the Release Hold action. Please note that releasing a hold source and releasing a hold are different: The hold source is the origin of the hold and will continue to put lines on hold until the hold source itself is released. The removal of the hold source releases all orders/lines that have been placed on hold. Releasing an single order from hold is done by assessing orders on an individual basis and only affects the specific order/line selection that you have made.

Process Flow

The process flows for holds in Oracle Order Management include the following:

Define Generic and Activity-Specific Holds

First Define a generic or activity-specific hold and assign the responsibilities that are authorized to apply or release the hold. A hold can be defined to be effective at certain steps of the order or line workflow or to be applied regardless of the stage of the orders flow. Because orders and returns are not affected by holds until they are applied, define all the holds you use in your business at once.

To define a generic and hold:

1. To define a generic hold, navigate to N: Order Management > Setup > Orders > Holds.
2. Enter a user defined hold name.
3. Enter a user defined description.
4. Pick and select a previously defined hold Type such as User Hold.
5. Optionally, select the 'Hold Included Items' check box. Hold included items allow the user to cascade the hold placed against a model to the 'included items' defined in the model.
6. Optionally, enter hold until dates.
7. Assign specific responsibilities to allow access to apply or release this hold.

Note: If the authorization region is left blank all users may apply or

remove holds.

To define an activity-specific hold:

1. To define an activity-specific hold, Navigate to N: Order Management > Setup > Orders > Holds.
2. Enter a user defined hold name
3. Enter a user defined description.
4. Pick and select a previously defined hold Type such as User Hold.
5. Pick and select a workflow item, order header/order line.
6. Select a workflow activity.
7. Optionally, select the Hold Included Items check box. Hold included items allow you to cascade the hold placed against a model to the included items defined in the model.
8. If the hold is a line level hold you can select the Apply to Order and Line check box. This enables you to take advantage of line level activities at the order header level. For example, if there is an order that you need to hold up to pick release—which is not an order level action—you can check this flag and can then select the hold at the order header level, thereby allowing all lines to be processed up to pick release.
9. Assign specific responsibilities to allow access to apply or release this hold.

Note: If the authorization region is left blank all users may apply or remove holds.

By assigning a workflow item and activity, the hold will be honored based on where the activity is assigned. For instance, defining a hold with the workflow item as Order Header and the workflow activity as Book Order, the order will be placed on hold when the order has been booked. You can create activity-specific holds at the line level for shipping activities, which include: Pack Line, Pick Line, and Ship Line. You can define holds with these activities to hold lines at those particular activities.

Define Hold Sources

A hold source allows you to apply a particular hold to a group of existing orders, returns or lines and to new orders and lines meeting your hold criteria. Hold Sources are created to hold all current and future orders for an item, customer, order,

warehouse or customer site (Bill to or Ship To locations), Sales Agreement No or a combination two attributes.

To define a hold source:

1. To define a hold source, navigate to (N) Order Management > Orders, Returns > Order Organizer.
2. Select the Tools menu, and choose Create Hold Source.
3. Use the Create Hold Source window to define the entity based on which the orders and lines can be placed on hold. This entity can either be Customer, Warehouse, Bill To Site, Ship To Site, Item or the Order itself. It can also be a combination of up to two entities. See Create a Hold Source with Multiple Entities, page 11-6
4. In the Criteria Tab, use the list of values to retrieve the hold defined in the previous step. This defaults the Hold Type and Description as defined from the hold. You can add a Hold Until Date and Comments and/or hold all existing or future orders/lines if needed.
5. Select a Hold Criteria. This can be any of the following: Customer, Warehouse, Bill To Site, Ship To Site, Item, or Order. Enter a value for the Hold Criteria based on the selected Hold Criteria, such as Item number or Order Number.

Please refer to the *Oracle Order Management User's Guide*, Order Inquiry chapter (Holds Information Tab section) for more information on creating hold sources.

Create a Hold Source with Multiple Entities

Creating a Hold Source for Multiple Entities is the same as defining a single Apply Holds window except you must define two entities.

To define a hold source with multiple entities:

1. To define a hold source with multiple entities, navigate to (N) Order Management > Orders, Returns > Order Organizer.
2. Select the Tools menu, and choose Create Hold Source.
3. Use the Create Hold Source window to define the entity based on which the orders and lines can be placed on hold. This entity can either be Customer, Warehouse, Bill To Site, Ship To Site, Item or the Order itself. It can also be a combination of up to two entities. Define two entities which orders and lines can be placed on hold based on the hold criteria defined.

For example, if you want to hold a specific item from being shipped to a customer, select the first Hold Criteria as Customer and the second as Item. This creates a hold source using that specific Customer and Item and does not process orders or lines

that have that Item and Customer on it.

Order Management supports Hold Sources with up to two entities. The combinations of two supported entities are as follows:

- Item > Customer
- Item > Ship To Site
- Item > Bill To Site
- Item > Warehouse
- Item > Sales Agreement Number
- Warehouse > Customer
- Warehouse > Ship To Site
- Warehouse > Bill To Site
- Sales Agreement Number > Ship To Site
- Sales Agreement Number > Bill To Site
- Sales Agreement Number > Warehouse
- Sales Agreement Number > Ship To Site
- Sales Agreement Line Number

For more information on the application and management of holds see the *Oracle Order Management User's Guide*.

Workflow

In Order Management, you can control the steps in your order process at which a hold is applied. Even with an exception, processing on an order can continue up to a certain step. More generally, when you place a hold against an item, you can disable any or all activities in its order process so the order cannot proceed unless the hold is removed.

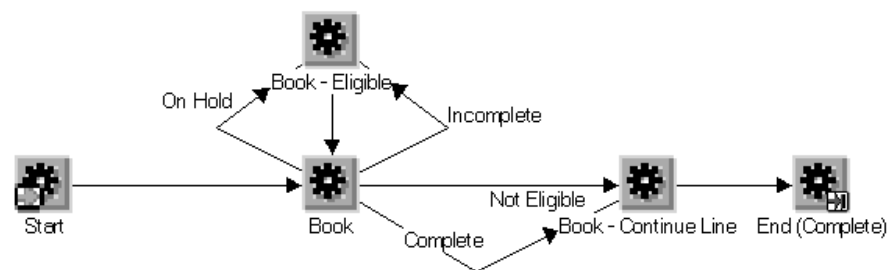
For example, you cannot Book an order that has a generic order level hold or a Booking specific hold. The Book activity posts messages indicating that a hold exists. It then completes with an On Hold result and transition back to the Book - Eligible activity.

You can define custom workflow activities that honor holds. Order Management provides Public APIs that can apply holds, check whether an order or line is on hold and remove holds. You can also seed lookups (Holdable Header Activities, Holdable Line Activities) based on your custom workflow activities and define holds based on

them.

Additionally, the notification functionality can be used for handling business exceptions, such as orders on hold, and for approval requests. For instance, you can setup a notification that requires a manager's approval when orders go on credit check hold. The role assigned to the Notification Approver, determines to whom the notification is sent. For instance, the person assigned as Notification Approver can be a Manager where all orders that are placed on credit check hold would be routed to him via e-mail for approval before the orders are released from the hold. Refer to the Required Setup, Profile Options section for details on assigning a notification approver.

Booking Process with Exception Handling



In this example, the booking process is designed to handle expected errors, that are validation or other errors that are expected as part of normal processing (i.e. Line on Hold, it cannot be Picked). If the Booking activity finds a hold on the Order, it will post a message that the Order is on hold and then complete with a result of ON_HOLD to the Booking eligibility block.

The flow needs to transition to a block that can be completed from the Sales Order window or to a Wait Activity.

The Line flow that is used with the Header flow should have the appropriate coordination wait-for-flow activity so that the line will not proceed until the appropriate action has been taken to resolve the errorWorkflow provides you the ability to customize your processes to include exception processing activities as well as approval activities in order to ensure the appropriate holds are placed on specific orders and/or lines.

Honor Holds in Repricing at Shipment

Overview

Order Management provides repricing at shipment functionality. Customers can put the reprice line workflow function in any place after booking, usually after shipping or fulfillment, in their order line workflow. This is a powerful feature used by customers

who have long lead times between order entry and shipping and customers who want to be able to finalize their price list or discounts after an order line is entered. This activity can be selected in an activity hold. You can define a reprice line workflow activity specific hold and apply to the order lines you choose. After the pricing setup is finalized, you can release the hold and progress the order line. Also the reprice line workflow activity is enhanced to retry every twelve hours.

Setup

There are no mandatory setups to enable the functionality of this feature.

Approvals

Approval Routing

After a sales document—either a quote or a sales agreement— is assembled, it can be submitted for approval. The sales document can be routed to various people in the organization for review, including people from Sales, Business Practice, Legal, or Finance. Multiple people may be required to approve a sales document.

A workflow process for Approvals allows you to leverage any business process where Approvals may be required. The Approver list is set up in Oracle Order Management and tied to a specific transaction type; workflow notifications provide details of the approval or rejection. The Approval flow is seeded in the negotiation phase as well as in the Oracle iStore Returns flow. A list of approvers can be defined through the Transaction Types or Approvals window, which can be accessed from the Transaction Types window or the Transaction Types menu. In order to use the Approval list, it must be linked to a transaction type. The transaction type must be linked to a workflow which includes the Approval flow such as "Negotiation Flow - Generic with Approval."

Alert Approvers For Pending Approvals

Approvers on the approval list are notified based on the precedence defined on the Approval list. A notification provides a description of what needs approval, and provides an easy way to open the workflow notification for review. The workflow notification for a sales agreement provides the following:

- Sales Agreement Number
- Customer
- Salesperson
- Creation Date
- Activation Date

- Expiration Date
- Ship To Customer
- Invoice To Customer
- Credit Holds.
- Payment Terms
- Mix Min Amount for Sales Agreement
- Mix Max Amount for Sales Agreement

The workflow notification for a quote provides the following:

- Quote number
- Customer
- Expiration Date
- Salesperson
- Creation Date
- Ship To Customer
- Invoice To Customer
- Credit Holds (yes/no)
- Currency
- Total Amt
- Gross Margin
- Payment Terms

The line details include:

- Line Number
- Items
- UOM
- Quantity

- Unit Selling Price
- Margin

Quotes and Sales Orders can be accessed in the Order Information Portal from a link on the notification. However, Sales Agreements do not have any direct access from the notification. If you have Preview and Print enabled, the workflow notification features a link to a PDF with additional detail.

View sales document before approving/rejecting

When the next approver in the chain of approvers is notified that a document requires review and approval/rejection, the approver can either:

- View a summary or abstract of the SA, including: SA number, Description, Customer name, Forwarded from, Requester, Total Amount (deal size), and an abstract/summary of the terms and conditions, or
- View the entire sales document as it would appear for printing, including all products/services, pricing/discounts, and all other terms and conditions

Approve, Reject, or Reassign

The system can capture an approver's action:

- **Approval:** The approver may approve the document. After approval, the document continues in the approval chain to the next approver, or if there are no additional approvers, the document status becomes "Approved."
- **Quotes:** View a summary or abstract of the Quote, including Quote number, expiration date, Customer name, gross margin, line and item information and an abstract/summary of the terms and conditions.
- **Rejection:** The approver can reject the document. A rejection stops the approval process and the person who initiated the approval is notified of the rejection and rejection reason. The transaction is set back to "Draft-Internal Rejected."

When rejecting, the reviewer can enter comments indicating why it was rejected, and be able to specify exactly what should be changed. This information is accessible and viewable by other approvers or by the initiator.

- **Reassignment:** The approver, after reviewing the approval chain, may decide that someone else in the organization should be reviewing and approving the sales document, rather than him. By reassigning the approval to someone else, that original approver's approval is not captured, and instead, the person who has been reassigned as the approver takes his place. The approval continues to the next approver on the list.

Setup

A list of approvers can be defined at the Transaction Type level. The sales document is required to be approved by each participant on the list before the transaction is eligible to progress in the Workflow. Workflow provides a notification of time-out if the approver fails to respond. System Parameters used to define behavior if there is no response from the approver are:

- Continue—Submit to next approver if timeout occurs (default)
- Reject—if timeout occurs during the process

Note: A notification is sent to the approver as soon as the transaction is submitted for internal approval or approved by the previous approver. If no action is taken by the approver, a reminder is sent. The seeded time before a reminder is sent is three days. If there is no response, the system parameter determines if the transaction continues or is rejected. If the approver is the final approver and fails to respond, the transaction is rejected and returned to "Draft-Internal Rejected" status.

To set up the Approval List from the Transaction Type window:

1. Navigate to (N) Orders, Returns > Setup > Transaction Type > Define.

Approvals Window

OM Approvals

List Name: SA Approval List

Description: List of Approvers for Sales Agreements

Transaction Type: SA with Approvals ... Vision Operations

Transaction Phase: Negotiation

Effective Dates: [] - 02-MAY-2006 []

List Members

Sequence	Role	Active
1	MFG9	<input checked="" type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

2. Select the Approvals button to bring up the Approver List.
3. Select the required names for approval from the Workflow Role view.

Note: Workflow Roles represent a union of the FND User/Responsibilities and the HR User.

4. Reorder the approval list as necessary. The order displayed here determines how the sales document is routed for approval. Ensure that the seeded Negotiation-Generic with Approval (or a copy) is assigned to the transaction type. See: Define Order Management Transaction Types.

To set up the Approval List directly:

1. Navigate to (N) Orders, Returns > Setup > Transaction Type > Approvals.
2. From the approval list window, select the required names for approval and order them in the sequence that the sales document should be routed.
3. When the Approval List is defined, it can be associated to a transaction type.
To setup automatic attachment of a PDF to include contract documents if Oracle

Sales Contracts is enabled of contract documents to the workflow approval notification, please refer to the section Preview and Print Sales Documents..

To set up contacts and roles for approvals:

1. To set up contacts and roles for approvals, ensure that the users are set up in HR as an FND User so that they are visible in Workflow Roles.

Scheduling

This chapter covers the following topics:

- Overview
- Introduction
- Key Features
- Terminology
- Calculating Available to Promise (ATP)
- Scheduling
- Scheduling by Ship or Arrival Date
- Alternative Ways to Schedule
- Automatic Line Set Assignment
- Profiles
- Setup
- Changing Scheduled Lines
- Override ATP
- Reserving
- Manual Reservations
- Reservation Time Fence
- Reservation Details Window
- Reserve Orders Concurrent Program
- Unreserving and Unscheduling
- Setup
- Scheduling Parameters
- Profiles

- Folders
- Scheduling Levels on Transaction Types
- Customer Window
- ATP and Sourcing Rules
- Choosing Not to Use ATP
- Inter Location Transit Times
- Late Demand Penalty
- Implementation Considerations
- Past Dates
- Reservations Details Window
- Reserve Orders
- Reservation Modes
- Override ATP
- Examples

Overview

The scheduling feature of Oracle Order Management (OM) enables you to determine when items will be available to promise to a customer, schedule the shipment or arrival of order lines based on this availability, and reserve on-hand inventory to sales order lines. These scheduling activities can be performed on individual order lines or groups of order lines such as ship sets, arrival sets, and configurations.

Introduction

Oracle Order Management works closely with Oracle Advanced Planning and Scheduling (APS) and Oracle Inventory to provide scheduling functionality. The features are provided in a variety of ways enabling you to tailor your processes to meet your business needs.

The features that are provided under the umbrella term of scheduling are:

- Calculating Available-to-Promise (ATP)
- Scheduling
- Reserving

Unscheduler and unreserving functionality is also provided. This chapter covers how scheduling works in Order Management and how to set up OM, APS and Inventory to achieve your scheduling goals.

In Oracle Order Management if a line requires more than one set of schedule details, such as schedule date or warehouse, the line is split into multiple lines. An order line represents demand and is visible to the planning applications when the `VISIBLE_DEMAND_FLAG` is set to yes. This flag is set when the line is scheduled.

Key Features

Scheduling in Order Management includes the ability to:

- Schedule at multiple points - either manually or automatically as the line is entered, when the order is booked, or later using a background process.
- Determine the best warehouse for an order line using sourcing rules. This includes using ATO models.
- Define by customer whether the request date is the requested ship date or requested arrival date.
- Automatically set the scheduled ship and arrival dates based on the calculated ATP date.
- Define a shipping network and determine the number of days required for delivery based on the transit time.
- Automatically reserve on-hand inventory to order lines.
- Control, based on order transaction type, the level of scheduling which should occur.
- View availability for multiple warehouses at one time.
- Group lines into arrival sets which may be shipped from different warehouses on different days but should arrive at the customer site on the same day, or group lines into ship sets which ship on the same day from the same location.
- Reserve scheduled lines from multiple orders using the Reserve Orders concurrent program. Optionally, you can use reservations strategies such as Fair Share, Percentage, and Partial. You can choose whether to simulate or commit the reservations. An API Hook is provided for those who want to write an API to tailor reservation logic for a business-specific processes. Reserve Orders can be run either from the concurrent request menu, or from Scheduling Across Orders.
- Override Available to Promise (ATP). This feature allows authorized users to override ATP schedule date from the sales order window as needed for exceptions.
- Perform scheduling actions on multiple lines across orders.

- Scheduling can be updated based on the latest planning output for planned items.
- Configured items can be matched at scheduling for planned items.
- Flexible scheduling parameters allow users to control the use of Promise Date, the impact of Request Date and Shipping Method on Schedule Date, the behavior of the LAD with manual scheduling, and whether to allow partial reservations for manual reservations and the reservation time fence.
- ATP/Scheduling uses Transportation calendars like Shipping Calendar, In-transit (Carrier) Calendar, and Receiving Calendar to calculate the ship/arrival dates
- The ATP window displays the scheduling results for all recent (related to the current order) scheduling actions- successes as well as failures.

Note: In this release with the introduction of the Multi-Org Access Control functionality, you will now be able to perform most scheduling actions on lines across operating units. This can be achieved via the Scheduling Organizer (Schedule Across Orders i.e. SAO) or by running the Schedule Orders / Reserve Orders concurrent program. across operating units. For additional information please refer to the *Oracle Order Management User's Guide*.

Terminology

Understanding the following terms will help you understand how scheduling works in Oracle Order Management.

- Actual Arrival Date: The date the order line arrives at the customer site.
- Actual Ship Date: The date the order line is shipped. This date is recorded by the ship confirm action.
- Arrival Set: A set of order lines which arrive at the same time at the destination.
- Available to Promise (ATP): The quantity of current on-hand stock, outstanding receipts and planned production not already committed to sales orders or other sources of demand.
- ATP Date: The date that a requested quantity will be available to promise.
- Delivery Lead Time: Time, in days, for items to reach the customer once they are shipped.
- Demand: Requests which consume inventory such as sales orders. Discrete

manufacturing work orders and flow manufacturing schedules place demand for component items, and sales orders place demand for finished goods.

- **Line Set:** A set of lines which can be grouped into a Ship Set or Arrival Set.
- **Override ATP:** An action that allows authorized users to schedule the line even if there is no supply. Overriding ATP requires users to find supply manually.
- **Promise Date:** The date on which you agree you can ship the products to your customer or that your customer will receive the products. This field is for tracking purposes only. It may be defaulted from the schedule ship date or the schedule arrival date.
- **Request Date:** The date the customer requests that the products be either shipped or received.
- **Reservation:** A guaranteed allotment of product to a specific sales order. Once reserved, the product cannot be allocated to any other source of demand. Also known as a hard reservation.
- **Reservation modes:** Choose one of three reservation strategies when using Reserve Orders: Fair Share, Percentage, or Partial.
- **Reservation Time Fence:** Time, in days, before the schedule date, within which a line should be automatically reserved.
- **Reservation Types:** Using Reserve orders, you can choose whether the reservation run should simulate the reservation strategy, or commit the reservations.
- **Reserve Orders:** A concurrent program that attempts to reserve all those order lines specified in the search criteria in a batch process.
- **Schedule Arrival Date:** The date returned by the system on which your customer can receive the products.
- **Schedule Ship Date:** The date returned by the system on which you can ship the products.
- **Scheduling Across Orders:** The ability to perform scheduling actions on lines from multiple orders. With Scheduling Across Orders, users can schedule, unschedule, reserve, unreserve and perform ATP checks on lines across orders.
- **Scheduling parameters:** Scheduling attributes are added to the OM System Parameters
- **Ship Set:** A set of lines which will be shipped together from the same warehouse to the same location.

- Sourcing: Selecting the warehouse for the order lines.
- Supply: Incoming inventory. Some Oracle transactions that generate supply are purchase orders, discrete manufacturing work orders and flow manufacturing schedules.

Calculating Available to Promise (ATP)

Oracle Order Management enables you to advise your customers when items will be available based on current on-hand inventory plus the expected incoming supply and outgoing demand. Calculating ATP requires as input the item, the order quantity, the order quantity unit of measure and the request date. In general the user will enter the item and order quantity on every order line. The request date and order quantity unit of measure may be defaulted or manually entered. ATP may be calculated for a single line, a group of lines, or a complete order. The results for a single line are displayed in a single column in a small window. The results for multi-line ATP are displayed in a table. In both formats, the following information is displayed:

- Warehouse: Either the warehouse on the order line or, if the warehouse on the order line was blank, the best warehouse as selected by the sourcing rules.
- Request Date Qty: The quantity that is available on the requested date
- Available: The order quantity, if ATP was successful. The available quantity, which will be less than the order quantity, if ATP was not successful.
- On-hand Qty: The quantity that is currently in the warehouse.
- Qty Reservable: The on-hand quantity minus the quantity that is already reserved to other sources of demand.
- Request Date: The date on the order line.
- Available date: The date that the ordered quantity will be available. It could be the request date if the order quantity is available on the request date, or it might be a future date when the order quantity will be available
- Error Message: Any error that occurred in calculating ATP. For example, if the Check ATP flag for the item is not selected then this field will display ATP not applicable.
- Substitute Item: If the requested item is not available and the requested quantity for a defined substitute is available, the substitute item will be displayed. An additional tab, showing the availability of the substitute item, is also displayed. displayed for single items. A multi-line window displays availability information for sets and models.

Clicking the Global Availability button located at the bottom of the Availability window opens the ATP window that has the list of warehouses where the item is enabled. You can select the warehouses for which you want to see the availability, and the system will return the availability in all the selected warehouses.

The ATP Details window can also be opened from the Availability window by pressing the ATP Details Button. The ATP Details window displays how the results were derived.

ATP is calculated automatically during scheduling, and may be calculated manually by clicking Availability on the Line Items tab of the Sales Order window. There are several steps required for ATP calculations.

If you are using ASCP, supply/demand is set up at the plan level. See the *Oracle ASCP Implementation Manual*. Global Order Promising will only use the infinite time fence specified on the ATP rule.

If you are not using ASCP, ATP rules must be defined to determine the sources of supply and demand which are included in the calculation. The ATP rules must be associated with items and/or inventory organizations. Also, the data collection program must be run. There is a requirement for ATP calculations to be very fast; some customer service representatives will need to give this information to customers on the phone. However, considering all the possible sources of supply and demand for an ATP calculation can be very complex. Therefore, a concurrent process known as data collection must be run to summarize the supply and demand picture. This program is part of the Oracle Advanced Planning and Scheduling application. The ATP calculation is then performed on the summary tables. For details about setting up ATP rules and running the data collection program, see the setup section of this document.

Scheduling

Scheduling is an action performed on an order line or a group of lines. The action performs the following:

- Determines the source (warehouse) for the order line. If the warehouse is entered on the line, either manually or using defaulting rules, the scheduling action uses the requested warehouse and the other scheduling results are based on it. If the warehouse is blank, the scheduling action determines the best warehouse based on the sourcing rules. This functionality includes ATO models.
- Determines the schedule ship date, the schedule arrival date, the delivery lead time and the shipping method.
- Makes the line visible to the planning applications and consumes supply for the item. When a line is successfully scheduled the `VISIBLE_DEMAND_FLAG` is set to Yes.
- If the reservation time fence is set and the schedule ship date is within the

reservation time fence, automatically reserves the line.

Scheduling by Ship or Arrival Date

The request date may be either the requested ship date or the requested arrival date depending on the request date type of the customer. If the customer's request dates are requested arrival dates, the scheduling action calls MRP's scheduling API with the requested arrival date. The API returns the first date on or after the requested arrival date that the items could arrive at the customer location, and enters that date into the scheduled arrival date field for the line(s). The schedule ship date is calculated by subtracting the delivery lead time (number of days for items to reach the customer once they ship) from the schedule arrival date. If the shipping network has not been defined for this combination of locations, the delivery lead time will be considered zero days and the schedule ship date and schedule arrival date will be the same.

If you enter a schedule ship date on the order line before performing the schedule action, the system will attempt to schedule on that date when the schedule action occurs. If it cannot, the schedule action fails.

You can define for each customer the delivery window in days that they will accept by entering the latest schedule limit on the customer window. When you enter an order line, the latest acceptable date is calculated by adding the latest schedule limit to the request date. When the scheduling action occurs, the schedule date will only be returned if it is between the requested date and the latest acceptable date. If it is not within this range, the scheduling action fails. For example, suppose that you have a customer who only accepts orders that ship within 5 days of the request date. You would enter 5 in the latest schedule limit fields on the Order Management tab of the customer window. When you enter an order line, if the request date is September 10, the latest acceptable date would be September 15. When the scheduling action occurs, if the schedule date returned is not in the date range of September 10 through September 15, the schedule request fails.

You can control whether OM schedules lines on hold by using the profile option OM: Schedule lines on Hold. If an order or line is on hold and this profile option is No, then the scheduling action fails.

Alternative Ways to Schedule

The scheduling action can be invoked in multiple ways. You can schedule from the sales order window by having autoschedule turned on, or by manually choosing to schedule using the context menu or the tools menu. You can schedule using a workflow activity either immediately or in deferred mode. If the scheduling action fails in the workflow then the line is moved to scheduling eligible activity. You can then use the Schedule Orders concurrent program to schedule the lines with exceptions.

Autoschedule

The sales order line is scheduled when it is saved. If either the Autoschedule check box

on the order transaction type is checked or the OM: Autoschedule profile option is Yes, the sales order will be opened in Autoschedule mode. You can turn Autoschedule on or off from the sales order window by going to the Tools menu. Note that if autoschedule is turned on the availability window is automatically displayed when the sales order window is opened. You can close the availability window, but the lines will still be autoscheduled unless the autoschedule check box on the tools menu is unchecked.

Manual

You can access the scheduling sub menu either by selecting schedule from the list of activities on the tools menu or by placing your cursor on a line and pressing the right mouse button. Selecting schedule from these menus will trigger the scheduling action. If the action is selected from the order header tab, all the lines on the order will be scheduled. If the action is selected from the lines tab, it applies only to the line or group of lines selected. If the profile option MSC_OM_IMPORT_PRESCCHEDULED is set to Yes, then you will be able to schedule ATO items on weekends as well. However if you require the scheduling to be done only on valid working days, set this profile option to No.

Workflow

The seeded scheduling workflow activity should be used in the workflow process for your order lines. In the Line Flow - Generic seeded flow, the schedule activity is a synchronous activity immediately after booking. With this type of process, scheduling will occur immediately after booking. Scheduling errors will be seen by the person who is booking the order. If the scheduling activity is deferred it will occur after the workflow background process runs and any error messages will be available in the process messages window. Only lines waiting at the Schedule-Eligible workflow activity are selected. The default is no value entered. Note that the lines may or may not be scheduled and still could be waiting at the activity. See: *Using Oracle Workflow in Oracle Order Management*.

Manual Scheduling Sub-Process

In Release 12, a new scheduling sub-process named Schedule-Line, Manual is provided to handle cases where you may want to control scheduling manually after the order is booked. If the new sub-process is used in the line workflow, then after booking the order, lines are blocked at the Schedule-Eligible activity. You can progress the Schedule-Eligible activity from Sales Orders window or use the Schedule Orders concurrent program to schedule the lines.

A new generic line workflow is not provided with this new sub-process. If you require to use this sub-process you can copy and customize the generic line workflow and replace the new sub-process in place of the existing Schedule – Line sub-process.

For additional details please refer to the Oracle Order Management User's Guide.

Schedule Orders Concurrent Program

The Schedule Orders Concurrent Program functionality has been enhanced in the current release. This program selects all lines that have failed workflow scheduling, and attempts to schedule them. These lines are waiting at the schedule-eligible activity. The

user can select orders based on the order number and other parameters.

In addition, lines that have never been scheduled can now be scheduled using the Schedule Orders concurrent program. This is useful for high-volume orders, where a batch of imported orders in Booked status can be mass scheduled. Please note that lines that have not been booked are not scheduled.

Also the enhancements to the Schedule Orders concurrent program enable you to reschedule lines in case there is a change in supply dates or even unschedule lines if they have been scheduled previously. You have two re-scheduling options: Re-Schedule and Re-scheduling with Request Date. You can query scheduled lines and perform a reschedule. You can move schedules in and out based on the item's availability, and if orders or delivery schedules from suppliers are changed or cancelled, then the allocated product can be rescheduled to meet other demands earlier or later. You can query and sort scheduled lines, and assign either a new Schedule Ship Date (this can be Schedule Ship Date or Schedule Arrival date; depending on the Order Date Type value) or Warehouse (location) when re-scheduling a line.

- For each line of the order that fails workflow scheduling, messages will be stored in the Process Messages table and also printed in the logfile.
- If scheduling was successful, the scheduling workflow activity will complete with a result of COMPLETE so that the line can progress to the next activity.
- If scheduling was not successful, the workflow activity will complete with the result of INCOMPLETE. The line can then be scheduled manually by progressing the order from the sales order window (press the Action button and select Progress Order) or automatically in the next run of the scheduling concurrent program.

Submit the scheduling concurrent program by navigating to (N) Orders, Returns > Schedule Order. See: *Oracle Order Management User's Guide*

Scheduling Across Orders

Scheduling Across Orders provides the ability to view scheduling attributes of multiple lines across orders, and to perform any scheduling action from a single window. From the Scheduling tab on the Find window of the Order Organizer, you can query lines based on a variety of parameters, such as:

- Item
- Warehouse
- Request Date
- Reservation Status (Reserved or Unreserved)
- Scheduling Status (Scheduled or Unscheduled)
- Shipping Status (Picked, Unpicked, or Backordered)

- Order Status
- Customer
- Shipment Priority
- Schedule Date Ranges
- Request Date Ranges

After performing an intelligent query to display a group of lines, you will see a new window, Scheduling Organizer. From the Scheduling Organizer, you can perform scheduling actions on lines across orders, that is, you can Schedule, Unschedule, Reserve, Unreserve and perform ATP inquiry.

Access to the scheduling tab is controlled by the Profile Option OM: Scheduling Role. Those with the role of CSR Only do not have access to the Scheduling tab, but they have the same functionality available in previous releases. Those with the role of Scheduler Only are allowed access to the Scheduling tab, but not to other tabs (Order Information, Line Information, Advanced, and Holds Information). Those with the role of both CSR and Scheduler have access to all tabs in the Find window of the Order Organizer. Additionally, the role determines whether some actions are available. For instance, those with the role of Scheduler only will not be allowed to open the Sales Order window from the Scheduling Organizer.

Scheduling Across Orders is useful in a variety of business scenarios:

- Availability and/or scarce inventory: Who has the reserved items? Which customers have scheduled lines? Which customers have unscheduled lines? If desired, you can take supply away from lower priority customers, and give it to higher priority customers within Scheduling Across Orders.
- Customer service: View all the lines for a customer. Which lines need to be scheduled or reserved?
- Scheduling: Query all lines that are scheduled to ship on a specific date, and push out the schedule date for those lines as required. Or query any lines where Override ATP is flagged, and decide how to provide supply.
- Revenue impact: Query up all lines for an item, and display gross margin. Using Folders, move gross margin to be one of the first three columns on the Scheduling Organizer. Then sort based on gross margin. Reserve the lines with the higher gross margins, and pick by prior reservation. By doing so, you can impact bottom line for a month, quarter, and so on.

To use these strategies, the general flow is:

- Use business logic to select and reserve the lines you want to pick release

- Pick release "By Prior Reservation"
- Ship the reserved items immediately
- Ship remaining qtys when supply is available
- Scheduling Groups of Lines

For scheduling functions other than Override ATP, Order Management may perform the function on only one line or on that line and a group of related lines. Scheduling treats the following groups as scheduling sets. For these line groups, the scheduling activity occurs on all the lines of a set.

- Assemble to Order (ATO) Models
- Ship Model Complete (SMC) Pick to Order (PTO) Models
- Line Sets
- Ship Sets
- Arrival Sets

Scheduling processes the lines of the set together and applies the rules required to honor the set. If lines are in a ship set they will be scheduled from the same warehouse and will have the same requested ship date and ship to. They may not have the same Shipping Method. For instance, in a PTO model or a ship set you might ship a fragile part using one Shipping Method, and a heavy part using another Shipping Method.

User created ship sets, ATO models and SMC PTO models are all ship sets.

All lines in a user created arrival set will have the same arrival date and ship to organization. Lines assigned to an Arrival Set within an order will be scheduled with the same requested arrival date and ship to.

The following table shows the behavior for each scheduling function with each type of line group.

Scheduling Groups of Lines

Line Group Type	Calculate ATP	Schedule	Reserve
Standard Line (not in any set)	That Line	That Line	That Line
Standard Line (in ship or arrival set)	Whole Set	Whole Set	That Line

Line Group Type	Calculate ATP	Schedule	Reserve
ATO Model	Whole configuration	Whole configuration	Cannot Reserve
ATO Class	Whole configuration	Whole configuration	Cannot Reserve
ATO Option	Whole configuration	Whole configuration	Cannot Reserve
PTO Model (Ship Model Complete)	Whole configuration	Whole configuration	Whole configuration, but each line is reserved separately
PTO Class (Ship Model Complete)	Whole configuration	Whole configuration	Class and its included items
PTO Options (Ship Model Complete)	Whole configuration	Whole configuration	Only the option
PTO Model (non-Ship Model Complete)	Whole configuration, but ATP will be performed separately for each line	Whole configuration, but each line will be scheduled separately	Whole configuration, but each line is reserved separately
PTO Class (non-Ship Model Complete)	Class and its included items	Class and its included items	Class and its included items
PTO Options (non-Ship Model Complete)	Only the option	Only the option	Only the option
Included Item (Ship Model Complete)	Whole configuration	Whole configuration	That Line
Included Item (non-Ship Model Complete)	That line	That line	That line
Service Line	Cannot calculate ATP	Cannot schedule	Cannot reserve

For scheduling actions other than Override ATP, you can manually request scheduling for more than one line at a time by multi-selecting the lines. (Override ATP is intended for exceptions only.) From the sales order window, select each line by pressing the Ctrl key and clicking the mouse. The selected lines will be highlighted. The scheduling activity that you request will be executed for the lines that you selected, plus any lines

that are required to be scheduled with them because they are in the same group. The lines that are multi-selected that are not in a scheduling group will be processed independently.

Line Sets: Ship/Arrival

Ship Sets can be enforced at the time of Pick Release or display a warning at Ship Confirm. If you decide to enforce Ship Sets at the time of Pick Release, N > Setup > Shipping > Shipping Parameters > Pick Release > check the flag to "Enforce Ship Sets and Ship Models." The enforcement ensures that all lines assigned to the same Line Set will not progress until each line in the set is ready.

A Ship Set is a group of order lines which must ship from the same warehouse on the same day with the same ship to location. If the enforce Ship Sets flag is checked, Pick Release will not pick anything in the ship set unless everything in the ship set is ready to go; that is, there is inventory available, no holds exist and it is eligible for pick release. The order entry window will ensure that the common attributes are the same across all lines in the set.

An Arrival set is a set of order line Shipments which must arrive at the customer site at the same time regardless of how each line is shipped or from where it is shipped. The scheduling functions will honor arrival sets and the ATP calculation will operate on a whole arrival set together as a group, taking delivery lead times into consideration to meet the scheduled arrival date. Arrival sets can ship from different warehouses and ship on different days, but the ship To organization and the scheduled arrival date must be the same on each line in the arrival set.

Lines in sets will be enforced to have some common attributes. Ship Sets need to have a common Schedule Ship date, Ship From and Ship To while Arrival Sets need to have a common Schedule Arrival Date and Ship To. A Line can either belong to a Ship Set or an Arrival Set at one time.

Automatic Line Set Assignment

Overview

Oracle Order Management enhances Line Set (Ship/Arrival) functionality with seeded defaulting rules minimizing the need for user action thus reducing error and keystrokes.

Features include:

- Allow defaulting header level Line Set (Ship/Arrival) from Order Transaction Types
See Transaction Types for more information.
- Customer
 - Invoice To

- Ship To

Defaulting Rules Setup

Previously, there were hard coded defaulting rules such as Ship To, Line Set, Invoice To, Line Set, or Customer.Line Set (Sold to), depending on which lines were automatically included in Ship or Arrival Sets.

- The hard coded defaulting rules have been converted to seeded defaulting rules using defaulting framework to provide flexibility in changing the sequence of the rules to be used.
- Added defaulting rule for Order Type.Line Set
- A facility has been provided to define a defaulting rule for Ship Set or Arrival Set based on the Transaction type.

Note: Defaulted Set at the header level will only affect the new lines that are being created and will not have any impact on existing lines.

See: Define Defaulting Rules, page 2-117

Transaction Types Definition Form

Default Line set column has been added to the Transaction type Form. This is available only for Order Level Transaction types.

- Line Set choice of "Ship" or "Arrival" provided by an LOV. N > Setup > Transaction Type > Define > Shipping Tab > Line Set field

See: Define Order Management Transaction Types, page 2-95

Ship Set or Arrival Set For Each Line

Oracle Order Management has increased the choice to their customers of header level Ship/Arrival Set functionality. The profile, "OM: Assign new set for each line," provides two alternatives:

Many businesses do not wish to create multiple shipments for a single order. The default is set to "No," creating a single Ship/Arrival Set per order. As an example, if the header level choice is Ship, all successfully scheduled lines are assigned to one Ship Set when created. If one line fails scheduling, none of the lines are assigned to a Ship Set.

It is important for other businesses that a single line ship complete and multiple shipments are allowed per order. By setting the profile to "Yes," the system creates a unique Ship/Arrival Set for each line in an order as long as the line can be scheduled.

Profiles

OM: Assign new set for each line

This profile allows you to determine how Order Management places lines into sets. Set to "No," all successfully scheduled lines automatically go into one Ship or Arrival Set. Set to "Yes," each line is scheduled into a unique set (Ship or Arrival) based on the header level preference.

Implementation Considerations

Option 1 provides functionality for businesses that prefer to group all lines of an order into one Ship Set or Arrival Set.

- Setting the profile to "No" with header level set to "Ship" creates one Ship Set per order, scheduling all of the lines to ship together from the same warehouse to the same Ship To with the same Scheduled Ship Date, potentially saving on freight costs.
- Setting the profile to "No" with header level set to "Arrival" creates one Arrival Set per order, scheduling all of the lines to arrive together at the same Ship To with the same Scheduled Arrival Date providing a high level of customer service through scheduling to deliver all lines of the order at the same time to the same place.

Option 2 creates an additional use of Ship/Arrival Sets by creating a unique set for each line of an order.

- Setting the profile to "Yes" with header level set to "Ship" creates a unique Ship Set for each line of the order. Creating line level Ship Sets enforces that the full quantity ordered is scheduled to ship at the same time. Thus assisting in customer satisfaction through shipping full quantity every time an item is ordered. It also allows flexibility in that each line is independent. Consider an order with two lines, 1) Item A, quantity 500 2) Item B, quantity 200. At the time of scheduling, Item A has full quantity of 500 available to be ordered while Item B only has quantity 50 available. With separate Ship Sets, Item A, quantity 500 proceeds to Pick Release and Ship Confirm while Line 2, Item B will not progress. The customer is happy as full quantity 500 of Line 1, Item A is shipped immediately instead of waiting for the complete quantity of Line, 2 Item B to ship on the same date.
- Similarly, setting the profile to "Yes" with header level set to "Arrival" creates a unique Arrival Set for each line of the order. Creating line level Arrival sets enforces that the full quantity ordered is scheduled to arrive. Thus assisting in customer satisfaction through shipping full quantity every time an item is ordered. It also allows flexibility in that each line is independent. Consider the same order with two lines, 1) Item A, quantity 500 2) Item B, quantity 200. At the time of scheduling, Item A has full quantity of 500 available to be ordered while Item B only has quantity 50

available. With separate Arrival Sets, Item A, quantity 500 proceeds to Pick Release and Ship Confirm while Line 2, Item B will not progress. The customer is happy as full quantity 500 of Line 1, Item A arrives together instead of waiting for the complete quantity of Line, 2 Item B to arrive on the same date.

Setup

To set up Order level Ship/Arrival Sets:

1. Define a Defaulting Rule to determine header level setting as Ship or Arrival
2. Set the profile option OM: Assign New Set For Each Line to "No."

To set up unique Line level Ship/Arrival Sets:

3. Define a Defaulting Rule to determine header level setting as Ship or Arrival.
4. Set the profile option OM: Assign New Set For Each Line to "Yes."

Changing Scheduled Lines

Order Management has many features to help manage scheduled lines when the lines are changed. When a scheduled line is changed, the system reschedules the line. For example, if you change the ordered quantity or the warehouse, the system reschedules based on this new information.

When a new line is inserted into a scheduling group (such as a ship set or a configuration) that is scheduled the system will first try to schedule the new line with the same attributes as the other lines in the scheduling group. If that fails, then it checks the value of the profile option Auto Push Group Date. If the value is No, the line is inserted but not scheduled. If the value is Yes, the system tries to reschedule the whole set. If rescheduling the whole set fails, the line is inserted but not scheduled. Exception: If the line is part of an ATO configuration or a ship model complete PTO configuration, and scheduling the group of lines together fails, then the line will not be inserted.

When you cancel a line that has been scheduled or reserved, the system unschedules the lines and removes the reservations. If a scheduled line is partially canceled, the system cancels scheduling information in this order:

Cancel the quantity which is scheduled but not reserved:

If the quantity requested for cancellation includes lines with reservations, the system cancels the reservations one at a time until the reserved quantity does not exceed the remaining uncanceled quantity. Reservations are canceled in this order:

- Reservations that are not detailed are canceled first, that is, organization or warehouse level reservations. Reservations that are detailed are canceled next, that is, subinventory or lot level reservations.
- If a scheduled line is split then both of the new lines are scheduled. If the line is partially reserved, Order Management determines which of the new lines get the reserved quantity, based on whether the split is initiated by a user or the system.
 - User splits: The customer may request shipment on more than one date so the user splits the line. If a original line is partially reserved, the first new line gets as much of the reserved quantity as it needs, then the second line, etc. For example, suppose that a line has order quantity of ten and reserved quantity of three. If the line is split into two lines with order quantities of six and four, the first new line will have a reservation for three and the second new line will not have any reservation. If an order line has order quantity of ten and reserved quantity of seven, and the line is split into two lines with ordered quantities of six and four, then the first line will have a reserved quantity of six and the second line will have a reserved quantity of one.
 - System splits: Lines are split by the system when a partial quantity is ship confirmed. In this case the shipped line will have a reserved quantity of zero—it doesn't need reservations any more—so any remaining reserved quantity belongs to the unshipped line(s).

Global Order Promising for ATO Models

This feature offers the following functionality:

- **Ability to schedule an ATO model without supplying a warehouse:** Supplying a warehouse is not necessary to schedule an ATO model. Sourcing rules are used to provide the best warehouse based on availability, and derive the source for the ATO Model. This is available regardless of whether you are using Operation Data Store or Planning Data Store. When scheduling with planned data, the system will try to net any existing configurations:
 - If a matching configuration is found, the system schedules based on the matched configuration. Available on-hand material is used before checking for other supply.
 - If no match is found, the system schedules based on the model and its children.
- **Ability to net configurations for ATO models:** This feature is available only with a fully licensed version of ASCP and GOP. Match functionality is available with Planning Data Store only, not with Operation Data Store.

GOP promises availability based on the configuration instead of the model and options, if the date for the configuration is better than that of the model and options. If a match is found, the promised availability considers the matched

configuration supply. The system checks whether there is any on hand or on order for a match that is not consumed by other orders before it checks availability for making a new item.

Linking refers to creating the configuration item. The configured item can be created either manually or via a concurrent program, Autocreate Configuration. The same match functionality used during scheduling is also supported during the creation of the configuration item.

Note: Operation Data Store (ODS) represents all tables that act as the destination for the collected data from Oracle applications or the legacy system. ODS ATP is Available to Promise based on collected data.

Note: Planning Data Store (PDS) encompasses all of the tables in ODS plus other output tables from planning. PDS ATP means ATP based on planning output.

Publishing Plan Results

For Scheduled lines with Planned items, Advanced Supply Chain Planning (ASCP) can make planning recommendations based on the latest supply/demand picture. These recommendations can be published to Order Management, automatically updating the sales order line(s). This is applicable for Planned items only. You can firm a line to prevent updates to the warehouse. Note that the ability to publish plan results to Order Management means that there is the potential for a number of scheduling attributes to be changed. If your items are not planned items, those items will not be impacted by any changes in planning.

The following attributes may be updated by ASCP:

- Scheduled arrival date
- Scheduled ship date
- Warehouse (if line is not firmed)
- Delivery lead time
- Shipping method

Publishing Plan Behavior with Models:

- 'Firm Demand' flag cascades across Assemble To Order (ATO) Models
- Updates occur only if all lines within the ATO Model contain planned items
- Pick To Order (PTO) models and kits

- Ship Model Complete (SMC) models / kits (SMCs) are not supported
- Options and included items in non-SMC models and kits are supported

Publishing Plan Behavior with Ship and Arrival Sets

- Updates to sets will occur only if all the lines in the set contain planned items
- Warehouse cannot be updated if any line within the set is firmed

If one line in the set is not planned, none of the lines in the set will be updated based on the results of the new plan.

Note: If one line in the set is firmed, all lines in the set are treated as firmed. The warehouse cannot be updated on any line in the set, if even one line of the set is firmed.

How would this new feature work with Override ATP?

APS can update overridden lines if they are NOT firmed. When this occurs, OM un-overrides the lines

OM allows APS to update the overridden lines irrespective of the authorization profile value OM: Authorized to Override ATP.

To firm a line:

Firming a line prevents updates to the warehouse by APS

There are three optional firming methods:

1. Manually enable the 'Firm Demand' Flag on Sales Order Line.
 - From the Shipping tab, use Folder functionality to display the Firm Demand flag.
 - To firm lines manually, check the flag for Firm Demand.
2. Set up pre-defined events on the Order Management System Parameters form
3. Create a Line Type with the seeded sub-process 'Wait to Firm Line' inserted in the line flow. Then use the 'Progress from Firm Process' concurrent program to progress and firm the line(s).

Override ATP

Override ATP enables you to schedule an item that is available to promise even if there is no supply. It is designed for exceptions. For example, you can take supply from one

customer and give it to a higher-priority customer. You can make use of supply that is not recognized by the system. Once Override ATP is set for a line, that line remains overridden until the override flag is removed or the line is unscheduled.

You may want to allow only a single planner, scheduler, or sales order administrator to use this feature. Overriding ATP creates the responsibility of manually finding supply. Authorization to override ATP is secured through the use of a profile options, OM: Authorized to Override ATP.

To override ATP you must:

1. Provide a schedule date
2. Check the Override ATP box
3. Save any changes.

Override ATP honors days, but ignores time stamps in the date fields. Once a line is overridden, unauthorized users cannot undo the override, unschedule a line, or change scheduling-related attributes such as warehouse or the Ship_To location. If the line is at a point in the flow where allowed by processing constraints, unauthorized users can cancel or reduce quantity, or delete the line. Unauthorized users can also split the line, if scheduling attributes are not changed.

If you uncheck the Override ATP check box, the system tries to reschedule the line. If there is supply, the line will schedule. If the supply is insufficient, the line can be left unscheduled, or you can override ATP. Override ATP does not apply to service items or to drop ship or return lines.

For ATO models, the override flag cascades to other items within the model. For PTO models, it cascades only to included items.

Reserving

In Oracle Order Management, you can reserve on-hand inventory to a sales order. Reserved inventory cannot be used for any other purpose. The reserved quantity for a sales order line is displayed on the shipping tab. You may reserve part or all of the ordered quantity.

A line must be scheduled before it can be reserved. If you try to reserve an unscheduled line, the system will first try to schedule the line. If the line is successfully scheduled then the system will try to reserve it.

Manual Reservations

There are two ways to reserve manually from the sales order window.

- Select reserve from the scheduling option under the tools menu

- Select reserve from the scheduling sub menu which is displayed when you select the context menu.

If you are on an order line the line will be reserved. If you are on the header, all the lines will be reserved.

Manual reservations are affected by a scheduling parameter that lets you control whether to apply a partial reservation manually. If 9 out of 10 are available, and if you have set the parameters to allow partials, you can right mouse click to bring up the context menu and select Reserve to reserve the 9.

Reservation Time Fence

Reservations are performed automatically whenever a line is scheduled and the schedule date is within the reservation time fence. For example, suppose the today's date is November 25th. An order line is scheduled for December 1st, which is 6 days away. If the reservation time fence is 10, the line will be reserved because $6 < 10$. If the reservation time fence is 2, the line will not be reserved because $6 > 2$. If the reservation time fence is NULL, then lines will not be automatically reserved. The reservation time fence is set using the system parameter Reservation Time Fence.

Reservations Time Fence is affected by the scheduling parameters, Allow Partial. If you want the reservation time fence to reserve as much as possible, even though full supply is not available, set the scheduling parameter to allow partials.

Reservation Details Window

When you create reservations manually on the sales order window or automatically using the reservation time fence, the items are reserved at the warehouse level with no inventory details specified, or at the subinventory if the subinventory is specified on the line. You can specify inventory details for a reservation by using inventory's reservation details window. To access the window from the sales order window, go to the tools menu and select scheduling. From the list of options select Reservation Details, where you can reserve by lot, revision, subinventory and/or locator. You can only access the reservation details window for lines that are scheduled.

Reserve Orders Concurrent Program

The Reserve Orders concurrent program is able to reserve any line that is scheduled, assuming full quantity for the line exists. A number of parameters are provided that enable you to select orders and lines to reserve by order number range, customer name, order type, item, request date, ship date, arrival date, order date, demand class, and within the reservation time fence.

Reserve Orders does not lock the supply for the queried lines. You may want to implement a business process of one person at a time reserving for an item.

You can run the Reserve Orders program against a filtered group of orders. In addition, there are Sort parameters, so that existing supply can be sequenced using attributes such as:

- Date Ordered
- Request Date
- Scheduled Ship Date
- Arrival Date
- Promise Date
- Line Planning priority

You can use this feature in a variety of business scenarios. Perhaps you are using the reservation time fence, but there is no supply at the time the line schedules. Once there is additional supply, you can run Reserve Orders to update reservations on lines that are within the reservation time fence. Or perhaps you have a Customer who is complaining about not receiving items as requested. You can query all lines for a particular customer, or for lines within a specific schedule date range, and place reservations on those lines.

Reservation Enhancements

You can also use Reserve Orders for the reservation strategies of Fair Share, Percentage, and Partial.

The following reservation modes are available for making reservations:

- Fair Share
- Percentage
- Partial, include only unreserved lines
- Partial, include partially reserved lines

Additionally, the following reservation run types are available:

- Reserve
- Simulate
- Create Reservation for Set

If you have specific business needs not met by the above, you can write your own using the API hook `OE_RESERVE_CONC_HOOK`. The Business procedure can be used to add business validation logic, that is only reserve case quantities.

Hook Package: OE_RESERVE_CONC_HOOK. This hook is provided with two procedures: Simulation Data Procedure :

- Business Validation Procedure : Procedure Qty_Per_Business_Rule
- Simulated_Results Business procedure can be used to add business validation logics like allow only case qty reservation and so on.

For example, Fair Share might determine that 58 out of the requested qty of 80 can be reserved for Fair Share. But if the user wants to ship only case quantities of 50, then the user can write their own API to round the qty of 58 down to 50. The Simulation procedure can be used to read the simulated data.

Reservation Modes

Fair Share

Fair share distributes available on-hand supply among selected lines on a pro-rated basis. For example,

- 10 units are available.
 - Line 1 Requested Qty is 60
 - Line 2 Requested Qty is 40
- Fair Share reserves as follows:
- 6 are reserved for Line 1
 - 4 are reserved for Line 2

With this method, distribution is determined by the amount of each order; a larger order will receive a larger portion of available supply. Once the reservations are placed, you can Pick by Prior Reservation, ship those lines, and get them out the door. The remaining quantities are fulfilled as supply is available.

With Fair Share, every queried line receives something assuming there is supply for each line to get at least one piece. If supply is divided across warehouses, Fair Share is calculated separately for each warehouse, as shown below. In this example, there are 100 pieces in M1 and 100 pieces in M2. Because 140 are requested in M1, each line gets about 71% of supply. Notice that the fractional quantities are rounded down, assuming that the OM Indivisible flag is set on the Physical Attributes tab of the Item Master.

Fair Share Example One

Line	Item	WH	Req Qty	Factor	Factor * Req Qty	Derived Qty
1	ItemA	M1	80	0.71429	57.14286	57
2	ItemA	M1	60	0.71429	42.85714	42
3	ItemA	M2	20	0.625	25	25
4	ItemA	M2	40	0.625	12.5	12
5	ItemA	M2	100	0.625	62.5	62

In this case, supply is divided across warehouses and different warehouses are specified on the order lines. Fair Share is first calculated for each subinventory. Then if there is remaining supply, lines with no subinventory receive Fair Share

Fair Share Example Two

Line	Item	WH	Sub	Req Qty	Factor	Factor * Req Qty	Derived Qty
1	ItemA	M1	Stores	80	0.71429	57.142857 14	57
2	ItemA	M1	Stores	60	0.71429	42.857142 86	42
3	ItemA	M2	Stores	20	1	20	20
4	ItemA	M2	FGI	40	0.35714	14.28571	14
5	ItemA	M2	FGI	100	0.35714	35.71429	35
6	ItemA	M2		15	0.50000	7.50000	7*
7	ItemA	M2		15	0.50000	7.50000	7*

Line	Item	WH	Sub	Req Qty	Factor	Factor * Req Qty	Derived Qty
							*Available in M2 Stores

Percentage

Percentage allows you to specify that a percentage of the available supply is allotted to specified lines. For example, assume that 100 pieces of the specified item are available:

For Line 1, 80 are requested and 40 are reserved.

For Line 2, 100 are requested and 50 are reserved.

For Line 3, 30 are requested and 10 are reserved.

For Line 4, 20 are requested and none are reserved.

This mode reserves the specified percentage on each line, if supply exists. But when the supply is consumed, no further reservations can be made.

Order By parameters can be used with Percentage Mode, such as Order By Request Date, in order to give available supply to those lines that were requested earlier rather than later.

Partial

If only part of the full Requested Qty is available, a partial reservation can be applied.

Summary

The following chart shows what you can expect if 100 are available, and the following amounts are requested.

- For Fair Share, each line gets approximately a third of the requested qty, because the demand for these lines is 300. Note that Line 2 rounds down, i.e. $.33333 \times 60$ is rounded down to 19. You can have remaining quantities with Fair Share.
- For Percentage and Partial, there is no guarantee that each line will get supply, which is why the Order By parameter is recommended.

Summary

Lines	Req Qty	Fair Share	Percentage, 40%	Partial
1	80	26	32	80

Lines	Req Qty	Fair Share	Percentage, 40%	Partial
2	60	19	24	20
3	40	13	16	
4	20	6	8	
5	100	33	20	
Remainder	2	N/A	N/A	

When using any of these reservation strategies, there is no special logic for sets and PTO models.

Reservation Run Types

Simulate - Reservations are not committed to the reservations table. They are instead saved in a temp table, and if desired, users can use the Scheduling Across Orders window to:

- View the simulated reservations
- Make modifications if desired

Create Reservation for Set - This allows users to commit the quantities reserved in the simulation set to become reservations.

You can perform Reservation Modes either from Scheduling Across Orders, or from Concurrent Requests. From Scheduling Across Orders, the steps are:

1. From the scheduling tab of the Find window, query the desired items / lines for reservations.
2. From the Actions menu, choose Reserve Orders Request. You will be asked to specify:

Reservation Run Type, i.e. do you want to simulate or reserve? If you reserve, the items will be reserved in Oracle's tables. If you simulate, you will have the opportunity to view and edit the reservations before committing them.

Reservation Set Name. You need to provide a name so that you can query later to see the results.

Override Set Name? If there is already a reservation set using this reservation set name, should that name be overridden?

Reservation Mode, i.e. do you want to do Fair Share or select another reservation strategy.

Percentage. If you've chosen the Percentage strategy, specify the percentage, i.e. 60% of requested quantity.

Order By. Not applicable for Fair Share. But for Partial and Percentage strategies, would you like to give preference to lines with an earlier request date, a higher planning priority, or other criteria?

3. After entering the above parameters, submit your request. Then if you choose, you can query by Reservation Set Name from the Scheduling tab of the Find window. The Derived Quantity indicates how many items were reserved. If you used a Simulation Run Type, you can make adjustments in the Corrected Qty column. Once satisfied, you can commit the reservations using Actions, Create Reservation for Set. Once the lines are reserved, the Processing column shows the lines as processed / reserved.

Reservation API Hook

This hook is provided to allow creation of need-specific APIs, extending Reserve Orders to apply business-specific rules, such as:

- Ensure that a particular customer receives only a case quantity.
- Ensure that the reserved quantity for a line never exceeds a specified amount.
- Give preference, if desired, to lines with promotional codes.

The modified reserved quantities can be passed back to Oracle and be reserved.

Note: This business process assumes only one person at a time performs reservations for an item.

Package Name: OE_RESERVE_CONC_HOOK. File Names: OEXRSHOS.pls and OEXRSHOB.pls, located in the \$ONT_TOP/patch/115/sql directory. Procedures that you can use: Qty_per_Business_rule and Simulated_Results.

Inputs for the 2 procedures can be found in the file OEXCRSVS.pls, located in the \$ONT_TOP/patch/115/sql directory. The input is a table of records, named Rsv_Tbl_type. The table of records is based on a record structure, named Res_Rec_type. You need to update the field, derived_reserved_qty with the reserved qty, as per your business rules. Please note that this API only performs reservations. You'll need to use inventory's public API, INV_RESERVATION_PUB, in order to perform unreserve activities.

Unreserving and Unscheduling

You can unreserve lines that have been partially or completely reserved. The inventory which was allocated to the line becomes available for other orders, but the line will still be scheduled so it will be visible as demand to the manufacturing applications. The system automatically unreserves a line if it is deleted or canceled.

When you unschedule a line the system will both unreserve and unschedule it. Unscheduling the line sets the `VISIBLE_DEMAND_FLAG` to No so that the line is no longer visible as demand to the manufacturing applications.

You can unreserve or unschedule by choosing these options from the scheduling submenu of the tools menu or by choosing scheduling from the context menu.

Setup

To set up scheduling to meet the needs of your business, note that several fields on the Order Management tab of the customer definition window affect the way scheduling works:

Request Date Type: Scheduling by Ship or Arrival Date

To determine whether to schedule by Ship or Arrival date, set the Request Date Type flag on the customer window to Ship or Arrival. If the value is arrival, the request date will be considered as the arrival date by the system. If the value is ship, then the request date will be considered the ship date. The request date type can be defaulted from the customer information to the order, and the user can change it on the order if required.

Latest Schedule Limit: Latest Acceptable Date

To set a Latest Acceptable Date (LAD) for a particular customer on the order line, enter a value on the customer window for Latest Schedule Limit. This field can contain any numeric positive integer value. This value can be defaulted to the header field, Latest Schedule Limit. When you enter an order line, the latest acceptable date is calculated by adding the latest schedule limit to the request date. When the scheduling action occurs, the schedule date will only be returned if it is between the requested date and the latest acceptable date. If it is not within this range, the scheduling action fails. You can manually override the LAD, but the system will not schedule lines that exceed the LAD.

To set a default ship set or arrival set based on the customer, select either Ship Set or Arrival Set from the Lines In field. If desired, you can also set the value at the Ship To Address (Site) level. You can default this value to the order. If this value is set on the order, then all lines of the order will be placed into a system-defined set if scheduling is successful.

If you are using a reservation mode such as Fair Share with discrete items, set up the OM Indivisible flag on the Physical Attributes tab of the Item. For instance, if you want to reserve "Fair Share" quantity, and your items are discrete units, setting this attribute prevents decimal quantity reservations such as 1.65.

Scheduling Parameters

Request Date affecting Schedule Date

This parameter allows you to control rescheduling if there is a change to the Request Date.

Ship Method affecting Schedule Date

This parameter allows you to control rescheduling if the ship method changes. By default, items are rescheduled if Ship Method is changed. This is desired if you are using Lead Time scheduling. If you are not using lead time scheduling, you can change the Ship Method without triggering rescheduling by setting this parameter to No.

Promise Date

This parameter defines the terms of the promise date. Available options are:

- **Manual:** Promise date entered manually or with defaulting rules. Promise Date not taken from Schedule Ship Date, Schedule Arrival Date, or Request Date.
- **First Schedule Date**
- **First Request Date**
- **Dependent on Schedule Date:** If Schedule Ship Date changes, Promise Date will change.
- **Dependent on Request Date:** Promise Date tied to Request Date.

Partial Reservations

This parameter allows you to determine if partial reservations are accepted. The default behavior does not allow a reservation to be placed if the full quantity is not available. If necessary, you can set this parameter to allow a partial reservation to be placed using available supply.

Latest Acceptable Date

Choices for Latest Acceptable Date

This parameter selects the behavior for the latest acceptable date for scheduling. Options are:

- Honors the Latest Acceptable Date
- Ignores the Latest Acceptable Date and gives a warning

- Ignores the Latest Acceptable Date, and gives no warning (default setting)

Schedule Lines on Hold

Possible values are yes and no. If this field is set to yes, the scheduling action processes order lines even if the order or line is on hold. If set to no, the scheduling action will fail if the line is on hold.

Reservation Time Fence

This may be any positive integer numeric value. When a line is scheduled it is also automatically reserved whenever the schedule date is within the reservation time fence.

Profiles

The following profile options affect scheduling functionality:

OM: Autoschedule

Possible values are yes or no. If set to yes, the availability window is displayed when the sales order window is opened and scheduling occurs automatically as each order line is saved. This profile applies only to standard items. It applies to lines entered through Order Import.

OM: Auto Push Group Date

Possible values are yes and no. If the value is yes and a line is added to a scheduled configuration, and the new line cannot be scheduled on the date that the rest of the configuration is scheduled, then the system will try to reschedule the complete configuration at a different time. If the value is no and the new line cannot be scheduled, then scheduling for the new line will fail and the rest of the configuration will not be affected.

OM: Authorized to Override ATP

Possible values are yes or no. If the value is Yes, the the authorized user will be able to check the override ATP flag, and override the Schedule ship date or Arrival date. If the value is No, the user will not be able to override the schedule ship date or arrival date.

OM: Scheduling Role

This pertains to Scheduling Across Orders. Possible values are CSR only, CSR and Scheduler, and Scheduler only. This can be set at either the Responsibility or User level. This profile option determines which tabs can be accessed on the Find window of the Order Organizer. If set to CSR only, there is access to the tabs pertaining to the sales order, but no access to the Scheduling tab. If set to CSR and Scheduler, there is access to all tabs, including the tabs for CSRs and the one for schedulers. If set to Scheduler only, there is access to only the Scheduling tab.

MRP: ATP Assignment Set

This can be any valid assignment set which is defined in the MRP application. It specifies the assignment set that will be used for calculating ATP. Assignment sets are mentioned later in this section.

INV: Capable to Promise

Possible values are Enable Product Family ATP and CTP, Enable Product Family ATP, Enable ATP, ATP/CTP based on Planning Output, and ATP based on Collected Data. This profile option indicates whether and how to calculate ATP. You can choose one of two options.

If you license ASCP and want to use planning output, choose ATP/CTP based on Planning Output.

If you are not licensing ASCP but want to calculate ATP, choose ATP based on Collected Data. See: Scheduling Parameters, page 12-30

Folders

You may want to expose the Override ATP flag on the Shipping tab. You may also want to use Folders to tailor the Scheduling tab on the Find window of the Order Organizer, or the Scheduling Organizer window.

Scheduling Levels on Transaction Types

The scheduling level on the order transaction type determines what type of scheduling is allowed. The possible values for this are:

ATP Only

You will not be able to schedule or reserve lines on the order. If you have an order transaction type defined with a scheduling level of ATP Only then you must not have the scheduling activity in any of the line level workflow processes. This could be used for Bill-Only or Bill-Only with Inventory Interface flows, or possibly for quoting scenarios.

For example, you could use the ATP Only flow for Bill Only lines that you want to omit from a header level set. If you do not want the Bill Only lines to be scheduled and considered part of the header-level set, you could make the scheduling level of the line transaction type be ATP Only.

No Reservations

You can perform all scheduling functions except for reserving inventory. You will be able to use ATPable items, and schedule all items, but you will not be able to create reservations from the sales order window.

Allow All Scheduling Actions

All scheduling actions can be performed.

Inactive Demand With Reservations

You can manually enter any schedule date, but the system does not schedule. The line can be reserved. The schedule date is not visible to MRP / APS. This functionality is only for standard items, and it does not support ship or arrival sets.

Inactive Demand Without Reservations

You can manually enter any schedule date, but the system does not schedule. No reservation can be placed on the line. The schedule date is not visible to MRP/APS. This functionality is only for standard items, and it does not support ship or arrival sets.

If you don't want your order lines to be visible as demand to the manufacturing applications, do not schedule the lines. Alternatively, you can control this by setting the scheduling level of the order transaction type.

Customer Window

Several fields on the Order Management tab of the customer window affect the way scheduling works.

Scheduling by Ship or Arrival Date

To determine whether to schedule by Ship or Arrival date, set the Request Date Type flag on the customer window to Ship or Arrival. If the value is arrival, the request date will be considered as the arrival date by the system. If the value is ship, then the request date will be considered the ship date. The request date type can be defaulted from the customer information to the order, and the user can change it on the order if required.

Latest Acceptable Date

To set a Latest Acceptable Date (LAD) for a particular customer on the order line, enter a value on the customer window for Latest Schedule Limit. This field can contain any numeric positive integer value. This value can be defaulted to the header field, Latest Schedule Limit. When you enter an order line, the latest acceptable date is calculated by adding the latest schedule limit to the request date. When the scheduling action occurs, the schedule date will only be returned if it is between the requested date and the latest acceptable date. If it is not within this range, the scheduling action fails. You can manually override the LAD, but the system will not schedule lines that exceed the LAD.

Line Set

To set a default ship set or arrival set based on the customer, select either Ship Set or Arrival Set from the Lines In field. If desired, you can also set the value at the Ship To Address (Site) level. You can default this value to the order. If this value is set on the order, then all lines of the order will be placed into a system-defined set if scheduling is successful.

ATP and Sourcing Rules

ATP Rules are created in the Inventory module. They indicate which sources of supply and demand to consider when calculating ATP. They can be assigned to inventory

organizations and items. If an ATP rule is assigned to an item that is used. If the ATP rule for the item is blank, then the ATP rule for the inventory organization is used.

You must define sourcing rules if you want ATP to determine the warehouse for your order lines. Once sourcing rules are defined, they must be assigned to particular items, categories and/or inventory organizations. You do this using assignment sets.

For scheduling to work in Oracle Order Management you must successfully run the data collection concurrent request set. As previously stated, calculating ATP must happen almost instantaneously, but searching through all the possible sources of supply and demand to calculate ATP is very complex. Therefore, a concurrent process known as data collection must be run to summarize the supply and demand picture. The ATP calculation is then performed on the summary tables. To run the data collection request set, choose Scheduling -> Collect Data from the Oracle Order Management navigation menu. There are two programs in the request set. Enter parameters for both and submit the set. The Planning Data Pull program has a parameter named Complete Refresh. If this is set to yes, then the collection will select all scheduling related information from the relevant tables. If it is set to no, then only the updated information will be selected.

The basic steps for setting up ATP are summarized below:

- In Inventory, create the ATP rule, and attach the rule to item(s).
- In ASCP, define sourcing rules, such as Item X can be transferred from M1 to M2.
- Set the MRP: ATP Assignment Set profile option to point to an assignment set that includes your sourcing rules. Include the ATPable items in the Assignment Set.
- Run Collections from either Order Management or ASCP. (If you have never run Collections before, you will need first to define an Instance with assigned orgs. For details, please refer to Oracle Global Order Promising Implementation and User's Guide.
- Set the INV: Capable to Promise profile option to the correct level. If you have licensed ASCP, choose ATP/CTP based on Planning Output. If you are using a shared version of ASCP, select ATP based on Collected Data. To use ATP / CTP based on Planning Output, plans must be run.

See: *Oracle Global Order Promising Implementation and User's Guide*

Oracle Inventory User's Guide

Oracle Master Scheduling/MRP and Oracle Supply Chain Planning User Guide

Choosing Not to Use ATP

You can turn off some or all of the scheduling functionality of Order Management. If you want lines to be visible as demand to the manufacturing applications but do not want to perform an ATP check on them then you can set the Check ATP flag of the item

to No. You would do this for items where you assume that the item is always available. When the scheduling action is called for a non-ATP item, the system will still perform the sourcing action to determine the warehouse if one is not specified. It will not check ATP but will copy the request date into the schedule date field. The line will become visible to the manufacturing applications as demand on the requested/schedule date.

If you do not want your order lines to be visible as demand to the manufacturing applications, do not schedule the lines. You can control this by setting the scheduling level of the order / line transaction types. The possible values for this setting are ATP only, No Reservations, Allow all Scheduling Actions, Inactive Demand with Reservations, and Inactive Demand without Reservations.

Inter Location Transit Times

If you want to calculate arrival dates based on the time required for shipment from a warehouse to a customer location through a specified ship method, you must define your inter-location transit times.

See: *Oracle Global Order Promising Implementation and User's Guide*

Oracle Shipping Execution User's Guide

Late Demand Penalty

The penalty factor for late demand is used to calculate the penalty cost calculated by Planning Optimization. You can update the field, but no defaulting logic is provided. For details on how Planning Optimization uses this value, please refer to the *Oracle Advanced Planning Implementation and User's Guide*.

Implementation Considerations

Time Stamp

- The schedule dates returned by MRP have only the day, and not the time. Therefore, automatic scheduling in OM can only be at the day level. The Order Management date fields have time capability, so you can enter the time on request dates, promise dates, and the like, but the scheduling function will ignore them: the time stamp returned by ATP is 23:59:59. Availability check provides a quick, rough-cut estimate, so it view availability by days, not hours.

ATP with or without ASCP

- You can use ATP with or without planning. To use ATP with planning, you must license ASCP.

ATP Without Planning

- If you have not licensed APS, you can still perform basic ATP. ATP without planning allows you to see what is currently available, but the system cannot use planning to determine if it's possible to build the product by the Request Date. ATP without planning is single-level. IT can see available for an ATO item that is assembled, or an if a WIP job or PO is expected by a certain date. But it cannot calculate whether there are components and resources to build it by a certain date. ATP without planning uses ODS.

ATP With Planning

- If you have licensed APS, you can not only see what is currently available, but also determine if there are resources to source the product by the Request Date. This type of ATP is multi-level, so it can drill down to the component level and look at available materials and resources to determine an available date. ATP with planning uses PDS.

Past Dates

If scheduling is called with a request date that is before today's date then ATP will be calculated using today's date and not the request date. If for some reason (for example a non-ATP item) a schedule date is returned for a past date, the system will not automatically reserve the item even if it is within the reservation time fence.

Reservations Details Window

There are some limitations to using the reservation details window. You cannot:

- Multi-select lines and go to the reservation details window.
- Go to the reservation details window from the orders block.
- Use this window to reserve more than the ordered quantity.
- Use this window to modify reservations for a configured item created for an ATO configuration.

Order Management does not guarantee the reservations from the Reservation Details window because the details passed to Inventory may not be valid for the Inventory hierarchy.

Reserve Orders

Assume the following lines are queried to be reserved, and 100 are available.

Line 1 Qty 35, reserved

Line 2 Qty 35, reserved

Line 3 Qty 35, unreserved (only 30 of 35 are available)

Line 4 Qty 20, reserved

Line 5 Qty 10, reserved

Notice that if full quantity is not available for the line, there is no reservation.

When you run Reserve Orders, there is no guarantee that all lines will be reserved.

Another user running Reserve Orders, or reserving manually, may reserve the supply before you do.

Reservation Modes

When calling Reserve Orders, either from the concurrent requests menu or from Scheduling Across Orders, supply is not locked for the items queried and then reserved. This may mean that one person at a time should reserve for the item. You may want to evaluate if it's feasible for one person to reserve for an item at a time.

If you are using reservation modes to manage scarce inventory, analyze if the business is interesting is more interested in customer service than in cost-cutting. If so, it could be very useful to ship partial quantity that is currently available, and ship remaining quantities when there is more supply.

Reservations modes apply to discrete manufacturing, not process.

Override ATP

Supply is not available. Once the line is overridden, you must take the responsible for finding supply manually.

Examples

The following examples illustrate some scheduling features.

Schedule by Ship Date with the Reservation Time Fence, without ATP

The warehouse for the order is defaulted from the ship to site. A shipping network is defined for this warehouse/ship to combination with the shipping method of UPS ground, and the transportation lead time is five days. The customer requests the shipment as soon as possible, so the request date is entered as today's date. On-hand inventory is available to fulfill the order. Autoschedule is on, and the reservation time fence is five days.

You enter an order line with the item, quantity and request date. When the line is saved, because autoschedule is on, it is automatically scheduled for the requested warehouse

with a schedule ship date of today. Because the schedule ship date is within the reservation time fence the line is also automatically reserved.

Schedule by Arrival Date, without ATP

One of the following is set up and used to defined to inter-location transit time from the warehouse:

- A customer Location set up in inventory.
- Region and Zones functionality introduced by APS

The shipping network is setup in inventory, specifying a Default method to be picked up by Order Management. On the Others tab of the Sales Order header, Order Date Type is Arrival. A warehouse for the customer defaults to the header and line. There is no ship method on the line.

The customer wants to receive the item on Day five. The Request Date is Day five. The item is available. The shipping lead time is three days. When scheduling by arrival date, the line schedules when it is saved. The default ship method defined in the shipping network defaults to the line. The user saves the line, and the item schedules to ship on Day five, arriving on Day five as requested by the customer.

See: *Oracle Global Order Promising Implementation and User's Guide*

Using ATP without Planning (ASCP), Schedule by Ship Date

No warehouse is defaulted or entered for the order. No shipping network is defined for the customer. The customer requests the shipment as soon as possible, so the request date is entered as today's date. There is no supply to fulfill the order, but there is a work order scheduled for completion in ten days, and the ATP rule includes work orders as source of supply. Autoschedule is off. The line level workflow process has the scheduling activity immediately after booking as a synchronous activity.

You enter an order line with the item, quantity, and request date. When the line is saved, it does not schedule because AutoScheduling is off. You enter additional lines and book the order. When the order is booked, the workflow scheduling activity executes. The warehouse is determined by sourcing rules. The schedule ship date is sysdate + 10 days, which is the day the work order is scheduled to complete. The schedule arrival date is the same as the schedule ship date.

Scheduling Across Orders

Some order lines were scheduled to ship on Day 2 because a purchase order was expected on that day. You now know that 100 pieces will arrive on Day 5, not Day 2.

Within Scheduling Across Orders, query lines for the delayed item with a scheduled ship date of Day 2. Multi-select lines that you want to reschedule, then change the Schedule Date to today's date to a more accurate date, Day 5.

Reserve Orders

A high priority customer is complaining about not getting full ordered quantity of a particular item. Using Reserve Orders, query all order lines for that item and customer. Run Reserve Orders, to place reservations on those lines.

If desired, query the lines for that item and that customer in Scheduling Across Orders. View the reservations. You can also pick release using the Pick by Prior Reservation flag on the Release Orders window. By doing so, you have picked and shipped all lines reserved for a particular item for a high-priority customer.

Override ATP

A very important customer requires a large quantity of a scarce-inventory item to ship as soon as possible. There is no availability, so the line will not schedule.

You know supply has been scheduled for a lower priority customer. You could decide to override ATP for the high priority customer, giving that customer a Schedule Date. You could then review all scheduled lines for the scarce item in Scheduling Across Orders, searching for a lower-priority customer who can wait for supply. Once you've identified a lower priority customer, you could extend the Schedule Date, in effect taking supply from the lower priority customer to give to the higher priority customer.

Loopback

Show that the schedule date is Day 4, but planning determines there is a shortage and the real schedule date is Day 6. The schedule date on the line can be updated. But maybe you know that for this particular Ship_To address, the warehouse should not be changed. You can firm the warehouse, so that although system can update the Schedule Date, it cannot update the warehouse.

Reservation Enhancements

Your supply for an item is short, and you want to give 100% of the requested quantity to your most important customer. Then you want to give everyone else Fair Share. First query all lines for that item for your highest priority customer, and reserve 100% of the requested quantity. Then query all other lines for that item, perhaps those lines scheduled to ship within a date range, and give those lines Fair Share. Then everyone gets something, even if not full quantity.

Perhaps you have short supply, and you have a couple of customers that you know you can short, that is, they are overstocked or have not been paying promptly. Query the lines for each of those customers, or perhaps query all lines with a lower planning or shipment priority. Give those lines 30% of requested quantity. Query all other lines, and give those lines Fair Share or a higher percentage. If you use percentage mode, use the Order By parameter to ensure that lines you deem more deserving get the limited supply ahead of less deserving lines. For example, Order By Request Date, Promise Date, or Ship Date.

Shipping Execution

This chapter covers the following topics:

- Change Orders in Oracle Shipping Execution
- Change Management Core Functionalities
- Change Management Setups
- Shipping Execution Workflows
- XML Publisher Enabled Shipping Documents
- Purging Shipping Records
- Parallel Pick Release
- Message Configuration
- Exception Messages
- Change Management Frequently Asked Questions
- Change Effects
- Change Management and Shipping Execution Actions
- Backorders
- Backorders and Cycle Counting
- Order Management and Shipping Execution Line Status
- Exception Handling
- Miscellaneous Shipments
- RFID-EPC Compliance

Change Orders in Oracle Shipping Execution

Order Line Change in Shipping Execution

In the course of business, Customer Sales Representatives (CSR) enter sales order changes in Oracle Order Management (OM) or Oracle Project Contracts. Changes are required when customers ask to change quantity or shipping information, reschedule or cancel a sales order.

The OM Change Management in Shipping design improves the synchronization of delivery lines and reservations with the order lines when they are changed.

The objective of the Line Change Management design is to allow most of the sales order changes up until the delivery lines are Staged or Ship Confirmed.

Only changes entered after the sales order lines are booked and interfaced to Shipping Execution are validated by the change logic in Shipping Execution. Order Attribute changes propagate in Shipping Execution based on the Shipping Execution change logic.

Change Management Core Functionalities

Delivery Line Split

When an interfaced order line is split, Order Management requests a delivery line split by setting the OM-WSH interface API action flag to S for Split.

As Shipping splits a delivery line, it also synchronizes the Inventory reservation and splits and the move order line.

Split is allowed for delivery lines that have not been ship confirmed.

- Delivery lines Released to Warehouse are reset to Ready to Release and their move order lines are canceled
- Reservations are split
- Both proportional and non-proportional splits retain and split original serial numbers

Note: Order Management is updated first and then the Inventory Interface is run at ship confirm.

Change Management Setups

There are no mandatory setups to enable the Change Management functionality. Order

Management provides constraints that can be changed during implementation. These constraints are used to prevent sales order changes after the associated delivery lines have been pick confirmed in Shipping.

If you choose to remove these constraints, it is recommended that you implement a two-step shipping process (Confirm/Close Delivery then Ship Confirm) or to always make sure that the deliveries are ship confirmed as soon they are loaded or picked up by the carrier. If the system is not accurately updated in real-time, changes may be allowed after the deliveries are far-gone.

OM Constraints

Order Management provides constraints at pick confirm for users who physically ship deliveries before confirming them in the system. Without these constraints, this process can allow changes between the time items are shipped and the ship confirmation update in the system.

By default these constraints are active to disable order line changes after pick confirm/stage step. Seeded constraints will not allow Order Management user to change, cancel or split order lines once delivery lines have been pick confirmed/staged in Shipping Execution.

Disabling Constraints

Some users require changing order lines after the delivery is pick confirmed/staged and until the ship confirmation stage. The system supports flexibility of removing some or all the Order Management- Shipping constraints.

Note: In the event the system was not updated and changes are committed after the deliveries are physically shipped, users may have to handle exceptions manually (revert changes, move inventory, and adjust inventory).

Changing Defaults

To access the Order Management constraints window:

1. Navigate to the Processing Constraints window.
2. In the Application field, query Oracle Order Management.
3. In the Entity field, query Order Line.

List of OM Constraints at Pick Confirm/Stage

The Order Management constraints control the following types of Order Line changes once deliveries are Pick Confirmed/Staged:

- Update order line
- Cancel order line
- Delete order line
- Split order line

In turn, Order Line update is controlled for 22 different shipping attributes as shown in the following table:

Order Management - Shipping Execution Constraints

Actions	Fields
Update	Authorized to Ship
Update	Customer
Update	Customer PO
Update	Customer PO Line Number
Update	Deliver To Contact
Update	Deliver To Org
Update	FOB Point
Update	Freight Carrier
Update	Freight Terms
Update	Item Type
Update	Order Quantity UOM
Update	Ordered Quantity
Update	Packing Instructions
Update	Request Date

Actions	Fields
Update	Schedule Arrival Date
Update	Schedule Ship Date
Update	Ship To
Update	Ship To Contact
Update	Shipment Priority
Update	Shipping Instructions
Update	Subinventory (cannot be removed)
Update	Warehouse
Cancel	Not allowed if pick confirmed
Delete	Not allowed if pick confirmed
Split	Not allowed if pick confirmed

Shipping Execution Workflows

Oracle Shipping Execution enables you to utilize Oracle Workflow to enhance your day-to-day business. Using Oracle Workflow with Oracle Shipping Execution is optional; however, if you choose to enable Oracle Workflow with Oracle Shipping Execution, specific tasks and output are enabled through the use of customized business objects. For example, the workflow can be configured so that specific users receive a notification email when an overship or backorder occurs. The following Shipping Execution-specific workflows are available:

- Delivery Flow - Generic
- Trip Flow - Generic
- Ship to Deliver Process Flow

You can customize any of the Shipping Execution-specific workflows and any of the workflows can be used in any organization. Workflows are customized by Oracle Workflow Builder. You can copy an existing workflow, rename it, save it, then add the

customized workflow to the lookup specific to that workflow. For example, the internal name of Trip Flow - Generic is R_TRIP_GEN. After customizing the workflow by adding a new notification activity, if you save it as NOTIFY_TRIP_GEN and add it to the R_TRIP_GEN lookup. With the lookup code as organization code for the organization, the workflow must be triggered in and Meaning as NOTIFY_TRIP_GEN. If the workflow needs to be triggered for all organizations, then the lookup code must be All.

See: *Oracle Workflow User's Guide*

Extending Shipping Workflows

Delivery and trip workflows enable limited extensions. That is, only those activities that do not required intervention and are not deferred, are allowed. All Oracle Workflow supported extensions are supported by the Ship to Delivery Process Flow. This includes response based notifications.

Shipping Workflow Lookups

The following are the lookups used to customize the Oracle Shipping Workflow:

- R_DEL_GEN: This extensible lookup is used with the Delivery Flow - Generic workflow. It reflects the operations performed on a generic outbound delivery.
- R_SCPD_C: This extensible lookup is used with the Ship to Deliver workflow. It performs the operations between ship confirm and final delivery of the shipment.
- R_TRIP_GEN: This extensible lookup is used with the Trip Flow - Generic workflow. It reflects the operations performed on a generic outbound trip.

Shipping Workflow Profile Option

When set to Yes, the profile option WSH: Override Ship to Deliver Workflow enables you to bypass the Ship to Deliver workflow as well as any extensions to the workflow, and continue the delivery through ship confirm.

The default value of this profile option is No.

Workflow-Specific Shipping and Global Parameters

The Shipping Parameters window and Global Parameters window both include the following Workflow-specific parameters:

- Enable Workflows: Select Delivery, Trip, Both, or None.
- Raise Business Events: Enabling this parameter causes Oracle Workflow to raise business events with the Shipping workflows

- **Enable Ship to Delivery Workflow:** Enable this parameter if you are using the Ship to Delivery workflow.

Enable Workflows must be enabled in the Global Parameters window before Enable Workflows, Raise Business Events, and Enable Ship to Delivery Workflow are enabled in the Shipping Parameters window. Enabling Workflows in the Global Parameters does not enable workflows in each organization. The Shipping Parameters are used to enable workflows for each organization.

Shipping Execution-Specific Business Events

The Oracle Workflow Business Event System is an application service that leverages the Oracle Advanced Queuing (AQ) infrastructure to communicate business events between systems. The Business Event System consists of the Event Manager and workflow process event activities.

The Event Manager contains a registry of business events, systems, named communication agents within those systems, and subscriptions indicating that an event is significant to a particular system. Events can be raised locally or received from an external system or the local system through AQ. When a local event occurs, the subscribing code is executed in the same transaction as the code that raised the event, unless the subscriptions are deferred. Subscriptions can include the following types of processing:

- Executing custom code on the event information
- Sending event information to a workflow process
- Sending event information to other queues or systems

Business events are represented within workflow processes by event activities. By including event activities in a workflow process, you can model complex processing or routing logic for business events beyond the options of directly running a predefined function or sending the event to a predefined recipient.

Shipping Execution-specific business events include:

- **wsh.delivery**
 - oracle.apps.wsh.delivery.gen.closed: Delivery Closure Event
 - oracle.apps.wsh.delivery.gen.interfaced: Delivery OM, INV Interface Event
 - oracle.apps.wsh.delivery.gen.setintransit: Delivery Set to Intransit Event
 - oracle.apps.wsh.delivery.gen.shipconfirmed: Delivery Ship Confirm Event
 - oracle.apps.wsh.delivery.itm.submittedscreeningatdelcreate: Delivery Export Screening at Creation Event

- oracle.apps.wsh.delivery.itm.submittedscreeningatship: Delivery Export Screening at Confirm Event
- oracle.apps.wsh.delivery.pik.pickinitiated: Delivery Pick Initiation Event
- oracle.apps.wsh.delivery.gen.create: Delivery Creation Event
- oracle.apps.wsh.delivery.gen.open: Delivery Open Event
- oracle.apps.wsh.delivery.itm.respondereceivedatShip: Delivery Export Screening Response
- oracle.apps.wsh.delivery.itm.respondereceivedatdelcreate: Delivery Export Screening Response
- **wsh.trip**
 - oracle.apps.wsh.trip.gen.initialpickupstopclosed: Trip Initial Pickup Stop Closure Event
 - oracle.apps.wsh.trip.gen.ultimatedropoffstopclosed: Trip Initial Pickup Stop Closure Event
 - oracle.apps.wsh.trip.gen.create: Trip Creation Event
 - oracle.apps.wsh.trip.gen.shipconfirmed: Trip Ship Confirm Event
- **wsh.stop**
 - oracle.apps.wsh.stop.gen.arrived: Stop Arrival Event
 - oracle.apps.wsh.stop.gen.closed: Stop Closure Event
 - oracle.apps.wsh.stop.gen.create: Stop Creation Event
- **wsh.line**
 - oracle.apps.wsh.line.gen.backordered: Line Backorder Event
 - oracle.apps.wsh.line.gen.releasedtowarehouse: Line Release to Warehouse Event
 - oracle.apps.wsh.line.gen.staged: Line Pick/Stage Event

Business event subscription specific to Shipping Workflow are:

- oracle.apps.wsh.delivery.gen.closed: WSH_WF_STD.Instance_Default_Rule

- oracle.apps.wsh.delivery.gen.open: WSH_WF_STD.Instance_Default_Rule
- oracle.apps.wsh.delivery.gen.interfaced: WSH_WF_STD.Instance_Default_Rule
- oracle.apps.wsh.delivery.gen.setintransit: WSH_WF_STD.Instance_Default_Rule
- oracle.apps.wsh.delivery.gen.shipconfirmed:
WSH_WF_STD.Instance_Default_Rule
- oracle.apps.wsh.delivery.pik.pickinitiated: WSH_WF_STD.Instance_Default_Rule
- oracle.apps.wsh.trip.gen.initialpickupstopclosed:
WSH_WF_STD.Instance_Default_Rule
- oracle.apps.wsh.trip.gen.ultimatedropoffstopclosed:
WSH_WF_STD.Instance_Default_Rule
- oracle.apps.wsh.sup.ssro: WSH_WF_STD.Instance_Default_Rule

Purging Shipping Execution Workflows

The concurrent program Purge Obsolete Workflow Runtime Data is used to purge Shipping Execution workflows. Shipping Purge also purges workflows associated with deliveries and trips that have met the purging criteria and are purged.

See *Oracle Shipping User's Guide* and Purging Shipping Records, page 13-11 for information on Shipping Purge.

See *Oracle Workflow Administrator's Guide* for information on Purge Obsolete Workflow Runtime Data.

XML Publisher Enabled Shipping Documents

Oracle XML Publisher enables you to extend various Oracle Shipping Execution reports by customizing the report templates and printing reports in PDF. The following list represents those seeded Oracle Shipping Execution report templates within Oracle XML Publisher:

- Bill of Lading
- Commercial Invoice
- Mailing Label
- Master Bill of Lading
- Packing Slip

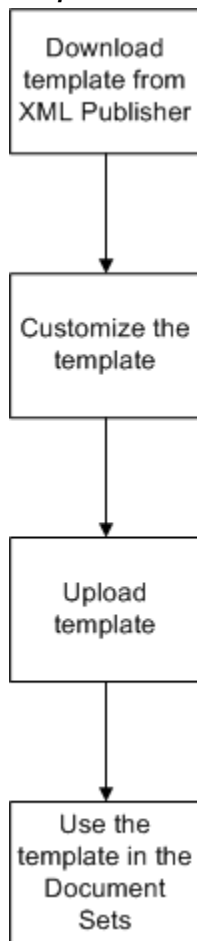
- Pick Slip
- Vehicle Load Sheet Summary

Customizing Templates

Templates can be customized in many ways. Depending on your business needs, customize your report templates by:

- Including your company logo
- Moving field prompts
- Adding new fields
- Removing unused fields
- Rearranging the layout

Template Flow



Creating Templates for Shipping Documents

There are two ways to create a custom report template:

- Create a new template line by line
- Copy an existing template (in Microsoft Word, for example) and edit the template to meet your business needs, including the layout, fonts, colors, and company logos

It is suggested that you edit existing templates rather than create new templates.

Once defined or modified, templates are used when printing reports from the Reports and Processes window, Shipping Transactions form, Quick Ship window, and through document sets.

The management of shipping document templates is performed in Oracle XML Publisher.

Note: Editing software can be used to modify and customize templates. For example, Microsoft Word and Adobe Acrobat.

The XML templates are assigned to document sets in the Shipping Document Sets window. See: Defining Shipping Document Sets, page 6-65.

See: *Oracle XML Publisher User's Guide*

Purging Shipping Records

The Shipping Purge concurrent process is used to purge or report and purge records that are no longer needed. The process identifies records that are eligible to be purged and purges them or generates a report on records that are candidates for purge and then purges them. Entities that can be purged are trips, trip stops, deliveries, delivery details (lines), and LPNs/containers.

The following is a list of exceptions to purging Shipping Execution entities:

- Shipping Execution entities generated through Oracle Project Contracts cannot be purged.
- Oracle Order Management generated Shipping Execution entities can only be purged if the order has been purged and no freight charges are open.
- In a WMS Enabled organization, delivery information cannot be purged until verification exists that there are no activities on Oracle Warehouse Management LPNs.

See *Oracle Shipping Execution User's Guide* for information on running the Shipping Purge concurrent process.

Purging Trips and Trip Stops

The following list includes restrictions associated with purging trips and trip stops:

- Trip status must be Closed in order to be purged.
- Trips cannot be purged if they are part of a multi-delivery consolidation and are in progress.
- In Transit trips are purged if the Purge SRS parameter Purge In Transit Trips is set to Yes. All entities associate with the trip are also purged.
- Unused trips are purged if the Purge SRS parameter Delete Empty Records is set to Yes.

Purging Deliveries

The following list includes restrictions associated with purging deliveries:

- Empty deliveries are purged if the Purge SRS parameter Delete Empty Records is set to Yes. If set to no, then empty deliveries will not be purged.
- All freight bills must be closed before the associated deliveries can be purged.

Purging LPNs

The following list includes restrictions associated with purging LPNs:

- All information associated with the purged LPNs is purged when the LPN is purged. For example, all associated freight costs, weight, volume, dates, and exceptions associated with an LPN are purged when the LPN is purged.
- An Oracle Warehouse Management API is called to determine whether Warehouse Management generated LPNs can be purged or not.

Parallel Pick Release

Parallel pick release enables multiple pick release processes to run simultaneously as child processes through the Pick Release SRS Parameters window and Release Sales Orders window through the concurrent mode. Parallel pick release is available when pick releasing from the Tools menu on the Shipping Transactions form through the concurrent mode.

Parallel pick release enables you to set a default number of child processes by defining the profile option: WSH: Number of Pick Release Child Processes.

Parallel pick release cannot be executed from the Shipping Transactions form action

Launch Pick Release. Parallel pick release does not run when Pick Release is executed Online.

Parallel pick release distributes the pick release workload across multiple child processes, reducing the overall length of time it takes to run pick release.

Parallel Pick Release Profile Option

The profile option WSH: Number of Pick Release Child Processes determines the maximum number of child processes that will run. If the number of items in the batch is less than the profile option, then only as many processes will run as there are items. If the number of items is greater than the profile, then the profile will be honored. Although this profile option is the default, the Number of Child Processes field, on the Pick Release SRS window, can be modified. For example, if you set the profile option to four, then each time pick release is run, four child processes run concurrently based on (and grouped by) item and organization if you do not change the Number of Child Processes field.

The actual number of pick release child processes spawned by pick release depends on each individual pick release batch and the profile setting.

Message Configuration

Oracle Shipping Execution enables you to determine the configuration (Error or Warning) of the following ship confirm actions:

- **Breaking Proportionality of Ship Model Complete:** For example, if your customer requires a specific percent to ship orders complete, then this will display an error at ship confirm if the proportion of the order is not shipping complete.
- **Breaking Ship Sets:** For example, your customer requests that you do not send partial ship sets. Setting this message to Error will prevent this by displaying an Error at ship confirm.
- **Missing Inventory Controls:** For example, if a delivery contains a delivery line that is missing inventory controls (for example, serial number or lot number), then an error is displayed at ship confirm.

You determine whether these Shipping events display an Error or Warning message during ship confirm (for all entities, including trips and deliveries). Warning messages enable you to continue, whereas Error messages stop the process until the error is fixed.

Automated ship confirm is not affected by the configuration of these messages.

See Roles and Users, page 6-14 for information on configuring ship confirm error/warning messages.

Exception Messages

The following messages have been created to provide feedback to Order Management users when an order line change is rejected.

Update Not Allowed

Message: The update is not allowed because the source line is under WMS control.

This message is returned if the update cannot be executed because the source line is under Oracle Warehouse Management (WMS) control.

Update Cannot Split Quantities

Message: The source line cannot be split because quantity conversion has an error.

This message is returned if the update is rejected because the source line cannot be split due to a quantity conversion issue. This exception happens when the result of a split would create a null or negative quantity.

Attribute Update Not Allowed

Message: The update requested cannot be executed now because the source line has at least one delivery line that is in a confirmed delivery or has been shipped.

This message is returned when the update cannot be executed because the source order line is only partially eligible for a change. The order line is associated at least with a confirmed delivery line or has already been shipped. For a change to be allowed, all delivery lines related to the source order line must be eligible for the change.

Invalid Source Code

Message: The Source code 'Source_code_name_string' is not recognized.

This message is returned when a delivery line update was rejected because it was requested by a product other than Order Management. The source code allowed is restricted to 'OE'. Other products cannot request Shipping changes.

Invalid Packing Condition Caused by Shipment Attribute Change

Message: One or more shipment attributes have been changed for delivery line &DETAIL. Please manually unassign the delivery line from container &CONTAINER_ID.

This packing exception message is returned when Order Management has changed at least one non-enforced Shipment attribute for a delivery line packed in an LPN (container.)

The update was executed but may require an additional manual step to unassign the delivery line from the LPN.

Change Management Frequently Asked Questions

How are inventory reservations handled?

Order Management creates Inventory reservations by calling internal Inventory APIs before interfacing sales order lines into Shipping.

Shipping manages reservation changes for all lines interfaced to Shipping that have reached an Order Management workflow status of Awaiting Shipping. Reservation changes for allocated or staged lines are allowed through backordering.

Do overpicked quantities have reservations?

Yes, Shipping creates reservations for overpicked delivery line quantities. Initially overpicked quantities do not have matching reservations. Shipping creates additional material reservations so that the whole picked inventory is effectively reserved.

How do individual serial numbers and ranges get split?

Shipping splits serial numbers ranges and assigns individual numbers when splitting delivery lines with serially controlled items. Serial numbers already assigned to items are kept during splitting. When splitting delivery lines, Shipping handles splits then updates the MTL_SERIAL_NUMBERS_TEMP table. The serial numbers are exploded at Inventory Interface time. Serial numbers assigned to Backorders are deleted during split changes.

What happens when OM makes a change to a shipping delivery grouping attribute?

The result of changing a delivery grouping attribute depends if the attribute changed is enforced. There are two types of grouping attributes: mandatory and optionally enforced. Shipment attributes are a sub-category of optional attributes.

There are five optionally enforced Shipping delivery grouping attributes. The first four are Shipment attributes:

1. Customer Name
2. Freight Terms
3. FOB Code
4. Ship Method
5. Intermediate Ship To Location

There are two mandatory grouping attributes: Ship From Location and Ship To Location.

When Order Management requests to change any of the mandatory or optional

attributes, Shipping will check the Shipping Parameters' grouping attributes to identify any optional attributes to enforce and perform the following actions:

- If the line is assigned to a delivery, then the delivery line will be unassigned from the delivery. Additionally, if the line is packed in a LPN, then a packing exception will be returned. In both cases, the system will automatically unassign the line from the delivery and the LPN.
- If none of the attributes changed are enforced, then the system will make the change and the delivery line will not be unassigned. Also, if at least one shipment attribute is changed, an invalid packing exception will be logged for the delivery line if it is packed in a container (LPNs). An exception message will remind the user to unassign the delivery line manually.

What happens to the requested quantity when OM requests an ordered quantity change?

Shipping looks up all the delivery lines related to the source order line in a sequence governed by the line status and makes changes to the requested quantity if possible.

The line status order ranking criteria is as follows:

- Delivery line status: Not assigned, Open, Closed/Confirmed/In Transit.
- Packed status of the line: Not packed, packed.
- Planned status of the delivery: Firm, Unfirm.
- Released status of the lines and associated flag status:
 - Ready to Release (R)
 - Non-transactable/pickable (X)
 - Backordered (B)
 - Released to warehouse (S)
 - Staged (Y)
- Ascending order of the requested quantity of the line.

How are changes in source line quantity propagated to the delivery line requested quantity?

For the related source order line, Shipping looks up the delivery lines in the sequence described and makes a decision as follows:

Increase in Quantity: Line is updatable: The line is updated if it is unassigned from a delivery or if the delivery is Opened, line is not packed in a LPN container, delivery (if present) is Not Firm and the line release status is one of Not Ready to be released,

Ready to be released and Non Transactable.

New delivery line: For all cases except updatable delivery line as mentioned, a new delivery line is created with the increased quantity.

Decrease in Quantity: Ship partial updatable: Lines requested quantity is updatable except for any line part of a shipped delivery (confirmed, closed or in transit). In that case the requested reduction in quantity can be accepted only if it is not more than the sum of those lines that are not shipped.

Move order line update: The Inventory Move Order Line needs to be updated for lines in status Released to Warehouse.

Multiple lines: The shipment lines are looked up in sequence and their requested quantities are reduced until the sum of the reduced quantity reaches the requested reduction in the source line quantity.

Exceptions: An exception is logged along with the reduction in requested quantity for the shipment lines that are either staged, part of a planned delivery, or packed in a container.

What happens if Order Management tries to make changes to a ship confirmed delivery?

Changes to Shipped Confirmed or Closed delivery lines are not allowed. Instead a sales order line quantity increase creates a new delivery line.

How does Shipping handle a change in allocated/picked ship set delivery line?

For a Ship Set delivery line Allocated or Picked, the Order Management change request is fulfilled according to the Shipping parameter Enforce Ship Set at Picking.

- If Ship Set integrity is enforced, the change is not allowed for Allocated or Picked lines.
- If Ship Set is not enforced, then the change is allowed even if it breaks the Ship Set.

What happens during an organization change?

When a delivery line is transferred to a different organization, the Move Order Line (MOL) is reset to Ready to Release for the target organization. The reservations in the original organization are deleted

Inventory reservations are created in the target organization.

How are reservations handled during split line requests?

During a delivery line split request the change logic retains and splits existing Inventory reservations. Reservations are associated with the delivery details. The delivery lines are sequenced according to their release status so that the shipped/staged lines with the specified inventory control will retain their reservations. The delivery lines not yet associated with a reservation (Ready to Release, Backordered, or Released to

Warehouse) have their reservations split arbitrarily.

What happens to changes on partially shipped deliveries (split lines)?

What happens when a change is requested for an order line that spans across two or more deliveries, one of which is ship confirmed or closed but not OM interfaced? Regardless of other delivery lines eligibility for changes, no changes are allowed until the Order Management interface has updated the source order line. This is to prevent data corruption since the source order line has not been updated by the shipped line. The change request can be manually resubmitted successfully once the source order line has been updated by the shipped delivery line.

Are non-proportional split changes supported?

Yes, both Order Management and Shipping Execution support non-proportional splits. The delivery lines are kept synchronized with the order lines during Order Management non-proportional set splits by propagating changed attributes to the ship set delivery lines.

Change Effects

Order is Booked/Scheduled

Once eligible booked sales orders are interfaced from Order Management to Shipping Execution, the delivery lines are accessible from the Shipping Transactions form. The initial delivery line status is Ready to Release.

Change the organization or subinventory

These changes are supported; changes can be made with no restriction.

Change a line item

Changing customer item is supported as long as the Inventory item is not changed on an existing delivery line. There is no change restriction if there is no delivery line.

Cancel an order line

This change is supported. The delivery lines are set as Canceled.

Decrease delivery line quantity

This change is supported. The delivery line quantity is reduced.

Increase delivery line quantity

This change is supported. The delivery line quantity is increased accordingly.

Move the schedule date later or earlier

This change is supported. The delivery detail is updated with the new scheduling information.

Unschedule a Delivery Line

This change is supported. The delivery line status is set to Ready to Release.

Changes to a ship set

If the Shipping Parameter Enforce Ship Set is active, changes to ship sets are allowed in Order Management before the inventory is allocated or before the delivery lines are picked. You can remove an order line from a ship set, regardless of the Shipping Parameter Enforce Ship Sets or the delivery line status prior to ship confirm.

Change ship-to location

This change is supported if the delivery line is not assigned to delivery or a container. If the delivery line is assigned, an exception is logged and the delivery line is unassigned from the delivery.

Split an order line

This change is supported. The delivery line detail is split.

Delivery Lines are Pick Released

The following details show how the order changes are supported after delivery lines get pick released. The inventory is allocated when a move order is created during pick release.

Change the organization or subinventory

These changes are supported. The delivery move order allocation status is changed to Canceled, the delivery detail is updated with the new organization and the status is reset to Ready to Release. A new reservation is created only if a reservation existed prior to pick release in previous org.

Change a line item

This change is not directly supported. An item cannot simply be changed for a different one at this stage. The CSR will need to cancel the order line. A new order line should be created with the replacement item.

Cancel an order line

This change is supported. The delivery line is set to status Canceled and the move order line is deleted.

Decrease delivery line quantity

This change is supported identically for backordered lines. The Move Order line quantity is updated and if applicable, the extra serial numbers are unassigned.

Increase delivery line quantity

This change is supported. A new delivery detail with status Ready to Release is created for the extra quantity.

Move the schedule date later or earlier

This change is supported. The delivery detail is updated with the new scheduling information.

Unschedule a delivery line

This change is supported. The move order line status is set to Canceled and the delivery detail status is changed to Ready To Release.

Change within a ship set

This change is supported unless the Ship Set profile option is set to Enforce Ship Set in Shipping. The delivery details are updated with the changes.

Change ship-to location

This change is supported if the delivery line is not assigned to delivery or a container. If the delivery line is assigned, an exception is logged and the delivery line is unassigned from the delivery.

Split an order line

This change is supported. The delivery line detail is split.

Delivery Lines Released to Warehouse

This status reflects that the move order lines were created and the delivery lines have been released to the warehouse. Lines may have been successfully allocated but not pick confirmed.

In this step, the inventory items are picked from inventory location. The picking operation ends with a pick confirmation to progress the delivery line to Staged status.

Change the organization or subinventory

These changes are supported. The delivery move order allocations are deleted, the delivery detail is update with the new organization, and the status is reset to Ready to Release. New reservations are created only if a reservation existed prior to being Released to Warehouse.

Change a line item

This change is not directly supported. An item cannot simply be changed for a different one at this stage. The order line will have to be canceled. A new order line should be created with the replacement item.

Cancel an order line

This change is supported. The delivery details are set as Canceled and the move order line is deleted.

Decrease delivery line quantity

This change is supported. The move order line quantity is updated and if applicable, the extra serial numbers are unassigned.

Increase delivery line quantity

This change is supported. A new delivery detail with status Ready to Release is created for the extra quantity. A new reservation assignment is not added.

Move the schedule date later or earlier

This change is supported. The delivery detail is updated with the new scheduling information.

Unschedule a delivery line

This change is supported. The move order line is deleted and the release status of the delivery detail is changed to Ready To Release.

Change within a ship set

This change is supported unless the Ship Set profile option is set to Enforce Ship Set in Shipping. Both the delivery details and the move order lines are updated with the changes.

Change ship-to location

This change is supported if the delivery line is not assigned to delivery or a container. If the delivery line is assigned, an exception is logged and the delivery line is unassigned from the delivery.

Split an order line

This change is supported. The delivery line detail is split.

Staged Delivery Lines

Occurs after pick confirm to reflect the subinventory transfer from source inventory location to staging area has completed. The picked items have been dropped in the staging inventory area. Delivery lines remain staged until they are ship confirmed.

Change the organization or subinventory

These changes are supported. The inventory control information is cleared and the delivery detail is set to status Ready to Release. An exception is logged.

Change a line item

This change is not directly supported. An item cannot simply be changed for a different one at this stage. The order line will have to be canceled. A new order line should be created with the replacement item.

Cancel an order line

This change is supported. The delivery lines are set to Canceled and an exception is logged.

Decrease line quantity

This change is supported. The delivery line quantity is adjusted, if applicable the serial numbers are unassigned. An exception is logged.

Increase delivery line quantity

This change is supported. A new delivery detail with status Ready to Release is created for the extra quantity. A new reservation is not created.

Move the schedule date later or earlier

This change is supported. The delivery detail is updated with the new scheduling information.

Unschedule a delivery line

This change is supported. The status of the delivery detail is changed to become Ready to Release.

Change within a ship set

This change is supported unless the Ship Set profile option is set to Enforce Ship Set in Shipping. The delivery details are updated with the changes.

Change ship-to location

This change is supported if the delivery line is not assigned to delivery or a container. If the delivery line is assigned, an exception is logged and the delivery line is unassigned from the delivery.

Split an order line

The delivery lines are split and remain in Staged status.

Ship Confirmed, In Transit, or Closed

Note: Companies that choose to support order changes after staging should ship confirm all deliveries in the system as they are moved across the loading dock or before. Ship confirming deliveries after loading or departure can enable you to make changes based on outdated status.

Note: You should ship confirm deliveries at the point when order changes should no longer be allowed through the system. This may be as the inventory is moved through the loading dock or when a seal is applied to the truck trailer door. Failure to update the order status while the order is being loaded will mislead CSRs to believe the delivery is still in house when it is actually in transit.

Delivery at the loading dock

The deliveries have not been and should not be loaded on board the truck.

Delivery on board the truck at the loading dock

The truck should be unloaded or if not practical the delivery drop-off should be canceled and dropped off back at the pick up stop.

Delivery truck in Transit

The delivery carrier should be called and asked not to deliver the goods or turn the truck around.

Delivery dropped off

An RMA should be issued, the delivery should be returned. A separate replacement order should be created.

Change Management and Shipping Execution Actions

In this section, you can find status tables to quickly capture the results of an Order Management change.

Sales order line changes in Order Management are not allowed if any related delivery line is either Confirmed or Shipped.

Shipping Actions for a Requested Quantity Change

Detail Status	Packed	Firmed	Sequence of Selection	Increase Line Quantity	Decrease Quantity (but not to zero)	Decrease Quantity to Zero
Line unassigned from a delivery or delivery is open	No	No	Not ready to be released	Increase fully, consider no more shipment lines	Decrease requested quantity; if not sufficient for the change request, proceed to the next shipment line	Cancel delivery details

Detail Status	Packed	Firmed	Sequence of Selection	Increase Line Quantity	Decrease Quantity (but not to zero)	Decrease Quantity to Zero
Line unassigned from a delivery or delivery is open	No	No	Ready to be released or non-transactable	Increase fully, consider no more shipment lines	Decrease requested quantity; if not sufficient for the change request, proceed to the next shipment line	Cancel delivery details
Line unassigned from a delivery or delivery is open	No	No	Backordered	New delivery detail with full change, consider no more shipment lines	Decrease requested quantity; if not sufficient for the change request, proceed to the next shipment line	Cancel delivery details

Detail Status	Packed	Firmed	Sequence of Selection	Increase Line Quantity	Decrease Quantity (but not to zero)	Decrease Quantity to Zero
Line unassigned from a delivery or delivery is open	No	No	Released to warehouse	New delivery details with full change, reservations are not created	Update move order line Unassign serial numbers Decrease requested quantity; if not sufficient for the change request, proceed to the next shipment line	Delete move order line Cancel delivery details
Line unassigned from a delivery or delivery is open	No	No	Staged/Pick Confirmed	New delivery detail with full change, consider no more shipment lines	Log exception Decrease requested quantity; if not sufficient for the change request, proceed to the next shipment line	Log exception Cancel delivery details

Detail Status	Packed	Firmed	Sequence of Selection	Increase Line Quantity	Decrease Quantity (but not to zero)	Decrease Quantity to Zero
Line unassigned from a delivery or delivery is open	No	Yes	Any other than canceled	New delivery detail with full change, consider no more shipment lines	Log exception Decrease requested quantity; if not sufficient for the change request, proceed to the next shipment line	Log exception Cancel delivery details
Line unassigned from a delivery or delivery is open	Yes	Any	Any other than canceled	New delivery detail with full change, consider no more shipment lines	Log exception Decrease requested quantity; if not sufficient for the change request, proceed to the next shipment line	Log exception Cancel delivery details
Delivery is confirmed, in transit, or closed	Any	Any	Status is closed; create a new sales order	After Order Management Interface run, new delivery detail with full change, consider no more shipment lines	Reject, return eligible quantity, and rollback	Reject, return eligible quantity, and rollback

OM Changes vs. Shipping Actions

Action	Booked or Scheduled	Pick Released	Reservations Allocated	Pick Confirmed or Staged
Change organization	Make change	Delete move order line Update delivery detail with new warehouse - Delivery detail should be Ready to Release	Set status on the move order line to Canceled Make delivery detail Ready to Release and change - Clear inventory control information - OM deletes reservation and recreates a new reservation only if the created reservation existed prior to Pick Release	Make change Log exception Unassign if needed - Clear inventory information - Make delivery detail Ready to Release
Change subinventory	Make change	Delete move order line Update delivery detail with the new subinventory	Set status on the move order line to Canceled Make delivery detail Ready to Release and change Clear inventory control information	Make change Log exception Unassign if needed Clear inventory information Make delivery detail Ready to Release
Change inventory line item (only Customer Item can be changed)	Change not allowed in Order Management with delivery in that status	Change not allowed in Order Management with delivery in that status	Change not allowed in Order Management with delivery in that status	Change not allowed in Order Management with delivery in that status

Action	Booked or Scheduled	Pick Released	Reservations Allocated	Pick Confirmed or Staged
Unschedule	Set delivery detail released status to Ready to Release	Delete move order line Update delivery detail released status as Ready to Release and change	Set Status on the move order line to canceled Make delivery detail Ready to Release and change	Make change Log exception Unassign if needed Reset status to Ready to Release
Schedule date change: Date pulled in	Update delivery detail with new scheduling information	Update delivery detail with new scheduling information	Update delivery detail with new scheduling information	Update delivery detail with new scheduling information
Schedule date change: date pushed out	Update delivery detail with new scheduling information	Update delivery detail with new scheduling information	Update delivery detail with new scheduling information	Update delivery detail with new scheduling information
	Log an exception	Log an exception	Log an exception	Log an exception
Increase quantity	Increase delivery details quantity	Create new delivery detail with status Ready for Release for the extra quantity Create new assignments if needed	<blank>	<blank>

Action	Booked or Scheduled	Pick Released	Reservations Allocated	Pick Confirmed or Staged
Decrease quantity or cancel line	Decrease quantity	Decrease quantity and update move order line	Decrease quantity and update move order line	Decrease quantity
	Set delivery details status to canceled if delivery detail is completely canceled	Unassign and unmark serial number if needed	Unassign and unmark serial number if needed	Log exception
		Set delivery details status to Canceled if delivery detail is completely canceled	Set delivery details status to Canceled if delivery detail is completely canceled	Unassign and unmark serial number if needed
		Delete move order line if completely canceled	Delete move order line if completely canceled	Set delivery details status to Canceled if delivery detail is completely canceled
Ship set	Make change	Update delivery details	Update delivery details	Update the set
		Update move order lines if enforce ship set		
Split line	Make change and split delivery details	Make change, split delivery details and unrelease (set to Ready to Release)	Make change, split delivery details and unrelease (set to Ready to Release)	Make change and split delivery detail
Delivery grouping attributes	Make change and split delivery details	Make change, split delivery details and unrelease (set to Ready to Release)	Make change, split delivery details and unrelease (set to Ready to Release)	Make change and split delivery detail

Action	Booked or Scheduled	Pick Released	Reservations Allocated	Pick Confirmed or Staged
Organization, implicit, mandatory	If assigned to delivery or container, log an exception and unassign from delivery	If assigned to delivery or container, log an exception and unassign from delivery	If assigned to delivery or container, log an exception and unassign from delivery	If assigned to delivery or container, log an exception and unassign from delivery
Ship from location, implicit, mandatory	If assigned to delivery or container, log an exception and unassign from delivery	If assigned to delivery or container, log an exception and unassign from delivery	If assigned to delivery or container, log an exception and unassign from delivery	If assigned to delivery or container, log an exception and unassign from delivery
Ship to location, implicit, mandatory	If not assigned to delivery or container, make change.	If not assigned to delivery or container, make change.	If not assigned to delivery or container, make change.	If not assigned to delivery or container, make change.
	If assigned to delivery or container, log an exception and unassign from delivery	If assigned to delivery or container, log an exception and unassign from delivery	If assigned to delivery or container, log an exception and unassign from delivery	If assigned to delivery or container, log an exception and unassign from delivery
Intermediate ship to location, implicit, optional	If enforced, unassign from the delivery	If enforced, unassign from the delivery	If enforced, unassign from the delivery	If enforced, unassign from the delivery
Customer, explicit, optional	If enforced, unassign from the delivery	If enforced, unassign from the delivery	If enforced, unassign from the delivery	If enforced, unassign from the delivery
Freight terms, implicit, optional	If enforced, unassign from the delivery	If enforced, unassign from the delivery	If enforced, unassign from the delivery	If enforced, unassign from the delivery
FOB code, explicit, optional	If enforced, unassign from the delivery	If enforced, unassign from the delivery	If enforced, unassign from the delivery	If enforced, unassign from the delivery

Action	Booked or Scheduled	Pick Released	Reservations Allocated	Pick Confirmed or Staged
Ship method, explicit, optional	If enforced, unassign from the delivery	If enforced, unassign from the delivery	If enforced, unassign from the delivery	If enforced, unassign from the delivery
Carrier, explicit	If enforced, unassign from the delivery	If enforced, unassign from the delivery	If enforced, unassign from the delivery	If enforced, unassign from the delivery
Delivery, implicit, mandatory when assigned to delivery	If enforced, unassign from the delivery	If enforced, unassign from the delivery	If enforced, unassign from the delivery	If enforced, unassign from the delivery
Legend for delivery grouping attributes	If enforced, unassign from the delivery	If enforced, unassign from the delivery	If enforced, unassign from the delivery	If enforced, unassign from the delivery
Implicit: Automatically included, not part of shipping parameters	Mandatory: Always Yes	Optional: Can be Yes or No, usually set for each organization in the shipping parameters	<blank>	<blank>

Backorders

This section describes the functional flow of the backorder process in Shipping Execution.

The Backorder status:

- Provides Order Management with better visibility to the status of a shipment line
- Provides cross docking capability within Oracle Warehouse Management against backordered delivery details upon receiving new material
- Provides feedback to production planners and schedulers what items need replenishing

Pick Release Statuses

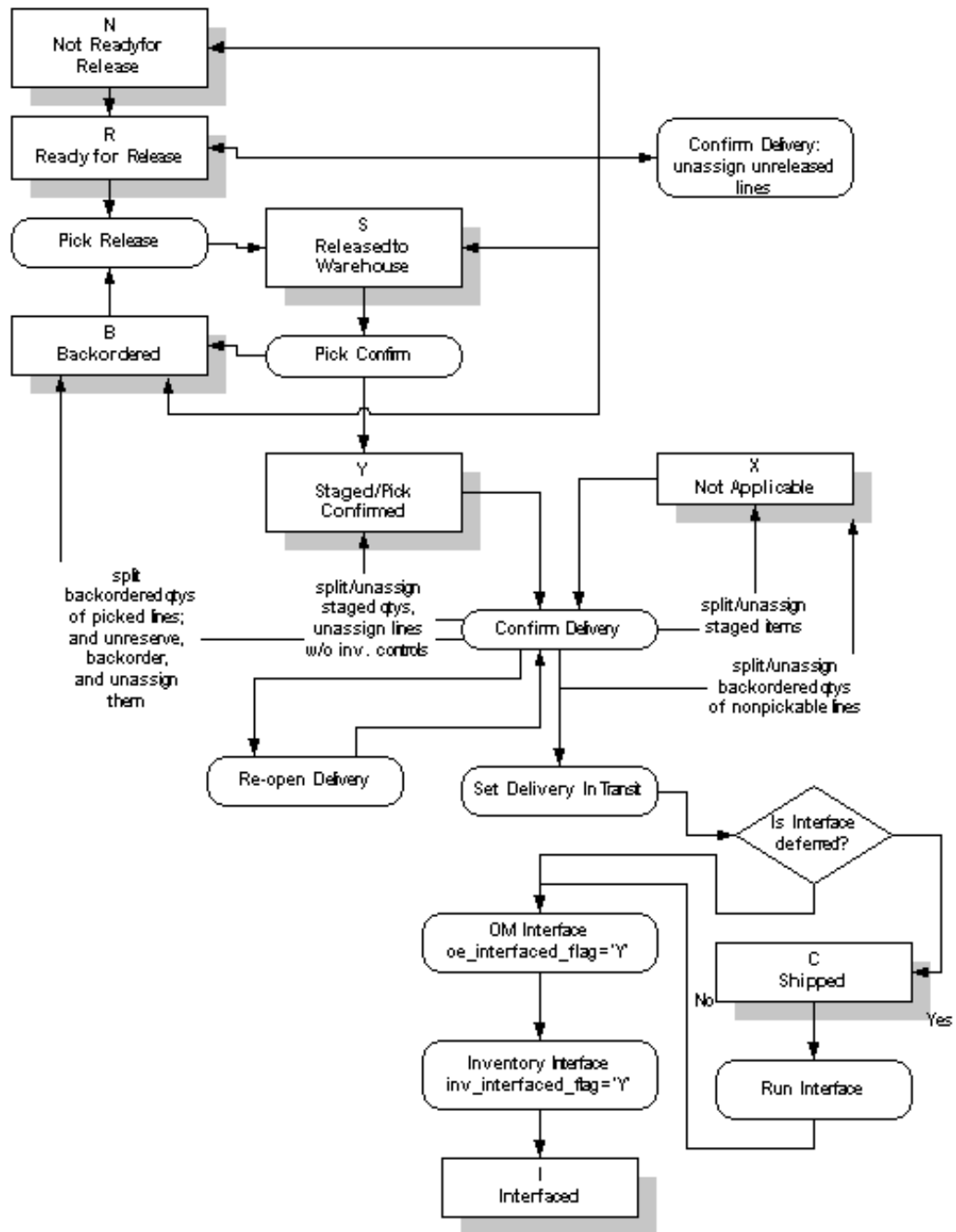
The following list displays the various pick release statuses along with a description for the status and an event that will cause the status to display on the delivery line.

- **Not Ready for Release:** This status occurs when a delivery line is manually imported into Shipping Execution using the Import Delivery Line program prior to the line reaching the awaiting shipping activity in Order Management.
- **Ready for Release:** The order line has reached the Shipping Workflow activity in Order Management, meaning that the line has been booked, scheduled, and imported into Shipping Execution. Pick release can be initiated as the next step in this process. The pick release process creates a move order header and move order line in Oracle Inventory. This is a common status that occurs when performing a two-step pick release process. It indicates that inventory allocation has occurred; however, pick conformation has not yet taken place.
- **Planned for Crossdocking:** A crossdock supply has been identified and the delivery line has been pick released.
- **Released to Warehouse:** Release has started but not completed. Either no allocations were created or allocations have not been pick confirmed.
- **Staged/Pick Confirmed:** The line receives the status of Staged once inventory has been allocated and pick confirmed. The allocation step and the pick confirmation step can be done manually or automatically based on business needs. Auto allocation and auto pick confirm are determined by set up steps in the Shipping Parameters form.
- **Backordered:** The status of Backordered is assigned to a line under the following circumstances:
 - The Pick Release process attempted to allocate inventory to the line and all or a partial quantity of the item was not available. In this case the system automatically backorders the discrepant quantity.
 - At ship confirm you enter a shipped quantity for an item that is less than the original requested quantity.
 - You backorder an entire delivery.
 - You record a missing quantity by transferring a reservation to cycle count.
- **Shipped:** The delivery that the line is assigned to has been set to intransit, and the OM Interface and Inventory Interface processes have been deferred.
- **Not Applicable:** The Not Applicable status applies to non-transactable order lines.

For example, lines that are invoiced but not physically shipped. Items such as service and warranty would have a status of Not Applicable.

- **Interfaced:** The delivery line is shipped and the OM Interface and Inventory Interface concurrent processes have completed.
- **Canceled:** The Canceled status applies when the order line has been canceled in Order Management.

Delivery Detail Status Flow



Backorder at Pick Release

One way a delivery line detail can receive a picking status of Backordered is by auto-backorder. When the system determines insufficient inventory exists at the time of

inventory allocation, it automatically splits the line if partial quantities are released and changes the status to Backordered for the unreleased quantity.

Picking Steps

1. Pick release creates pick wave move order header.
2. Pick release creates move order line.
3. Move order line is allocated at pick release or at a subsequent step.
4. Inventory updates Shipping Execution with the results of allocation. If a shortage exists (the quantity requested is greater than the quantity allocated on the move order line) Shipping performs the auto-backorder routine.

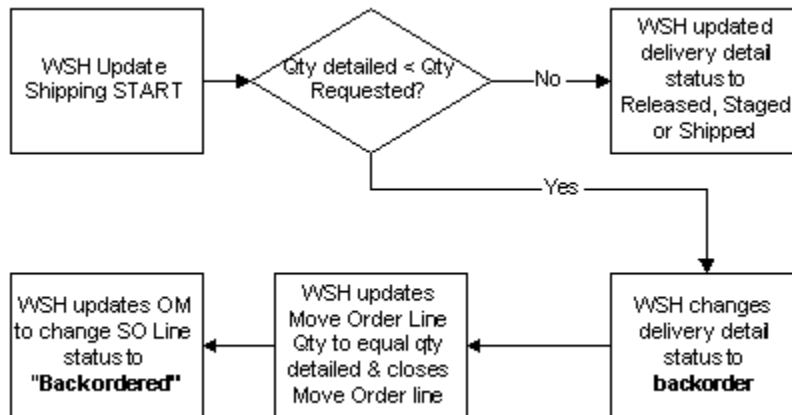
Backorder at Ship Confirmation

Backordering also happens at ship confirmation either by backordering the entire delivery, in which case all delivery lines that are associated with the delivery will receive a picking status of Backordered. Or you can enter a shipped quantity of less than the requested quantity to backorder a partial quantity of the items being shipped.

Picking Steps

1. Pick release creates pick wave move order header and lines
2. Move order line is detailed
3. Move order line is pick confirmed
4. Delivery is backordered at ship confirmation
5. If the status is firmed, keep the LPN and delivery assignment. Otherwise, unpack if packed.
6. Change line status to Backordered.

Backorder Flow

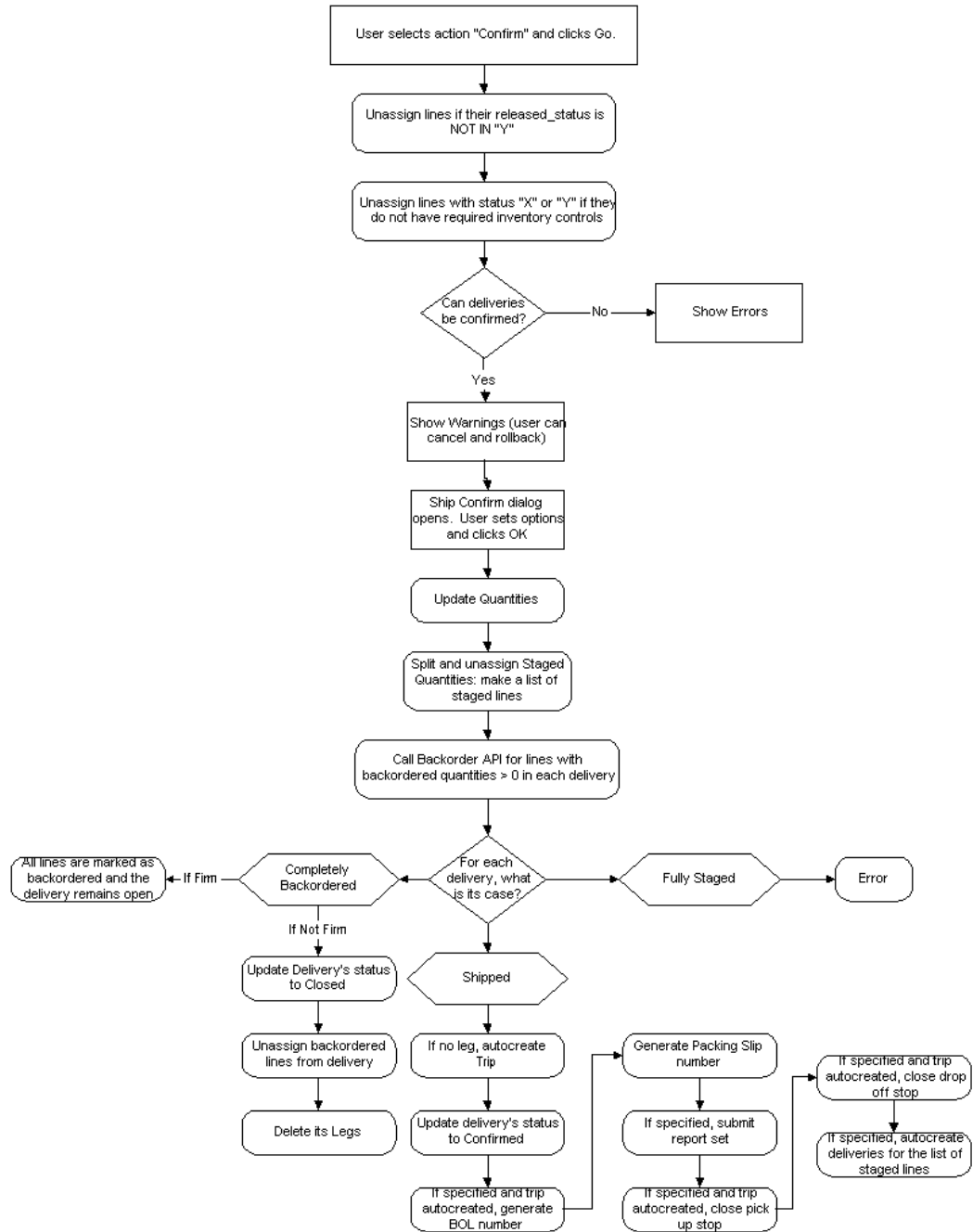


In the physical flow of the backorder process, material may or may not exist. In the case where the material does not exist, the backorder process is used to identify inventory discrepancies. For example, the system allocates the complete requested quantity at pick release based on availability. When the picker physically accesses the picking location, the quantity available to ship is less than the quantity the system determined as available. The shipper enters the actual quantity available in the shipped quantity field. The result of the ship confirm action is as follows:

- The line is split into two. One line will indicate the entered quantity as shipped quantity and have a pick status of shipped and the other line will indicate the unshipped quantity with a status of backordered.
- Another case is when the material being shipped is available and material is being backordered for specific business reasons. For example, all available material has been allocated to a specific customer when you find out additional supply for other orders will be delayed. Another customer will have a down production line situation if some of the allocated material doesn't get to them right away. A decision could be made to ship a partial quantity to one customer and backorder enough quantity to accommodate the down line situation. At the ship confirmation step, you enter a partial ship quantity for the material. At ship confirmation, the line is split into two lines. One with a status of Shipped for the entered quantity's and one with a status of Backordered for the unshipped lines.
- The physical material for the backordered material systematically resides in the staging location. A manual subinventory transfer is required if the desired location of the backordered material is another location.
- Pick release could be run again for the down line customer and the system will allocate the material that was previously allocated to the backordered lines to the down line customer.

This diagram illustrates the transaction flow for backorders.

Transaction Flow for Backorders



Scenario 1: Shortage at Detailing

A sales order line for 10 units of item A is booked and released. Only seven units exist in inventory. The order is allocated, pick confirmed and ship confirmed.

Post Detailing

During allocation, seven units are found. Inventory updated shipping with the results of the detail. Auto backorder split the delivery line and called OM to split the sales order line. Oracle Shipping then reduced the requested quantity on the move order line. These tables show post detailing data for sales order lines, delivery lines, move order lines, and move order line details.

Sales Order Lines

Line	Quantity
1	10

Delivery Lines

Line	SO Line	Qty	MO Line	Staged Qty	Status	Subinventory
100	1	7	1000	0	Released to Warehouse	
101	1.1	3			Backordered	

Move Order Lines

MO Line	Req Qty	Detailed Qty	Delivered Qty
1000	7	7	0

Move Order Line Details (MMTT)

Line	MO Line	Qty	From Loc	To Loc
100	1000	7	Stores	Stage

Pick Confirm

You pick confirm the seven units. Because the move order line was changed at detailing, the move order line is closed at pick confirm even though all 10 units were not found. These tables show pick confirm data for sales order lines, delivery lines, move order lines, and move order line details.

Sales Order Lines

Line	Quantity
1.1	10

Delivery Lines

Line	SO Line	Qty	MO Line	Staged Qty	Status	Subinventory
100	1.1	7	1000	7	Staged	Stage
101	1.1	3		0	Backordered	

Move Order Lines

MO Line	Req Qty	Detailed Qty	Delivered Qty
1000	7	7	7

Move Order Line Details

Line	MO Line	Qty	From Loc	To Loc
10000	1000	7	Stores	Stage

Ship Confirm

You now ship confirm the seven units. These tables show ship confirm data for sales order lines, delivery lines, move order lines, and move order line details.

Sales Order Lines

Line	Quantity
1.1	10

Delivery Lines

Line	SO Line	Qty	MO Line	Staged Qty	Status	Subinventory
100	1.1	7	1000	7	Shipped	
101	1.1	3		0	Backordered	

Move Order Lines

MO Line	Req Qty	Detailed Qty	Delivered Qty
1000	7	7	7

Move Order Line Details

Line	MO Line	Qty	From Loc	To Loc
10000	1000	7	Stores	Stage

Scenario 2: Shortage Reported at Pick Confirm

A sales order line for 10 units of item A is booked and released. Seven units are found during detailing but at pick confirmation you report a missing quantity of one and can only pick confirm six units for the order.

Post Detailing

Allocation completes successfully and all 10 units are found. These tables show post detailing data for sales order lines, delivery lines, move order lines, and move order line

details.

Sales Order Lines

Line	Quantity
1.1	10

Delivery Lines

Line	SO Line	Qty	MO Line	Staged Qty	Status	Subinventory
100	1.1	10	1000	0	Released to Warehouse	

Move Order Lines

MO Line	Req Qty	Detailed Qty	Delivered Qty
1000	10	10	0

Move Order Line Details

Line	MO Line	Qty	From Loc	To Loc
10000	1000	10	Stores	Stage

Pick Confirm

You were instructed to find 10 units but could only find seven. A missing quantity is reported. When you asked the system to redetail the balance, the system could not find more quantity of the item (the results would be the same if you had not prompted the system to find the balance.) These tables show pick confirm data for sales order lines, delivery lines, move order lines, and move order line details.

Sales Order Lines

Line	Quantity
1.1	10

Delivery Lines

Line	SO Line	Qty	MO Line	Staged Qty	Status	Subinventory
100	1.1	7	1000	7	Staged	Stage
101	1.1	3		0	Backordered	

Move Order Lines

MO Line	Req Qty	Detailed Qty	Delivered Qty
1000	7	7	7

Move Order Line Details

Line	MO Line	Qty	From Loc	To Loc
100	1000	7	Stores	Stage

Ship Confirm

You now ship confirm the seven units that were available to ship in the staging location. These tables show ship confirm data for sales order lines, delivery lines, move order lines, and move order line details.

Sales Order Lines

Line	Quantity
1.1	10

Delivery Lines

Line	SO Line	Qty	MO Line	Staged Qty	Status	Subinventory
100	1.1	7	1000		Shipped	
101	1.1	3			Backordered	

Move Order Lines

MO Line	Req Qty	Detailed Qty	Delivered Qty
1000	7	7	7

Move Order Line Details (MMTT)

Line	MO Line	Qty	From Loc	To Loc
100	1000	7	Stores	Stage

Backorders and Over Picking

After pick-confirm step, the picked quantity should always be greater or equal to the requested quantity.

If not enough quantity was picked, the delivery line will be split at pick confirm. The delivery line will be updated to Staged with the picked quantity and a new backordered delivery line will be created.

If a delivery line is fulfilled by the picked quantity and there is a pending quantity, a

new delivery line pending over pick is created.

When either one of the picked quantity or the pending quantity is null the following rule is used to handle delivery lines:

- Backorder the delivery line if its picked quantity is null and the requested quantity is greater than zero.
- Delete the delivery line if its requested quantity is zero and the picked quantity is greater than zero.

Consolidating Backorders

Consolidation of backordered delivery details can be performed systematically during pick release, cycle count, and ship confirm. The option to consolidate backordered lines is controlled using a Global Shipping Parameter, page 6-29 named Consolidate Backordered Lines. If you enable the Consolidate Backordered Lines parameter, then any delivery line that was split and subsequently backordered will be automatically consolidated with other backordered lines that it was part of originally.

When this feature is enabled and a backorder occurs, Oracle Shipping Execution searches the database for existing delivery line backorders for the particular detail line. If an qualified existing backorder is found, then the current backordered delivery detail is consolidated with the existing backordered delivery detail. However, a backordered line that remains packed after backordering will not get consolidated.

See: Consolidating Backorders, *Oracle Shipping Execution User's Guide*

Backorders and Cycle Counting

The ability to identify and remedy inventory discrepancies as part of the picking and shipping process is available in Oracle Shipping Execution.

The process to send a reservation to cycle count and backorder lines that were released as a result of discrepant inventory is as follows.

Within the Shipping Transactions form:

1. Select a line with a pick status of staged.
2. Select Cycle Count from the action menu.
3. Click Go.

The Transfer to Cycle Count window opens. In this figure, the delivery has a delivery detail with a requested quantity of two.

Transfer to Cycle Count Window

The screenshot shows a dialog box titled "Transfer to Cycle Count". It is divided into two panels, "Primary" and "Secondary". Each panel contains three input fields: "Original Quantity", "Quantity to Cycle Count", and "UOM". In the Primary panel, "Original Quantity" is set to 2 and "UOM" is set to Ea. In the Secondary panel, all three fields are empty. At the bottom right of the dialog are "OK" and "Cancel" buttons.

If you enter a quantity less than two, then the delivery detail will split as one staged, and one backordered.

If you enter a quantity of 2, then the delivery will be completely backordered.

In both cases the reservation for the quantity that you see backordered, is transferred to cycle count. This can be verified from the inventory Supply/Demand form.

There are two other ways to transfer backordered quantities to cycle count:

- There is a radio button titled Cycle Count All under the Ship Options in the Confirm Delivery dialog box. By selecting this at ship confirm, the reservations for all lines in the delivery will be transferred to cycle count and the entire delivery will be backordered.
- In the unspecified quantities drop down box there is a Cycle Count selection. By choosing cycle count from here, any line that does not have a shipped quantity specified will be backordered and the reservation transferred to cycle count.

Note: If a delivery line is Firm status (planned delivery line) and you transfer the line to cycle count, the delivery line will be un-assigned from the delivery.

Order Management and Shipping Execution Line Status

Oracle Order Management and Oracle Shipping Execution provide line statuses to best reflect the stage of the process for the order line and delivery line.

This section covers the flow and definitions of the order line and delivery line status from time of order entry to invoice.

Three tables are provided at the end of this chapter to serve as a quick reference for viewing actions and associated line status within the Order Organizer, Sales Orders window, and Shipping Transactions form.

Standard Line Status Flow (also includes PTO)

Oracle Order Management captures the order line status in the Sales Order Pad on the Line Items Main tab in the Status field and in the Order Organizer on the Summary and Line tabs. Oracle Shipping Execution displays the delivery line status in the Shipping Transactions form on the Lines/LPN Main tab in the Line Status field and in the Quick Ship window in the Line Status field within the Delivery Lines/LPNs region. For a standard flow the statuses are:

Begin by placing the order in Order Management (OM):

- **Entered (OM):** Order is saved but not booked.
- **Booked (OM):** Order is booked.
- **Scheduled (OM):** You can customize the Workflow to show the Scheduled status which indicates that the order line has been successfully scheduled by adding a customized activity after the Schedule activity. This activity will make a process order API call to update the status to Scheduled. When the ship line logic starts, the order line status changes to Awaiting Shipping.
- **Awaiting Shipping (OM):** Order is booked and scheduled but lines have not been picked. This status is also displayed after the line has been ship confirmed but before the Order Management interface has been run.
- **Picked (OM):** Order is booked and lines are picked.
- **Open (OM):** This status of a delivery on the Additional Line Information form indicates that none of the delivery lines associated with that delivery have been ship confirmed.

Navigating to Shipping Execution, the delivery line status flow is:

- **Ready to Release (SE):** Order line is booked and passed to Shipping Execution. It is now a delivery line that is eligible for pick release.
- **Not Ready to Release (SE):** A delivery line might be in this status when it is interfaced manually into Shipping Execution, is not scheduled, and has no reservations. When lines are imported automatically from Order Management this status is not used.
- **Backordered (SE):** The delivery line is pick released but no allocations were created or partial allocations occurred. As an example, if a delivery line has a quantity of 100, and at pick release only 25 are available for allocation, the original delivery line

splits to create a new line (quantity of 75) for the unallocated portion with a status of Backordered. The quantity on the original delivery line changes to 25 to reflect the allocated portion with a status of Staged/Pick Confirmed.

- **Staged/Pick Confirmed (SE):** The delivery line is successfully pick released. It occurs after pick confirm to indicate subinventory transfer from source location to staging location is complete. Lines remain staged until they are ship confirmed.
- **Released to Warehouse (SE):** Pick release has started but not completed. Either no allocations were created or allocations have not been pick confirmed.

Note: Both Backordered and Staged/Pick Confirmed statuses provide the ability to perform opportunistic cross-docking for warehouse organizations with Oracle Warehouse Management (WMS) installed.

- **Shipped (SE):** This line status indicates that the delivery associated with the delivery lines is ship confirmed.
- **Interfaced (SE):** If delivery was sourced from Oracle OM: The delivery line is shipped and the OM Interface and Inventory Interface concurrent processes have completed. If delivery was sourced from an Oracle Application other than OM: The delivery line is shipped and the Inventory Interface concurrent process has completed.
- **Canceled (SE):** This status indicates that the delivery line was cancelled.

Navigate back to Order Management and query the order that results in Order Management pulling updated pick release information from Shipping Execution:

- **Picked (OM):** Pick release has completed normally (both allocation and pick confirm). The delivery associated with the delivery line(s) may have also been ship confirmed but the delivery may not be set to In Transit and the trip may not be closed.
- **Picked Partial (OM):** This status occurs when a delivery line is not allocated the full quantity during pick release and ship confirm has not occurred.

The delivery line splits during ship confirm and the information passes to Order Management through the Process Order API. The order line splits to reflect the changes that occurred during the Shipping process. As an example, a customer orders quantity 50. There are 20 on hand in inventory. The delivery line splits into two delivery lines and therefore represents two order lines in Order Management. The order line with quantity 20 has the status of Picked or Shipped depending on whether or not the delivery line is ship confirmed, the delivery set to In Transit, and the trip closed. The second order line with a quantity of 30 has status of Awaiting Shipping.

Shipping Execution passes the status information to Order Management when ship confirm is complete:

- **Shipped (OM):** The delivery associated with the line is ship confirmed. The delivery status is set to In Transit. This status appears at the line level as well as in the Additional Line Information at the Pick Status field.
- **Awaiting Shipping (OM):** Awaiting information from shipping. This status will remain until the Order Management interface is run.
- **Awaiting Fulfillment (OM):** Not all shippable lines in a fulfillment set or a configuration are fulfilled. The current line is waiting for other lines in the fulfillment set or the configuration to be fulfilled. This is a synchronization step within the Workflow process.

- **Fulfilled (OM):** All lines in a fulfillment set are fulfilled.

Fulfillment sets are defined as a group of order lines that are fulfilled together. Items that are not shippable can be in fulfillment sets with shippable items, and then will not be fulfilled (and therefore invoiced) until the shippable items are fulfilled. A line can belong to either a ship set or an arrival set, but can belong to multiple fulfillment sets.

- **Interfaced to Receivables (OM):** Order Management has written information to the Receivables Interface tables. You should run Auto Invoice (from Receivables) to generate the Invoice.
- **Partially Interfaced to Receivables (OM):** This status is used in a PTO flow and indicates that the particular PTO item is required for revenue.
- **Closed (OM):** Closed indicates that the line is closed. It does not necessarily indicate that the line is interfaced to Accounts Receivable (AR) since you must close line activity in a no-bill flow.
- **Canceled (OM):** Indicates that the line is completely canceled. No further processing will occur for this line.

Scenario

The following scenario will emulate a standard customer order from the first customer call to the invoice. The line status will assist the customer service agent on the shipper's side to answer the questions of the customer.

Entered Status (OM)

A customer calls and begins placing an order with the customer service representative. The customer is unclear whether or not the order is complete and indicates that he or she will call back to finish placing the order. The customer service representative saves the order to capture the current information but will not book the order, because the

Sales Orders Window - Status: Entered

Booked Status (OM)

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Sales Orders Window - Status: Awaiting Shipping

Sales Orders (Vision Operations) - 83, Business World

Order Information **Line Items**

ABN01 Order Total 1,095.03

Main Pricing Shipping Addresses Returns Services Others

Line	Ordered Item	Unit Selling Price	Request Date	Schedule Ship Date	Status	Or
2.1	CM31556 ...	801.00	18-SEP-2006 13:43:35	18-SEP-2006 23:59:00	Awaiting Shipping	

Line Total 801.00 Line Qty 1 Service Total 0.00

Description Monitor - 19" Flat

Actions Related Items Configurator Availability Book Order

In the Order Information tabbed region, the order status is Booked, as shown in the following graphic.

Sales Orders Window, Main Tab - Status: Booked

The screenshot displays the 'Sales Orders Window, Main Tab - Status: Booked'. The window title is 'Sales Orders (Vision Operations) - 83, Business World'. It features two tabs: 'Order Information' (selected) and 'Line Items'. Below the tabs, there's a sub-tabbed area with 'Main' (selected) and 'Others'. The 'Main' tab contains two columns of fields. The left column includes 'Customer' (Business World), 'Customer Number' (1608), 'Customer PO', 'Customer Contact', 'Ship To Location' (San Jose (OPS)), 'Ship To Customer' (Business World), 'Ship To Contact', 'Bill To Location' (San Jose (OPS)), and 'Bill To Customer' (Business World). The right column includes 'Order Number' (83), 'Order Type' (Mixed), 'Date Ordered' (18-SEP-2006 13:43:35), 'Price List' (Corporate), 'Salesperson' (Sprague, Mr. Howard), 'Status' (Booked), 'Operating Unit' (Vision Operations), 'Subtotal' (801.00), 'Tax' (120.00), 'Charges' (174.03), 'Total' (1,095.03), and 'Sales Agreement No.' (empty). At the bottom, there are five buttons: 'Actions', 'Related Items', 'Configurator', 'Availability', and 'Book Order'.

Field	Value
Customer	Business World
Customer Number	1608
Customer PO	
Customer Contact	
Ship To Location	San Jose (OPS)
Ship To Customer	Business World
Ship To Contact	
Bill To Location	San Jose (OPS)
Bill To Customer	Business World
Order Number	83
Order Type	Mixed
Date Ordered	18-SEP-2006 13:43:35
Price List	Corporate
Salesperson	Sprague, Mr. Howard
Status	Booked
Operating Unit	Vision Operations
Subtotal	801.00
Tax	120.00
Charges	174.03
Total	1,095.03
Sales Agreement No.	

Ready to Release Status (SE)

Once the order has been booked, the information passes to Shipping Execution. Order lines appear as delivery lines. Initially, it is a one to one ratio of order line to delivery line.

The customer service agent calls the warehouse to ensure that the order that was just booked has appeared in Shipping Execution. The warehouse clerk queries the delivery lines by the order number provided by the customer service representative and indicates that the line status is Ready to Release indicating the delivery lines are eligible for pick release. The customer service representative has been assured that the booked order lines are visible in the Shipping Transactions form and are ready for the next step, pick release. The following graphic illustrates the Ready to Release status on the Lines/LPNs tab in the Shipping Transactions form.

Shipping Transactions

Query Query <1>

Context Line - 1867171

Detail	LPN	Item Name	Delivery	Line Status	Next Step	Exceptions	Order	Requested Qty
1867171	<input type="checkbox"/>	CM31556		Ready to Release	Pick Release	<input type="checkbox"/>	83	
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		

Lines/LPNs
 Delivery
 Path by Stop
 Path by Trip
 Auto-pack
 Pick and Ship
 Actions Unpack
 Go
 Detail...

The warehouse clerk launches pick release. Upon querying the delivery lines by order number, the warehouse clerk will see that the pick release status is Staged/Pick Confirmed for those delivery lines that have received allocation and pick confirmed successfully and Released to Warehouse for delivery lines that require a manual pick confirm or have not been allocated. The following graphic illustrates the Staged/Pick Confirmed status on the Lines/LPNs tab in the Shipping Transactions form.

Shipping Transactions

Query

Query <1>

Context

Line - 1867171

Detail	LPN	Item Name	Delivery	Line Status	Next Step	Exceptions	Order	Requested Qty
1867171	<input type="checkbox"/>	CM31556		Staged/Pick Confir	Ship Confirm/CI	<input type="checkbox"/>	83	
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		
	<input type="checkbox"/>					<input type="checkbox"/>		

Lines/LPNs

Delivery

Path by Stop

Path by Trip

Auto-pack

Pick and Ship

Actions

Unpack

Gg

Detail...

The customer who placed the order calls up and wants to know the status. The customer service representative queries up the order in the Order Organizer and finds that the status of the sales order lines are Picked and Awaiting Shipping. The customer service representative is equipped to report that the order lines are processing smoothly as they have been picked from their source location and transferred to the staging location within the warehouse. The following window illustrates the Picked and Awaiting Shipping statuses on the Line Items Main tab in the Sales Orders window.

Sales Orders Window - Status: Picked

Line	Ordered Item	Unit Selling Price	Request Date	Schedule Ship Date	Status	On
1.1	AS54888	1,000.00	09-APR-2002 11:35:53	09-APR-2002 11:35:53	Picked	
2.1	CPU 632	1.00	09-APR-2002 11:35:53	09-APR-2002 11:35:53	Picked	
3.1	SB10299	32.00	09-APR-2002 11:35:53	09-APR-2002 11:35:53	Awaiting Shippin	

Order Total: 11,449.69

Line Total: 10,000.00 Line Qty: 10 Service Total: 0.00

Description: Sentinel Standard Desktop

Buttons: Actions, Configurator, Availability, Book Order

Closed Statuses (OM)

The warehouse clerk has just ship confirmed the delivery associated with the delivery lines corresponding to the customer's order. The warehouse clerk used the check boxes on the Ship Confirm window to automatically set the delivery In Transit and close the trip automatically. Order Management is updated through the Process Order API and the order lines that previously had the status of Picked will now show a status of Closed.

The customer calls back to check the status of the order, the customer service representative can tell the customer the date(s) that the order lines physically shipped from the warehouse. The following window illustrates the Closed and status on the Line Items' Main tab in the Sales Orders window.

Note: For a short time immediately following ship confirm, the order line status will show as Shipped while OM interfaces with Receivables so that the customer can be invoiced. When the interface to Receivables is completed the line status in Sales Orders window changes to Closed.

Sales Orders Window - Status: Shipped/Closed

Sales Orders (52609) - Computer Service and Rentals

Order Information Line Items

Order Total **11,449.69**

Main Pricing Shipping Addresses Returns Services Others

Line	Ordered Item	Unit Selling Price	Request Date	Schedule Ship Date	Status	On
1.1	AS54888 ...	1,000.00	09-APR-2002 11:35:53	09-APR-2002 11:35:53	Closed	
2.1	CPU 632	1.00	09-APR-2002 11:35:53	09-APR-2002 11:35:53	Closed	
3.1	SB10299	32.00	09-APR-2002 11:35:53	09-APR-2002 11:35:53	Picked	

Line Total **10,000.00** Line Qty **10** Service Total **0.00**

Description **Sentinel Standard Desktop**

Actions Configurator Availability Book Order

ATO Line Status Flow

A customer calls up Computer ABC and orders a laptop computer with a 56k modem and 64 mb of memory. This order will be processed as an Assemble to Order (ATO) item. The line status flow will be:

- Entered
- Booked
- Create Configuration Item Eligible:
 - Booked (item, options, option classes)
 - BOM and Routing Created (configuration item)
- Create Supply Order Eligible:
 - Booked (item)
 - BOM and Routing Created (configuration item)
 - Awaiting Fulfillment (options and option classes)

- Release the job in WIP:
 - Production Partial (configuration): Production has been partially completed.
- Complete the job in WIP:
 - Production Complete (configuration): Entire production is complete.
- Pick Release
 - Ready to Release (SE)
 - Staged/Pick Confirmed (SE)
- Ship Confirm
 - Staged/Pick Confirmed (SE)
 - Shipped
- Invoice
 - Closed

Bill Only Line Status Flow

A customer calls up to place an order for Service that is a non-shippable item. The line status flow of this order will be:

- Entered
- Booked
- Invoiced
- Closed

Returns Line Status Flow

- Entered
- Booked
- Awaiting Return Disposition: Item requires inspection before Purchasing can create a receipt
- Awaiting Return: Purchasing creates a receipt of the item

- Returned: Item has been received and accepted

Drop Ship Line Status Flow

- Entered
- Booked
- Purchase Release: Item requires inspection before Purchasing can create a receipt
- Awaiting Receipt: Purchasing creates a receipt of the item
- Interfaced to Receivables
- Closed

Order and Delivery Line Statuses

These tables show the status of order lines and delivery lines after you perform certain actions. They show information for the Order Organizer, Sales Orders window, Shipping Transactions form for deliveries and delivery lines, and Shipping Transactions form for stops and trips.

How to read the lines in the table:

Immediately after you autocreate a delivery, the status of all the entities will be as listed in the Create Trip column of the table.

- The Order Organizer Summary form will show the status of Booked
- The Order Organizer Lines form will show the status of Awaiting Shipping
- The Order Information Main tab of the sales order pad will show the status of Booked
- The Line Items tab of the sales order pad will show the status of Awaiting Shipping
- The delivery Status on the Shipping Transactions form, Deliveries tab, will show the status of Open
- The Line Status on the Shipping Transactions form, Lines/LPNs tab, will show the status of Ready to Release
- The trip Status on the Shipping Transactions form, Path by Trip tab, will show the status of Open
- The stop Status on the Shipping Transactions form, Path by Stop tab, will show the

status of Open

- The Stop Activity Status at Origin and Destination on the Shipping Transactions form will show the status of N/A
- The Trip Activity of the Shipping Transactions form will show the status of N/A

Status: Order Organizer

Entity	Summary	Lines
<i>Actions</i>		
Enter Order	Entered	Entered
Book Order	Booked	Awaiting Shipping
Create Trip	Booked	Awaiting Shipping
Autocreate Delivery	Booked	Awaiting Shipping
Assign Delivery to Trip	Booked	Awaiting Shipping
Pick Release Delivery	Booked	Awaiting Shipping
Pick Release Delivery	Booked	Picked
Pack Line	Booked	Picked
Ship Confirm	Booked	Closed
Ship Confirm	Booked	Closed
Back Order Line Qty.	Booked	Awaiting Shipment

Status: Sales Orders Form

Order Information Main Tab	Line Items Tab	Additional Line Information		
		Delivery Status	Pick Status	Trip Status
Entered	Entered	N/A	N/A	N/A
Booked	Awaiting Shipping	Open	Ready to Release	N/A
Booked	Awaiting Shipping	Open	Ready to Release	Open
Booked	Awaiting Shipping	Open	Ready to Release	Open
Booked	Awaiting Shipping	Open	Ready to Release	Open
Booked	Awaiting Shipping	Open	Released to Warehouse (1)	Open
Booked	Picked	Open	Staged/Pick Confirmed	Open
Booked	Picked	Open	Staged/Pick Confirmed	Open
Booked	Shipped (2)	Closed	Shipped	Closed
Booked	Closed	Closed	Shipped	Closed
Booked	Awaiting Shipping	Open	Backordered	N/A

(1): Occurs when pick release has started but not completed. Either no allocations were created or allocations are not yet pick confirmed

(2): Occurs when deferred interface is turned on and interface has not started

Status: Shipping Transactions Form

Entity	Delivery Line	Delivery Status	Stop			Trip	
Action	Line Status		Status	Activity		Status	Activity
			Ord/Dest	Origin	Dest.		
Order Entered	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Order Booked	Ready to Release	N/A	N/A	N/A	N/A	N/A	N/A
Create Trip	N/A	N/A	N/A	N/A	N/A	Open	N/A
Autocreate Delivery	Ready to Release	Open	N/A	N/A	N/A	N/A	N/A
Assign Delivery to Trip	Ready to Release	Open	Open/Open	Awaiting Pick up	Awaiting Drop off	Open	Remaining
Pick Release Delivery	Released to Warehouse (1)	Open	Open/Open	Awaiting Pick up	Awaiting Drop off	Open	Remaining
Pick Release Delivery	Planned for Crossdocking	Open	Open/Open	Awaiting Pick up	Awaiting Drop off	Open	Remaining
Pick Release Delivery	Staged/Pick Confirmed	Open	Open/Open	Awaiting Pick up	Awaiting Drop off	Open	Remaining
Pack Line	Staged/Pick Confirmed	Open	Open/Open	Awaiting Pick up	Awaiting Drop off	Open	Remaining
Ship Confirm	Shipped	Confirmed	Open/Open	Awaiting Pick up	Awaiting Drop off	Open	Remaining
Back Order Line Qty.	Backordered	Confirmed	Open/Open	Awaiting Pick up	Awaiting Drop off	Open	Remaining
Close Pick up Stop	Shipped	In Transit	Closed/Open	Picked Up	Awaiting Drop off	In Transit	On Board
Interface Order Mgt.	Interfaced	In Transit/Closed	Closed/Open	Picked Up	Awaiting Drop off	In Transit/Closed	On Board
Arrive Stop Trip	Shipped	In Transit	Closed/Arrived	Picked Up	Awaiting Drop off	In Transit	Unloading
Close Final Stop	Shipped	Closed	Closed/Closed	Picked Up	Dropped Off	Closed	Complete

(1): Occurs when pick release has started but not completed. Either no allocations were created or allocations are not yet pick confirmed.

Exception Handling

Export Compliance Screening Concurrent Program

This program can be used to progress any lines that are waiting at the Export Compliance Screening Eligible activity. The provided parameters such as Customer or Order Number can be used to refine the selection criteria for the lines. For example, if you have many orders for a customer that has come up with the same data errors, then you can fix the customer data and progress all lines for that customer.

Miscellaneous Shipments

Miscellaneous Shipments enable you to ship confirm deliveries that are not tied to (or did not originate from) a sales order, or have been sent via XML Shipment Request from a legacy order management system to Oracle Shipping Execution. XML support enables Oracle Shipping Execution to return an XML Shipment Advice message back to a legacy OM system to confirm the shipment.

XML Shipment Request is an XML message that is sent to Oracle Shipping Execution. It is the equivalent of the EDI transaction 940 Inbound. Oracle XML Gateway is used to generate the XML messages (both Shipment Request and Shipment Advice). Miscellaneous shipment deliveries can be combined in a trip with OM-originated deliveries.

The functionality of miscellaneous shipments is the same as Oracle Order Management-originated deliveries.

The following restrictions exist when using miscellaneous shipments with Oracle Shipping Execution:

- Cannot assign delivery lines to a delivery
- Cannot unassign delivery lines from a delivery
- Cannot reopen deliveries
- Partial shipment of a delivery will result in the cancellation of the remaining quantity or line(s)
- Cannot run pick release

Oracle XML Gateway, along with Advanced Queuing, must be installed. The WSH organization must be defined as a Trading Partner. (The supplier site Shipping organization must be defined as a Distributed organization).

Oracle Workflow is required for notifications.

XML Used with Miscellaneous Shipments

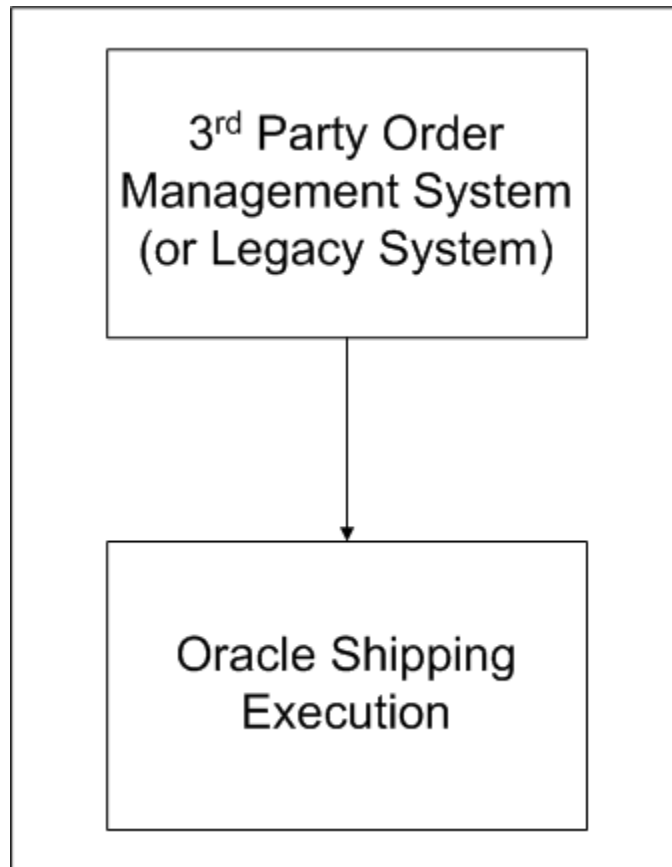
Shipment Request: Shipment Request transaction (the XML equivalent of the ASC X12 940 transaction) is a modified version of the Open Applications Group (OAG) document type definition (DTD) show_shipment_005. This DTD is used to send shipment information from Oracle Shipping Execution to a 3rd party order management system (or legacy system). These transactions contain all pertinent information for the delivery.

Shipment Advice: Shipment Advice transaction (the XML equivalent of the ASC X12 945 transaction) is a modified version of the OAG DTD show_shipment_005. This DTD is used to send shipment information from a 3rd party order management system (or

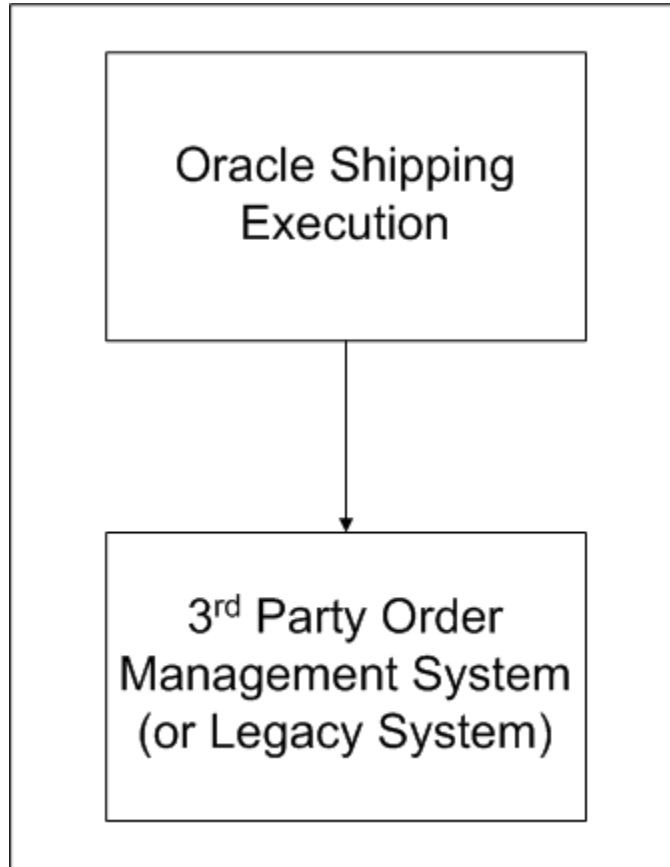
legacy system) to Oracle Shipping Execution. The Shipment Advice transaction sends all pertinent information for the delivery.

Data Flow

The following graphic describes the data flow when Shipment Request is used to send information from a third-party order management system to Oracle Shipping Execution.



The following graphic describes the data flow when Shipment Advice is used to send information from Oracle Shipping Execution to a third-party order management system.



RFID-EPC Compliance

If you enable Oracle Warehouse Management, Radio Frequency Identification (RFID) can be used in the shipping process through the ship confirm process. RFID is a technology for tagging physical items with a unique ID that can be easily and non-invasively read, like a "wireless bar code". The Electronic Product Code (EPC) is a numbering standard for the unique identification used within RFID tags. RFID-EPC supported in the Shipping Execution enables you to select the LPN format and the printer associated to print a RFID tag, track the EPC associated with an LPN ID, and provide the EPC in the Departure Ship Notice Outbound (DSNO) file.

See: *Oracle Warehouse Management User's Guide* for more information on RFID-EPC.

Fulfillment Flows

This chapter covers the following topics:

- Configure To Order
- Process Steps
- Configured Item Workflow
- Related Processes
- Global Order Promising for ATO Models
- Decimal Quantity for options of an ATO Model
- Enhanced ATP
- Auto Create Configuration
- Autocreate Supply Changes
- Drop Shipments
- Required Setup
- Process Steps
- Workflow
- Back-to-Back Orders
- Setup
- Sales Order Process
- Purchasing Process
- Sales Order Line Status
- Reservations
- Changes or Cancellations
- Miscellaneous
- Fulfillment

Configure To Order

The Configure-to-Order process (CTO) is a cross-modular process that enables you to select options in the sales order window to define a possibly unique item, build the item using Oracle's Manufacturing Applications Suite, and continue processing the item as if it were a standard item through the shipping and invoicing activities. This section defines the CTO process as well as the related processes of Assemble-to-Order (ATO), Pick-to-Order (PTO) and Kits. It provides an overview of how this business process is implemented, the workflow processes that support it, and the required setup.

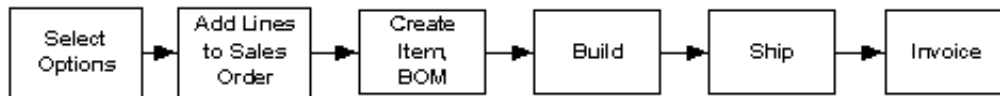
See

Oracle Configure to Order Process Manual

Basic CTO Process Steps

The CTO process goes through these basic steps:

CTO Process



First, you navigate to the Sales Order window and enter an ATO model as an item. Depending on your setup, you can use the Configurator or Options window to select options. The system adds the options to the sales order as new lines. The system creates a new item and a new bill of material (if necessary) and then communicates with the manufacturing applications so that the item is built. The completed item is then shipped to the customer and an invoice is generated.

Note: These steps are described in detail later in this chapter.

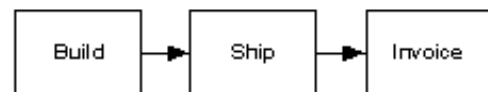
The PTO process is similar to the CTO process except that all options are finished goods that are stocked in the warehouse, so no assembly operation is required. These are the basic steps for the PTO process.

PTO Process



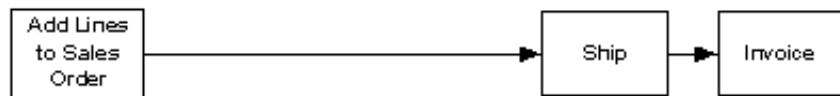
The ATO process is also similar to the CTO process. The item is built based on the demand from the customer order. However, for an ATO item the customer cannot select options. Therefore the item and the bill of material are already defined. You enter an ATO item and it follows this process.

ATO Process



Finally, the kit process is similar to the CTO process, because a kit item has a bill of material structure and the included items are added as lines to the sales order. You enter a Kit item and it follows this process.

Kit Process



Setup

All models, option classes, options, and kits must be defined in Oracle Inventory and they must have their attributes set appropriately. Bills of material must be created for all models, option classes, and ATO items. Finally, the workflow processes must be correctly assigned to the transaction types.

The key attributes that control the processing of the CTO and related processes are on the Order Management tab in the Item setup window. The flag Assemble to Order

should be selected for CTO items and ATO items. The Pick Components flag should be selected for PTO models. Other attributes are also important. The best way to create your items is to copy them from the following seeded templates:

- ATO Model (for the Configure-to-Order process)
- ATO Option Class
- ATO Item
- PTO Model
- PTO Option Class
- Kit

Bills of Material (BOMs) must be created for your models, option classes, ATO items, and kits. For models and option classes, some key attributes are defined on the Order Entry tab of the BOM window. The optional flag is checked if an option class or option is not required. If an option class is required then the configuration must include at least one of the options from the class. The option class that is not optional is called a mandatory option class. If an option is not optional it is considered an included item and it not shown as an available selection in the Configurator or option selection window. It is automatically added to the sales order. At least one item should be optional within the structure of an ATO model or a PTO model. No items can be optional in a kit. Another important attribute of the BOM is the required for revenue flag on the shipping tab. This flag is only enabled in PTO configurations for included items. If the flag is checked, then the option class or model which is the parent of the item will not be invoiced until this item has been shipped.

See: *Oracle Bill of Material User's Guide*

The transaction type for an order which will include CTO items must have at least two line workflow processes associated with it - one for the model, options and option classes and one for the configured item. In the Assign Line Flows window, the item type of Configuration must be specified for the workflow of the configured item. For ATO models, ATO items, PTO models, options, option classes, and kits the seeded generic line flow can be used for all the item types.

Transaction Types, page 7-2

Profiles

You can configure these profiles with the Configurator or through the Options Window within Order Management. In order to use the Configurator or Options Window in Order Management, the profile OM: Use Configurator must be set.

Optional profile settings for Configurations include:

OM: Charges for Included Items

If set to Yes, Order Management calculates and returns charges for included items. Keep in mind that even if the profile is set to Yes the included item is not priced. This calculates only the charges.

OM: Configuration Quick Save

If set to Yes, Oracle Order Management creates option class order lines without applying certain business functions. This is applicable only during initial order entry when the options are selected via the options window or configurator. It does not apply to update / booking / scheduling or for lines imported via Order import OR the Process order API. The option class order lines are not subject to defaulting, processing constraints, or taxation.

OM: Copy Model DFF to Child Lines

This profile option enables copying Additional Line Information flexfield data to the child lines from the model line. Context sensitive flexfields are usually desired, so the default value is No. You must set this parameter to Yes in order for the values to copy.

OM: Item View Method

This profile is used to decide the Options Window LOV item display format for models. This can be set with the following values: Description, Description without indentation, Concatenated segment values, and Concatenated segment values without indentation. This can be set at all four levels.

OM: Show Line Details

This profile option determines whether the line details of a model are displayed in the Sales Orders window.

Process Steps

This section will describe to steps required to order, ship and invoice a CTO item from the Order Management point of view including:

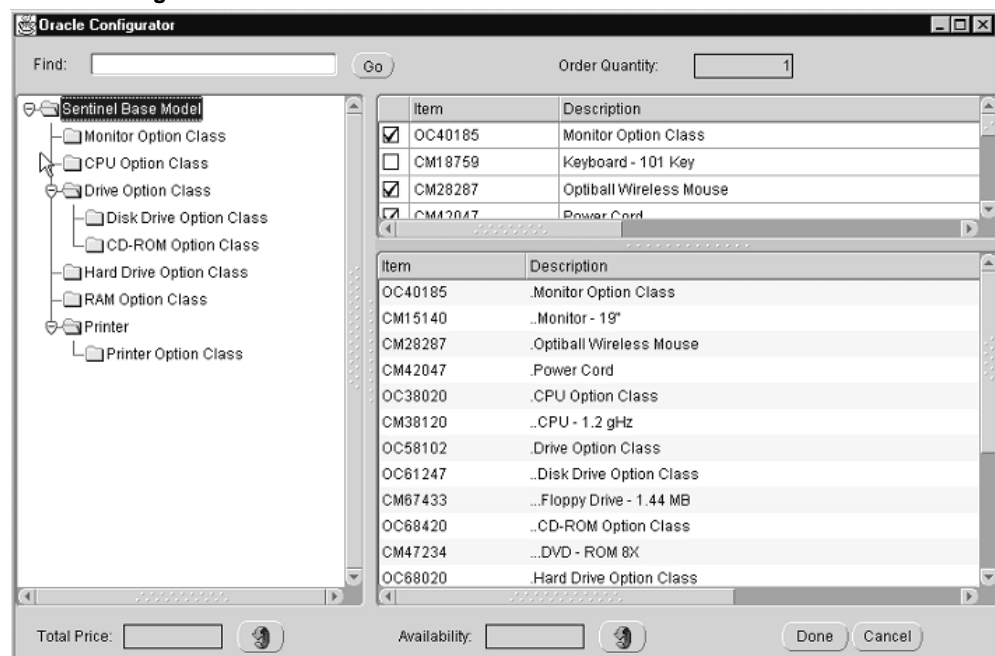
- Entering the item - OM
- Selecting the options - CZ or OM
- Creation of a configured item - BOM
- Creation of a work order - WIP
- Manufacturing - WIP
- Shipping and invoicing - SHP
- Associated workflows - WF

To setup a CTO item for ordering, shipping, and invoicing:

1. Enter your item.
2. Enter an ATO model as the item number.
3. Click Configurator.

If the profile option, OM: Use Configurator is set to Yes and the Configurator product is installed, the Oracle Configurator window appears after when clicking the Configurator button.

Oracle Configurator window



4. Select your options.

The folders on the left side are the model and its option classes. For the selected option class (in this example the RAM option class), the available options are in the top box on the right. The options are selected by checking the box to the left of the item name. The options and option classes which are selected are in the bottom right. Required option classes which have no selections are indicated by a red asterisk on the folder icon.

Note: Oracle Configurator is a powerful tool that enables you to create complex rules for configurations and then validate those rules when you create configurations. It is completely integrated

with Order Management. See: *Oracle Configurator Developer User's Guide* and the *Oracle Configurator Installation Guide*.

5. Click OK.

The model, option classes, and selected options are now all separate lines on the sales order window, as shown in. Note that the lines are related by the line number.

6. If the profile option, OM: Use Configurator is set to No, the Options Window will appear.

Options Window

Sales Orders (62637) - Computer Service and Rentals

Order Information Line Items

Order Total 4,471.89

Main Pricing Shipping Addresses Returns Services Others

Line	Ordered Item	Qty	Wareh
1.1	OM-HYBRID-M	2	V1
1.1.1	OM-HYBRID-OI	2	V1
1.1.2	OM-NONSMC-I	6	V1
1.1.3	OM-OP-CLASS	12	V1
1.1.3.1	OM-INC-ITEM1	72	V1
1.1.4	OM-OP-ITEM1	4	V1
1.1.5	OM-ATO-MODI	8	V1
1.1.6	OM-ATO-OP-C	24	V1

Line Total 4,351.89

Description OM-HYBRID-MODEL

Actions Related Items

Options

Line Number 1 1 Model Qty Ea 2

Model Item OM-HYBRID-MODE OM-HYBRID-MODEL

Option Number	Item	UOM	Qty	[]
1	OM-HYBRID-OP-CLASS	Ea	2	<input type="checkbox"/>
2	OM-NONSMC-PTO-MODEL	Ea	6	<input type="checkbox"/>
3	OM-OP-CLASS2	Ea	12	<input type="checkbox"/>
4	OM-OP-ITEM1	Ea	4	<input type="checkbox"/>
5	OM-ATO-MODEL	Ea	8	<input type="checkbox"/>
6	OM-ATO-OP-CLASS	Ea	24	<input type="checkbox"/>
7	OM-ATO-OP-ITEM1	Ea	1.2345767	<input type="checkbox"/>
8	OM-ATO-OP-ITEM2	Ea	11.2375859	<input type="checkbox"/>

Item OM-HYBRID-OP-CLASS

Ok Cancel

7. Select your options.
8. Click OK.

Note: When using the Enhanced Effectivity functionality the options window, at the time of re-configuration also displays any previously selected options that were disabled since the last time the configuration was created/updated. Such disabled options will be flagged appropriately in the 'Disabled' column in the options window.

Each of these lines has a separate workflow and chapter will discuss the workflow process for each line in the workflow section.

After the options for the configuration are selected, the items on the order must be scheduled.

Sales Order Window with Model, Option Classes and Options

The screenshot shows the 'Sales Orders (96692) - Business World11' window. The 'Order Information' tab is active, showing the 'Order Total' as 1,608.12. Below the tabs, there is a table of line items:

Line	Ordered Item	Qty	UOM	Unit Selling Price	Request Date	Schedule Ship Date
1.1	CN97444	1	Ea	1,269.00	16 JAN-2002 00:00:00	
1.1.1	OC68020	1	Ea	9.00	16 JAN-2002 00:00:00	
1.1.2	CM25287	1	Ea	146.70	16 JAN-2002 00:00:00	
1.1.3	OC42556	1	Ea	9.00	16 JAN-2002 00:00:00	
1.1.4	CM34225	1	Ea	9.00	16 JAN-2002 00:00:00	

At the bottom of the window, there is a summary section:

Line Total: 1,442.70 Line Qty: 1
Description: Build Your Own Laptop

Buttons at the bottom: Actions, Configurator, Availability, Book Order.

See: Scheduling, page 12-2

Create the configured item

This item could be completely new, or it could have been manufactured before because someone selected the same combination of options. A program runs looks for an existing configuration with these options (if the value of the profile option BOM: Match to Existing Configuration = Yes), and if one does not exist (or if the value of the profile option BOM: Match to Existing Configuration = No) it creates an item and BOM for this combination of options. To run this program from the sales order window, place your cursor on the model line (the one with a two segment line number), press the Actions button and select Progress Order. The line will be eligible for the Create Configuration activity. Select this from the list and click OK. Alternatively you can create one or more configuration items in batch mode by running the AutoCreate Configuration Items concurrent request in the Bills of Material application.

When you have completed this step, your order will have an additional line item which is known as the configured item. The item will have an item number which was created for the first order with this exact combination of selected options. The format for the

configuration item number is determined by the Numbering Method parameter in the BOM parameters window.

Note: There are two batch programs, AutoCreate FAS, which creates work orders, and AutoCreate Configuration, which creates configuration items, configuration BOMs and routings, and calculates cost and lead time. These batch processes update the workflow of each order line that it processes.

Note: AutoCreate Configuration Items picks up orders that are at the Create Configuration Item Eligible block activity and creates the configuration item, configuration BOM and routing, and calculates cost roll up and lead time roll up. It then completes the Create Configuration Item Eligible block activity with a Complete result and completes the Create Configuration BOM Eligible block activity with a Config Data Created result.

Note: AutoCreate FAS picks up orders for configuration items with discrete routings that are at the Create Supply Order Eligible block activity and creates work orders for them. It then completes the Create Supply Order Eligible activity with a Reserved result.

Note: Create the work order. Creation of the work order will trigger the manufacture of the item.

The CTO process works with both Oracle's Discrete Manufacturing applications and Oracle's Flow Manufacturing applications. This section uses the terminology of the discrete manufacturing process.

To create the work order from the sales order window, place your cursor on the configured item line (the one that was added in the previous step,) click Actions and select Progress Order. The line will be eligible for the Create Final Assembly Order activity. Select this from the list and click OK. Alternatively you can create one or more work orders in batch mode by running the AutoCreate FAS concurrent request in the Work in Process (WIP) application.

Manufacture the Item.

In a production environment this could require many steps. None directly affect Order Management until the final status of work order completion. When the completion activity is performed in WIP the item is transferred to inventory with a reservation to the sales order.

At this point, the configured item is available to progress through the

standard order process of shipping and the model progresses through the invoice activity. The steps are described in the sales order flow and the shipping process flows sections of this manual.

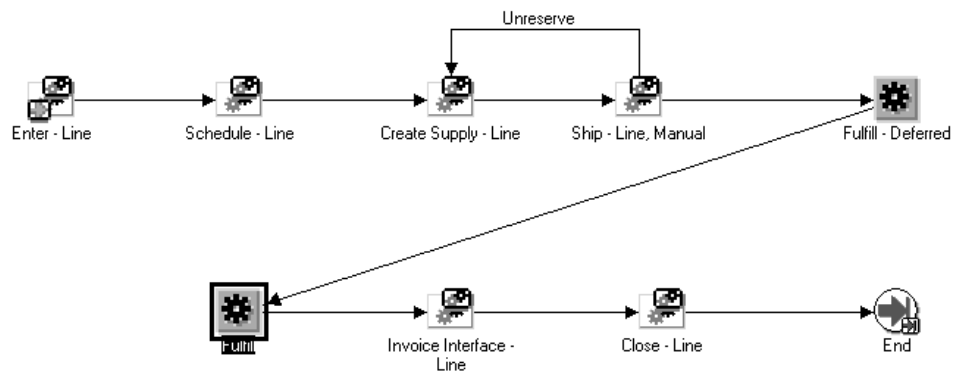
Workflow

Although there are many item types in this business process, only two top level line Oracle Workflow processes are needed to support it. The seeded flow Line Flow - Generic is used for the model, option class and option lines. The seeded flow Line Flow - Configuration is used for the configured item.

Model, Options and Option Classes Workflow

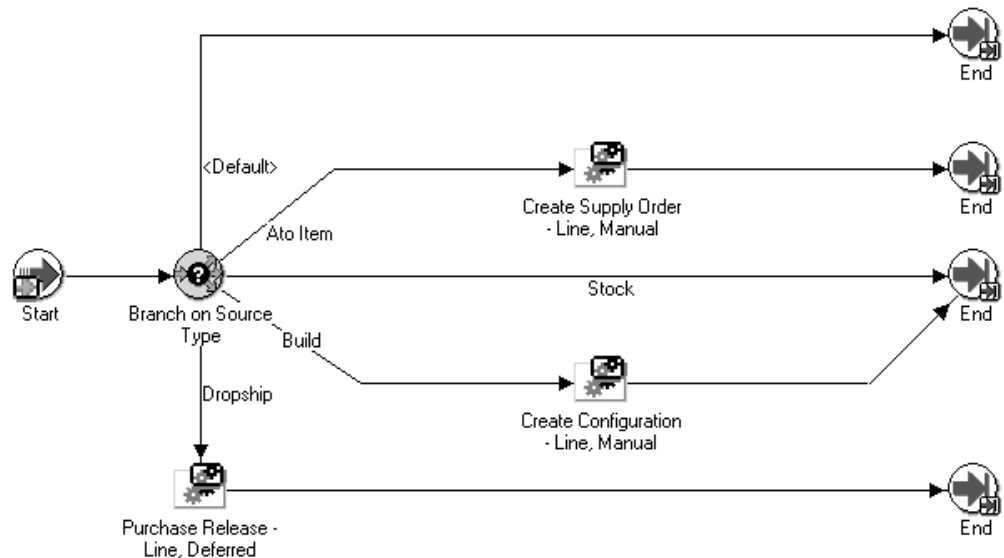
The flow for the model, options and option classes all begin with the following basic process depicted in.

Line Flow - Generic Workflow Process



The lines progress through the Enter - Line and Schedule - Line subflows along the same path. At the Create Supply - Line subflow, their paths deviate.

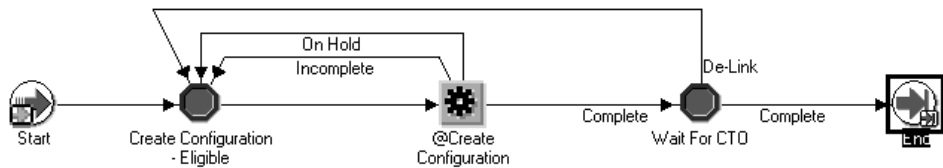
Create Supply - Line Subprocess



The graphic above shows the variety of subflow paths that can be taken within Create - Supply Line. In the Branch on Source Type function, the options follow the path for Stock and the model follows the path for Build. Purchase Release - Line, Deferred is another subflow for drop shipments. See the corresponding section in this manual for more information on drop shipments.

The Build path, shown in the following figure, has an additional sub-process of Create Configuration - Line Manual which looks like this.

Create Configuration - Line, Manual Workflow Subprocess



This subprocess creates the new line on the order for the configuration item, and its workflow begins. This flow will be addressed in a moment. The activity also creates the new item (or finds the existing one, if applicable) and creates the BOM and Routing.

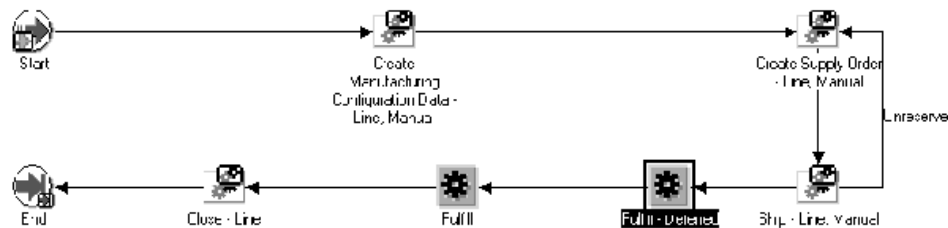
Once the Create Configuration - Line, Manual subflow is complete for the model line, the model line as well as the options and option classes have completed the Create

Supply - Line subprocess and are ready for shipping. However, the model, options and option classes of a Configure to Order item are not shippable. The assumption is that in the manufacturing process the components are built into one indivisible item. So they pass through the shipping process with a result of Not Applicable, and proceed to the invoice process. The model line will be invoiced, so it goes through the Invoice Interface - Line activity and should complete. The options and option classes are not invoiced, so they go through the Invoice Interface - Line activity with a result of Not Applicable.

Configured Item Workflow

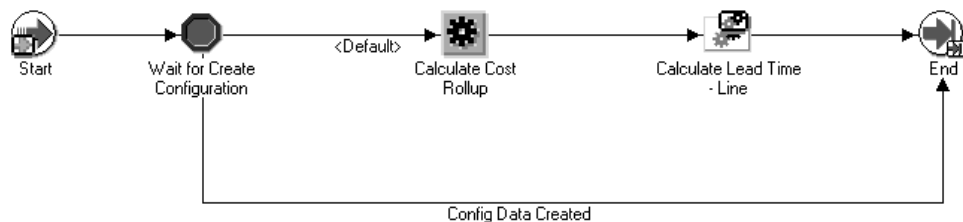
The configured item is created and added to the order when the model goes through the Create Configuration activity. Its workflow process is simpler than the process for models and options, shown in below.

Line Flow - Configuration Workflow Process



The figure below shows the first subprocess in the flow is the Create Manufacturing Configuration Date - Line, Manual.

Create Manufacturing Configuration Data - Line Manual Workflow Subprocess

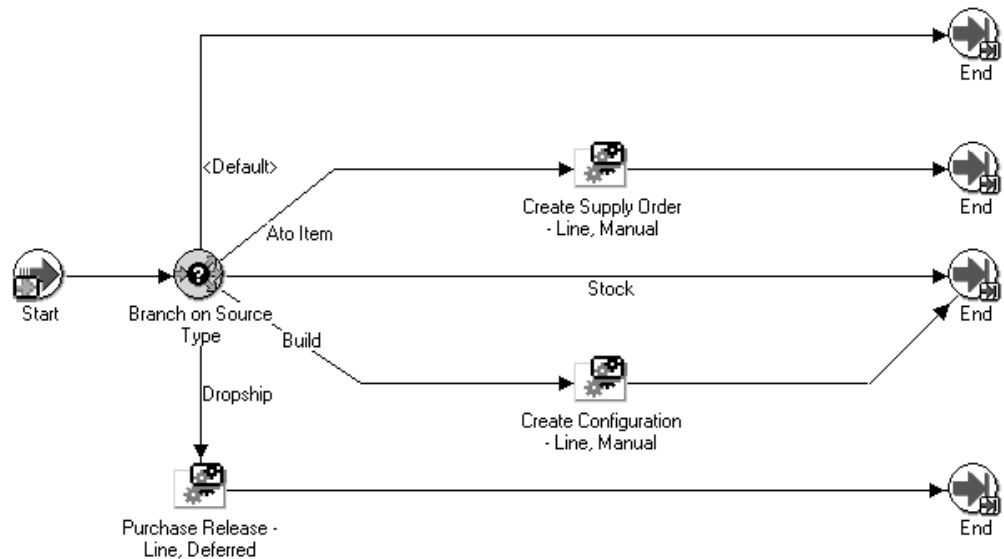


This is the subprocess that performs the necessary Costing rollup and calculates the lead time for the configured item.

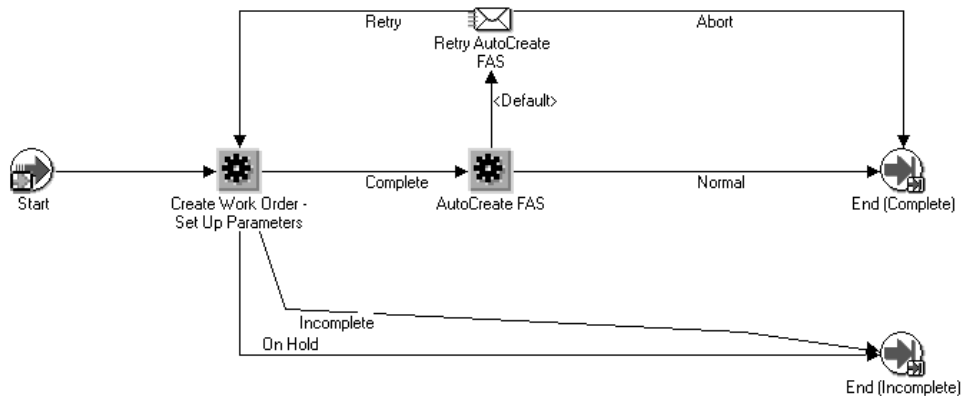
The figure below shows the next step in the configured item workflow, Create Supply Order - Line, Manual subprocess. This subprocess interfaces with the manufacturing system to trigger the assembly of the item. The Check Supply Type activity determines

whether the item should be manufactured using discrete manufacturing or flow manufacturing. If the result is Flow Schedule, the Create Flow Schedule activity is executed. If the result is a Work Order, the final subprocess, the Create Work Order - Line process is executed.

Create Supply Order - Line, Manual Workflow Subprocess



Create Work Order - Line Workflow Subprocess



The above figure indicates the final subprocess flow - Create Work Order - Line. The primary activity in this flow is the AutoCreate FAS activity, which will cause the WIP application to create a work order.

After the work order is created, the sales order will wait for completion of the work order before proceeding. When the work order is complete the inventory will be received into the inventory module and automatically reserved to the sales order.

The configured item then continues through the normal shipping and fulfillment steps and then its workflow is complete. It does not have an Invoice Interface subprocess because it is never invoiced. Only the model line, option classes and options may be invoiced depending on their item attributes.

Related Processes

Several processes share some of the characteristics of the configure-to-order process. They include the assemble-to-order process, the pick-to-order process and the kit process. Because the configure-to-order process is the most comprehensive and includes all the steps it was described first, and the rest will be described relative to it.

The assemble-to-order process is similar to the PTO model, item, or PTO/ATO models because the items that are ordered by a customer are manufactured specifically for the customer order. So the manufacturing steps of the configured item are part of this process. However, the ATO item is not configurable for a customer in the sales order window. The ATO item is entered on the sales order window and then the order is booked without selecting any options. No option class lines or option lines are added to the order. The workflow process Line Flow - Generic supports the ATO process. The ATO item takes the ATO item branch in the Create Supply - Line workflow subprocess.

The pick-to-order process is similar to the configure-to-order process because you can select the options chosen by the customer. On the sales order window the PTO model is entered, and then you press the Configurator button to launch the options selection window. The configuration options are saved, and the option classes and options are added as lines on the sales order. However, there are no assembly steps in the PTO process. The options all continue their own workflows which include the standard sales order line activities. When you create your PTO model in the Inventory application, Inventory sets the attributes for the model, and you can specify whether or not it is Ship Model Complete. If this attribute is Yes, all the options will be in a ship set. If this attribute is No then the items can ship independently.

The kit process is similar to the pick-to-order process except that the user cannot select options to create a configuration. All the items in the kit are required; these are known as included items. Kits are similar to configure-to-order items because the included items are added to the order and have their own workflows. They are added either when the kit line is saved, when the order is booked, or when the line is pick released depending on the value of the profile option OM: Included Item Freeze Method. Ship Model Complete logic for PTO models also applies to kits.

Enhanced Date Effectivity

Allows control over the behavior of configuration effectivity date based on the value of a system parameter. Supported for Oracle configurator or the OM options window. See:

Oracle Order Management User's Guide for more information.

Sample Flows for Enhanced Date Effectivity

Sample Flow 1

1. Set new system parameter OM: Configuration Effective Date to Model Creation date.
2. Create an order line for a model in order management on 3/20/03.
3. Launch Configurator or Options window for the Model.
4. Select options and save.
5. Add new option to BOM on 3/21/03. Also disable some option or option class in BOM on 3/21/03.
6. Re-open Configurator or Options window, new option will not be displayed. Disabled option or classes will still be available to choose.
7. User modifies the configuration and saves.

Sample Flow 2

1. Set new system parameter OM: Configuration Effective Date to System Date until Booking.
2. Create an order line for a model in order management on 3/20/03.
3. Launch Configurator or Options window for the Model.
4. Select options and save.
5. Change the BOM for the model on 3/21/03 to add a new option and disable an option or a class.
6. Re-open Configurator or Options window. A message to user will be displayed saying one or more options / classes are disabled in this configuration and will be removed from the existing configuration. New options will be available to choose.
7. User accepts the message and modifies the configuration in the options window or the Configurator, and saves.
8. Disabled options and classes will be deleted (or cancelled) automatically.
9. User Books the order on 3/21/03. User changes BOM to include new options or

disable options or classes.

10. Re-open the Configurator or Options window.
11. Now, new option will not be displayed. Disabled option or classes will still be available to choose.
12. User modifies the configuration and saves.

Sample Flow 3

1. Set new system parameter OM: Configuration Effective Date to System Date until Booking.
2. Create an order line for a model in order management on 3/20/03.
3. Launch Configurator or Options window for the Model.
4. The BOM of this model has a mandatory option class and user selects one option under it and saves the configuration.
5. Change the BOM for the model on 3/21/03 to disable the selected option under the mandatory option class.
6. Book the order. System will remove the disabled option and populate an error message to indicate the same. This will result in Configuration validation error and Booking will fail.
7. Re-open Configurator or Options window. Choose an options for the mandatory option class and save.
8. Book the order, this time Booking will be successful.

Note: Mandatory option class rule is just an example and similarly some other BOM or CZ rules may result in invalid configuration with system parameter Configuration Effective Dates set to System Date until Booking.

Sample Flow 4

1. Do not set new system parameter OM: Configuration Effective Date. This setting should be used to retain existing behavior.
2. Create an order line for a model in order management on 3/20/03.
3. Launch Configurator or Options window for the Model.
4. Select options and save.

5. Add new option to BOM on 3/21/03. Also disable some option or option class in BOM on 3/21/03.
6. Re-open Configurator or Options window, new option will not be displayed. Disabled option or classes will still be available to choose.
7. User modifies the configuration and saves.

Sample Flow 5

Note: This procedure is specific to Configurator.

1. Set new system parameter OM: Configuration Effective Date to Model Creation Date or System Date until Booking.
2. Create an order line for a model in order management on 3/20/03.
3. Launch Configurator for the Model.
4. Select options and save.
5. Add new option to BOM on 3/21/03. Also disable some option or option class in BOM on 3/21/03.
6. Copy the order on 3/22/03. Disabled options will not be saved in the new order at the time of copy. Message will be populated to user to indicate that the options were not found in the BOM of model.
7. Re query the copied order and open Configurator.
8. New options will be available to choose.
9. User modifies the configuration and saves.

Note that point 6 is existing behavior even without setting the system parameter

Sample Flow 6

1. Set new system parameter OM: Configuration Effective Date to System Date until Booking.
2. Create an order line for a model in order management on 3/20/03.
3. Launch Configurator or Options Window for the Model.
4. Select options and save.

5. Add new option to BOM on 3/21/03. Also disable some option or option class in BOM on 3/21/03 – this option or class should be one of the selected items in the configuration from step 4.
6. Change the ordered quantity of an option or a class in the configuration using sales order form. System will perform configuration validation.
7. System cascade the quantity change and also will remove the disabled option and populate an error message to indicate the same.
8. Book the Order.
9. Again change BOM to disable some options selected in the configuration.
10. Query the order and change ordered quantity on some options.

The quantity should be cascaded and newly disabled options should not be removed from the configuration.

Service Termination

Service Termination allows

- Issue of full or partial credit for service lines during returns
- Terminate service item (extended warranty) when product is returned.

See the *Oracle Order Management User's Guide* for more information.

Global Order Promising for ATO Models

Scheduling for ATO models allows sourcing rules to be used to select a warehouse for an ATO model: you do not need to specify a warehouse for the ATO model.

If the ATO model or any of its components are ATPable, the promised availability considers the matched configuration supply if ASCP is installed. If you drill from the Availability window to ATP Details, the quantity of available matching configured items is displayed. The Days Late column identifies options that are extending the Schedule Date on the ATP Details window.

Decimal Quantity for options of an ATO Model

This feature allows decimal quantities to be used on the options of an ATO Model during order entry. Decimal quantity can also be used for the options of an ATO Model even when the ATO Model is part of a parent PTO Model. ATO items and options of a PTO Model cannot use decimal quantities.

Note 1: Non-Integer ratio is allowed between the Option and its parent (Option class). It is also allowed between the Option and its Model.

Note 2: Non-Integer ratio is NOT allowed between the Option class and the Model.

Examples:

CASE 1: Valid

	Ordered Quantity
ATO Model	1
Option Class 1	10
Option 1A	11
Option Class 2	20
Option 2A	20

Ratio of Option Class: Model are integer ratios, Option level is non decimal quantity.

CASE 2: Valid

	Ordered Quantity
ATO Model	1
Option Class 1	10
Option 1A	11.5
Option Class 2	20
Option 2A	19

Ratio of Option Class: Model is an integer, Ratio of Option: Option Class/ Model is non-integer.

Option 1A has an ordered quantity which is a decimal quantity.

CASE 3: Invalid

	Ordered Quantity
PTO Model	
ATO Model	1
Option Class 1	10.4
Option 1A	11.5
Option Class 2	20
Option 2A	19

Decimal Quantity Allowed ONLY for options of an ATO Model. Decimal Quantity NOT allowed at the option class level. Ratio of Option Class: Model is a non-integer.

CASE 4: Invalid

	Ordered Quantity
PTO Model	
ATO Model	1
Option Class 1	10
Option 1A	11.5
Option Class 2	
Option 2A	20
PTO Option Class 2	1
PTO Option	2.5

Decimal Quantity allowed for options of an ATO Model ONLY. Decimal Quantity NOT Allowed for options / option class of a PTO Model.

CASE 5: Invalid

	Ordered Quantity
PTO Model	
ATO Model	1
Option Class 1	10
Option 1A	11.5
Option Class 2	20
Option 2A	20
PTO Option Class 2	1
PTO Option	
ATO item 3	2

Decimal Quantity allowed for options of an ATO Model ONLY. Decimal NOT Allowed for options / option class of a PTO Model OR ATO items

CASE 6: Valid

	Ordered Quantity
PTO Model	
ATO Model	1
Option Class 1	10
Option 1A	11.5
Option Class 2	20
Option 2A	20

PTO Option Class 2	1
PTO Option	1
ATO item	4

Decimal Quantity Allowed for options of an ATO Model ONLY. All ratios between Option class and Model are integer ratios.

To set up global order promising for available to order models:

1. Define your planning sourcing rules, such as for Make, Transfer, and Buy
2. Set up the profile option BOM: Match to Existing Configurations to Yes. For the system to look for a match for your configured item at the time of scheduling, you must set this profile option to yes. The profile option for BOM: Use Custom Match Functionality is not required. If the Item attribute is null, it uses this profile option. Otherwise, it uses BOM: Match to Existing Configuration.
3. On the item, set Match Configuration to Standard Match. With PDS, which refers to ATP with planning output, you can match configurations. This requires that you set the Item Level Attribute, Match Configuration, in the Item master for the model. When you Enable Configuration and set Match Configuration, the following occurs:
 - If the item attribute Match Configuration is set to No, a Match is not performed for the configuration of this base model.
 - If the item attribute Match Configuration is set to Standard Match, a Match is performed for the configuration of this base model.
 - If the item attribute Match Configuration is set to Custom Match, a custom hook for Models is called for configuration of this base model. If the item level attribute is set for Custom Match then you must specify custom code. If this attribute is null then no match will occur.
4. Run Data Collections.
5. Create a plan for your items.
6. Optionally, create a folder for the ATP Details summary region to provide visibility to the Days Late attribute. Use Folders to display the Days Late attribute. The summary region of the ATP Details window is modified to show the Matched Configuration. Also, you will probably want to set up a folder to improve visibility to key attributes on the summary region of the ATP Details window.

Relaxed Order Management constraints:

To take full advantage of planning and create configuration features the following OM constraints have been removed:

- If you have non-organization specific sourcing assignments set for your model, warehouse is no longer required prior to scheduling.
- Warehouse changed allowed until a reservation is made to the configuration item ONLY for order lines for models with the "Create Configuration item, BOM" attribute set to "Based on Model." With this setting, configuration data is created from all possible sources, giving you the flexibility to change the warehouse at any time.
- In all other settings, the configuration data was created only in the sourcing chain for the shipping warehouse, and you must delink the item, change the warehouse and rerun autocreate config to create the data based on the new warehouse.
- If you are using match, the same item will be reused, and additional data created.
- Splits are now allowed on a model line until a reservation is made to the configuration item
- You can unschedule an order until it has been shipped.

Enhanced ATP

Enhanced ATP and planning support for configurations supports the following features:

Note: Some of the features listed below are available only with ATP based on planning output, Advanced Planning and Scheduling, and Demand Planning.

- **Match during ATP and planning:** ATP does a match prior to performing its availability check. If a match is found, ATP is done on the matched item instead of the model and options. This provides an accurate ATP and scheduling throughout the Order lifecycle, as well as enables customers to manage a combination of make to stock and make to order business processes. ASCP identifies that a sales order for the model and option matches an existing configuration item. This allows ASCP to net existing supplies of pre-configured stock at any supply chain bill of material level.
- **Global ATP for ATO Models and ATO Items:** You do not have to specify a warehouse prior to scheduling or performing an ATP. ATP chooses a source based

on sourcing assignments and availability to produce the specific configuration, enabling the system to recommend the best possible source for the product.

- **Support for Multiple Sources:** You can source configurations from more than one location. This can be done through sourcing assignments that are a combination of make/buy, make/transfer, transfer/transfer, and so on. Multiple Sources also requires global forecasting, which is a feature of Demand Planning.
- **Option Specific Sourcing of ATO Models:** You can restrict the sourcing of a model based on the options chosen. For example, a Model could be made in organizations 1 & 2, but if option 1 is chosen, it can only be made in organization 1.
- **Pre-configuration forecast consumption:** If a forecast exists for the matched item, its forecast is consumed first, then the model and option forecast is consumed, if needed.
- **Planning for option dependant resources:** When planning to a forecast, APS applies the planning percentages to the option dependant resources in addition to the optional material.
- **Supplier Capacities for ATO Models:** You can specify a supplier capacity for an ATO model, and sales order for configurations of that model consumes the models capacity.

See:

Oracle Configure to Order Process Manual

Oracle Advanced Planning Implementation Guide

Oracle Global Order Promising Implementation and User's Guide

Oracle Demand Planning Implementation & Users Guide

Auto Create Configuration

Enhancements and changes in this area include:

- **Match control by Model:** Control for matching is a model item attribute, enabling you to choose to match in some cases and not others.
- **Control where the Configured item, BOM and Routing is created:** You can specify to create it only in the organizations required for this order, or in all organizations where the model exists
- **Option Specific Sourcing:** BOM and routing creation are further restricted by the option specific sourcing setup used during ATP.
- **Configured Item creation for all Scheduled Orders:** The auto create configured

items process will now create configurations for all scheduled orders that fit the program parameters, even if scheduling happens before booking. Scheduled orders for generating the Configurations with out looking at whether the Order is booked or not. This helps planning consider the Sales order demand in the form of configured items instead of Model and Options. However, the creation of configurations through sales order workflows (Progress Order to Create Config Eligible) is not possible for scheduled orders if they are not booked. The Batch Program Auto Create Configured items when Automated to run at regular intervals picks up the scheduled and configured orders and creates configurations for them. Before creation of Configurations the demand exists as Model and Option demand. The demand is transferred to a Configured item when created and linked to the sales order De-link, Link, Match and Reserve possible before booking. For a scheduled order, de-linking the configured item, creating configured item, Match and reserve functions work before booking.

- **Indication of Dropped Components:** If you select optional components, and they cannot be added to a bill in any organization in which the application attempts to create it, the program either stops the item/bill creation or creates it without the required item. In either case, a message is sent to the appropriate planners that action is needed and the order line is put on hold.
- **Decimal Quantities for Options of an ATO Model:** You can enter decimal quantities on options during the configuration process. These decimals are used during the Bill creation process. Decimals are not allowed on the ATO model itself, option classes, or components of PTO models.
- **Re-Use for Non-Matched Models:** If a configuration item is manually de-linked from a sales order, but the configuration is not changed, the same item number is re-linked to the configuration the next time auto create configuration is run.
- **Flexibility to delay optional processing for configured items:** You can separate the optional processing (lead time roll-up, cost roll-up, purchase price roll-up) from the create config process. Batch programs do the optional processing as separate processes.

Autocreate Supply Changes

In previous releases, if you were not using Configure to Order create supply processes to create sales orders, you were required to:

1. Modify the workflow so that it no longer required a reservation for shipment

or

1. Leave the workflow as is, and run an OM auto-reserve program before being able to ship your configurations.

In previous releases, you could use the standard workflow to bypass the create supply processes in cases where you did not want to create supply for a sales order.

If you use planning to create supply for sales orders, the workflow has been modified to skip the create supply process in the following scenarios:

- More than one source is defined for the configuration in the shipping organization in default assignment set
- Configuration has a 100% transfer from sourcing rule in shipping organization
- Customer defined logic exists.

Example

Planning is run once per week. If an order comes in within the week, create supply through the automated process, otherwise skip it and move to ship line.

Update Existing Configurations

A new program has been created to allow users to update the configuration item, BOM, Routing and sourcing rules for existing configurations when the following setup changes occur on the model:

- Addition or change of sourcing rules, assignments, or option specific sourcing
- Change of the Create Configured Item, BOM attribute setting
- Change of ATP attributes

Business Flow Support

Oracle Supply Chain Applications have introduced support for business flows for global corporations, in which the financial ownership of goods does not necessarily follow the physical movement of goods. These include the following business flows:

- Central Procurement
- Central Distribution

Drop Ship Across Ledgers

If enhanced intercompany is being used, at the time of intercompany invoicing between each operating unit pair in the transaction flow:

1. The system checks to see if a transfer price already exists for the specific configuration (you may have a set price for a preconfigured item, for example).
2. If no price exists, it performs a calculation of the transfer prices based on the rolled up transfer prices of the base model and all its options. Standard, mandatory components are not included in the roll-up.

3. Include their prices in the price of the parent model or option class. This calculation is based on the model and options on the linked sales order (if one exists) or on the configuration bill of material.

Note: The system randomly chooses a BOM from those that exist in the system.

See: *Oracle Inventory User's Guide*, *Oracle Purchasing User's Guide*

Drop Shipments

Overview

Drop shipments occur when your customer orders product from you, you order the product from your supplier, and your supplier ships the product directly to your customer. Order Management sends information to the Purchasing Application to create that PO, and then when that PO is received (to indicate shipment from the supplier to your customer), the order line is automatically updated to indicate that it was fulfilled.

In this process, the company running Order Management is modeled as the company to whom the end customer places the original order. We call this process Vendor Drop Shipment, to indicate that we are defining the process from this point of view.

The Source Type attribute on the order line controls whether a line will be fulfilled internally or drop shipped. A source type of External indicates Drop Ship. Drop ship order lines can be processed for standard items, ATO models, Non SMC PTO models and kits. SMC PTO models cannot be used on drop ship order lines. You can define an Order Transaction type that specifies all of its lines be sourced externally.

Required Setup

Warehouse

Consider establishing a logical warehouse to receive drop shipments. This will isolate the costs of drop shipped items from items you physically stock. Order Management does not require you to use a special shipping organization for drop shipments, but you can choose to do so. In that case, define the logical warehouse as a shipping organization, and enable the items you want to be drop shipped in that warehouse.

Order Transaction Type/Line Transaction Type

Define line type/order types for your drop shipment orders that have a workflow containing the Create Supply—Line subprocess. This sub process could have the 'Purchase Release Line Deferred' activity - so drop ship lines are automatically

interfaced to Purchasing via a workflow background process after Booking. You could include the 'Purchase Release Line - Manual' activity and allow Purchase Release to be a manual activity i.e. run adhoc or in batch mode via the concurrent program.

Defaulting Rules

Define defaulting rules, based on conditions that make sense to your business process, for the source type attribute of the Order Line. If you want a line to be drop shipped, make the source type equal to External. In addition, if you defined a special warehouse for drop shipped items, you might want to create a defaulting rule to default that shipping organization to your order line.

Processing Constraints

Depending on your business needs you could use various constraints for example you could prevent changes once a PO is approved or you could choose to disable this constraint provided you have a process to handle any exceptions from the supplier.

Depending on the status of the PO / Requisition - some typical changes allowed from the sales order are - Quantity Increases / Decreases, Cancellations, Scheduled Ship Date, Ship To Location, or Referenced Data elements (ship method).

Depending on the status of the PO / Requisition / Sales Order Line - some typical changes allowed from the PO side are - Promise Date, Delete Lines, or Cancellations.

Other restrictions imposed during the change management process are included in Oracle Order Management User's Guide.

Process Steps

1. Enter and book an order.

Defaulting Rules may set source type attribute to External through the organization level item attribute setting—Default SO source type for the item, or you can manually choose External as the source type on the sales order line. Drop ship order lines can be processed for standard items, ATO models, Non SMC PTO models, and kits. SMC PTO models cannot be used on drop ship order lines. The Create Supply workflow step loads OM information into Oracle Purchasing's Requisition Import tables. Alternatively, a Purchase Release concurrent program can be run to do the same.

2. Run Requisition Import in Purchasing to create the requisition.
3. Create a PO or autocreate a Sales Agreement PO release from the approved requisition.
4. When the vendor ships product to your customer, you may receive an ASN, or even an invoice, to indicate shipment to the customer.

If the vendor does not send an ASN, a receipt can be entered manually (passive receiving) to record a logical receipt.

5. You can set the profile PO: Automatically Deliver Drop Ship ASNs to trigger automatic receipt of the ASNs in Purchasing, or choose to have manual intervention to receive the ASN. Inbound and outbound material transactions are automatically created for accounting purposes.
6. Order Management workflow proceeds to next step, typically invoicing of the end customer.

Workflow

The Generic Line workflow contains the Create Supply activity, which branches to various sub-processes based on different characteristics of the item and sales order line.

Order Management's workflows streamline the process of loading order information into the Purchasing Requisition import tables, eliminating the need to run the Purchase Release concurrent program. You can still run Purchase Release as a concurrent program, if you prefer to batch up requisition lines.

Drop Ship Across Ledgers

Within a Centralized Distribution / Manufacturing environment Drop ship across Ledgers could be used for example, in a case where you use a global/regional distribution center to gain tax advantages, you can now perform clear 'arms length' ownership transfer between the operating unit shipping the goods and the operating unit which sold the goods and possibly one or more internal organizations.

Drop shipping across ledgers offers the ability to consolidate procurement functions for all global business units into one or multiple Shared Service Centers. Central Procurement Organizations:

- Leverage buying volume by consolidating demand across organizations
- Standardize terms and conditions across all enabled organizations
- Centralize supplier relationship management
- Complete transactions across international borders through foreign subsidiaries/shared service centers

When goods are shipped or received, the financial ownership through these organizations does not necessarily follow the physical movement of goods.

Drop Ship across Ledgers can fulfill drop shipments across multiple operating units (OU), ledger or legal entities, and automate inter-company transactions between multiple operating units, ledgers or legal entities.

Note: Only When using drop ship across ledgers/operating units, the requisition/purchase order is created in the operating unit of the warehouse that has been referenced on the drop ship order line.

See: Oracle Purchasing Product and Functional Overviews,

Oracle Inventory & Cost Management Enhanced Intercompany Product and Functional Overviews

Change Management

Change management support between Order Management and Purchasing automatically propagates user initiated changes on the sales order to the corresponding requisition/purchase order even if they are across ledgers or in different operating units.

See: Change Management for Drop Ship Orders in *Oracle Order Management User's Guide*.

Additional Information to Supplier

Enhanced integration between Oracle Order Management and Purchasing sends additional sales order data to the supplier.

See: Sales Order Elements in *Oracle Order Management User's Guide*.

Back-to-Back Orders

In an environment where lead times are often only a matter of 24 hours, you may need to create a specific supply order linked to each customer order as soon as the order is booked, with the supply order hard pegged to the customer order that it is supplying. Once the supply reaches the warehouse it must not be inadvertently taken by another order or demand. Additionally, where the Sales Order line is in the process must be visible to you at all times so you can answer customer service inquiries. This process, Back-to-Back Orders, closely links the Sales Order and the supplying Purchase Order, often where one PO is tied to one Sales Order. The following shows you how you can model this process using Oracle Order Management and Oracle Configure-to-Order workflows.

Overview

Often customers order products that you do not typically stock but that you do not manufacture either. You may want to purchase that item specifically for this order, have the supplier ship it to you, and then combine it with other items you may have purchased or stocked to create one shipment to the customer. This is a common scenario for Wholesale Distributors who use the S3, or Sell-Source-Ship business model as well as for other demand channels. We call this process back-to-back orders or procure-to-order.

Keys to making this business process work are automating the Purchasing document creation, having accurate status of where the line is in the process, and pegging (or hard reservation) of the supply to the demand, so that the inventory isn't shipped to other customers once it is received.

The supply-to-order process satisfies this business need through both the familiar assemble-to-order process—in which a specific work order is created to build the item—and the procure-to-order process whereby a specific purchase order is created to fulfill the sales order demand.

Supply-to-order items are either standard items or models that have the assemble-to-order item attribute turned on. It is this attribute that launches the ATO workflows that deliver this feature. PTO models by definition cannot be supply-to-order, since turning on the assemble-to-order attribute would make them an ATO model. But you can fulfill the shippable options of a PTO model with back-to-back orders by checking the assemble-to-order item attribute of those components.

Using this process, you can:

- Designate the items you want to procure each time they are customer-ordered as supply-to-order.
- Set up a Buy From sourcing rule for those items or, if you don't set up sourcing rules, indicate that the item is a buy item rather than a make item.
- Enter sales order lines for these items, and have the supply automatically created via a requisition. No user decision-making is required to make this happen.
- Have the requisition converted into a Purchase Order or a release of a Sales Agreement and have the PO or release sent to the supplier.
- View the requisition number or PO number and its status from the Sales Order.
- Accept changes to the Sales Order and have the ability to notify the buyer to take appropriate action on the associated PO.
- Reserve the supply from the Requisition to the PO and finally to Inventory once the PO is received.
- Pick, ship and finally invoice the customer for the product.

Features

To satisfy the above business needs, Oracle Order Management and Configure-to-Order have combined to deliver the back-to-back business flow with the following set of features:

Auto Create Requisitions

An automatic process called Auto Create Requisition is available that creates the

requisition in Purchasing for the Sales Order line. This process takes information from the sales order line and puts it in the requisition import interface tables so that a purchase requisition can be created. This process can be run as a scheduled or on-request concurrent process, or can be initiated online from the Sales Order line using 'Progress Order' action.

Flow of Reservation Supply from Requisition to PO to Inventory

The supply for the reservation is first linked to the requisition, then moves to the PO, and finally to Inventory as the PO is received. Visibility to the supply for the reservation is provided in the View Reservations window.

Use of Workflow to Automate Process Steps

A branch of the existing Create Supply workflow subprocess in the seeded generic sales order line workflow initiates the autcreate purchase requisition processing when there is a Buy result.

Setup

Restrictions

To setup Back-to-Back Orders in Oracle Order Management:

1. Use the Inventory Master Items window to define the items that you wish to supply to order. The following item attributes must be specified:
 - Item must be marked as Customer Orderable on the Order Management tab and Purchasable on the Purchasing tab.
 - Item must be marked as Assemble-to-Order on the Order Management tab.

Note: The Assemble-to-Order attribute is actually called Replenish to Order in the database. The same flag also controls Procure-to-Order.
 - Item must be marked as Build in WIP on the WIP tab.
 - Item must either have the make/buy flag on the General Planning tab set to Buy, or else have a sourcing rule saying that it is to be sourced from a vendor.
2. If you define a sourcing rule for your Supply-to-Order items, then the sourcing rule must be of type Buy From. Also, you may only define one single sourcing rule for your item, or this process will not work.
3. You must add this sourcing rule to the assignment set which is specified as the MRP default assignment set in the MRP: Default Sourcing Assignment Set profile option.

Note: You may not have a combination of Buy From and Make sourcing rules or more than one sourcing rule in the assignment set for the same item. If you do that, Auto Create Requisition errors out and puts details about the problem in the log file.

Sales Order Process

To enter orders using Supply-to-Order items:

1. Enter the item on the Sales Order line.

When the line is Booked/Scheduled, the Create Supply subprocess of the workflow will put the lines through the Buy ATO Item flow which contains the autocreate purchase requisition activity. AutoCreate Requisition can be run as a concurrent program or can be initiated for an individual order by using the Progress Order action on the sales order if it is in status Create Supply Line – Eligible. As stated above, AutoCreate Requisition takes information from the Sales Order line and loads the Requisition Import interface tables.

2. Requisition Import must be run to create the purchase requisition tied to the sales order line. This can be done by manually submitting the Requisition Import concurrent program, or you can schedule it to run automatically. Requisitions created by this process all have an interface source type of CTO so you can identify and segregate these requisitions as needed. There are also message dictionary entries for CTO Note to Receiver that can be populated with custom text. The requisition column Note to Buyer is populated by the AutoCreate Requisition process with a message Supply for sales order: <order number> that indicates the order number of the line. Add additional custom text to the note by editing the message dictionary for CTO Note to Buyer.

Purchasing Process

Once the purchase requisition is created and identified as CTO, the regular purchasing process takes place:

1. A Purchase Order is created and approved and sent to the necessary supplier, or a release of a previously created Sales Agreement is used.
2. Once the PO or release is received, the items are recorded in inventory and a reservation is automatically made to the sales order line.

Note: View the Note to Buyer at any point in this process to find

out what sales order generated this PO or release.

3. The sales order can now be pick released, shipped and invoiced just like other stocked items.

Sales Order Line Status

The following line statuses help you track where the line is in the process:

- PO Req Requested
- PO Req Created
- PO Created
- PO Received

If you want to see the Requisition number or Purchase Order number created by your Sales Order line, you must go to the Reservations Details window to find that information.

Reservations

A key in making this functionality work for you is how the inventory reservation is handled. This happens automatically, and can be traced from the sales order window by using Tools->Scheduling->Reservation Details as well as by directly using Inventory's Supply/Demand forms.

When Req Import processes, the purchase requisition is reserved to the sales order line. View the Inventory Reservations window supply tab to see the reservation linked to a requisition, and the requisition number and line number.

When the requisition becomes a PO or a Sales Agreement release, the reservation moves with it. The Reservations window, supply tab, then shows the reservation is linked to a PO or a Sales Agreement, and you will see the PO number or the PO and release number, as well as the line number.

When the PO is received into inventory, the reservation is automatically transferred into Inventory, and it now looks like any other reservation from a sales order to on-hand stock.

Just as in the regular ATO process, if you manually reserve the sales order line to inventory the Create Supply workflow step will not do anything, and the line will progress to Awaiting Shipping without flowing through the requisition process.

Changes or Cancellations

What happens if you need to make changes to the sales order line that is in the back-to-back process? What if the order line is cancelled? What if you need to make changes to the PO or the requisition?

If the sales order line is cancelled or the quantity is reduced, then the reservation is reduced and a notification is automatically sent to the buyer explaining that there is now a PO outstanding for a higher quantity than what is needed for the sales order. The buyer can then decide whether to cancel the PO line, or to buy the product anyway and put it into inventory.

If the schedule date on the sales order line is changed, again a notification is sent to the buyer, who can then decide to either change the date on the PO or cancel it or do nothing. If the buyer decides to cancel the PO, then a new requisition will be created the next time AutoCreate Requisition is run.

If the PO is cancelled or a partial quantity is cancelled, then the reservation is cancelled or reduced appropriately. The next time AutoCreate Requisition is run, it will create another requisition for the unreserved amount on the sales order.

Miscellaneous

Drop Shipments

Drop Shipments is similar to this back-to-back process in that your sales order line creates a requisition line that becomes a PO sent to your supplier. In a drop shipment; however, you instruct your supplier to send the item or configured item directly to your customer. The items never physically pass through your warehouse, and therefore you do not pick, pack or ship them yourselves. In the back-to-back scenario, you instruct your supplier to send you the goods, and then you ship them on to your customer.

Supply Type for Reservations

There is a Supply Type of External Requisition to inventory reservations that also shows the purchase order or requisition that the reservation is made to in the Inventory Reservations window.

Debugging

The AutoCreate Requisition program uses the OM debug system. This means you can generate a debug file if you set the OM debug profile and the OM debug log directory profiles and then run the program.

Purchasing has its own debug profile which is used by Requisition Import to log messages, but any messages regarding the reservations are logged using OM's debug facilities.

Fulfillment

Order Management provides the functionality required to recognize fulfillment of an order line, and delays processing of some order lines until related order lines have been fulfilled.

Introduction

Oracle Order Management enables you to group lines into a fulfillment set and to establish a gate activity in your workflow process. Lines in a fulfillment set will wait until all lines in the set have been fulfilled to proceed through the gate. This gate is known as the fulfillment activity. The fulfillment feature is primarily designed to allow the grouping of related lines and to keep any lines in the group from being invoiced until all lines have been fulfilled.

Terminology

The following terms will be used to describe fulfillment:

- **Fulfillment activity:** The synchronization point or gate in the workflow process at which lines wait for other lines to be fulfilled.
- **Fulfillment method activity:** The activity in the workflow process which indicates that the line has been fulfilled.
- **Fulfillment set:** A group of lines which must all be fulfilled before any of the lines proceed beyond the fulfillment activity in the workflow

How it Works

The fulfillment activity is a seeded workflow activity named FULFILL_LINE. This activity is the synchronization point between the lines of a fulfillment set.

There are two activities that are considered fulfillment method activities in the seeded OM workflows. For a standard shippable line the fulfillment method activity is the shipping activity. For a return line the fulfillment method activity is the receiving activity. You may define any activity as the fulfillment method activity in a workflow process. The fulfillment activity must be between the fulfillment method activity and the invoice interface activity in the respective workflows.

When a line workflow reaches the fulfillment activity, the activity checks to see if the fulfillment method activity (for example, shipping or receiving) completed successfully. If so, it updates the fulfilled quantity on the line with the shipped or received quantity, and sets the fulfilled flag to Yes. It then checks to see if the line is part of a fulfillment set. If not, then it completes the fulfillment activity and continues with the next activity in the workflow process. If the line is part of a fulfillment set, it checks to see if the other lines in the fulfillment set are fulfilled. If any lines are not fulfilled, it waits at the fulfillment activity. If all the lines are fulfilled it completes the fulfillment activity for all

the lines in the fulfillment set.

Service lines behave differently in Fulfillment Sets depending on the business scenario. The most common business scenario is to order a product with an associated Service line on the same order. In this situation, it is not necessary to assign a Fulfillment Set to the Service line as the Fulfillment activity takes care of fulfilling the product and Service line as a Fulfillment Set, implicitly. There are business scenarios where Fulfillment Sets can be assigned to Service lines. One scenario is in the case of ordering a Customer Product with an associated Service line. A second is when placing an order for a Service line associated to a product which is not in the same order.

PTO Models and ATO Models are treated as inherent Fulfillment Sets by the system. As an example, A PTO Model is ordered, the Fulfillment Set field does not contain a value yet all nonshippable lines from the Model wait at the Fulfillment activity for the shippable lines prior to progressing.

Setup

No setup is required to use the fulfillment functionality with the seeded workflows. If you create your own workflows, include the fulfillment activity before invoicing in each process. This will provide two benefits: it will update the fulfilled quantity for the lines, and it will allow you to use fulfillment sets. For each workflow process that you define, you will need to check the attributes of the FULFILL_LINE activity. The FULFILLMENT_ACTIVITY attribute must be your fulfillment method activity, which in the seeded flows is either the shipping activity or the receiving activity. The COMPLETION_RESULT should be the result with which the fulfillment method activity completes if it is successful. This allows you to designate any activity as a fulfillment method activity.

If you have a workflow process with two separate branches, such as a single workflow process with separate branches for ordered items and returned items, then you should have one fulfillment activity for each branch which relates to the fulfillment method activity for that branch.

Implementation Considerations

You can have multiple fulfillment sets in a single order. If a line is a member of two fulfillment sets then all lines from both fulfillment sets must be fulfilled for any of the lines to complete the fulfillment activity.

If a line workflow process with a notification is in a fulfillment set, and the notification is rejected, then the other lines will not progress in their flows. You will have to delete or cancel the rejected line.

Example

Assume that you enter an order with four lines:

- Standard Item 1
- Standard Item 2

- An item which is shippable
- An extended warranty for that item.

You would like to send the customer two separate invoices: one for the two standard items; and a second for the item with an associated extended warranty.

Put the two lines with standard items into a fulfillment set. Select Sets > Assign a Fulfillment Set Name, 2 from the context menu. The Fulfillment activity recognizes the service item as associated to the shippable product and considers the two in a Fulfillment set even though a Fulfillment Set name was not identified on either line. You would not want to bill for the service contract until the item was shipped. The service item will wait at the fulfill line activity until the shippable line arrives there, and then both lines will continue to invoicing at the same time.

When the order is booked, the shippable lines must complete the scheduling and shipping activities. These activities are not applicable for the service contract, so they will complete immediately. The two standard items will progress through the Fulfillment activity as Fulfillment Set 2. Similarly, the shippable line and the service contract will progress through the Fulfillment activity together as an implicit Fulfillment Set.

Invoicing

This chapter covers the following topics:

- Overview
- Feature Functions and Basic Instruction
- Detail Instruction
- Tools/Techniques of Feature - API's, Workflow
- To Implement Invoicing
- Troubleshooting
- Vertex Integration

Overview

Invoicing in Oracle Order Management is the process by which data from Orders and Returns is communicated to Oracle Receivables to create invoices, credit memos and credits on account, recognize revenue and manage sales credits.

Invoicing Integration has been implemented as a workflow activity in Order Management. When it executes, it transfers fulfilled item information including quantities, selling prices, payment terms, and transaction dates to Oracle Receivables, which processes invoices for customers and accounts for revenue. Additionally, you can process credit memos and credits on accounts created from returns using this process. Upon completion of the Invoicing workflow activity, you must submit AutoInvoice from Oracle Receivables to import the invoice and credit data into Oracle Receivables. The Invoicing Integration workflow activity can be part of the Order Header workflow, if you want the entire order to interface to Receivables at the same time, or part of the Order Line workflow, which will interface each line or set of lines as they become eligible.

See: *Oracle Order Management User's Guide*

Oracle Manufacturing APIs and Open Interfaces Manual

Feature Functions and Basic Instruction

The Invoicing workflow activity loads the Receivables Autoinvoice Interface tables with data from the order lines, price adjustments, sales credits and charges. Types of data interfaced are product information such as ordered item identifier, description, inventory item identifier, quantities and prices, currency, and payment terms. It can be run from the line workflow or the header workflow, depending on whether you want to invoice the lines as they are shipped or wait for the whole order to invoice together.

Invoicing and Fulfillment

Order Management seeded workflows are designed so order lines are eligible to be Invoice Interfaced once they have completed the fulfillment workflow activity. The fulfillment concept, along with the use of fulfillment sets, enables you to group lines together for invoicing purposes. Typically, for shippable lines, shipping completes fulfillment. For non-shippable lines, booking completes fulfillment. If you want to hold up invoicing of a non-shippable line until an associated shippable line is shipped, put those lines together into a fulfillment set. None of the lines in the set progress past fulfillment to invoicing until all lines in the set are fulfilled.

Automatic Fulfillment Set Assignment

Oracle Order Management enhances Fulfillment Set functionality with seeded defaulting rules which will minimize the need for user action thus reducing error and keystrokes.

Features include:

- The ability to automatically assign all lines of an order to one Fulfillment Set.
- Defaulting of header level Fulfillment Set from Order Transaction Types allowed
- Removal and addition of a line from Fulfillment sets from Order Import and Process Order API

Discounts

In Order Management, you have the option to send items and prices to Receivables net of any price adjustments or to send the list price and then send separate adjustment lines for each discount. This is controlled by the system parameter Show Discount Details on Invoice. If you choose to show discounts, they are sent as regular invoice lines to Receivables with a negative price, and are accounted for like the item to which they belong. The Description field for the discount lines is the name of the discount. This feature provides visibility to discounts for printing on invoices, but does not provide separate accounting for discounts.

Freight and Other Charges

In Order Management, all freight and special charges such as insurance, handling, and export charges are passed individually to Oracle Receivables as invoice header level charges. There is no grouping done by the Invoicing Activity. However, Oracle Receivables will consolidate all the freight charge lines into one line for accounting and printing on the invoice. Order Management passes the details to Receivables to support differing charge accounting and printing in the future, once Receivables supports such functionality.

Freight charges are applied at the header level. However if the customer uses line level invoicing, sometimes a part of the freight charge at the header level used to get invoiced. Moreover, if the freight charge used to get updated, this difference was not passed to invoice interface. Now with enhancements to the functionality, the amount difference is populated in the invoice interface tables. This indicates that a charge has to be credited and the invoicing takes place for the correct amount.

Over and Under Shipments

Overshipments are invoiced based on the setting of the Overshipment Invoice Basis system parameter and also corresponding attributes on the Customer and bill-to site. Values for this attribute are Ordered or Shipped. If this value is Ordered, the ordered quantity is invoiced, even if a larger amount was actually shipped. If this value is Shipped, the actual shipped quantity up to the Overshipment Tolerance limit is used for billing. Undershipments are always invoiced as the amount shipped. Please note that you must set over and under shipment tolerances to be able to overship or automatically close a line on an undershipment. You can set site-level shipping tolerances via a profile option. You can also specify exceptions for a customer, bill-to site, item or customer/item combination using the Customer Standard form, Master Items form, and an Order Management form for customer/item.

Credit Cards

Credit card information is sent to Receivables if the Payment Type on the order or line is Credit Card. Data interfaced includes: Oracle Payments order number (transaction id), approval code, bank account id, credit card holder name, primary payment method. This information will allow Receivables to do the necessary capture functions for the credit card. If an order or line that was paid with a credit card is returned with reference, Receivables automatically creates a refund to the credit card rather than an on-account credit. Receivables now had automated credit card refund processing. Order Management does not require any setup for this, it is done at Receivables.

Customer Acceptance

In previous order fulfillment flows, the goods were shipped to the customer and were then invoiced and interfaced to AR. Now the flow includes an additional step – customer acceptance – where the customer accepts the goods either before or after

billing takes place. The revenue recognition process is deferred and linked to customers' accepting the shipped goods during post-billing acceptance. The basic business need is to defer invoicing and/or revenue recognition for the shipped goods till the customer receives the shipment and accepts the material. Consequently, COGS accounting should be deferred till customer communicates acceptance. In pre-billing acceptance, the customer accepts the goods first and then invoicing takes place. For pre-billing and post-billing acceptance, you can accept the goods explicitly or implicitly. For more information on using the Customer Acceptance feature, please refer to the *Oracle Order Management User's Guide*.

Customer Acceptance is set up in AR's Revenue Management module. At order entry, Order Management defaults the customer acceptance deferral reason and its attributes from Receivables onto the sales order line.

The OM System Parameter to enable Customer Acceptance has been introduced. This is for performance reasons, as calling the AR API to invoke their rules engine on every order line is expected to be expensive. It is called Enable Fulfillment Acceptance and the values are Yes/No. The default is No. This new parameter will be seeded in the Generic Category of System Parameters.

Setup for Customer Acceptance:

Customer acceptance can be enabled at Operating Unit level through OM system parameter: Enable Fulfilment Acceptance – Y/N.

We need to enable function security for the given responsibility for the following two functions:

1. Sales Orders: Fulfillment Acceptance – This ensures that the action attribute Fulfilment Acceptance is available in the Actions LOV.
2. Sales Orders: Update Acceptance Attributes – This allows for updating the acceptance attributes of Acceptance Name and Acceptance Expire days.

These are attached to the sales order menu – ONT_Sales_Order.

Define Deferral Reason

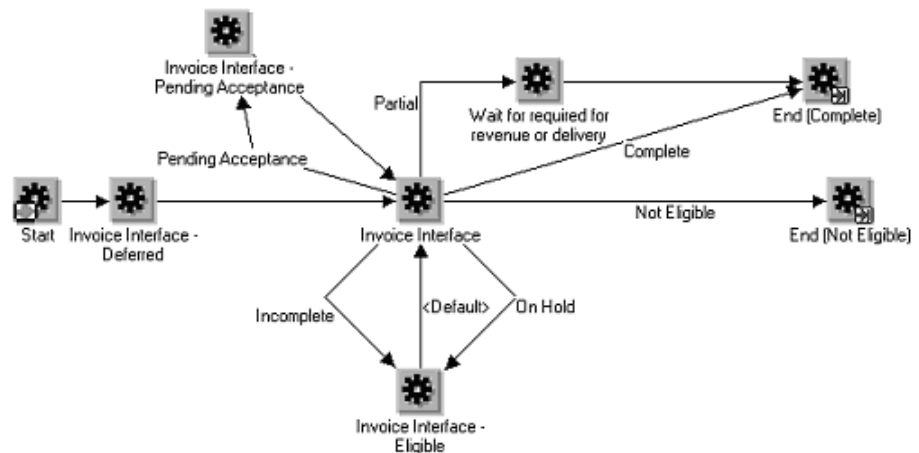
- Define 'Deferral reason' under Receivables Revenue Management set up
Navigation: Revenue Management Super User -> Contingency Search / Definition -> this launches an HTML page.
- Define assignment rules to assign the deferral reason to customer, site, item, etc.
- For defining a Pre-billing Acceptance, use the deferral reason removal event as Invoicing.
- For defining a Post-billing Acceptance, use the deferral reason removal event as Customer Acceptance.

- For defining an Implicit Acceptance, we need to define the Optional time attributes – Event Attribute and Days added to Event attribute.
- Please note that Order Management supports Ship Confirm Date as only event attribute for the current release.
- The Days added to Event Attribute gets defaulted as Acceptance Expire days in Sales Order Line.

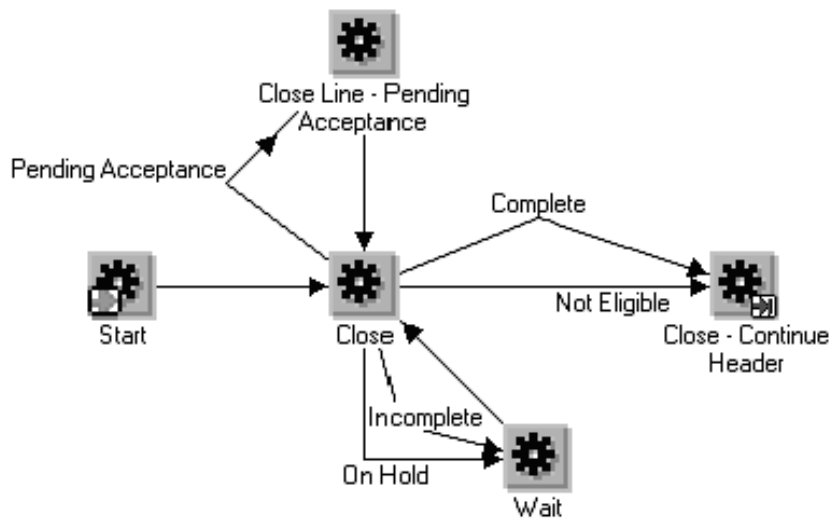
Note: The deferral reason defined in AR's Revenue Management setup page is actually used as Acceptance Name in Order Management.

For further information on setting up deferral reasons and other features, please refer to the *Oracle Accounts Receivables User Guide*.

The Invoice Interface Workflow subprocesses handles sending interface data to Oracle Receivables for invoice and credit memo creation. It is used to handle pre-billing customer acceptance. If an order line requires pre-billing Customer Acceptance, this sub-process will prevent the order line from being interfaced to Receivables.



Post-billing acceptance is handled in Close-Line sub-process. Also, if an RMA line that references a pre-billing rejected quantity comes into this sub-process, it will not interface that line to AR.



The Invoice Interface module does the following:

- Checks if pre-billing Customer Acceptance is required on the order line.
- If required, wait until customer acceptance is recorded.
- When customer acceptance has been recorded, continue the invoice interface process.
- If pre-billing acceptance is not required, continue the invoice interface process.
- Interface acceptance information and the deferral reasons information to Receivables.
- OM will change Invoice Interface to not interface an RMA line to AR if it references pre-billing rejected quantity.

Please note, this sub-process does not communicate the event of acceptance recording to AR. AR is notified of Customer Acceptance event in Customer Acceptance Capture module.

Notes/Attachments

It is possible in Order Management to set up note categories to indicate you want the note to print on the Invoice. The notes do not print on the seeded standard Receivables Invoice although they are visible in the Receivables Transaction window, but you can modify the invoice to print them. If you choose to customize the printing of the Invoice, you can fetch those notes flagged for the invoice and print them in your print procedure.

Viewing the Invoice

Once a line or an order has invoiced, you can view the invoice summary information from Order Management. From the Sales Order Organizer, select 'Invoices/Credit Memos in Additional Line Information or in Additional Order Information to see invoice data. Data available to be viewed include Invoice Number, Batch Source, invoice date, amount and balance. Select the Invoice Details button to view all the details about the invoice selected in the Receivables Transaction Summary window.

Detail Instruction

Defaulting Rules Setup

The hard coded defaulting rules (Ship to, invoice to and sold to) have been converted to seeded defaulting rules using defaulting framework to provide flexibility in changing the sequence of the rules to be used. Order type is an additional seeded defaulting rule that can be used in defining sequence for defaulting rules of Fulfillment Sets. A defaulting rule can be defined for Fulfillment Sets based on the Transaction type.

Note: Defaulted Set at the header level affects only the new lines that are created and does not have any impact on existing lines.

Order Import

- Fulfillment Set Name column has been added to OE_ACTIONS_INTERFACE table to specify Set Name.
- OE_ACTIONS_INTERFACE table can be used to perform multiple fulfillment set operations on single line.
- Action ADD_FULFILLMENT_SET can be used to add lines into fulfillment set.
- Action REMOVE_FULFILLMENT_SET can be used to remove line from a fulfillment set.
- Combination of Addition and Removal will help in moving line from one fulfillment set to another

Example: In order to add line 1.1 into fulfillment set F1, F2, populate two records into the OM actions interface table.

Note: To support previous functionality, if lines are created during order import, the fulfillment set name specified on the lines interface table is used to add lines to fulfillment set. If the UPDATE operation is

being performed on existing lines in Order lines, the fulfillment set name specified on the lines interface table is ignored and you must populate the fulfillment set name on the actions interface table.

Transaction Types Definition Form There are default Fulfillment Set columns on the Transaction type Form. This is available only for Order Level Transaction types. To locate the Default Fulfillment Set check box, navigate to Setup > Transaction Type > Define > Shipping Tab > Fulfillment Set check box.

Note: A seeded defaulting rule is provided for defaulting this on to the Quote/Sales Order Pad.

Sales Order Form The Default Fulfillment set is on the Quote/Sales Order Form Header, which may be defaulted from transaction type. You can change the value of the Default Fulfillment Set column. If the Set Name is available it is used as the name for the system defined set. If the Set Name is not available then the system generates a set name Starting with "1." If the system defined fulfillment set is fulfilled, then no new lines are added to the system defined set. Changing the set name is allowed only when no line is part of the default set. You cannot change the name if there are one or more lines for that set.

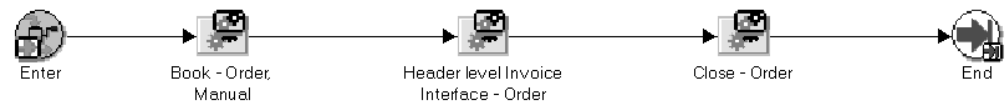
Order Import Corrections Form Specify the Set Fulfillment name on the Actions Form. You can edit the Fulfillment set name.

Tools/Techniques of Feature - API's, Workflow

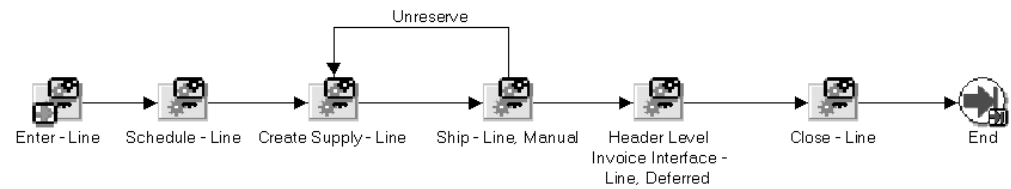
When you set up your order and line workflows for invoicing, choose carefully which line and header workflows you use together to be sure you match the correct Invoicing Activities.

If you intend to use header level Invoicing, be sure to use line level workflows that have coordination points with the header activity. The seeded Oracle Workflows are named to make that easy to do. For example, there is a header workflow called Order Flow – Generic with Header Level Invoice Interface – you would use it with line flows such as Line Flow – Generic with Header Level Invoice Interface.

Order Flow with Header Level Invoicing



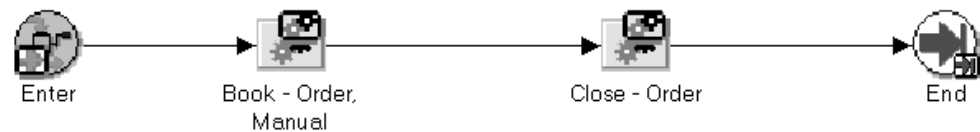
Line Flow with Header Level Invoicing



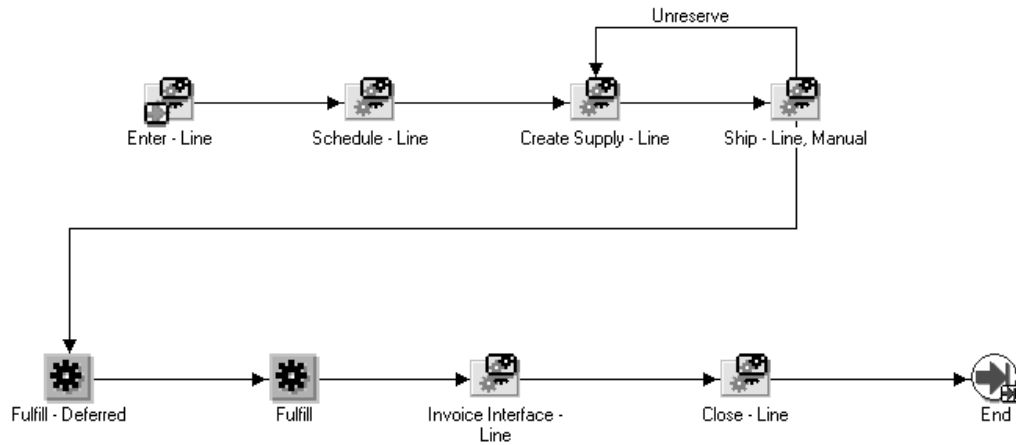
Similarly, if you want to use line level Invoicing, use a header workflow that does not have invoicing, and use line flows that do not wait for coordination with the header regarding Invoicing.

See: *The Oracle Order Management User's Guide*

Order Flow with Line Level Invoicing



Line Flow with Line Level Invoicing



To Implement Invoicing

Profile Options

Profile Options, page 2-14

See: Invoice Processing, *Oracle Order Management User's Guide*.

Item Attributes

The items you expect to invoice must be setup with the Invoiceable and the Invoice Enabled item attributes turned on. You can also specify a GL account which can be used for building the revenue account in autoAccounting on this tab of the item setup form.

Accounting Rules and Invoicing Rules

These are set up in Oracle Receivables and refer to the way revenue is recognized and in which accounting period. There are several seeded rules which suit most applications. In Order Management, you can specify an Accounting and an Invoicing Rule when you define an order type or line type, and also when you define agreements. If you choose an Accounting Rule with a variable duration, you must also enter the number of periods to be used for recognizing revenue. When the Invoice Interface workflow activity runs, the data to pass to Receivables is obtained based on tables documented in the *Oracle Manufacturing APIs and Open Interfaces Manual*, chapter on Interfacing Oracle Order Management with Oracle Receivables and Invoicing.

Receivables Transaction Types

There are various transaction types seeded in Receivables, such as Invoice or Credit Memo. These definitions control how the different AR transactions are processed, and they can specify various GL accounts available for use during autoAccounting. You

must attach a Receivables Transaction Type to your Order Management Order Types and Lines Types when you define them in order to make Autoinvoice import your orders.

Receivables Invoice Sources

Also called Transaction Sources or Batch Sources – these entities enable you to specify a default transaction type assigned to a batch and determine whether Receivables will automatically number your transactions and batches. To use for OM, create at least one of these with a type = automatic. For more information on Invoice Sources and uses, see *Oracle Manufacturing APIs and Open Interfaces Manual*, chapter on Interfacing Oracle Order Management with Oracle Receivables and Invoicing.

Auto-accounting

Controls how the accounting is derived for lines that are processed by the Autoinvoice Import process. See the *Oracle Receivables Implementation Guide* for set up details.

Order Management Transaction Types

When you define your Order Management order types and line types, you can specify various information that affects the Invoicing Activity. Enter this information on the Finance tab of the Define Transaction Type form. Pick a Receivables Transaction Type and Invoice Source. You may choose Accounting and Invoicing Rules, Credit Method for Accounting and Installment.

Invoice Grouping Rules

These rules are setup in Oracle Receivables and let you specify which attributes must be identical on the same invoice. If the chosen attributes are different for different lines, then separate invoices will be generated.

Invoice Line Ordering Rules

These rules are also setup in Receivables and let you specify the sequence of printing lines within an invoice.

Troubleshooting

If your order does not appear in the Sales Order list of values in the Autoinvoice Import request submission window, check the workflow status of your lines and verify that the Invoice Interface activity status is COMPLETE.

If your lines show Invoice Interface activity status of INCOMPLETE, AWAITING INVOICE INTERFACE - ON HOLD, or AWAITING INVOICE INTERFACE - INCOMPLETE DATA, "AWAITING INVOICE INTERFACE" statuses, you can use the Process Messages window to find the messages logged by the Invoice Interface for these lines. Typically the process errors out due to incomplete or missing data on the order

line, data such as batch source name, Receivables transaction type, credit memo transaction type or service start date and end date for service lines.

See: Detailed Order Statuses for Invoicing in *Oracle Order Management User's Guide*

If your invoices are not getting created when you run Autoinvoice Import, be sure to examine the log and report resulting from the concurrent job. It points out the reasons why data is not processed. Usually the problem stems from auto-accounting rules that have or have not been set up. For example, verify that there are General Ledger numbers entered for the revenue accounts for the salespeople on your order. Usually you can correct the setup and rerun Autoinvoice Import. The corrected sales order data will process correctly and your invoices will be created.

Vertex Integration

A new tax engine called Vertex Engine has been incorporated into the Tax application to assist the tax calculation facility. All previous tax calculations and tax-related activities that were done in Order Management are now done in the Tax application using the Vertex Engine.

Some changes to Order Management include profile option changes, new tax fields etc. The Setup > Tax menu options have been changed to include the Location window only.

Tax Calculation setup considerations

In the Transaction Types window, Finance tab, you can specify a Receivables Transaction Type and a Tax Event for tax calculation. You must ensure that in the Receivables Transaction Type window (Receivables > Setup > Transaction Types), the Tax Calculation box is checked, otherwise tax calculation will not take place in the order lines.

Transaction Types (Order Management Super User, Vision Operations (USA))

Operating Unit	Vision Operations	Legal Entity	
Name	Inv-Hdwre-East	Description	Invoice for Hardware Sales East
Class	Invoice	Creation Sign	Positive Sign
Transaction Status	Open	Printing Option	Print
Invoice Type		Credit Memo Type	CM-Hdwre-East
Application Rule Set		Terms	2/10, Net 30
Start Date	01-JAN-1990	End Date	
<input checked="" type="checkbox"/> Open Receivable <input checked="" type="checkbox"/> Post to GL <input checked="" type="checkbox"/> Natural Application Only		<input checked="" type="checkbox"/> Allow Freight <input checked="" type="checkbox"/> Tax Calculation <input type="checkbox"/> Allow Overapplication	

[]

Accounts	Bills Receivable	Deposit	
Receivable Account	01-000-1210-0000-000	Freight Account	01-420-7220-0000-000
Revenue Account	01-420-4110-0000-000	Clearing Account	01-000-1222-0000-000
Unbilled Receivable Acct	01-000-1232-0000-000	Unearned Revenue Acct	01-000-2550-0000-000
Tax Account	01-000-2520-0000-000		
GL Account Description			

Retroactive Billing

This chapter covers the following topics:

- Defining Retroactive Billing
- Setup

Defining Retroactive Billing

Overview

Retroactive Billing allows you to change billing amounts retroactively in the event of a price renegotiation. Retroactive Billing is a common business process in some industries, especially the automotive industry, whereby a customer requests changes to the amounts charged on already invoiced orders and receives credits or additional invoices. Order Management provides a query to identify order lines that have previously been invoiced that may be subject to such retrobilling, a simple approval mechanism, and then the automatic generation of credit memos (and occasionally invoices).

Setup

Restrictions

To set up retroactive billing:

1. Create an unique reason code for credits. This is optional, but recommended because it allows you to query the credit lines and credits in Receivables using the reason code. Navigate to the Oracle Receivables Lookups window. Order Management > Setup > QuickCodes > Receivables.
2. Create a new Credit Memo Reason Code to use for retrobilling.

Oracle Receivables Lookups Retrobilling

Oracle Receivables Lookups

Type:

Meaning:

Application:

Description:

Access Level:

☒ User

☐ Extensible

☐ System

Code	Meaning	Description	Tag	Effective Dates		Enabled
				From	To	
RETROBILLIN	OM Retrobilling	Credit due to price rec	Y	29-JUN-2004		<input checked="" type="checkbox"/>
				29-JUN-2004		<input checked="" type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>

3. Create an order type for retrobill orders. Navigate to the OM Transaction Types window. Order Management > Setup > Transaction Types > Define. Create an order type to use for Retrobilling. Set up the transaction type as follows:
 - Mixed order category
 - No credit check rules specified
 - Bill-only line type for the default order line type
 - Credit-only line type for the default return line type
 - This order type should not have scheduling turned on because these orders should not be visible as demand to the planning systems.

Define Order Management Transaction Types, page 2-95 for more on setting up transaction types.

4. Set the OM Parameters. Navigate to the OM System Parameters values window. Order Management > Setup > System Parameters > Values.
Setting OM System Parameters, page 2-74.
5. Enter the operating unit in the Operating Unit field.
6. Select Retrobilling Parameters from the Category field.

OM System Parameters Window Retrobilling Parameters

Operating Unit **Vision Operations**

Category **Retrobilling Parameters** Show All ☐

Parameter	Value	[]
Default Order Type	Mixed	
Enable Retrobilling	Yes	
Retrobill Reason Code	Credit and Rebill	

Description **Default order type for retrobilling**

OK **Cancel**

- Set the default retrobilling order type to the transaction type you created.
 - Set Enable Retrobilling to Yes.
 - If you created a default reason code, choose it.
7. Save the parameters. You can override the order type and reason code for individual runs of Retrobilling. This step determines the defaults Retrobilling uses. Then enable Retrobilling, set the default order type, and set the default reason code.
 8. Create any necessary folders for the Sales Order window. The fields on the Sales Orders form that support retrobilling are seeded as Hidden. You must create folders to display the retrobilling fields. Create folders with the attributes visible, and then assign those folders to the responsibilities who will perform retrobilling.
 9. Add Retrobilling Organizer to the menu. Add the Retrobilling Organizer menu item to the responsibilities that will do Retrobilling. This menu item is seeded, but is not active for any responsibility until you assign it. If you have installed Oracle Release Management, this menu item is seeded as granted, so you do not need to perform this step.

Payment

This chapter covers the following topics:

- Credit Checking
- Global Credit Checking
- Credit Cards and Oracle Payments
- Features
- Set Up
- Payment Terms
- Lookups
- Oracle Payments Setup
- Reports
- Implementation Considerations
- Examples
- Multiple and Partial Payments
- Profiles
- Setup

Credit Checking

Overview

The ultimate goal of Credit Management processes is to minimize the financial risk that your organization assumes as a result of day-to-day operations. Order Management's credit checking feature is the process by which orders are validated and released against your credit checking business rules. Using credit rules, system parameters, and credit profiles, Order Management credit checking verifies that your customer has a

sufficient credit availability with your organization to allow orders to be processed and shipped in advance of payment.

Order Management enables you to perform credit checks on customer orders or order lines, and automatically hold orders or lines that violate your credit setup. Using Order Management credit checking effectively requires a complete understanding of the functional components as well as a careful consideration of timing and performance factors. For example,

- You can choose to perform credit checking automatically at pre-specified workflow events against real time transactional data or pre-calculated summary exposure amounts. Pre-calculated exposure amounts can be either:
 - Real time transactional data summarized at a specific point in time
 - Exposure amounts imported into Oracle Order Management exposure tables
 - Real time transactional data summarized at a specific point in time plus exposure amounts imported into Oracle Order Management exposure tables
- You can choose to perform credit checking across orders with different currencies within a single organization, specifying the currencies to include when calculating overall exposure amount
- You can choose to perform credit checking at the customer account level, across all operating units within your system
- You can choose to perform credit checking on external transactions utilizing the credit check processes and exposure balances maintained within Oracle Applications

Order Management Credit checking includes:

- Validating orders and lines against existing credit limits to enable continued flow through order and line workflows
- Placing credit holds at either the order or line level, including notifications to appropriate parties of credit holds
- The functionality to either manually release or schedule credit reassessment processes for order or line credit holds
- Approvals for orders that exceed credit limits
- Reporting and querying tools to effectively manage your credit processes and ensure credit holds are processed in a timely manner

Depending upon your business practices, you may not want to perform credit check for all orders, but rather only those orders that could pose a credit risk. Orders that could

be exempted from credit check can be:

- Orders of a given type. For example, you may want to exclude staff sales or internal sales orders from credit checks. Credit checking rules are assigned to order types. While setting up order types, if the credit check rule fields are left blank, this would automatically exclude orders of that type from credit check.
- Orders for a given customer. For example, a manufacturer may wish to exclude all orders from its largest customer from credit check. With Order Management and Oracle Receivables, excluding a specific customer from a credit check can be achieved by disabling the Credit Check flag for this customer in the individual customer profile.
- Orders for a given class of customer. For example, a manufacturer may wish to exclude all orders from internal customers from credit check. You can group all your internal customers into one Customer Profile Class, and then set up credit checking rules to exclude that profile class of customer. With Order Management and Oracle Receivables, while setting up a customer profile class, you can disable the Credit Check flag. Customers that have this customer profile class assigned to them would then be excluded from credit check.
- Orders for a given customer billing address. For example, a manufacturer may wish to exclude orders that will be invoiced to one of its' largest customer corporate headquarters from the credit check process. With Order Management and Oracle Receivables, the individual bill-to sites can have a different transaction profile from the parent customer. While setting up the bill-to site profile, enabling the Credit Check flag determines whether orders billed to that address will be credit checked.
- Order lines with a given payment term. For example, order lines with a cash on delivery payment term can be excluded from the credit checking process. With Order Management and Oracle Receivables, the payment terms also have a Credit Check flag. Disabling this flag will automatically exclude order lines with that payment term from the credit evaluation. Only those lines that have payment terms with credit checking turned on are compared against the credit limits.
- Order lines that are paid via Commitments. These lines are in effect prepaid, so you do not need to credit check them.
- Orders with a payment type = Credit Card. These orders will have credit card authorization in place of credit checking.

When using Oracle Order Management to define your credit management policies, you should familiarize yourself with the following Oracle credit check concepts:

- Credit Profile
- Credit Check Rules

- Credit Usage Rules

Credit Checking Components

The Credit Check process can be performed for orders or order lines, and the determination on whether credit checking is performed is based upon all of the following:

- The credit check rule definition and the order type of which the definition is attached
- Order or line payment terms
- Enabled credit profiles

Credit Checking will only occur for an order or line when all three levels enable credit checking. If one level disregards credit checking, credit checking does not occur for the order or line.

Credit Exposure

When you perform credit checking in Order Management, you determine what type of exposure to use when determining credit worthiness. Order Management enables you to perform credit checking against real time transactional data or current exposure amounts stored in exposure summary tables.

- Real time transactional data is all related transactions which are summarized at the point credit checking is invoked.
- Current (pre-calculated) exposure amounts can be either:
 - Real time transactional data summarized at a specific point in time *or*
 - Exposure amounts imported using the Credit Exposure Import concurrent program.

When defining your Credit Check rules, you specify the type of exposure to utilize when performing credit checking.

Credit Check Rule Definition

Credit Checking Rules within Order Management enable you to determine credit worthiness of orders when performing credit checking, and provide you with various options in determining your customer's credit exposure.

Credit Check Rules are attached to Order Management Transaction Types. Within the Transaction Type window, credit check rules are assigned to pre-specified events that trigger the credit checking process. For example, you might want to perform a high-level credit check before booking, but you may want to apply more specific

controls before shipping the product to your customer.

In Order Management, separate credit checking rules can be assigned for use at the time of booking, pick release and purchase release (for drop shipments), packing, or shipping within corresponding order or line workflow processes. You can also choose to perform credit checking at multiple points within an order or line processes by selecting credit check rules for a combination of booking, pick release and purchase release (from drop shipments), packing, or shipping.

Order Management Credit Check Rules enable and control:

- Credit check level
- Credit check hold level
- Currency conversion type used during exposure calculations
- The exposure method used for validating credit checking
- Whether to include open receivables balances, uninvoiced order balances, freight and special charges, or taxes
- Hold management procedures
- Notifications of credit holds to appropriate personnel

See: Credit Cards and iPayment, page 17-13

Credit Checking Rule Level

The Credit Check process can be performed at sales order header or sales order line level. Additionally, the payment terms used for orders and order lines must be enabled for credit checking to occur. See: Payment Terms, page 17-29

1. **Order Header Level:** Order Level credit check uses exclusively header level information ignoring different bill-to sites detailed at line level. Order level credit check uses the credit profile attached to the customer Bill-to site defined at order (header) level. Credit checking will use order totals and will evaluate credit exposure against the credit profile attached at header level, and holds are always applied at header level.

Note: Sales Order header level credit checking enables backward compatibility with previous credit check versions.

2. **Order Line Level:** Line level credit check uses data at the sales order line level. If you have sales order lines that are attached to different Bill To sites and if you want to use the specific credit profiles attached to those Bill To Sites, you should use Sales Order Lines level credit check.

Additionally, you could use line level credit check when you have defined customer relationships in your system and you actively use them in Order Management. In this situation, you are able to create a sales order whose lines could be attached to different bill-to sites owned by different customers.

Credit Checking Rule Hold Level

You can choose to place credit holds for orders or lines that fail credit check validations at either the sales order or sales order line if you use order line level credit checking. Credit checking holds are automatically placed based upon your credit rule definition, and you can automatically release order or order line credit holds when a customer's credit exposure has been reduced to a point that enables credit checking validation to pass successfully. You automatically release credit holds by scheduling the Credit Check Processor concurrent program to run at specific intervals.

Credit Checking Rule Override Manual Release (check box)

In previous releases of Oracle Order Management, you had the ability to manually release order or line credit check holds that were placed by credit check process. However, no additional credit checking of manually released credit holds occurred.

You can now specify whether or not you wish to enable additional credit checking if an order or line credit check hold was released manually. The Override Manual Release check box, used in conjunction with Days to Honor Manual Release field, enables you to define the duration (number of days) you will forego additional credit checking if an order or line credit check hold is released manually.

Your Order Management Transactions Type definitions will control whether or not additional credit check processing can occur for manually released holds (credit check rules entered for booking, pick release and purchase release (for drop shipments), packing, or shipping within your transaction type definitions).

Manually released holds are honored only if the Credit Check Rule being used is Picking, Packing or Shipping, and the credit check was not triggered due to a change on the order itself, such as change in item quantity, or price.

Credit Checking Rule Days to Honor Manual Release

This field, in conjunction with the Override Manual Release check box, enables you to define the duration (number of days) manually released holds will be honored and not overridden by additional credit checking processes.

For example, suppose you have defined a credit check rule in which you have enabled the Override Manual Release check box, with a value of 15 within the Days to Honor Manual Release field. Assume that this credit check rule is assigned to the transaction type as a credit check rule for booking and shipping. If you manually release an order or line from credit check hold after booking, and if you ship the order or order line within 15 days, Order Management will not enable credit checking to occur again. However, if you ship after Day 15, then Order Management will enable the credit

checking process to be invoked again.

Credit Checking Rule Conversion Type

Conversion types for credit check rules enable you to model a fixed exchange rate between currencies or use an average exchange rate. When performing credit checking, the credit limit currency does not necessarily have to be the same as the functional currency. Conversion types are limited to the values you define within the Oracle General Ledger Conversion Rate Types window.

Credit Checking Rule Exposure

You can choose how you wish to validate credit worthiness during credit checking by determining the exposure method used.

Previous versions of credit checking calculated customer exposure accessing underlying transactional tables. When a credit check request was executed, underlying transaction tables were summed to generate customer balance information.

In order to improve performance, Oracle Order Management has incorporated an additional option, the use of pre-calculated exposure. Using this option, credit checking will validate exposure against balance information stored in a summary table. The summary table is updated as often as your business practices require, and updates to the table are performed by submitting a concurrent program. This program accesses both Oracle Receivables and Order Management transactional tables, and should be scheduled to run periodically, based on your specific business needs.

Credit Checking Rule Values to Include Within Exposure Calculation

Your credit checking rule definition can include or exclude the following credit related details when calculating credit exposure:

- Open receivables balances
- Uninvoiced order balances
- Freight and special charges
- Taxes
- Payments at risk

Credit Checking Rule Notifications

You can choose to send notifications whenever a sales order or order lines fails credit check. The notification is sent to the person who created the order.

Credit Checking Limits Hierarchy

Site Level

If credit check is not enabled, then no credit checking takes place. If credit checking is enabled and limits are available, then credit check is done at the site level. If credit checking is enabled and limits are Null, Customer level is accessed.

Customer Level

If credit check is not enabled, then no credit checking takes place. If credit checking is enabled and limits are available, then credit check is done at the customer level. If credit checking is enabled and limits are Null, Party level is accessed.

If Credit Management is installed and pre-calculated exposure is checked, then party limits are used.

Party Level

If credit check is not enabled, then no credit checking takes place. If credit checking is enabled and limits are available, then credit check is done at the Parent Party level. If credit checking is enabled and limits are Null, Operating Unit Default is accessed. If the party hierarchy is set up using Trading Community Architecture, then credit checking will look into this hierarchy, to verify if a Parent Party is available. If so, the limits of the parent are checked and if it is null, Operating Unit Default level is checked.

Operating Unit Default Level

If credit checking is enabled and limits are available, then credit check is done at the Operating Unit Default level. If the credit limits are null, then the Maximum Credit Limit is used.

Order Management Order Transaction Type

Order Management Order Transaction Types enable you to also control when credit checking occurs and the credit check rule to be utilized when calculating credit exposure (outstanding credit balance) by assigning credit check rules to Order Management Transaction Types.

When you assign a credit check rule to a transaction type within the Order Management Transaction Types window, you enable credit checking for all orders or order lines which use the order type. Select a credit check rule for an order type by selecting a credit check rule within the Booking, Pick Release and Purchase Release (for drop shipments), Packing, or Shipping fields of the Credit Check Rule region.

You can assign the same credit check rule to a single function (field), multiple functions, or all functions, or use a different credit check rule for each function, depending upon your business needs.

Payment Terms

Payment Terms specify the due date and discount date for payment of an invoice.

Payment terms also enable you to choose whether or not the payment term will be used for controlling credit checking. Each payment term can be enabled for credit checking by selecting the Credit Check box for the payment term so you never unnecessarily perform credit checking.

All orders, except orders with a Payment Type of Credit Card are included when exposure calculations are performed, regardless of their payment terms. If an order is to be paid by credit card and has already been approved (approval date not null) it will never be included in exposure.

Credit Profiles

Credit profiles define the maximum financial risk you are willing to withstand on your regular operations. The Credit Check check box in the credit region of the Standard Customer window (for the customer master record) must be enabled in order to perform credit check. You can define the credit profile information at the following levels:

- **Customer and Customer Site:** This profile defines your credit policies for individual customers or customer sites. You can accept the default credit policies from a Customer Profile Class, or you can customize credit limits to fit the particular customer.

You can implement credit policy changes by modifying a Profile Class and cascading the changes to individual Customer Profiles. Check current limitations for multi-currency credit check set up.

- **Organization:** This type of Credit Profile is used to define an organization's (operating unit) credit policy for credit control and credit checking. It is used as a default when customer/customer site credit profile is missing.

Organization Default provides a higher level in the customer profile hierarchy (customer site - customer - organization default), and the fulfilled credit profile at operating unit level enforces credit checking for any customer which does not have credit limits defined at the customer or site level.

- **Item Category:** Item Category Credit Profiles enables you to define credit information by Order Management Item Category.

Item Category credit profile is completely independent from customer credit profiles. Item-category credit check will place a credit hold for transaction amounts over pre-defined category credit limits.

Item Category credit profiles can be used to model credit limits such as service line for insurance coverage which can prevent you from shipping materials that exceed a pre-defined monetary limit.

There is an embedded hierarchy provided by credit checking routines for establishing credit information between the following entities:

- Customer Site
- Customer
- Organization Default

When customer site and customer credit profiles do not exist, the Organization Default credit profile is used, if it exists.

Integration between Credit Checking and Credit Management

Credit Management is a Receivables functionality and when integrated with Credit Checking, enables you to perform credit checks at party level or at any level of a Credit Management hierarchy. You can also release holds based on implemented recommendations generated in Credit Management.

Some of the important integration features between Credit Checking and Credit Management include:

- You can define a credit hierarchy of parties, party relationships, hierarchy levels, accounts, and account sites. Typically, the party object and party subject in a credit relationship represent a parent and child, or HQ and division hierarchy. For each entity in the hierarchy, you can view credit information, such as credit hold status, credit limits by currency, and credit review cycle. Please note that all setup is performed through Credit Management (credit profiles at party level can only be done in Credit Management).
- In order to perform credit check at party level or at any level of a hierarchy, the credit check rule must use pre-calculated exposure.
- When credit profile is not defined at customer site level, or customer account level, then credit checking will go up to the party level and use the credit profile defined at that level. Exposure is summarized for all the customer accounts associated to that party.
- Whenever a sales order is placed on hold because the overall credit limit is exceeded, a Credit Request application is generated in Credit Management. Recommendations generated in Credit Management (i.e. release credit check hold) are implemented in Order Management in the background, if the sales order amount has not increased.
- When using Credit Management, credit check holds trigger a credit review in Credit Management. To apply a hold release or not is decided in Credit Management and implemented in Order Management.
- Different Exposure Sources can be configured in OM as part of the OE_EXPOSURE_INTERFACE program. The Initialize Credit Summaries table program do not delete imported exposure. There is a purge program that allows

you to delete by exposure source.

- The imported exposure is maintained as one single amount group by customer account, bill-to site, and currency. Currently, it is not group by date. So, when enabled in the credit check rule, the imported exposure amount is always included in the overall exposure even if the shipping horizon days are specified. If you want to consider shipping horizon for the imported exposure, you will need to consider the shipping horizon in your exposure calculation before importing it. The import program allows import of exposure by overwriting any existing imported exposure amount or updating the existing exposure amount.

Global Credit Checking

Oracle Order Management enables you to perform global (across multiple operating units) credit checking. Global credit checking ensures that all organizational data, irrespective of the operating unit, is considered during the credit checking process. You enable global exposure credit checking if you select the Global Exposure check box when defining Credit Usage Rules.

Global Credit checking is currently only enabled at the following levels in the credit checking hierarchy:

1. Customer level credit checking: Global credit checking will use the overall credit limit defined at the customer level for all operating units.
2. Organization (org) Default level credit checking: Global credit checking will use the overall credit limit defined at the organizational level for all operating units within the organization.

The credit check engine will identify the overall limit (which level within hierarchy) to utilize for credit checking, calculate the credit exposure for all the operating units, and then validate the calculated exposure against the overall credit limit selected.

Multi-currency Credit Check

You can perform multiple currency credit checking by sharing credit limits across currencies you specify.

With Single currency credit check you must define a credit limit profile in each currency if you want to control your customer exposure in that currency. In other words, every currency is treated individually for credit check purposes.

With Multi-currency credit checking, you need to define just one credit profile (i.e. in US dollars) and share it among the other currencies.

Multi-currency Terminology

Usage Rule Sets: Usage rule sets define the set of currencies that are involved in a

specific credit check process. A usage rule set specifies which transactions (based upon transaction currency) qualify for use with a credit limit.

Usage Rule Sets can be assigned to a customer profile class, or credit profiles: customer, customer site, item category, or organization. If you do not assign a credit usage rule set to your credit profiles, then the credit checking is performed as Single currency credit check.

Support for Credit Checking External Transactions against exposure balances maintained within Oracle Order Management (OE_EXTERNAL_CREDIT_PUB)

With this release Order Management enables you to perform credit checking of external amounts utilizing the Oracle credit check process and exposure balances maintained within Order Management. The API essentially perform the same credit checking process as the Order Management credit check engine except for the differences listed in the table below:

Credit Checking

OM Credit Check Engine	Check External Credit API
Validate if the item categories flag is enabled for the credit check rule. If, enabled, perform item category credit check for each item category of the sales order.	Item category limits will not be checked. The API will give an error if the credit check rule has the item categories flag enabled.
Check that the Credit Check flag is specified for the customer profile and payment term. If either of these items are not enabled, do not perform credit check for the sales order.	Ignore the Credit Check flag setting at the Payment term. Only the Credit Check flag specified at the default/customer/site credit profile is validated to see if credit checking will be performed. For anything else, it is assumed that credit check is needed when the API is called. It is up to the calling program to determine credit check should be done or not.
The credit check level (order / line) selected for the credit check rule setup determines what level the credit engine will perform.	The API will only allow credit check rules that utilize order level credit checking; the API does not support line level credit checking and will error out if a line level credit checking rule is provided.

OM Credit Check Engine	Check External Credit API
If the Send Holds Notification check box is enabled for the credit check rule, the credit check engine will send a workflow notification to the creator of the sales order when a credit hold is placed on the sales order.	The API will not send any notifications. It will ignore the Send Hold Notifications flag set at the credit check rule.
When an order fails credit check, it is placed on credit check hold. The hold contains the reason for the failure.	When an order fails credit check, a reason is returned to the calling program in addition to the Failure result. It is up to the calling program to take appropriate action, such as placing the sales order on credit check hold.

Given a credit check rule, a bill-to site, and the transaction amount and currency, the API will credit check the amount against the credit limits and exposure within Oracle Applications and return the result of the credit check. The calling routine then can perform the appropriate action depending on the result of the check.

You must create a custom program that can execute PL/SQL procedures to utilize the Check External Credit API. For each sales order in the external system, a call will need to be made to the Check External Credit API to credit check against the exposure data stored inside Oracle Order Management. Prior to executing the call, ensure the following:

- Group all the lines for the external transaction into a single amount and single currency, along with the credit check rule to utilize
- Determine appropriate customer (Bill To site) within Oracle Applications to associated your external transactions with

The API will return the result of the credit check.

Depending on the result of the check, the custom program can take the appropriate action for the sales order such as place a credit hold on it.

Credit Cards and Oracle Payments

Oracle Payments (formerly known as Oracle iPayment) now has a number of enhancements in the E-Business Suite funds capture process in the current release. One of the most important enhancements is the centralization and encryption of credit card data and bank account data in Oracle Applications. Information about credit cards, pinless debit cards and bank accounts is encrypted and stored in the centralized Payments model. Calling applications (like Order Management and iStore) now simply integrate with the Payments model and do not store any payment-related data locally.

In addition to these enhancements, there is support for capturing and validating the Credit Card Security Code for credit card transactions. The security code is however, not stored anywhere in the database.

Features

Oracle Order Management enables you to enter one credit card that can be used as invoice payment on the order header and one credit card for the order line as invoice payment. You can enter multiple credit cards as prepayment, however prepayment can be used only at the order header level.

Credit card and bank account information are now stored in an encrypted format in Oracle Payments. Furthermore this information is masked as well for display purposes. The display / masking of credit card and bank account number is controlled by Oracle Payments. However it is user-definable. The possible masking options that a user can select are:

- Display last N digits (N – user defined as per requirement)
- Display first N digits (N – same as above)
- Display all digits (no masking)
- Mask all digits (complete masking)

For more information on this and other setup related to Oracle Payments, please refer to *Oracle Payments Implementation Guide*.

Sales Orders - Computer Service and Rentals

Order Information Line Items

ship test

Main Others

Payment Terms	Due 15th	Sales Channel	
Warehouse	M1	Shipping Method	DHL
Line Set		Freight Terms	Prepaid
FOB	Destination	Shipment Priority	
Shipping Instructions		Packing Instructions	
Tax Handling	Standard	Tax Exempt Number	
Exempt Reason		Payment Type	Credit Card
Amount		Check Number	
Card Brand	Diners Club	Credit Card Num	XXXXXXXXXXXXXX
Card Holder	Richard	Card Expiration Date	12-2009
Approval Code		Prepaid Amount	
Order Source		Order Source Reference	

Actions Related Items Configurator Availability Book Order

Changes to existing profile options/system parameters

OM: Credit Card Privileges: This profile option is used for controlling the entry of new credit card details, updating existing details, and allowing for manual authorization. The valid values for this profile option are Yes and No. Please note that this profile option was additionally controlling the masking or display of credit card number in earlier releases; in the current release, this profile option is used by Oracle Payments.

Obsoleted profile options:

- OM: Risk Factor Threshold for Electronic Payments
- OM: Estimated Authorization Validity Period
- OM: Number of Days to Backdate Bank Account Creation
- OM: Payment Method for Credit Card Transactions
- OM: Process Payment Immediately at Booking?

System Parameter

The system parameter Enable Multiple Payments was used to enable multiple payments for the same order. In the current release the system parameter is always set to on, i.e. multiple payments are always enabled. This means that the users can always invoke the payment windows from the header or the lines and enter payment information.

Payment Types

The Order Management seeded payment types are in use and they now map to the Oracle Payments' payments methods. In the current release you can disable a seeded payment method. Since Order Management uses its own lookup codes for payment types, only those payment types that map to active payment methods are displayed.

Credit Card Billing Address

Oracle Payments enables you to enter a card statement billing address and this can be set as mandatory. However Order Management passes the bill to address as the statement billing address during credit card creation.

Actions on sales orders that affect Payment information

- The field label Credit Card Type used in the earlier release of the product would now be called as Card Brand.
- When a sales order or line gets cancelled or deleted, the payment information would also get deleted in the order header and the payments windows of the header or lines.
- The copy functionality ensures that payment information is also copied to new orders/returns. In the current release, copying of payment attributes from a source order to a destination order would be supported only when the security code is not set as mandatory. If the security code was set as mandatory in Oracle Payments, when trying to copy an order to a new order, you would have to uncheck the Payments box in the header or line before copying. If you go ahead with the copy, an appropriate error message would be displayed, asking the user to use copy appropriately.
- In the Order Organizer, you can query for sales orders by credit card number. However, you need to enter the complete credit card number along with other criteria like bill to customer, bill to site, in order to optimize the search. Wild card searches with the credit card number are not supported. The search results would display the credit card number as per the display control setup in Payments Central Security. For more information on this, please refer to the *Oracle Payments Implementation Manual*.
- When you change the bill to address on the order header or line, the information in the credit card related fields would be deleted from the Payments table. The information would no longer be shown in the order header or line and you would be required to enter new card information. This also applies to the Header Payments and Line Payments windows; ACH and Direct Debit types are also affected in the same way as they are dependant on bill to address.
- In the credit card LOV, all credit card assignments belonging to a customer account

are displayed. The LOV now displays additional fields like card holder name, expiration date, bill to org etc. The LOV is displayed in the figure below:

Credit Card Number	Card Brand	Card Holder	Card Expiration Date
XXXXXXXXXXXXXXXXXXXX	Visa	Rick	31-DEC-2048
XXXXXXXXXXXXXXXXXXXX	Visa	NEO	31-DEC-2020
XXXXXXXXXXXXXXXXXXXX	Visa	Rick	31-DEC-2048
5555555555554444	MasterCard	LARSEN	31-DEC-2020
XXXXXXXXXXXXXXXXXXXX	Diners Club	Richard	31-DEC-2009
XXXXXXXXXXXXXXXXXXXX39424	Discover	Fred	31-JAN-2040

Card Brand: **Diners Club**
Card Holder: **Richard**
Approval Code:
Order Source:
Credit Card Num: **XXXXXXXXXXXX**
Card Expiration Date: **12-2009**
Prepaid Amount:
Order Source Reference:

Note: There is no multi-org impact on credit card information as this information is not org-specific.

Credit Card Security Code

Credit card companies have incorporated new methods of securing transactions in order to ensure safety and authenticity during a transaction. One such precaution is to introduce a security code, a 3 or 4 digit code. The customer is required to verify this code to the customer service representative, in order to validate that he has the card in front of him, thus preventing fraud.

The security code, called CVV2 (by Visa) or CVC2 (by MasterCard) or CID (by American Express) is used to authenticate the cardholder and progress the transaction to authorization. During authorization, the credit card company reserves a credit amount from a customer's account for an ongoing transaction. The account is not actually charged – that is carried out during the capture phase of the credit card transaction processing cycle. The credit card company issues an authorization code, which the system uses in the capture phase. Additionally, risk management is also carried out after authorization. Risk Management allows you to define any number of risk factors to verify the identity of your customers, assess their credit rating, and manage risk in a secure online environment.

Credit card transactions are validated and authorized by Oracle Payments. The

Payments server now stores all credit card related information and Oracle Order Management uses the Process Order API to call the Payments application for credit card related transactions.

Online transactions are handled by iStore and there are 2 ways in which iStore handles the credit card transactions. Depending on the profile option IBE: Perform Payment Authorization in iStore, iStore can now either call the Payments Authorization directly or call Order Capture (ASO) and then Order Management, which in turn calls Payment Authorization. The details of the two scenarios are given below:

1. When the profile option IBE: Perform Payment Authorization in iStore is set to Yes, iStore calls Payment Authorization to authorize the card. If the authorization succeeds, then iStore calls the Process Order API to create an order in Order Management. If the authorization fails, then iStore does not call the API to create an order. Please note that when iStore calls Payments directly, risk management is not carried out.
2. When the profile option IBE: Perform Payment Authorization in iStore is set to No, then Order Management calls Payment Authorization. Now depending on the value of the Order Capture profile option ASO: Credit Card Authorization, authorization/risk management will be carried out. If authorization/risk management succeeds, then the iStore order can progress. If authorization/risk management fails, then the order will be put on hold. When ASO: Credit Card Authorization is set to Yes, either of the following flows take place:
 - When the profile option ASO: Enable Risk Management is set to N, ASO: default order status = 'Entered' and IBE: Perform Payment Authorization in iStore = 'No', the order will be created in entered mode and authorization will be performed at order creation time without risk management.
 - When the profile option ASO: Enable Risk Mgmt is set to 'Y', ASO: default order status = 'Entered' and IBE: Perform Payment Authorization in iStore = 'No', the order will be created in entered mode and authorization will be performed during order creation. In this scenario, risk management is also carried out during order creation.

In order to ensure both the safety and success of the transaction, the credit card transaction needs to be authorized and also risk management needs to be carried out. There are various scenarios in which credit card security code is checked and authorization is carried out. Given below are some common scenarios:

In iStore, customers enter credit card information along with the security code. iStore either calls Payments directly or via Order Capture / Order Management depending on the value of the profile option IBE: Perform Payment Authorization in iStore. In either case, Oracle Payments API is called and it creates a record in the Payments table and generates a unique id for the credit card. iStore passes this unique id to Order Management with other data for order creation. Order Management passes this unique id to Payments to identify the card and perform credit card authorization.

In Order Management, the Sales Orders, Quick Sales Orders and Order Import Corrections windows have a new field – Security Code - in the database. This field is also visible in the Payments window. The security code value is available only temporarily, that too only till the time authorization is done. Once authorization is done, the security code value gets nulled out and is not stored anywhere. Credit card authorization may fail on account of multiple reasons and one possible reason is an invalid security code. However, please note that there are some cornerstone cases where credit card authorization can still succeed even with an invalid security code. It depends on the payment system in use. Please refer to *Oracle Payments Implementation Manual* for more information on these scenarios.

The following Sales Orders window, Orde Header, Others tab shows the new Security Code field. This is a field that can be displayed using the folder functionality. The security code field is also displayed in the in the Payment windows invoked from Order Information Sub-tab and Line Items sub-tab under Orders tab of Contact Center window in addition to its availability in Order Information sub-tab under the Orders tab as shown above.

Order Information		Line Items	
Default			
Main Others			
Payment Terms	30 Net	Sales Channel	
Warehouse	LG2	Order Date Type	Ship
Line Set		Shipping Method	Internal
FOB	Destination	Shipment Priority	
Shipping Instructions		Packing Instructions	
Tax Handling	Standard	Tax Exempt Number	
Exempt Reason		Payment Type	Credit Card
Amount		Security Code	
Credit Card Type		Credit Card Num	
Card Holder		Card Expiration Date	
Approval Code		Prepaid Amount	
Order Source		Order Source Reference	

Actions Related Items Configurator Availability Book Order

If you want to run risk management during credit card authorization as an option, you need to populate request type of the action request table p_Action_Request_tbl with G_VERIFY_PAYMENT, the parameter param1 associated this request type will be used to indicate whether or not to turn on or off the risk management. This should be done when calling Process Order API to create or book an order with credit card authorization.

In case there is a credit card authorization failure, the order will be put on hold. Also if the card fails risk validation, Order Management would put the order on hold.

Scenarios	Message Text	Internal Name	Existing / New
Credit Card Authorization success	Payment of &AMOUNT has been authorized	ONT_PAYMENT_ATH_SUCCESS	Existing
Credit Card Authorization failure on account of payment authorization and the parameter value is set to hold the order on failure	Credit card authorization for this order has failed. The order has been placed on Credit Card Authorization Failure Hold.	ONT_CC_AUTH_HOLD_APPLIED	New
Credit card authorization success but security code related errors	Credit card authorization for this order has succeeded but with security code warning. Order has been put on Hold.	ONT_CC_SECURITY_CODE_FAILED	New
Risk management evaluation failure and the parameter is set to hold the order on failure.	Risk management evaluation for this order has failed due to a high risk credit card. The order has been placed on Credit Card High Risk Hold.	ONT_CC_RISK_HOLD_APPLIED	New

Scenarios	Message Text	Internal Name	Existing / New
Credit Card Attributes validations	Credit Card Security Code is required for credit card payment	OE_CC_SECURITY_CODE_REQD	New
	Credit Card Expiration Date is required for Credit Card Payment Authorization.	OE_VPM_CC_EXP_DT_REQUIRED	Existing messages
	Credit Card Holder Name is required for Credit Card Payment Authorization.	OE_VPM_CC_HOLD_ER_REQUIRED	
	Credit Card Number is required for Credit Card Payment Authorization.	OE_VPM_INV_TO_REQUIRED	
	Invoice To is required for Credit Card Payment Processing.	OE_VPM_CC_ACCT_NOT_SET	
	Unable to set up a Credit Card Bank Account for the Customer.		

The credit card information can also be viewed in the Contact Center window (in the Orders tab) as shown below:

Search By Search View Details For **Customer : Computer Service and Re...**

Caller Information

First Last Type **Organization**

Number Relation Cust Name **Computer Service ai** Cust Number **1006**

Phone E-mail Acct Num **1006** Cust URL **www.compsew.co**

Address Operating Unit **Vision Operations** Cust E-mail

Postal Country Cust Address **USA.301 Summit Hill Drive...CHATTANOOGA.Hami**

Time Zone Time Cust Postal **37401** Cust Country **United States**

Dashboard Interactions Notes Tasks Service Request Contracts Install Base Invoices **Orders** Collateral Addresses Contact Points

Order List **Order Information** Line Items Price Summary

test

Order Type Order Only	Ship To Location Chattanooga (OPS)	Bill To Location Chattanooga (OPS)
Order Number 63598	301 Summit Hill Drive	301 Summit Hill Drive
Customer Number 1006	CHATTANOOGA, TN,	CHATTANOOGA, TN,
Request Date 08-JAN-2006 23:22:18	Price List Corporate	Status Entered
Salesperson Sell, Thomas	Shipping Method DHL	Currency USD
Warehouse M1	Security Code <input type="text"/>	Subtotal 1,800.00
Shipping Instructions <input type="text"/>	Payment Type Credit Card	Tax 0.00
Payment Terms 2/10, Net 30	Credit Card Num XXXXXXXXXXXX	Charges 0.00
Card Brand Diners Club	Card Expiration Date 12-2009	Total 1,800.00
Card Holder Richard		

Action

Authorization Flow

The following is an Oracle Payments authorization flow example:

- During Order Header entry, choose a payment TYPE of Credit Card.
- The customer's credit card number, expiration date and cardholder's name default in from Receivables Customer information. In Release 12, each credit card account for the customer has a priority, the highest priority is indicated by the lowest number (among the account level and account site level) and is defaulted to Order Management. Also, you cannot override the Primary flag as it does not exist at all in this release, instead, you can change the priority.
- If the security code is set as mandatory in the Payments Central Security Setup, enter the security code. Enter the rest of the order information, including all the line information and book the order.
- Order Management calls the Oracle Payments server to obtain authorization for the full amount of the order, including tax and freight and other charges, less commitments.
- Oracle Payments returns an approval or a denial, along with a risk code. The authorization code is recorded on the order header, and the order proceeds in its workflow. If authorization is denied or an unacceptably high risk factor is returned, Order Management places the order on hold until the problem is resolved.

- The order is picked and shipped, and during Invoice Interface, the credit card information is passed to Receivables. AR handles the funds capture and all accounting transactions.
- In Oracle Payments, you can set up the risk score threshold, that determines which transactions are risky transactions.

Prepaid Flow

In Oracle Order Management, you can collect funds for credit card orders at the time of booking, rather than having to wait for Invoicing to occur. The following is an Oracle Payments authorization prepaid flow example:

- Enter an order and open the Payments window through Actions.
- Check the prepay flag and enter the required card information. Save the payment information and return to the order header.
- Enter the rest of the order information, including all the line information and book the order.
- The customer's credit card number, expiration date and cardholder's name default in from Receivables Customer Information. You can override the credit card and select from other credit cards that have been set up in Customer Bank Accounts for this customer, or enter a new credit card number along with any other required information. You also need to check the Prepay check box, and enter percent or amount of the prepayment amount.
- Oracle Order Management calls the Receivables Receipt API to capture funds from the credit card and create a receipt for those funds. The amount captured is the amount you entered.
- Receivables returns a payment set ID that references the receipt that was created. If any error occurs in this processing, Oracle Order Management places the order on hold until the problem can be resolved.
- At any time during the processing of the order, any Receipts in Receivables tied to this order can be viewed from Order Management by using the View Receipts button from the Order Header Payment window. This action opens the Receivables Receipt window.
- The order is fulfilled and the credit card information and the payment set ID are passed to Receivables during Invoice Interface. AR matches the receipt with the invoice and performs all accounting transactions.

Types of Authorizations

There are three types of authorizations that can be done from Order Management.

1. A credit card can be authorized automatically, as described above. For this to occur, the order type must be setup must be set up in such a way that there is at least one credit check rule assigned to either Ordering, Picking/Purchase Release, Packing or Shipping event in the Order Type setup window. The authorization will occur automatically during the Payment Verification processing.
2. A credit card can also be authorized on-line, by choosing the Process Payment order action from the Action button on the Sales Order window. If this is done, authorization is attempted using the Oracle Payments interface, and the results are processed the same as for automatic authorization.
3. Problems, such as those with hardware, software, servers or networks, may require an authorization to be obtained manually. This might be necessary because of hardware or software problems with the link to the Oracle Payments server or out to the credit card networks. Some back-end processors return an error instructing the user to call for authorization. In any event, an authorization might be obtained via a telephone call, or a dial-up device. In that case, the authorization code can be keyed on the Order Header, and the order will be considered to be authorized. This Voice Authorization results in a call to Oracle Payments to record the authorization, so that AR can later capture funds against it.

Voice Authorization

Voice authorization is supported both in Payments' UIs and APIs. There are three fields and their corresponding parameters in the APIs:

1. Voice Authorization (Yes/No)
2. Voice Authorization Date (date field)
3. Voice Authorization Code (free text field)

If a voice authorization is obtained instead of an online electronic one, then the user should set the first field to Yes and enter the other two pieces of data. Oracle Payments then passes that information through when settlement is done.

Manual authorization refers to those approval codes that were obtained outside of the payment system. In Order Management, the manually obtained code is checked to confirm if it is still within the validity period; if so, it is marked as a Voice authorization and sent to Oracle Payments. If it is beyond the validity period, then it is re-authorized as the regular authorization.

Timing of Authorization

The authorization call to Oracle Payments takes place at Booking, if there is a Booking Credit Check Rule set up for the order type. The second authorization takes places in

one of the following ways:

- If the credit check rule is set at Booking and Pick Release Only, the Second Authorization takes place at Pick Release if the first authorization has expired.
- If the credit check rule is set at Booking and Shipping Only, the Second Authorization takes place at Ship Confirm if the first authorization has expired. In this Case, there is NO Authorization during Pick Release because no Credit Check Rule is set at Pick Release.

Authorization Results

The authorization call to Oracle Payments returns a success or failure, as well as a risk code. The authorization code can be viewed by users with appropriate security. If an authorization fails, the order is placed on Credit Card Authorization Failure hold. If the authorization was done on-line or at Booking, you will be notified of the failure by a message. The message will indicate the type of error encountered, such as communication error, invalid credit card . If there was a communications error, the action can be retried using the Action button. An invalid credit card error can be remedied by changing the credit card information and then re-authorizing using the Action button.

Returns and Mixed Orders

In Order Management, you can use a credit card as a Payment Type on returns and also on mixed orders – that is, orders containing both outbound and return lines. In the case of mixed orders, the amount authorized is the total amount of the outbound order lines, not the net of outbound and inbound. For pure return orders, a credit card number can be recorded, but no processing is done with it in Order Management. The credit card information is passed to Receivables for return lines. The payment type on the return in Order Management is ignored in Receivables, and if the order was originally paid with a credit card, then that same card will be refunded for credit. If you set up your system to automatically manage receipts when importing credits, then the automated receipt handling process occurs as follows:

- AutoInvoice reviews the transaction batch source for each submission, to determine if automated receipt handling is enabled.
- If enabled, then AutoInvoice evaluates each credit memo and its associated invoice to determine eligibility for automatic receipt handling. To be eligible, the paid invoice's transaction type must be set to allow natural application only. Additionally, the transaction must not be in doubt.
- If eligible, then AutoInvoice unapplies the paid invoice (original transaction) from the receipt to be credited.
- AutoInvoice automatically creates the credit memo in the amount of the requested credit, and applies the credit to the correct invoice.

- If your policy is to automatically refund your customers, then AutoInvoice evaluates the receipt for refund eligibility. To be eligible, the receipt must not be in doubt.
- Finally, AutoInvoice applies the appropriate receivable activity to the receipt, as determined by your batch source setup.

Copy Orders

Copy Orders has been enhanced in Order Management to give a choice whether or not to copy credit card information when an order header is being copied. There is a check box on the Copy Header window called Credit Card details where you can indicate your desire to copy. Data to be copied are Credit Card Number, Card Holder's Name, Credit Card Type and Expiration Date. This check box is enabled only when you have All or Limited credit card privileges, as set in the profile option. The check box is seeded as unchecked to allow users to make a conscious decision to copy such information.

Order Changes and Partial Shipments

Authorization Flow

Credit card authorization is obtained for the authorized amount. If the order changes after authorization result in the amount being decreased, no further authorization occurs. If the order total increases, another authorization is done if the previous authorization is still valid. Oracle Payments no longer supports void transactions, so in order to not block excess funds which would occur if multiple authorizations are done, reauthorization is done only if the previous authorization has expired. If an order is authorized and then only partially shipped, the shipped amount may go to Receivables for capture before the backordered quantities ship. If that occurs, Receivables captures only the amount of the shipped lines, using the original authorization code. An authorization code can only be used once for a capture transaction. When the remainder of the order is Shipped (Pick Released), a check is made to see if there is an unexpired and uncaptured authorization on the order. If not, then the remaining amount is authorized again. See the examples below for further clarification.

Prepaid Flow

Credit card funds capture takes place for the total order amount minus commitments. If order changes occur after the funds capture occurs, Oracle Order Management calls the Receivables Receipt API to create incremental receipts or creates refunds, if the order amount is reduced.

Holds

Authorization

There are two holds seeded in Order Management for credit card authorization processing:

- Credit Card Authorization Failure is applied if authorization fails

- Credit Card High Risk is applied if authorization is successful but the risk score is higher than the threshold set in Oracle Payments.

Both of these holds can be released manually, but can be reapplied automatically if a subsequent authorization fails. These holds can be removed with a manual authorization.

Prepaid

There are three holds seeded in Order Management for the Prepaid Credit Card feature:

- Pending Process Payment is placed if an order needs to have a Receipt processed asynchronously
- ePayment Failure is placed when a failure occurs in the capture and receipt creation process that needs human intervention to resolve
- ePayment Server Failure is placed when an error occurs in the capture process. This error allows you to retry the capture process.

Note: The credit card bank account needs to be set up correctly in Payments for authorization to take place. If it is not set up correctly, an ePayment Failure hold is placed. So if the Payments server is unavailable and the bank account is not set up properly, the hold that is placed is the ePayment Failure Hold and not the ePayment Server Failure hold. This is because Receivables is checked first for errors/failures.

The concurrent program Credit Card Process Pending Payments can be scheduled to process ePayment holds.

Risk Management

Oracle Payments has a Risk Management feature, that can help manage exposure to questionable transactions. You can define any number of risk factors to verify the identity of your customers, assess their credit rating, and manage risk in a secure online environment. Set up these factors and a risk calculation formula when you set up Oracle Payments. Authorizations from Order Management use the default risk formula setup in Oracle Payments. Authorization returns a risk score, in addition to an authorization code. The score can range from 0 to 100, with 0 referring to a risk free transaction and 100 referring to a high risk authorization. If the risk score exceeds the risk threshold you have set up in the corresponding profile option, the order is automatically placed on Credit Card High Risk hold.

The profile option OM: Risk Factor Threshold for Electronic Payments has been obsoleted in the current release and now risk management is handled by Oracle Payments. Orders are checked for high risk and compared to the risk score returned by Payments. If the risk score exceeds the risk threshold, then Order Management initiated

orders would go on high risk hold. For more information on setting up risk management, please refer to the *Oracle Payments Implementation Manual*.

For Order Management you can get the risk management evaluation results even if credit card authorization has failed as this is derived from Payments. For iStore, risk evaluation may be turned on or off depending on the parameter value.

Scenarios

- In case authorization is carried out successfully and there is a security code warning, the order would be placed on hold.
- In a situation where authorization is carried out successfully and there is no security code warning, risk evaluation is done. The order is placed on credit card high risk hold if the risk score exceeds the threshold.
- If authorization is carried out and error messages like "Authorization Declined", "System Error" or "Developer Error" are displayed, then the order is automatically placed on Order on Credit Card Authorization hold.

Importing Orders and CRM Integration

You can import orders with a payment type of credit card. There are columns in the payment interface tables for all of the credit-card related data. You can import orders that are already authorized by populating the authorization code and authorization date columns. This supports the business case where you might have a legacy system or some other feeder system that has already done the authorization sending orders into Order Management for fulfillment.

Similarly, orders coming from CRM or other front-end systems that have been pre-authorized can be entered into Order Management via the Process Orders API. Those orders will not be re-authorized, unless re-authorization is needed at Shipping or because of increases in the order value after authorization.

Commitments

Commitments are a type of prepayment transaction recorded in Oracle Receivables. Order Management enables you to specify that a line is to be paid from funds paid from a commitment by selecting a commitment number, and optionally, an amount on the order line. If commitments are used on orders that have a payment type of credit card, the amount to be authorized or collected is the total order or line amount minus the commitment amount on lines with commitments. This supports the business case where some lines are prepaid with commitments and the customer gives a credit card number to cover the amount of the order not paid by the commitment.

Set Up

To use credit card authorization in Order Management, you must install and set up the

Oracle Payments server which in turn communicates with the credit card provider networks. In addition, create at least one Credit Check Rule in Order Management and set up your order transaction types to use Credit Checking. Credit Card authorization will not occur automatically unless a credit card rule is present on the order type.

See: *Oracle Payments Implementation Guide*

Oracle Payments Concepts and Procedures

Payment Terms

If you use the Prepaid Credit Card feature, you must set up at least one Payment Terms in Receivables with the prepaid credit card attribute checked. Oracle Order Management only invokes the Prepaid Credit Card processing if the order header payment terms is a prepaid payment terms. If an order has a header payment terms indicating prepaid credit card, then any payment terms at the order line level are ignored. They are not even passed to Receivables at Invoice Integration.

There are two ways to create a Prepayment in Release 12:

- Enter a Prepaid Payment Term in the Order Header, and a prepayment record is created automatically.
- In the Payments window, you can create Prepayments by selecting the Prepay box.

Lookups

There are several OM lookups that are used by Credit Card authorization. There is an OM lookup for Credit Card Type— this is seeded with the most common credit card types such as AMEX or Visa. You can extend this list.

Oracle Payments Setup

There is an entire manual devoted to implementing the Oracle Payments server. Several critical things to setup that influence Order Management are the risk management factors and formula and the merchant bank account. Other setup information can be found in the *Oracle Payments Implementation Guide*.

Reports

There are no new or existing reports in Order Management that list credit card information.

Implementation Considerations

Credit Checking

A credit check rule must be assigned to one of the credit checking events (Booking, Shipping, Picking/Purchase Release or Packing) in Order Type set up. It is not mandatory for credit checking to be active, as other setup steps are involved in activating credit checking. However, Authorization requires that a credit check rule be assigned in the Order Type setup.

Encryption

The masking of credit card information is now controlled by Oracle Payments.

Under Authorization

Order Management can have multiple active authorizations per order at any given time. If the order value increases on an order with an unexpired and uncaptured authorization, Order Management does not perform additional authorization. Because of this, it is possible that insufficient funds may be available on the credit card for the order when it gets to AR for capture. AR will still attempt to authorize and capture the full amount if the invoiced amount exceeds the authorized amount.

If it is a common practice in your business to have users add products to credit card orders after they have been authorized but before the typical authorization expiration, you will need to assess the risk of non-payment. If this is deemed to be an issue, you might want to adopt a practice of requiring that users create new orders for the additional lines or quantity, so that those amounts will be authorized.

If Oracle Payments is not Installed

If Oracle Payments is not installed, but a payment type of credit card is entered on the order, Verify Payment does not return an error or place the order on hold. The Authorize Payment action on the Action button will not be available. The only way to authorize a credit card without Oracle Payments or customization is to manually enter the authorization code. In effect, if you don't have Oracle Payments installed, the credit card fields on the order header are for information only. Credit card data is passed to Receivables; however, even if Oracle Payments is not installed, which may cause problems in Autoinvoice.

If you don't have Oracle Payments installed and you don't want to take the risk of entering credit card information that is not used, you can set up a Processing Constraint to prohibit users from saving data to the credit card fields. See Processing Constraints, page 10-1 for more information.

Oracle Order Management always treats credit card information as automatic payment. It is therefore recommended that you should not enter any credit card information in the sales order if the provided credit card information is not intended for automatic

payment. You can make use of order or line level descriptive flex fields if credit card information is intended for information purposes only.

Debugging Tips

If you are experiencing problems getting the Oracle Payments integration to work in your environment, it can be very helpful to Oracle Support if you generate a log file of what is happening. Here are specific steps to generate a debug file while reporting Oracle Payments integration issues:

1. Log into the application using a new session.
2. Open the sales order window and query the order.
3. From Tools menu click Debug.
4. Choose Turn Debug On.
5. From Tools menu click Debug.
6. Choose Initialize Debug Cache.
7. From Tools menu click Debug.
8. Choose Write to a File. Make a note of the default file name—you cannot change it. Debug messages are logged into this file.
9. Perform the steps which are failing—in this case it may be payment authorization through booking/ picking/ manual.
10. Turn debug off.
11. Provide the debug file to Oracle Support.

Examples

The following examples assume an order type that has a Credit Check Rule assigned for both Booking and Shipping.

Note: These are authorization-only examples and do not apply to prepayment orders or orders with line level payments.

Simple order: Consider the case of a simple order that is authorized at Booking, pick released and shipped complete within one week with no changes to the order. One authorization is obtained for the entire order at Booking. No further authorization at Shipping occurs, because an unexpired and uncaptured authorization existed. The entire order interfaces to Receivables at one time. Receivables does the funds capture

against the original authorization code.

Partial Shipment: This order consists of one line for a quantity of 10 with an extended amount of \$1000. The authorization obtained at Booking is for \$1000. Only 3 of the quantity of 10 is picked and ship confirmed and interfaced to Receivables. The remaining 7 were backordered. What occurs when the remainder of the order is pick released depends on whether Receivables has captured against the original authorization. If so, AR captures \$300 against the first authorization. At Pick Release of the remainder of the order, a new authorization is obtained for \$700 – the amount uncaptured. If AR has not done a funds capture at the time of the second Pick Release, OM will not reauthorize if the original authorization had not expired. Whether or not an authorization has had funds captured is determined by calling an Oracle Payments API.

Cancellations: Consider the same order as in Partial Shipments above. However, after Booking, but before interface to Receivables, the order is cancelled. If the entire order is cancelled, OM will do nothing and the authorization will just be left to expire. On the other hand, if the order is partially cancelled, the part that is shipped and interfaced to Receivables will capture against the original authorization code but for the amount shipped. The remainder—the amount canceled—will never authorize, as it has been canceled.

Mixed Order: This order consists of one outbound line for \$200 and one return line with a value of \$50. Therefore the order total is the net or \$150. The authorization at Booking will authorize for the full \$200.

Migration/Upgrade

There is no special upgrade performed for orders containing credit card information. Credit card information from old Order Entry orders are copied to the upgraded order. If the new upgraded order goes through Booking or Shipping and there is a credit check rule on the order type, then authorization is attempted.

Multiple and Partial Payments

Overview

Oracle Order Management's multiple and partial payment features allow additional types of payment vehicles and specification of a payment type at the line level. Also multiple prepayments can be processed at the order header level, to provide support for down payments. This increases support for Business to Consumer flows, reduces risk in collection of payments, and enhances flexibility in the payment of orders through use of multiple credit cards, electronic payment options. Major features include the following:

- Additional payment types supported:
 - Wire Transfer

- Purchase Card
 - Automated Clearing House transaction (ACH)
 - Direct Debit
 - Cash
 - Credit Card
 - On-account (or PO)
- Window to enable Payment Types and input optional attributes
 - Window of payment information for an order or line
 - Prepayment data input for an order: Create multiple prepayments for a partial amount of the order total or for the full amount. Oracle Order Management creates one or more Accounts Receivable receipts linked to the order, for later application to the invoice when it is created.
 - Workflow activity for Payment Assurance: Verifies that a prepayment has been collected before you ship, for example.
 - Ability to enter one payment instrument (in addition to a commitment) at the line level, as long as there are no prepayments on the order.
 - Quick Receipt document that can be printed and handed to a retail customer.
 - Enhanced Credit Card Authorization for Installment terms. Oracle Order Management provides an option to authorize the first installment only instead of the total order amount.
 - Batch authorization of Credit Cards, including automatic retries of authorizations that fail due to network outages.
 - Ability to create multiple payments and prepayments using Order Import.
 - Ability to copy order or line with payment information.

Profiles

Existing profile options related to Credit Card Processing must be set up appropriately when using multiple and partial payments.

Setup

Multiple Payments

- 1. The system parameter Allow Multiple Payments is always enabled by default in Release 12. It is not visible in the System Parameters window for updating.

Adding new Payment Types or Deleting seeded payment types is not allowed. Payment Types are Operating Unit (OU) specific. Changes made in one operating unit are not replicated to other Operating Units. Order Management seeds only those payment types that are supported in Oracle Receivables and Oracle Payments.

Note: If payment types are not displayed for your Operating Unit, run the "Replicate Seed Data" concurrent program from the System Administrator responsibility.

Payment Types Setup Window Details

Payment Types window

Operating Unit:

Default

Payment Type Name	Description	Payment Type Code	Receipt Method	Start Date	End Date	Enabled	Defer	Credit Check
ACH	Vendor initiated electron	ACH	ACH	01-01-1990		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cash	Cash	Cash	Cash	01-01-1990		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Check	Non-electronic check	Check	Check - BoFA	01-01-1990		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Credit Card	Credit Card of any type	Credit Card, Purchase	Credit Card	01-01-1990		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Direct Debit	Direct Debit	Direct Debit	Direct Debit	01-01-1990		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wire Transfer	Wire Transfer	Wire Transfer		07-28-2003		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- **Operating Unit:** This shows your default Operating Unit. You can pick a different Operating Unit from the LOV which displays all Operating Units accessible to you via your MO: Security Profile. Thus you manage payment types across multiple Operating Units that are accessible to you.
- **Payment Type Code:** Payment Types supported. You cannot change the entry in this field, but you can change the description and the Payment Type name.
- **Receipt Method:** Assign a pre- defined Receipt Method to the Payment type. This payment method will be used on the Invoice to collect the open balance.

You can update this field.

The Receipt Method that is assigned to the check payment type has a creation method of Manual, because that is validated in Order Management. The Accounts Receivables Receipt API handles Manual or Automatic Receipt Methods. The Automatic creation method is reserved for the Automatic Receipts program in Accounts Receivables, which is the automatic generation of receipts from the Invoice document flagged with an Automatic receipt method.

See Setting up Accounts Receivable (AR) For Multiple Payments, page 17-44.

- **Start Date:** Effective Start Date for payment type. You can update this field.
- **End Date:** Effective End Date for payment type. You can update this field.
- **Defer Payment Processing:** Y/N decides if this Payment Type should be processed in deferred mode for performance gain. You can update this check box.
- **Credit Check:** Y/N decides if this payment type should go through Credit Check or not. This is an additional setup required for Credit Checking to occur if you are using the prepayments functionality. You can update this check box.

Payment Types supported and additional information required on the transaction

- **Credit Card / Purchase Card:** Specify Credit Card Number, Credit Card Holder Name, Expiration Date, Type of Card
- **ACH:** Specify Bank Number, Account Number, Account Holder Name, Account Type
- **Direct Debit:** Specify Bank Number, Account Number, Account Holder Name, Account Type
- **Wire Transfer/EFT:** Supported for Invoice Payment Only
- **Check:** Specify Bank Account Number, Check Number. Note that if you use Check for a prepayment, you cannot use the lockbox to process the check.
- **Cash:** cash

When the payment type on an Order Header is NULL Send an Invoice is implied. In addition, the PO number can be entered on the Order Header.

Specify Commitment Number (Supported for Line level payments)

- Available only at the line level and Only one commitment per order line

- The Commitment Promised Amount can be updated.
- Commitment is not included as a Payment type and cannot be used for Down Payment.

Multiple Payment Types for down payment are at the order level only. If there is a pre payment/down payment on the Order, you cannot specify any payment types at the order line level. If there is a pre payment on the order, the View Line Payments button on the Payments window is greyed out and the Payments Action on the Lines tab is not visible.

For Orders without down payment you can choose ONE additional payment type in addition to a commitment PER order line. Only one payment instrument in addition to Commitment can be used for the balance of an order line.

Defer Prepayment Processing and Credit Card Authorization:

Payment can be processed first at Booking. However you can defer prepayment processing by setting the Defer flag on the Payment Type to Yes. You can override the defaulted value of the flag at the transaction level on the Payments window for more granular control.

The Defer flag represents both Prepayment Processing and Credit Card Authorization. Setting that flag to Yes defers both payment processing and credit card authorization.

Once flagged for deferred authorization, Order Management defers the call to Oracle Payments for credit card authorization. A Pending Payment Authorization hold is placed on the order/line.

If you use a Credit Check Rule at shipping the Defer flag is not applicable, as Credit Card Authorization is executed regardless of the setting of this flag.

Credit Check

For Credit Checking to occur on orders with Payment Types, this flag must be set to Y on the Payment Type, in addition to setting Credit Check = Y on the Payment Term, Order Transaction type and the Customer Profile.

Set up Prepayment Payment Terms. Payment Terms can be set up in Order Management. Navigate to Setup > Orders > Payment Terms. Optionally you can also set up Payment Terms from the Oracle Receivables Super user menu.

Payment Terms Window

Payment Terms (Order Management Super User, Vision Operations (USA))

Name: **distributedpay** Base Amount: **1000**

Description: **distributed payment terms**

☒ Allow Discount on Partial Payments

☒ Prepayment

☒ Credit Check

Discount Basis: **Lines Only**

Effective Dates: **27/OCT/2004** -

Print Lead Days:

Installment Options: **Include tax and freight in first** []

Cutoff Day

Day of month:

☒ Last day of month

Payment Schedule

Seq	Relative Amount	Days	Date	Day of Month	Months Ahead	
1	100	15				
2	500	15				
3	400	20				

Discounts

A selected check box for Pre Payment in setup implies that when the payment term is used on the Order Header for pre payment, a suggested prepay amount is defaulted on the Payments window. The calculation for the suggested prepay amount is based on the first installment setup for the prepaid payment term.

During order entry the List of Values (LOV) for payment terms also displays Pre Paid / Non Prepaid flag. If a non prepaid payment term is used on the order header, user can still enter a prepayment amount to record a prepayment on the Payments window.

For down payments only the header level payment term is used to determine the suggested down payment amount. Users can manually override this amount on the payments window during order entry.

For pre paid payment term with installments you must set up the first installment to be the down payment.

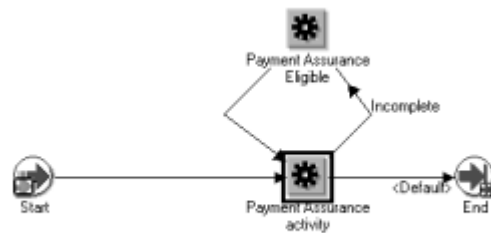
Oracle Receivables supports early pay discounts when using prepayments on remaining installments other than the down payment. Tax is not accounted upon collection of down payment, and revenue is not recognized.

Note: IA prepayment term with an installments calculation of a suggested down, assumes the usage of "Allocate Tax and Freight"

across the Installment instead of "Include Tax and Freight in first installment."

2. Create a transaction type with Payment Assurance activity included in the line workflow. It is possible to include Payment Assurance workflow activity within your line level workflow.

Payment Assurance in line level workflow



This optional workflow activity ensures that the receipt must be in a specific receipt status depending on the Payment Type before an order line can progress. You can set up workflow or extend seeded line flows to insert this activity at any point between booking and invoicing. It is recommended to add it before Shipping. With this activity in the flow, the order line does not progress unless the Pre pay Receipt is in an appropriate status depending on the Payment Type used. This ensures reasonable assurance of collection of down payment.

See: Define Order Management Transaction Types.

3. Decide if you want to print the Payment receipt document and how you want to launch it. Create a transaction type with Payment Receipt Printing activity included in the order workflow. This optional step creates a document as a payment receipt when funds are collected along with the order. Note: Funds are not necessarily collected, and this shows only the prepayment processed. The three ways to create the Payment Receipt document are:
 - **Option 1:** Include the "Print Payment Receipt" function within the workflow. Use this option if you always want to trigger printing a Payment Receipt. Usually, you would put this right after booking in the Order flow.
 - **Option 2:** Launch the new report Payment Receipt with parameters Order Number or Order Type using Run Reports. Use this option if you do not want to Print Payment Receipts for every order.
 - **Option 3:** It is also accessible through Actions at the Order level.

The Print Payment Receipt action is available only if the function Sales Orders: Print Payment Receipt is attached to the OM Menu

4. You can define Defaulting on the following attributes using the Defaulting Framework (payment_type_code, Receipt_method_id, Payment_collection_event). Defaulting Rules are seeded for the entities Order Payment and Line Payment, Receipt Method, and API Based Defaulting:
 - If a value exists in the payment type setup, then this value defaults to the payment record.
 - Otherwise, for Credit Card and ACH payment type, look at the primary payment method defined for the customer site.
 - Otherwise, for Credit Card and ACH payment type, look at the primary payment method defined for the customer.
 - Otherwise, for Credit Card payment type only, please refer to Oracle Payments functionality.

Note: Payment method and customer bank account ID is defaulted at payment creation time. These are required at Booking for Credit Card and ACH. Payment Level code is defaulted at Payment creation time.

See: Define Defaulting Rules, page 7-32.

5. Set up Processing Constraints.

Seeded Processing Constraints

For prepayments, when payment has been processed and the receipt has been successfully created:

- Payment information cannot be updated except for the amount, which can be adjusted to a higher or lower value
 - Payment information cannot be deleted
- Cannot change the following attributes on the order header – Transactional Currency, Invoice To Customer, Invoice To Address, Payment Type
- Payment number is system generated and cannot be updated

For header level invoice payment, the payment information cannot be changed if at-least one order line has been invoice interfaced.

For Line level payment the payment information cannot be changed if the order line

has been invoice interfaced.

For Invoice payment using credit card, credit card related data cannot be changed when authorization has been completed.

Note: It is not required to provide a payment instrument at Order Entry. Null is allowed as the payment type. A constraint can be set up so that a not null form of payment type must be provided at order entry.

Constraints can be defined on other attributes using the constraint framework. Available attributes include:

- Payment Type Code
- Commitment Applied Amount
- Credit Card Code
- Credit Card Number
- Credit Card Holder Name
- Credit Card Expiration Date
- Credit Card Approval Code
- Credit Card Approval Date
- Receipt Method Id
- Payment Collection Event
- Check Number
- Payment Amount

See: Define Processing Constraints.

6. Schedule the Process Pending Payment concurrent program. Payment Processing can also be triggered by running this program standalone or in batch mode. Navigate to the Submit Request window. Order Management > Reports, Requests > Run Requests.

Submit Request Window

The image shows a 'Submit Request' dialog box with a title bar containing a minimize button, the text 'Submit Request', and a close button. The dialog is divided into three main sections: 'Run this Request...', 'At these Times...', and 'Upon Completion...'. The 'Run this Request...' section contains a 'Copy...' button, a 'Name' field with the value 'Process Pending Payments' and a dropdown arrow, an empty 'Parameters' field, a 'Language' field with the value 'American English', a 'Language Settings...' button, and a 'Debug Options' button. The 'At these Times...' section contains a 'Run the Job' field with the value 'As Soon as Possible' and a 'Schedule...' button. The 'Upon Completion...' section contains a checked checkbox for 'Save all Output Files', a 'Notify' field, a 'Print to' field with the value 'noprint', and an 'Options...' button. At the bottom of the dialog are three buttons: 'Help (C)', 'Submit', and 'Cancel'.

Run this Request...

Copy...

Name: **Process Pending Payments**

Parameters:

Language: **American English**

Language Settings... Debug Options

At these Times...

Run the Job: **As Soon as Possible** Schedule...

Upon Completion...

☒ Save all Output Files

Notify:

Print to: **noprint** Options...

Help (C) Submit Cancel

7. In the Name field select Process Pending Payment from the list of values.

Process Pending Payments Parameters Window

Parameters

Pending Process Payment Hold

Epayment Failure Hold

Epayment Server Failure Hold

Payment Authorization Hold

Order Type

Order Number Low

Order Number High

Customer Number Low

Customer Number High

Customer Class

Credit Card Number

Credit Card Type

Bill To Org

Booked Date Since

OK Cancel Clear Help

The Process Pending Payments concurrent program can be used to process the following in batch mode:

- **Credit Card Authorization Only (non – Prepayment):** Process those orders that have no pre payments on the order and have a Pending Payment Authorization hold on the Order/Line
- **Pre Payment Processing only:** Process those orders which have a pre payment on the order and have a Pending Process Payment hold on the Order/Line
- **Both Pre Payment and Non Prepayment processing:** Process those orders that have a Pending Payment Authorization hold or Pending Process Payment hold on the Order/Line

You can submit this program to run a specified number of times or at regular intervals to process payments asynchronously without manual intervention. This setup is optional.

Note: The Process Payment action from the Sales Orders window processes all pending payments for the current order including prepayments processing and credit card authorizations. It behaves like the Pending Process Payment concurrent program with the parameter selected as Both Pre Payment and Non Prepayment processing.

Credit Check for Orders with Prepayment

Order Level Credit Check

Pre-paid amount for any payment type, is subtracted (in addition to commitment applied amount) from the total order value during credit checking. All other credit checking controls are still honored.

Line level Credit Check

For orders with down payment, the pre paid amount is not subtracted from the total order value. Only the commitment applied amount is subtracted from the line total.

Note: Calculation of Overall Credit exposure is not impacted by prepayments functionality, regardless of whether or not AR balances are included in the total exposure calculation.

Credit Card Payment Type

When Credit check flag is on: Credit Check and authorize open balance. **When Credit check flag is off:** Authorize open balance only.

Credit Checking is re-executed upon subsequent payment processing.

Pre Payment Holds

- **Pending Process Payment Hold:** Relates to all cases where Process Payment activity is Pending.
- **Epayment Failure Hold:** For expected errors returned by Oracle Payments, like invalid data.
- **Epayment server failure Hold:** For any unexpected errors returned by Oracle Payments, like failure to connect to server.
 - Process Pending Payments concurrent program (batch mode)
 - Process Payments Action (manual action from sales order form - per order)
 - At Booking (Booking triggers Process Payments)

For credit card payment at header level, the amount to be authorized at the header level is equal to the Order Total, charges and estimated taxes included, minus the total prepayment, minus the line totals of commitment applied amount, and the amount covered by other payment instruments.

For credit card payment at the line level, the amount to be authorized at the line level is equal to the Line Total, charges and taxes included, minus the commitment applied

amount.

For authorization to occur you must turn on the credit check rule as appropriate, such as those for Booking.

Overpayment

If the prepayment amount collected is higher than the total open balance a warning message is displayed and payment is processed successfully.

Note: Once a down payment amount has been processed any changes that increase or decrease the Order total will not automatically result in an additional Receipt/Refund. The prepaid amount must be manually set to a higher value for more collection, and the Process Payment Action must be executed or the Process Pending Payments program must be run.

Setting up Accounts Receivable (AR) For Multiple Payments

Receivables Activity is set up in Oracle Receivables. Receivables activity of type Prepayment must be set up. Once an order with prepayments is Booked, Payment Processing is triggered automatically provided Defer flag was unchecked on the Payments window prior to Booking. A prepayment receipt is created in Oracle Receivables. This prepay receipt is applied to the Prepayment Receivables Activity. The Receivables Activity of type Prepayment is a placeholder application until the Order is Invoiced and the Invoice and Prepayments are matched. Upon matching, the Prepayment is unapplied from the Prepayment Receivables Activity and applied to the Invoice to close out/reduce the balance of the Invoice.

See: *Oracle Receivables Implementation Guide*

Setting up Remittance Bank Accounts

Navigate to Bank Accounts from the Receipt Class / Payment Method window. The attribute for the Remittance Bank should be the Minimum Receipt Amount. Before creation of a Receipt for Pre payment, the system validates that the Receipt creation amount is greater than the Minimum Receipt Amount of the Remittance Bank. If the receipt creation amount is less than the Minimum Receipt Amount then a prepay receipt is not automatically created. In such a case, the order is not placed on Pending Payment Process hold.

See: *Oracle Receivables Implementation Guide*

Copying Orders with Payment Information

The Payments check box on the Copy Header and Copy Lines tabs of the Copy window allows you to copy payment information. Please note that if the Credit Card Security Code is mandatory, then the order will not be copied with all the credit card attributes.

If Credit Card Security Code is not mandatory, then the order will be copied with all the credit card attributes.

Copy Header Tab of Copy Window

Copy

Quick Copy Copy Header Copy Lines Pricing Options

Include

☒ Descriptive Flex

☒ Sales Credits

☒ Attachments

☒ Existing Holds

☐ Offer Expiration Date

☒ Transaction Name

☒ Payments

Specify

Expiration Date

Transaction Name

OK Cancel

The default value for this check box is Unchecked. The payment types are copied from the source order but the amounts are not.

Copy Lines Tab of Copy Window

Copy

Quick Copy Copy Header **Copy Lines** Pricing Options

Change Line Type To

Return Reason

Include

☒ Lines

☒ Descriptive Flex

☒ Sales Credits

☒ Attachments

☒ Fully Cancelled Lines

☒ Payments

☐ Holds

Version Reason

Comments

Action

☐ Default Missing Attributes

☒ Copy Complete Configuration

OK Cancel

Copy of payment information is available for Outbound orders only.

Order Import

This chapter covers the following topics:

- Overview
- Feature Functions and Basic Instruction
- Tools/Techniques of Feature - API's, Workflow
- Setup Steps to Implement Order Import
- Loading the Import tables
- Flags
- IDs vs. Codes
- Matching Changes to Orders

Overview

Order Import is Order Management's open interface for entering, changing or canceling orders and returns. Use Order Import to bring in orders from external systems, legacy systems, EDI, or from internal systems such as internal orders created by Oracle Purchasing to fulfill internal requisitions. If you have enabled Multi-Org Access Control, you can import orders for all Operating Units that are accessible to you in a single submission. Please refer to the *Oracle Order Management Open Interfaces, API, & Electronic Messaging Guide* for more information on using Order Import across Operating Units.

Order Import has been implemented as a set of interface tables that must be loaded with the order or return data, and a set of APIs to process that data. A concurrent program is provided which calls the APIs to initiate processing of the data. In addition, Order Import provides forms that allow you to query orders from the interface tables, make corrections or changes to that data, and re-initiate the import process. Orders that fail to be imported are retained in the tables, and can be queried and corrected using the forms. Messages are provided to give you details of why the order did not import.

Order Import calls base Order Management APIs (specifically, Process Order API) to validate and insert or update data in the base order tables, thereby insuring that consistent processing occurs.

Queries in Order Import are optimized with the Cost Based Optimizer of the database. The Cost Based Optimizer uses generated statistical information to optimize queries. The Order Import Statistics concurrent program gathers statistics for use by the cost based optimizer. This concurrent program should be run after data is populated into the interface tables.

The Cost Based Optimizer performs a table analysis of all interface tables related to Order Import for determining optimum record processing. You have the option to submit this program prior to each submission of the Order Import concurrent program. If you normally process a similar number of interface records, you typically do not need to submit this program.

Feature Functions and Basic Instruction

Order Import provides many features to ease the work of integrating order data from external and other types of system.

Importing Orders

Order Import's main task is to provide a batch-like facility for inputting large numbers of orders into Order Management. It is runnable as a concurrent request, so you can schedule it to run at specific intervals throughout the day – for example, to coincide with schedules of your feeding systems. Once orders are imported into the base Order Management tables, the order and line workflows are started. All subsequent processing, including sourcing and scheduling activities, takes place as though the order were input manually.

Validation

Order Import does not contain its own validation routines for the data. Instead, it calls the Process Orders API, which is the same API used to validate and insert orders if you are keying them through the Sales Order window. This design makes for better maintainability, as any enhancements or bug fixes done to Process Orders will immediately affect importing orders too. The Process Orders API uses Processing Constraints to evaluate whether a requested change can be made to an order. Order Import, because it uses Process Order API, evaluates all Processing Constraints, and any constraint violations are captured and can be reviewed using the Correction Forms and the Messaging Window. Order Import has a feature that allows you to run in validate only mode, to pre-screen the orders in a batch and correct all the errors before you run the import. If an order has any errors, then the entire order will be retained in the import tables. Importing is an all-or-nothing process per order.

Correction Forms

Order Management has a set of forms you can use to review and correct data that is in the Order Import tables. They are called the Order Import Correction forms. They are accessible from the OM Menu under the Order Import menu item. They consist of a find screen followed by a series of forms where you can view and correct data. There are forms to display order headers, order lines, sales credits, price adjustments, return lot/serial numbers, payments, new customer and address records, pricing attributes, and the actions table. The forms have buttons to enable you to re-validate or re-import data that you have selected. There is another button to transfer to the Message Window to display any error messages in your data import. Viewing error and warning messages about imported orders replaces the Order Import Processing Exception Report used in earlier versions. Most fields do not have any validation or list of values within the window, so if you key over a field to correct it, you won't know if it is good until you either validate or re-import. If you decide an order or line is in the import tables in error, you can set the Reject_Flag to Y on the Status Tab to indicate that you don't want to continue processing it. The order or line will be deleted in the next run of Order Import. See the Flags section below for more information about the Reject_Flag. This can be useful if an order is too difficult to correct via the forms. This allows you to fix it in the feeder system and re-import it, or it can be used to purge off orders that may have resulted from duplicate runs of your feeder systems.

The user interface for the Correction Form is a folder window. The forms are not multi-select enabled for re-validating or re-importing using the button. The data from the header and lines import tables is presented in forms with the data organized logically onto various tabs. The other forms—discounts, sales credits, payments, pricing attributes, and actions—are single-tab forms. Screen shots of the Find screen and the Orders window are contained in the *Oracle Order Management User's Guide*.

Importing Customer Information

Order Import can enter a new customer account with minimal data at the sold-to level on the order header. You can enter a new customer account at the ship-to, bill-to level or deliver_to at the order header or order line. An add customer interface table accommodates this: when the table is loaded it indicates the intention is to create a new customer account the required fields are populated for the new account. Order Import then creates a new customer account and, if all required data is present and valid in the interface tables, a party. You can associate the new customer account with an existing party by providing the party (organization or person) number in the interface tables. If that column is left null, Order Import creates the party as well as the customer account. The new customer is assigned to the Default customer profile class, which specifies various financial and credit checking information.

Order Import turns off all Trading Community Architecture business events before using the Add Customer functionality. This is done by setting the profile option HZ: Raise API Events to No at the user level for the session. This profile option is used to configure the raising of Granular (V2) and Business Object business events from

Trading Community Architecture Public APIs. After Order Import is over, the value of the profile option is reverted to its old value. Order Management does not have seeded subscriptions to TCA business events. However some other products do and you may need to run the TCA Full Synch concurrent program after Order Import.

For more information about TCA integration, please refer to the *Trading Community Architecture Administration Guide (Implementation chapter)* or the *Trading Community Architecture Technical Implementation Guide (Business Events section)*.

Booking Orders via Order Import

Import orders and book them through Order Import. If the order fails booking validation, the order is still imported, but is left in the Entered state. The Messages Window can be used to see why the order failed booking or you can just attempt to Book using the Book button, and then errors will be displayed. There are two ways to indicate that you want the order to be booked. You can load the actions interface table OE_ACTIONS_IFACE_ALL with a value of BOOK_ORDER in the OPERATION_CODE column to import orders in a booked status, or you can set the booked flag. See the section below on the Actions table for more information.

Item Cross Referencing

Customer item numbers or UPC numbers can be entered in Order Import the same way as manually created orders, so long as you have the cross-references and cross reference types set up in advance of running order import. In the interface tables you need to put the 'item ordered' into the column named CUSTOMER_ITEM_NAME and if you know what kind of item number it is (customer, inventory item or one of the generic cross references), you can put its type into CUSTOMER_ITEM_ID_TYPE.

Changes and Cancellations

Input order changes and cancellations to existing orders via the Order Import open interface tables. There is a column in each of the interface tables called OPERATION_CODE where you put INSERT, UPDATE or DELETE. Null is equivalent to INSERT. If you want to make changes, you must specify an OPERATION_CODE of UPDATE. To cancel a line, use an operation of UPDATE and then make the ordered quantity = 0. To partially cancel, change the ordered quantity to the new quantity you want to remain on the line. To cancel an order in its entirety, use an operation of UPDATE at the header, and then set the CANCEL-FLAG to Y. All order changes and cancellations are subject to the Processing Constraints you defined.

Returns

Import returns just like you import orders, by choosing an order type that supports return line types. You can also import mixed orders – those are orders that have some outbound lines and also some inbound (return) lines. The path that the line follows is determined by the workflow attached to the line type. You might import returns or return lines from legacy systems, or from other order entry systems you might be

running. There is a separate interface table where you can import anticipated lot/serial numbers – this table is only used for return lines.

Notes/Attachments

Orders that are input using Order Import will get rule-based attachments automatically applied based on the setting of the profile option *OM: Apply Automatic Attachments*. If you have this profile option set to NO, you can still apply automatic attachments on an order by order basis by using the Actions Interface table – see the discussion of that table below. There is at this time no way to import note texts, or to create attachments via an open interface.

Pricing

There are two ways to price orders being imported. You can let the system calculate the price, or you can populate the price fields in the lines interface table with the price you want to charge, and also populate the price-adjustment interface tables with price adjustments that result in that net price. You indicate which you want to use by setting a value in *CALCULATE_PRICE_FLAG* in the lines interface table. If the calculate price flag is Y, the system will ignore any pricing values loaded into the price fields and will calculate the price using the pricing engine. If the calculate price flag is N, you must populate unit list price, unit net price, and any price adjustments in the interface tables to account for the difference between list and net.

Note: If you are importing a modifier with a qualifier of type Order Amount, it will not be applied during order import. If you reprice the order after the import, the modifier with the Order Amount qualifier will be applied.

Pricing and Payment Terms Validation

A common requirement from EDI customers is the ability to validate the price and payment terms that a customer sends in against what the system determines. EDI customers do not typically accept any price or terms that the customer sends in, but they need to keep track of what the customer said they thought they should get. The Customer Service Representative usually contacts the customer to resolve any discrepancies. For example, a customer may send in one price that they have been quoted by a salesperson, which assumed they received some discount. Perhaps the discount had expired by the time the order was imported. This results in a discrepancy that a CSR needs to investigate.

Order Import supports this requirement by letting you populate two attributes in the order lines interface table, *CUSTOMER_ITEM_NET_PRICE* and *CUSTOMER_PAYMENT_TERM*. If either of these columns contain data, Order Import compares the system-determined price or payment terms to these columns, and raises a warning if there is a difference. It will still import the order as long as there are no other errors in the order. In both cases, the system-determined value is what is used to

process the order, and the customer value is retained on the order line in the base sales order tables for reference purposes.

Following is a table with examples of what would happen in different cases of the customer price and the system price – in addition, it shows how the Calculate Price Flag affects the process:

Customer Price Versus System Price

Calculate Price Flag	Customer Provided Price	System Calculated Price	Action
N	20	-	Accept customer price.
Y	20	20	Accept customer price. (System = Customer).
Y	20	10	Accept customer price. (System < Customer).
Y	20	30	Don't accept Customer price. Report the error. (System > Customer).

Tools/Techniques of Feature - API's, Workflow

Order Import uses the Process Orders API to validate and process order data in the interface tables. For more information on open interfaces, see the *Oracle Manufacturing APIs and Open Interfaces Manual*.

There are no special workflow considerations for Order Import.

Profile Options

OM: Add Customer - Order Import

This profile controls whether the user has authorization to create customers, addresses and contacts with Order Import

OM: Run Order Import for XML

This profile controls whether Order Import is run synchronously whenever XML data is imported.

OM: Unique Order Source, Orig Sys Document Ref Combination For Each Customer

This profile controls whether uniqueness of this data is enforced by customer or across customers.

HZ: Raise API Events

This profile option is used to configure the raising of Granular (V2) and Business Object business events from Trading Community Architecture Public APIs. It is updateable at the Site, Application, Responsibility, User levels. Please refer to the section on Importing Customer Information for details on how Order Import uses it.

Setup Steps to Implement Order Import

There is only one special setup for Order Import; otherwise, the same setup that you need to perform to manually key orders must be in place before you can import orders.

Order Import Sources

Set up the names of the sources from which you intend to import orders. There is a special setup window in Order Management allows you to define the name and description for your source. Import Source is a parameter you can use when you submit the Order Import concurrent program, and it is also one of the queryable fields on the Find window of the Order Import Correction window. The Import Source is carried in the order header also, so you can identify the origin of the order. Seeded Order Import sources include EDI and Internal Orders.

The **Item Validation Org** parameter for the operating unit of the user running Order Import determines the organization used for validating items and bill of material structures. Item Validation Org is an Order Management parameter that is set per operating unit.

Loading the Import tables

To import orders, you need some means to load the Order Import tables. In most cases, you will develop a program or script using SQL-loader or some other programming language to convert data from your feeder system into the standard data format that Order Import is expecting.

Oracle Purchasing contains such a program (Create Internal Sales Order) that takes data from the Purchasing schema for internal requisitions and loads the Order Import tables. Similarly, the eCommerce Gateway product provides a program (Purchase Order Inbound) that loads the import tables for the Inbound Purchase Order EDI transaction set. You can take a look at that code to guide you in writing your own program to load the tables.

It is advisable that you set up Defaulting Rules in Order Management that will default as much of the order and line information as possible for your environment, thereby reducing the amount of data that would need to be populated into the import tables.

There are certain columns and tables in the set of import tables whose function is not self-evident. Here is some additional information about these attributes to help you be successful in loading the tables properly.

Flags

Several flags in the interface tables of Order Management affect Order Import processing. Valid values of these flags are Y, N and null. Null means different things depending on the particular flag. These flags are viewable and updateable from the Status Tab of both the Order Header and Lines forms of the Order Import Correction forms.

Force Apply Flag

(used for Change transactions only)

The Force Apply flag is used to indicate that you want to apply a Change transaction even though the change sequence numbers are out of order. Default is N, and a null value is equivalent to N. Typically a user would set this flag to Y (checked in the UI) if they determine that a set of changes should be applied regardless of the change sequence. See the section below for more information on **Change Sequence Numbers** and how they are used.

This flag is at the header level only.

Closed Flag

The Closed flag is used to indicate the line or order being imported should be imported in a Closed state. You might want to import a closed order so your historical data is all in one place, or to provide reference data for Returns. Default for this flag is N, and a null value is equivalent to N.

This flag is at both the header and the line level.

Canceled Flag

The Canceled flag is typically used to indicate that the line or order being imported should be imported in a Canceled state. Default is N, and a null value is equivalent to N.

This flag is at both the header and the line level.

Booked Flag

Set this flag to Y if you want this order to be booked once it is imported. Default is N and null value is equivalent to N.

This flag is available at the header level only.

Reject Flag

There may be orders or order lines you have determined you no longer want to attempt to process further. Using the Order Import Corrections window, you can select an order or line you no longer wish to process, go to the STATUS tab, and select the Rejected

checkbox. Rejected orders or rejected order lines are *Deleted* during the next execution of the Order Import program. Default is N, and a null value is equivalent to N.

This flag is at both the header and the line level.

ERROR_FLAG

The error flag is set on by the Order Import process whenever an error is encountered during the validation process. Default is N, and a null value is equivalent to N.

This flag is at both the header and the line level.

READY_FLAG

The ready flag indicates that the record will be processed in the Order Import Process. Default is Y, and a null value is equivalent to Y. If the ready flag is N, the order will not be looked at when Order Import is run.

This flag is at the header level.

Validate Mode Parameter in Concurrent Manager

There is a validate mode parameter you can set when you submit Order Import to run through the concurrent manager. This parameter tells the process to only validate the records, and not to process valid records any further. Base Order Management tables will not have records inserted, updated, or deleted.

Ready Flag

READY_FLAG	(Only) Validate Parameter	Processing
N	Y	Record is not processed
N	N	Record is not processed
Y or NULL	Y	Process to Validate Only
Y or NULL	N	Process to Insert/Update/Delete in Base Table

Actions Table

One of the Order Management interface tables is the Actions table. Its purpose is to allow you to indicate what 'actions' you want to be done to the order, once it has been written to the Order Management base tables. It is the Order Import equivalent of a user pressing the Action button on the Sales Order window after you have entered an order.

Load the action name into the OPERATION_CODE column of this table, and populate other data as needed, and then Process Orders will execute that action if the order import is successful. You can hold or release an order or line from hold using this method; this is one way to book an order through Order Import. Other actions you can perform are Apply Automatic Attachments and Delink Config Item and Match & Reserve a configured item. Here is the character string you need to populate in OPERATION_CODE of the OE_ACTIONS_INTERFACE table and other data you need to put in the table to achieve each action.

Actions Table

ACTION	OPERATION_CODE	OTHER DATA
Apply Automatic Attachments	AUTOMATIC_ATCHMT	none
Apply a Hold	APPLY_HOLD	hold_id, hold_type_code, hold_type_id, comments (optional), hold_until_date (optional)
Release a Hold	RELEASE_HOLD	hold_id, hold_type_code, hold_type_id, comments (optional), release_reason_code
Book the Order	BOOK_ORDER	none
Delink the Config Item	DELINK_CONFIG	none
Match and Reserve a configuration item for an ATO model	MATCH_AND_RESERVE	none

IDs vs. Codes

Most attributes in the interface tables have two flavors – a code or name and an ID. You may choose to populate either the code or the ID for each attribute. If you populate IDs, performance will be improved. If you populate both an ID and a code for an attribute, the ID will be used and the value in the code field will be ignored.

Matching Changes to Orders

When you send in changes to orders using Order Import, you need a way to tell Order Import what order or line you are changing. Your feeding system most likely doesn't know the Order Management Order Number. If it does, you can populate the interface column `ORDER_NUMBER` to locate your order. There are a group of columns in the interface tables that are carried over into the Sales Order tables, and these are used to locate the order to be changed.

For Order level changes, the following fields need to match between the change transaction in the interface tables and the existing order in the Sales Order tables:

- `ORIG_SYS_DOCUMENT_REF` - note, this is often the customer's purchase order number
- `ORDER_SOURCE_ID`

For Line level changes, the following fields need to match between the change transaction in the interface tables and the existing order in the Sales Order tables:

- `ORIG_SYS_DOCUMENT_REF` - note, this is often the Customer's Purchase Order Number
- `ORDER_SOURCE_ID`
- `ORIG_SYS_LINE_REF` - note, this is often the customer's purchase order line Number concatenated with the shipment number or current customer request date.

If the existing order or line do not have these fields populated, you will not be able to make changes to them using Order Import.

Please note that if you need to update a line, the header should not be cancelled. In case the header is cancelled, the corresponding lines are also cancelled and if you attempt to update the lines, an error message will display.

Change Sequence Numbers

Change sequence numbers are a way to control the sequence in which a group of changes is applied to an order. The use of change sequence numbers in Order Import is optional. Change sequence numbers are most frequently used by the EDI Purchase Order Change transaction, but you can also use them to control the order of application of changes, in the event you are importing changes from a legacy or third-party system. For more information about how change sequence numbers work, see the *Oracle Order Management User's Guide*.

High Volume and High Performance

This chapter covers the following topics:

- Quick Sales Orders
- Creating & Managing Folders in Oracle Applications
- Extended Folder Functionality in Quick Sales Orders
- High Volume Order Processing
- Supported Features
- Unsupported Features
- Supported for HVOP Pricing Integration
- Unsupported with HVOP Pricing Integration
- Implementation Considerations of HVOP
- Setup

Quick Sales Orders

Overview

Quick Sales Orders reduces data entry and shortens the time required to perform this task through the use of a streamlined entry window. You can search for customer data by using the Easy Search feature, enabling you to search on various fields, then bring that customer's information into the order. Headers and lines are displayed in the same window. In the Line Details region you can add related items or upsell the existing item on the line as well as verify price and availability.

Use Quick Sales Orders to configure your user interface to meet business flow needs, and make input intuitive for users with minimal training. You can create keyboard hot keys or configure window buttons to reduce keystrokes using the folder function. Data entry is shortened by the reduced need for navigation to other windows. Processes can be deferred during order processing, including pricing and automatic data refresh

processes.

The interface has been designed to facilitate orders to be entered with minimal data entry and time lag, and provides the following features and functions:

- Configurable user interface using the folder function to display/hide Tabs as well as columns at both Header and line
- The ability to configure how actions are executed
- Header and lines appear in a single full screen
- A new icon can be activated to display lines and line details on a single screen
- Related Items/ Upsell /Cross sell opportunities for user selection
- Price adjustments for user selection
- Display price and availability and associated price breaks for the ordered item or any item
- Configuration of model options
- Provides the ability to choose whether the Pricing engine is called during the entry process or upon command of the user
- Associate service lines with an ordered item or for an item on an existing order.
- A new icon to activate the find customer window and populate selection directly into the order.
- Configure the preferred line detail region required to open when navigating to the line details region.

Setup

There are no setup steps required to enable Quick Sales Order functionality. There are folder extensions to assist in the configuration of the user interface. All existing sales orders can be queried and modified using this feature as is in the existing sales order window. All pre-existing sales orders are queryable and modifiable from this window as currently supported in the existing sales order window. The quick sales order window does not currently support mass selection. Use the sales order window to perform these functions. The scheduling organizer and item search are not supported.

Profile options

OM: Default Defer Pricing at Order Entry Values at Site Level

This profile controls the default setting of Defer Pricing; options are Yes or No. This value is read from the profile when a new session begins; however, a user is able to

activate Defer Pricing directly.

OM: User Interface Defer Pricing

This profile determines if pricing is deferred during line entry. Options are Defer pricing to save, and No. For Defer pricing to save, pricing is done when the lines are saved. Line level pricing is suppressed. If No is selected, pricing is not deferred.

OM: Quick OE Auto Refresh. Site, Application, LOV

This profile controls the automatic refreshing of a window when changes have been made. It allows instant updating of the display. The options are Line, Line Detail, or Both.

OM: Use Configurator

If the Advanced Configurator product is installed and the OM: Use Configurator profile is set to Yes, selecting the Configurator Button will take you to the Configurator window. If it is set to No then the options section in line details displays. Selecting the configurator button moves you to the options section for model items.

OM: Enable Related Items and Manual Substitution

This profile enables the selection of related items in the line details region if you are using related items.

Supported Features

Defer Pricing

This feature enables you to defer pricing at line level. Unit List Price, Unit Selling Price are not displayed to the user while entering the line and navigating out of the line. Order and lines are priced when the lines are saved. This feature can be controlled through the Defer Pricing check box that is displayed in the Lines window.

Quick Order Entry Window Line Details Options

The Options region in Line Details has the following fields: Option Number, Item, Item Description, UOM, and Qty. Options and Classes are created and displayed in this window. Option Number is system generated and may not be the actual option number that the system assigns when the configuration is saved. It is a sequence number assigned for display purposes. The quantity defaults to what is entered on the mode line.

Auto Refresh

If the Toggle Query Coordination check box is selected then the newly created option lines are displayed immediately in the lines block when the cursor is moved to the line. If it is not selected the options are saved. The lines region does not display available options immediately upon navigation to the lines; you have to manually requery to see them.

Creating & Managing Folders in Oracle Applications

Please refer to the *Oracle Applications User's Guide* on how to customize the layout of

data in various forms by creating and managing folders in Oracle Applications.

Extended Folder Functionality in Quick Sales Orders

Quick Sales Orders is folder enabled, but the folder functionality in Quick Sales Orders allows display of additional tabs both at the header and line; you can select which line detail regions need to be displayed. The folder can be configured to select which specific actions should be available as buttons.

Folders can be extended separately for the header and the line regions of Quick Sales Orders.

Folder extensions at the header level can:

- Display Order tabs
- Display the Action buttons & amend the user prompts
- Assign access keys for various actions

Folder extensions at the line level can:

- Display line tabs
- Display the line level detail regions, such as Options, or Pricing and Availability
- Select the default region which is displayed, when the user navigates to the line detail region

Folder Extensions- Header Level:

1. Order Tabs

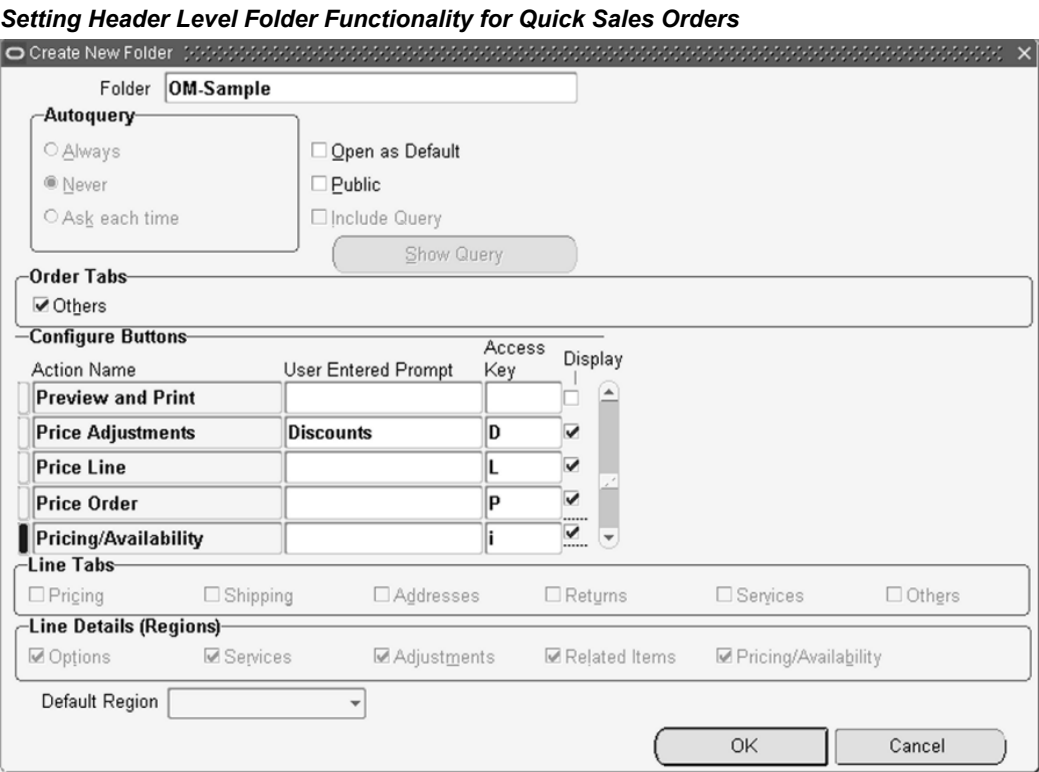
Using this feature, the Others tab can be displayed by selecting the Others check box and saving the folder. This folder can be saved to open as default folder and in which case this folder is opened automatically whenever the form is invoked.

2. Configure Buttons

You can select which specific actions should be displayed as action buttons. All the critical actions that are currently available from the headers and lines are seeded and can be selected to be displayed as buttons. Up to eight buttons can be displayed. Optionally, you can specify a custom prompt and an access key. If the access key is already used by some other button, then the access key that is specified here is ignored. The configure buttons functionality is enabled only when a folder for the Header is created.

Note: When the user configures a folder for the header region, the Line

Tabs, Line Details section and Default region List of Values are disabled.



The figure above shows a header level folder configuration with the Others Tab displayed at the header. The Action buttons have been configured to display Configurator, Pricing/Availability, Price Adjustments, and Price Order as buttons. Actions is not selected for display as a button.

Price Adjustments has the user prompt "Discounts." That reads as "Discounts" when the folder is invoked.

Price Order and Price Adjustments are selected to be displayed as buttons with the access keys as "P" and "D" respectively.

Folder Extensions- Line Level:

1. Line Tabs

Using the folder extension at the line level, the following additional tabs can be selected for display:

- Pricing

- Addresses
- Shipping
- Returns
- Services
- Others

Any of the above listed tabs can be displayed by selecting the corresponding check boxes and saving the folder. This folder can be saved to open as default folder and in which case this folder is opened automatically whenever the form is invoked.

1. Line Details (Regions):

Folders can be used to control the display of the following line details (regions):

- Options
- Services
- Adjustments
- Related Items
- Pricing/Availability

You can select the default line details region that displays when you switch to Expand Line Details mode.

Setting Line Level Folder Functionality for Quick Sales Orders

The screenshot shows the 'Create New Folder' dialog box with the folder name 'OM-Test'. The 'Autoquery' section has 'Never' selected. The 'Order Tabs' section has 'Others' checked. The 'Configure Buttons' section is a table with columns for Action Name, User Entered Prompt, Access Key, and Display. The 'Line Tabs' section has 'Pricing' and 'Addresses' checked, while 'Shipping', 'Returns', 'Services', and 'Others' are unchecked. The 'Line Details (Regions)' section has 'Options', 'Services', 'Adjustments', 'Related Items', and 'Pricing/Availability' all checked. The 'Default Region' dropdown is set to 'Options'. 'OK' and 'Cancel' buttons are at the bottom right.

Action Name	User Entered Prompt	Access Key	Display
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

The figure above shows the line level folder configured to display only the Pricing and Addresses line tabs. The other line tabs like Shipping, Returns, Services and Others will not be displayed when this folder is invoked as these have not been checked.

This folder allows you to view all the line details (regions) from the Options, Services, Adjustments, Related Items and Pricing/Availability tabs as all these have been checked.

At the bottom of the window is the Default Region field. The various Line Details (Regions) as mentioned above, are available for selection in the list of values. In this case, Options is selected as the default region.

Note: The Order Tabs section and Configure buttons regions are disabled when you configure a folder for the line region. The folder will not save if you select a value in the Default Region List of Values that is not also selected in the Line Details region. The configuration window that launches when selecting the Configurator button is dependent on whether you are using Oracle Order Management Configurator or Oracle Configurator. If Order Management Configurator is used, select the Options check box or the application will error out. The check box is disabled if you are using Oracle Configurator.

High Volume Order Processing

Overview

High Volume Order Import improves the performance of order import for high volume users who require basic processing. If you have enabled Multi-Org Access Control, you can use High Volume Order Import to import orders for all Operating Units that are accessible to you in a single submission.

Please refer to the following guides for more information on High Volume Order Processing:

Oracle Order Management User's Guide.

Oracle Order Management Open Interfaces, API, & Electronic Messaging Guide.

High Volume Order Processing (HVOP) takes advantage of the high-volume processing features introduced with Oracle8. HVOP uses memory caching extensively and it bulk enables several processing operations. For lines imported in booked status, it also improves the performance of interfacing lines to shipping. If full quantity is shipped, it improves the performance of interfacing lines from shipping to Order Management.

High Volume Order Processing (HVOP) Pricing Integration also leverages the JAVA Pricing Engine, which is required for optimal performance. See the *Oracle Pricing Implementation Guide* for more information.

Note: The Java Pricing Engine is only available to those in the Approved Strategic Implementation Program.

Certain features have not been bulk enabled for High Volume Order Import, and are not optimized for HVOP. These features are:

- Workflow Integration
- Scheduling via Workflow (Auto-Scheduling is Bulk Enabled)
- Credit-checking functionality is supported by HVOP, although it is not optimized for higher performance.

Supported Operations

Creating Orders with HVOP Order Import

You can perform high-volume order processing on orders that are created via Order Import (this includes EDI orders). High-volume order processing supports creation of supported order entities, including creation of the entire order, i.e., Order Header, Order Lines, Order/Line Price Adjustments. Lines imported in Booked status are bulk enabled for Shipping Interface, which means the lines flow through to shipping in less

time.

Pricing Integration with HVOP Order Import

The performance of pricing integration is optimized for orders brought into Order Management with HVOP Order Import. Performance of pricing integration is optimized for many pricing features used by high volume users.

See: Oracle Pricing Setup, *Oracle Advanced Pricing Implementation Manual*

Shipping Interface

With HVOP Order Import

The interface of lines to shipping is now optimized with HVOP Order Import. Using a typical line flow, lines are entered and scheduled and then interfaced to shipping. Without HVOP Shipping Interface, individual line workflows go one by one to interface with shipping. But if you import scheduled lines in Booked status using HVOP Order Import, the bulk processing pushes the lines all the way through to interface with shipping. Once the lines are interfaced with shipping, it is possible to pick ship, etc.

Without HVOP

There are also performance optimizations for lines that interface back to Order Management after shipping. For instance, after shipping the order line is updated with shipping information. If the full quantity of the line ships, performance of the Shipping to Order Management interface is optimized. The optimization can occur either when you ship confirm manually, or when you run the Trip Stop Interface concurrent program.

Supported Features

The following is a list of features that are supported by high-volume order processing.

- Autoscheduling
- Booking
- Interface to Shipping for Booked lines
- Manual Price Adjustments
- Order Creation
- Scheduling Parameters for LAD and Promise Date
- Shippable Flows
- Standard Items and Kits

- Pricing features (See the *Oracle Pricing Implementation Manual*)

Unsupported Features

The following is a list of features that are not supported by high-volume order processing.

- Add customers
- Any action request other than booking
- ATO items
- Audit trail
- Automatic attachments
- Commitments
- Configurations other than kits
- Credit card orders
- DBI Key Transaction Dates
- Drop-shipments
- End customer
- Gapless order numbering
- Import of pricing attributes
- Insert-based constraints
- Internal orders
- iPayment integration
- MACD (Move, Add, Change, Disconnect)
- Multiple and Partial payments
- Pricing attributes, coupons, and ask-for promotions
- Quote processing
- Releases against sales agreements

- Reservations
- Returns
- Service items
- Sets - arrival, ship, fulfillment
- Tax calculation before invoicing
- Updates/deletes
- Use of defaulting framework for specifying defaulting sources and the hierarchy in which they are to be used
- Versioning

If you need to use unsupported features, use standard Order import for those lines.

Types of Items

You can process the following types of items on high-volume orders.

- Standard, non-ATO items
- Kits and included items

Booking

Orders created using high-volume order processing with the Book Order request are validated for booking and created as booked. Pricing is based on booking events. Modifiers tied to the booking phase are evaluated for these orders.

Credit checking is supported, but not optimized. You can use either real-time credit checking or credit-checking with the precalculated exposure functionality. Use pre-calculated exposure functionality for improved performance. Also note that real-time credit checking with HVOP may not be accurate with multiple threads, because the commit boundary in HVOP depends on the batch size. It is possible for several orders to be processed before a batch is committed, in which case the exposure calculations may not include order lines being processed by other threads at the time of the calculation.

Auto-Scheduling

Auto-scheduling is optimized for high-volume order processing. Regular scheduling via Workflow can be performed, but it is not optimized for high-volume order processing.

Auto-scheduling does not currently support the reservation time fence. A warning

message will be populated when the schedule date falls within the reservation time fence. In addition, the lines are scheduled but are not reserved.

Note: High-volume import supports auto-scheduling for both supported item types: standard, non-ATO items and kit with its included items. Please note that regular import supports auto-scheduling only for standard, non-ATO items.

Credit Checking

Credit checking can be set up to calculate real-time credit exposures or pre-calculated exposures. For optimal performance, use the pre-calculated exposure functionality. Also consider limiting the use of credit checking to higher risk customers.

Sales Credit

The software automatically creates a 100% sales credit for the sales person on the order. For the order line, if sales person matches the order header, then there is no sales credit created at the line level. If sales person is different, then it will generate 100% sales credit for the sales person on the line and 100% sales credit for sales person on order header (this is how regular order entry is done). For high-volume order processing, the data in the sales credit interface tables is not processed.

Holds Processing

You can evaluate hold sources and automatically put the applicable orders/order lines on hold.

Price Adjustments

High-volume order import supports only manual price adjustments of the type: Discount, Freight Charge, and Surcharge. There is no such restriction on automatic adjustments. All types of automatic adjustments can be defined and applied if order is priced during high-volume import. During manual adjustments, it is necessary to modify the Corrections form and enter the values in the Operand (for ordered quantity) and Operand per PQTY (for pricing quantity) fields. This ensures that the overridden values are applied.

Tax Calculation

There is no tax calculation during high volume order import. Order lines imported in this mode will not display tax values. Therefore, you can only use line transaction types with a receivable transaction type that does not require tax calculation or order transaction types in which tax calculation is performed at the point of invoicing.

Pricing

Both Basic and Advanced Pricing are optimized. Features commonly used by high volume customers are optimized:

- Discounts
- Surcharges
- Freight and special charges
- Static and dynamic formulas
- GSA pricing

Features not supported include pricing attributes, ask-for promotions, and coupons.

See: *Oracle Advanced Pricing Implementation Manual*

Defaulting

Orders created using high-volume order processing will undergo defaulting for attributes that the customer cannot know and hence cannot send. These attributes are defaulted using a fixed hierarchy of two or three sources. These requirements are based on EDI needs.

Certain key attributes that are required for successfully processing the order are not defaulted regardless of how the Defaulting Enabled? parameter is set. This is detailed in the following tables.

Bill-to and payment terms are defaulted from the header, but not at the line level. This is done to simplify credit checking and this means that orders that have lines that have a bill-to or payment term that is different from the header will be errored out.

Tables 1 and 2 lists the individual attributes that are defaulted and the fixed source and hierarchy used for each attribute.

Defaulting Sources for Order Header

- Agreement: To ensure that pricing attributes like payment term are identical to those set up on the agreement.
- Invoice To: For invoicing/pricing attributes like price list, payment term, and order type.
- Ship To: For shipping attributes like FOB, shipping method, and order type.
- Order Type: Primary default source as it can be set up to default most of the attributes on the order.

Defaulting Sources for Order Line

- Item: Certain defaults like primary UOM, and warehouse are retrieved from item first.
- Ship To: For shipping attributes like FOB, shipping method, and source type.
- Order Header: Primary default source - also an indirect source when attributes need to default from Invoice To, Agreement, or Order Type.

Any other sources for Order Line are not supported.

You can turn off defaulting in case the customer is providing all the required attributes. This is implemented using the Defaulting Enabled? parameter.

Note: High-volume order processing uses a different defaulting mechanism than the standard Order Management Defaulting Framework to default attributes. It defaults from a limited number of source attributes using a fixed hierarchy. However, once the order has been created, any updates to attributes that result in the clearing and re-defaulting of dependent attributes will use the rules set up in the standard Order Management Defaulting Framework. Even though the fixed defaulting hierarchies that the bulk process uses reflect in most cases the seeded rules in the standard Defaulting Framework, you might occasionally see different values being defaulted in case of an update.

Defaulting Details

High-volume order processing does some limited defaulting if the Defaulting Enabled? parameter is set to Yes. The following tables list the attributes that will be defaulted and the sources they will be defaulted from.

Note: Attributes that are set to No for the Defaulting Enabled in High-Volume Order Processing? column in the following tables will not be defaulted regardless of how the Defaulting Enabled? parameter is set. For example, Ship To, Invoice To, Ship To Contact, Invoice To Contact etc. will not be defaulted on the order header. Therefore, users should supply these values on the interface table if needed.

The fields marked Yes in the Required? column in the following tables are mandatory fields. Depending on the Defaulting Enabled? parameter value, you may need to supply values for some or all of these fields in the interface tables. For example, on the order header, you should always populate Ship To and Invoice To in interface tables as they are never defaulted in high-volume order processing. However, Tax Exempt values should be supplied only if the Defaulting Enabled? parameter is set to No. If Defaulting Enabled? is set to Yes, then a constant value of Standard is supplied by the program.

In addition, other non-mandatory fields that are defaulted in regular order import

should be supplied in the interface tables for bulk import if orders are to be created with values in these fields.

Supported for HVOP Pricing Integration

Other pricing features are supported, but if used, pricing does not use the optimized code path:

- Discounts
- Surcharges
- Freight and special charges
- Static or dynamic formulas
- GSA pricing
- Promotional goods
- Term substitution
- Item upgrade
- Limits Processing
- Catchweight pricing

Unsupported with HVOP Pricing Integration

- Pricing attributes
- Ask-for promotion
- Coupon issue

Attribute sourcing is somewhat restricted, because orders are placed before posting to the database.

Implementation Considerations of HVOP

Some features are supported by HVOP Order Import but not optimized. Credit Checking is an example. If you can limit credit checking to higher-risk customers, you can improve performance.

It is useful to analyze which lines can be imported with HVOP Order Import. For instance, if only 15% of your lines require tax calculation at booking, you could consider

importing those lines with standard order import, and the remaining lines with HVOP order import.

You can autoschedule the lines by populating the schedule dates in the HVOP interface tables. This method of scheduling typically offers better performance than scheduling each line using workflow.

Also consider whether you can import lines in booked status. It is possible to improve the performance of lines through shipping interface if you can.

To optimize the performance of HVOP pricing integration, use the supported features and the Java pricing engine.

If a line is imported with one of the above unsupported pricing features, the lines are imported, but pricing-related performance is not recognized. You should evaluate whether you can run batches of HVOP Order Import with lines that use supported features. In this way, you will achieve higher performance.

Defaultable Attribute	Defaulting Enabled in High-Volume Order Processing	Defaulting Source in High-Volume Order Processing	Required?
Accounting Rule	Yes	1. Agreement 2. Order Type	No
Agreement	No	n/a	No
Contact	No	n/a	No
Conversion Rate Date	No	n/a	No
Conversion Type	Yes	Order Type	No
Credit Card Expiration Date	No	n/a	No
Credit Card Holder Name	No	n/a	No
Credit Card Number	No	n/a	No
Currency	No	n/a	Yes, on entered orders
Customer	No	n/a	Yes, on booked orders

Defaultable Attribute	Defaulting Enabled in High-Volume Order Processing	Defaulting Source in High-Volume Order Processing	Required?
Customer PO	No	n/a	No
Deliver To Contact	No	n/a	No
Deliver To Org	No	n/a	No
Demand Class	Yes	1. Ship To 2. Order Type	No
Earliest Schedule Limit	No	n/a	No
FOB Point	Yes	1. Ship To 2. Order Type	No
Freight Terms	Yes	1. Ship To 2. Order Type	No
Invoice To	No	n/a	Yes, on booked orders
Invoice To Contact	No	n/a	No
Invoicing Rule	Yes	1. Agreement 2. Order Type	No
Latest Schedule Limit	Yes	Ship To	No
Order Date Type Code	Yes	Ship To	No
Order Type	Yes	1. Invoice To 2. Ship To	Yes, on entered orders
Ordered Date	Yes	Sysdate	Yes, on booked orders

Defaultable Attribute	Defaulting Enabled in High-Volume Order Processing	Defaulting Source in High-Volume Order Processing	Required?
Packing Instructions	No	n/a	No
Payment Term	Yes	1. Agreement 2. Invoice To	Yes, on booked orders
Price List	Yes	1 Agreement 2. Invoice To	Yes, on booked orders
Pricing Date	Yes	Sysdate	
Request Date	Yes	Sysdate	
Sales Channel	No	n/a	No
Salesperson	No	n/a	Yes, on booked orders
Ship To	No	n/a	Yes, on booked orders
Ship To Contact	No	n/a	No
Ship Tolerance Above	Yes	Ship To	No
Ship Tolerance Below	Yes	Ship To	No
Shipment Priority	Yes	Order Type	No
Shipping Instructions	No	n/a	No
Shipping Method	Yes	1. Ship To 2. Order Type	No
Tax Exempt	Yes	Constant: Standard	Yes, on booked orders
Tax Exempt Number	No	n/a	No

Defaultable Attribute	Defaulting Enabled in High-Volume Order Processing	Defaulting Source in High-Volume Order Processing	Required?
Tax Exempt Reason	No	n/a	No
Warehouse	Yes	1. Ship To 2. Order Type	No

The next table shows the Line Attributes that will be defaulted and the sources they will be defaulted from.

Defaultable Attribute	Defaulting Enabled in High-Volume Order Processing	Defaulting Sources in High-Volume Order Processing	Required?
Accounting Rule	Yes	1. Item 2. Order Header	No
Agreement	No	n/a	No
Calculate Price	Yes	1. Constant = Yes	No
Commitment	No	n/a	No
Customer PO	No	n/a	No
Customer PO Line Number	No	n/a	No
Deliver To Contact	No	n/a	No
Deliver To Org	No	n/a	No
Demand Class	Yes	1. Ship To 2. Order Header	No
Dep Plan Required	No	n/a	No
Earliest Acceptable Date	No	n/a	No

Defaultable Attribute	Defaulting Enabled in High-Volume Order Processing	Defaulting Sources in High-Volume Order Processing	Required?
FOB Point	Yes	1. Ship To 2. Order Header	No
Freight Terms	Yes	1. Ship To 2. Order Header	No
Grade	No	n/a	No
Invoice To	Yes	Order Header	Yes, on booked lines
Invoice To Contact	No	n/a	No
Invoicing Rule	Yes	1. Item 2. Order Header	No
Item Identifier Type	Yes	Ship To	No
Item Revision	No	n/a	No
Latest Acceptable Date	No	n/a	No
Line Type	Yes	Order Type.Outbound Line Type (only Regular lines supported in Bulk!)	Yes, on entered lines
Order Quantity UOM	Yes	Item.Primary UOM	Yes, on booked lines
Ordered Quantity	No	n/a	Yes, on booked lines
Packing Instructions	No	n/a	No
Payment Term	Yes	Order Header	Yes, on booked lines
Price List	Yes	Order Header	Yes, on booked lines

Defaultable Attribute	Defaulting Enabled in High-Volume Order Processing	Defaulting Sources in High-Volume Order Processing	Required?
Pricing Date	Yes	Sysdate	No
Promise Date	No	n/a	No
Request Date	Yes	Sysdate	No
Return Reason	No	n/a	No
Salesperson	Yes	Order Header	No
Schedule Arrival Date	No	n/a	No
Schedule Ship Date	No	n/a	No
Secondary Quantity	No	n/a	No
Secondary UOM	No	n/a	No
Service Period	No	n/a	No
Service Reference Type Code	No	n/a	No
Service Start Date	No	n/a	No
Ship To	Yes	Order Header	Yes, on booked lines
Ship To Contact	No	n/a	No
Ship Tolerance Above	Yes	1. Item 2. Ship To 3. Order Header	No
Ship Tolerance Below	Yes	1. Item 2. Ship To 3. Order Header	No

Defaultable Attribute	Defaulting Enabled in High-Volume Order Processing	Defaulting Sources in High-Volume Order Processing	Required?
Shipment Priority	Yes	Order Header	No
Shipping Instructions	No	n/a	No
Shipping Method	Yes	1. Ship To 2. Order Header	No
Source Type	Yes	Constant = INTERNAL	No
Subinventory	No	n/a	No
Tax Code	No	n/a	No
Tax Date	No	n/a	No
Tax Exempt	Yes	Order Header	Yes, on booked lines
Tax Exempt Number	No	n/a	No
Tax Exempt Reason	No	n/a	No
Warehouse	Yes	1. Item 2. Ship To 3. Order Header	No

Value to ID

If value fields are supplied on interface tables, high-volume import converts them to IDs and updates the ID fields directly on interface tables. If there is a value in the ID field, it takes precedence, and corresponding value fields are not used in the processing at all.

Note: If you decide to correct some value fields on interface tables because the order failed to import, you must clear the corresponding ID fields on interface table. For example, if the ship to location field is corrected, please check that ship to ID value is null.

Error Handling

The error messages output file identifies the following types of errors:

- Validation errors
- Errors for unsupported features
- Unexpected errors

The output file also identifies order references to identify which orders failed to import. Note that in the case of validation errors or errors for unsupported features, one or more orders may fail to import while others import successfully. In the event of an unexpected error (memory errors, unable to extend tablespace, etc.), all orders fail to import. When an unexpected error occurs, all records in the batch are marked with an error. The errors must be cleared before submitting the records again for high volume order processing.

The following types of errors are not identified in the error count:

- Updates
- Deletes
- Manual pricing attributes passed on interface tables
- Manual sales credits passed on interface tables
- Manual reservations passed on interface tables
- Action request other than booking

Setup

To import high volume orders:

1. Populate the interface tables.
2. Evaluate if simplified defaulting rules are sufficient. If so, use them to supply the required values.
3. If defaulting rules are not sufficient, turn them off and provide the attribute values directly in the interface tables.

Note: The QP: High Volume Order Processing Compliance profile option cannot be set by a user. It is set as a result of running the "

Maintain the Denormalized Data in QP Qualifiers" pricing concurrent program. It should be run with the update type of HVOP_Pricing_Setup, Update High Volume Order Processing profile.

Order Management Integration

This chapter covers the following topics:

- Integration
- Applications Core Technology Family
- Order Fulfillment Family
- Business Intelligence Products
- Financials Product Family
- Human Resources Product Family
- Logistics Product Family
- Product Lifecycle Management Family
- Procurement Family
- Supply Chain Planning Family
- Manufacturing Product Family
- Marketing and Sales Family
- Service Family
- Authoring and Negotiating Contract Terms
- Overview
- Profiles
- Setup
- Sales Contracts Workbench

Integration

Processing an Order requires integration with many other business areas. Most integration points with other Oracle products are implemented via PL/SQL-based APIs.

The following summarizes the integration points between OM and other products, organized by Product Family:

Applications Core Technology Family

AK - Common Modules

AK serves as a common runtime dictionary for both the Defaulting and Processing Constraints Frameworks. These modules use AK for object and attribute information. AK replaces the functionality provided by SO_OBJECTS and SO_ATTRIBUTES in R11 Order Entry.

Additionally Order Management uses the following tables to extend the AK data model to support Usage functionality:

OE_AK_OBJECT_EXT

OE_AK_OBJ_ATTR_EXT

AOL

Order Management uses the following AOL features:

Document Sequences

AOL Document Sequences feature meets Order Numbering requirements. This lets you number Order and Returns using Manual, Automatic or Gapless sequences.

You can define Document Sequences using the AOL Define Document Sequences form. When you define an Order Transaction Type, the application automatically creates a Document Sequence Category of the same name. You can assign a pre-defined sequence to one or more Document Sequence Categories, using the AOL Sequence Assignments form. When an Order is created, Order Management calls AOL Document Sequence APIs to number the Order.

Attachments

Order Management drives off the AOL Attachment functionality enabling you to attach images and web pages as well as short or long text. It also offers multi-lingual document capability. Attachment definition and usage data is stored only in AOL.

Automatic Addition rule definitions are stored in Order Management (OE_ATTACHMENT_RULES, OE_ATTACHMENT_RULE_ELEMENTS). In addition to the attributes (Customer, Ship-to, Invoice-to, Order Type, Item, PO #) that were previously available, you can now define rules based on the Order Category, Line Category and Line Type.

The Profile Option OM: Apply Automatic Attachments determines whether rule based attachments are automatically applied (without User intervention).

eCommerce Gateway

The eCommerce Gateway has the ability to load orders and order changes into Order Management via Order Import. Order Management pushes Order Acknowledgment and Change Order Acknowledgment data back to the eCommerce Gateway.

iSetup

iSetup pushes setup information into the Order Management schema after an implementer has answered questions regarding their business setup.

Workflow

Order Management uses Oracle Workflow to manage Order and Line processing. PL/SQL based Workflow is a natural replacement for Order Cycles functionality. It provides a Graphical User Interfaces for defining activities, notifications, flows and viewing flow status. There are no limits on the number of custom functions or notifications you can define.

Additionally, it provides the following features:

- In-built flexibility: You can easily extend functions or flows using the Workflow Builder.
- Support for notifications: Approval functionality is supported via Notification activities. You can easily define notifications via the Workflow builder and use them in flows. Notifications can be accessed via any electronic mail application or the Notifications web page.
- Coordination between parent-child flows: This aids in synchronizing Header and Line flows. Thus you can have lines wait for the Order header to complete a certain header activity or have the Header wait for all lines to complete a certain line activity.
- A built-in on-line/background mode with a user-definable threshold: This enables you to run certain activities such as Credit Checking off-line.

Every Order Header and Line entered into the system starts a workflow. Order Headers follow Header flows and Order Lines follow Line flows. The product comes seeded with several Order and Line flows. Every business function is workflow enabled and the product comes seeded with functional workflow sub-processes.

Order Headers are mapped to the OM Order Header workflow item type (OEOL). Order Lines are mapped to the OM Order Line workflow item type (OEOL). The Workflow Engine APIs are used to create, start and manage flows. The Order Type tied to an Order determines the Header flow it starts. The Order Type, Line Type, and Item type determines the Line flow a Line starts.

The FLOW_STATUS column on Order headers and Lines provides summary

information about the flow. Its value changes as the Order or Line progresses in its respective flow. You can also use the Public query APIs (OE_HEADER_STATUS_PUB, OE_LINE_STATUS_PUB) to get information regarding various functional statuses and when an Order or Line activity was completed.

The Workflow builder is available on the Windows (NT, 98 and 2000) platform. You can use this graphical tool to define flows. The Workflow monitor is a Java based tool that can be launched from the Sales Orders form. It lets you graphically monitor a workflow's progress as well and view its transaction history.

XML Gateway

The XML Gateway has the ability to load orders and order changes into Order Management via Order Import. Order Management pushes Order Acknowledgment and Change Order Acknowledgment data back to the XML Gateway.

Order Fulfillment Family

Advanced Pricing

Order Management leverages many business objects belonging to Advance Pricing, including price lists, modifiers, and agreements. Order Management, through its Sales Agreement functionality, creates price lists and pushes them into the Advanced Pricing tables. Order Management calls the Pricing Engine to make pricing requests during the processing of orders, and receives pricing information back from Advanced Pricing.

Configurator

Order Management integrates with Oracle Configurator to support ordering and validation of configurations. The Configurator window is a Java Applet that can be launched from the Sales Order form. Order Management communicates with Oracle Configurator through XML messaging. See: *Oracle Configurator Developer User's Guide*

iStore

iStore generates quote header and lines which are then sent to Order Management using the Order Capture API. RMAs are generated using Order Management's Process Orders API.

Release Management

Oracle Release Management pushes orders, lines and Sales Agreement releases into Order Management via the Process Order API. Order changes arising from changes to schedules in Release Management are also communicated to Order Management via Process Order. Order Management sends order status information back to Release Management, so that its schedules can be kept in sync with the orders.

Shipping Execution

Order Management provides APIs to Shipping to view lines that are eligible for delivery planning, picking and shipping. The view OE_DELIVERY_LINES_V returns all open, booked, shippable lines that are not interfaced to Shipping. When an Order Line reaches the Ship Line workflow activity, Order Management calls Shipping APIs to indicate that a line is pick eligible and communicate changes to the line once it is interfaced to Shipping. When a delivery is ship-confirmed, Shipping calls OM APIs to communicate the event, triggering the line flow to move forward. If Freight Costs were input during ship confirmation, that information is communicated back to Order Management when the delivery line is interfaced back from Shipping.

Oracle Order Management/Shipping Execution, provides an XML-based adapter to integrate to International Trade Management (ITM) Applications. The Oracle International Trade Management Adapter serves as the interface point to third party international trade management partners. With this adapter, Oracle E-Business Suite applications can embed global trade functionality into core business transactions. Oracle Order Management utilizes the ITM Adapter to support Denied Party Screening. Oracle Order Management has expanded the ITM features that are available when using Oracle Order Management and the Oracle ITM Adapter in conjunction with a third party ITM partner. Features include:

- Export Compliance Workbench: Process screening failures without having to navigate to multiple forms
- Export Compliance Screening Concurrent Program: Progress multiple lines that have failed earlier due to data errors
- Export Compliance Screening Failure Report: Manage screening failures
- Export Compliance Report to Government: Provide the US Government with a list of exported lines

Business Intelligence Products

Business Intelligence

Booked and fulfilled order lines from Order Management are pulled into the Applications Data Warehouse, where they become input to the various sales Business Intelligence reports.

Daily Business Intelligence

Order lines from Order Management are pulled into the Daily Business Intelligence product to produce up-to-date performance metrics.

Financials Product Family

Oracle Payment

Order Management accepts Credit Card information when entered on orders. It integrates with Oracle Payment to validate this information and get Credit Card authorizations. This information is then interfaced to Receivables.

Receivables

Order Management integrates with Receivables through the Order Information, page 8-7. This integration allows users of the Order Information Portal to view invoices and credits related to the order they are viewing.

Payables

Order Management accesses the AP Bank Accounts table to populate the Credit Card LOV when an order is being entered with a payment type of Credit Card. Additionally, if a new credit card number is entered and the authorization of that card through iPayment is successful, Order Management calls an AR API to create a new bank account record for the customer in the Bank Accounts table.

Receivables

Order Management integrates with Oracle Receivables in the following function areas:

- **Invoice Interface:** Order Management sends invoices and credit memos to Receivables via the Invoice Interface workflow activity. The seeded Invoice Interface - Line workflow sub-process populates the Receivables interface table. You run AutoInvoice to create invoices.

Order Management also supports Header level invoicing via the seeded Invoice Interface - Order.
- **Receipts:** Order Management calls Receivables' Receipt API to create receipts for prepaid credit card orders. Order Management receives a payment-set id from AR when the receipt is created, and then passes that id back to AR in the autoinvoice tables at invoicing time so that the invoice can be matched to the receipt.
- **Tax:** Order Management calls the Global Tax Engine APIs to default the Tax Code (ARP_TAX.GET_DEFAULT_TAX_CODE) and to calculate estimated tax (ARP_PROCESS_TAX.SUMMARY) for the order Line. The estimated tax value is now stored on the line and re-calculated only when any of the attributes affecting tax change. Information about the tax value is also stored as Line Price Adjustments.

The Tax Engine looks at the view OE_TAX_LINES_SUMMARY_V to calculate the estimated tax value for an Order Line.

- **Credit Management:** If the Credit Management product is installed, notifications are sent to it by Order Management when an order or line goes on credit hold, to initiate a credit review. If the credit review results in a decision to approve the order, a business event is posted which OM subscribes to and then releases the credit hold.

Trading Community Architecture

Order Management integrates with Oracle Trading Community Architecture to access customer setup information, including party data, account information, account sites, relationships and contacts. Many attributes of importance to Order Management, such as preferred warehouse, preferred order type, set preferences, price list and many others, are stored in the TCA data model at the account and account site level and are used by Order Management as defaulting sources.

In addition, Order Management, through the 'Add Customer' functionality, allows users to input new customer accounts, addresses and contacts. This data is pushed to the TCA schema, using TCA APIs. 'Add Customer' functions can also be performed through Order Management's Order Import program.

Human Resources Product Family

Training Administration

Order Management integrates with Oracle Training Administration to link classes and enrollments with orders for the purpose of billing. When classes or enrollments are marked as having been attended, the associated order lines are updated as fulfilled, and their line flows advance to the invoicing step.

Logistics Product Family

Inventory Management

Order Management integrates with Oracle Inventory Management through Managing Reservations. Order Management calls Inventory's reservation APIs to manage reservations. You can create reservations to on-hand quantities from the Sales Orders form. You can also go to Inventory's reservation form from the Sales Orders form and create a reservation to any level of inventory such as sub-inventory, locator, or lot if supply is available.

When supply is created for a ATO configuration (for a configuration item), it is reserved to a Work Order. This reservation gets transferred to on-hand when the work order is completed, thus reserving the Order line to on-hand. For every Order created, Order

Management creates a record in MTL_SALES_ORDERS, an entity that Inventory uses to manage demand from various sources.

Reservation information is stored in MTL_RESERVATIONS. Reservation records for order Lines point to both MTL_SALES_ORDERS and OE_ORDER_LINES_ALL.

Transportation Execution

Order Management calls APIs belonging to Oracle Transportation Execution to obtain Shipping Method options and estimated Freight costs at the time of order entry. Order Management passes order line information to Transportation Execution, and it uses any routing guides that have been set up as well as actual carrier rates to determine the ship method and the estimated costs. The call is first made by the user executing Freight Rating or Ship Method Selection from the Action menu, and subsequently, any order changes that impact the rate or ship method cause those functions to be re-executed.

Freight Choices integrates Order Management with Transportation Execution to allow manual selection of ship method. Selecting "Choose Ship Method" displays the available ship methods, costs and transit times—this information comes from data in Oracle Transportation Execution. When you select the ship method, the order is automatically updated with that ship method.

Product Lifecycle Management Family

Bills of Material

Order Management integrates with Oracle Bill of Material when models and kits are entered on sales orders. Order Management uses the Bill of Material defined for the model or kit or explode the model into its components, for the purpose of the user selecting options and for shipping purposes.

PLM

Order Management integrates with Oracle Product Lifecycle Management in the following areas:

- **Items:** Order Management integrates with Oracle Product Lifecycle Management to access item setup information, including items, cross references and item relationships. Many attributes of importance to Order Management, such as preferred warehouse, processing flags, item type, price list, catchweight-enabled and many others, are stored in the item database and are used by Order Management as defaulting sources.
- **Customer-Item Cross reference:** You can use Oracle PLM to set-up Customer Items and Customer Item Cross reference information. You can then place orders using those pre-defined customer item identifiers. Order Management calls the Inventory API INV_CUSTOMER_ITEM_GRP to derive the internal item based on the

specified customer item, ship-to site and the warehouse on the Order Line. The Item Identifier Type on the Order Line indicates the Cross-reference Type that was used for placing the order. The Ordered Item tracks identifier that was used to place the order.

- **Related Items:** Item Relationships set up in PLM are used in Order Management to display the 'Related Items' window on the Sales Order form, to give users visibility to, for example, upsell and cross-sell items, substitute items, item supercessions, and so on.
- **Advanced Item Search:** Order Management integrates with PLM's advanced item catalog to enable parametric searches of the item catalog.

Procurement Family

Purchasing

Order Management integrates with Oracle Purchasing in the following functional areas:

- **Return Receipts:** Order Management uses the Oracle Purchasing Receipt functionality to handle Return receipts. When an item is received, Purchasing calls Order Management to indicate delivery and to get COGS information. When an item is accepted and delivered to Inventory, Purchasing calls Order Management (OE_RMA_RECEIVING) to indicate acceptance. Fulfillment of the Return line is driven off the acceptance event.

Purchasing looks at the view OE_PO_ENTER_RECEIPTS_VIEW to determine the Order Lines to expect Return receipts against. This view returns lines that are booked, receivable and are waiting at the Wait for Receiving block activity.
- **Internal Orders:** Oracle Purchasing uses Order Import to create internal orders. Purchasing calls the Process Order API to communicate changes in the requisition to Order Management. Order Management calls a Purchasing API (PO_SUPPLY) to communicate changes in the internal order to Purchasing.
- **Drop-Ship Orders:** Order Management integrates with Purchasing to fulfill drop-ship orders. It populates the PO requisitions interface table with information for order lines that need to be fulfilled via an external source. Purchasing calls Order Management APIs (OE_DROP_SHIP_GRP) to communicate information about the requisition, purchase order and receipts. Order Management provides a link to the Drop Ship information from the Additional Line and Additional Order Information windows of the Sales Order form.

Supply Chain Planning Family

Advanced Planning System/Global Order Promising/ Advanced Supply Chain Planning

Order Management uses Advanced Supply Chain Planning's Global Order Promising functionality to check the availability of ordered items and to schedule order lines. Scheduled Order Lines are viewed as demand by the Advanced Planning System.

To check availability or schedule an order line (scheduling checks availability and consumes supply if there is any available), Order Management calls an MRP API (MRP_ATP_PUB.CALL_ATP). MRP checks for item availability (or group availability if a group of lines is passed) and returns back the results. The API also sources the line (find a ship from location) when a ship from location is not specified. A source will only be returned if there are sourcing rules set up in MRP. To ascertain open demand Planning looks at the view MTL_DEMAND_OM_VIEW, based off OE_ORDER_LINES. This returns open (un-shipped) lines whose visible to MRP flag is set to Y. The visible to MRP flag is set to Y, when a line is scheduled.

Before booking, Advanced Supply Chain Planning also performs item substitution during scheduling for order lines, when the ordered item is not available at the sourcing location and a substitute is available for the total line amount.

Sourcing rules can be used in scheduling for ATO models to select a warehouse for an ATO model. You do not need to specify a warehouse for the ATO model. To supply the warehouse for an ATO model, there is interaction with GOP and ASCP. Licensing these applications for autosourcing of the warehouse is not necessary, but you cannot use the Match feature without licensing both GOP and ASCP, and using PDS.

Manufacturing Product Family

Cost Management

Order Management calls the Cost Management CST_COST_API to obtain cost from cst_item_costs or cst_quantity_layers when the Gross Margin feature of OM is enabled. Item cost is stored on the order line, for ease of calculating the margin.

CTO

Order Management integrates with Configure-to-Order processes to fulfill orders for Replenish to Order models and items. These business functions are Workflow enabled. If the item is a 'buy' item, the process routes the items to Purchasing by creating a requisition. This process is called back-to-back orders. If the item is a 'make' item, the process flow creates the Configuration Item, BOM, Routings, Work Orders, and Flow Schedules. When the item is replenished (either by making it or buying it), the item is received into inventory and the reservation is transferred to the OM order line, so it can be shipped.

Order Management's Sales Order UI provides a link to the Supply to Order Workbench where the user can see the supply details and status for documents (purchase order or work order) that are reserved or referenced to the ATO sales order line. This enables customer service representatives to give customers an order status without having to navigate to the PO, WIP or flow forms.

Process Manufacturing

Order Management is able to process orders for items whose inventory is tracked in the Oracle Inventory application.

When processing orders for items in inventory organizations, Order Management enables additional attributes at the order line level to allow dual unit-of-measure (catchweight) and grade support. The secondary unit-of-measure and pricing unit-of-measure are interfaced to Advanced Pricing for catchweight items to enable accurate pricing at time of shipment.

Project Manufacturing

If a line is sold for a project tracked in PJM, you can record in Order Management the project and task number. Order lines that are identified as belonging to a project and task are pulled into PJM after fulfillment to update status in PJM.

Quality

Oracle Order Management provides visibility to Quality Plans for items displayed via the Order Information Portal through integration with Quality.

Work in Process

Order Management integrates with Oracle Work in Process to fulfill orders for Assemble to Order models and items. These business functions are Workflow enabled. The ATO process flow creates the Configuration Item, BOM, Routings, Work Orders, and Flow Schedules as required. The Work Order carries a link back to the OM order line, and the OM user can see the WIP job number and status by viewing the Inventory Reservation associated with the order line. Once the WIP job is complete or partially complete, the reservation is transferred to the OM line, and the line continues on its process flow.

Marketing and Sales Family

Oracle Sales Contracts

Oracle Order Management together with Oracle Sales Contracts can create long term agreements or a one-time sale, including terms and conditions for use by Sales Managers, Sales Representatives, Contract Negotiators, Contract Administrators as well as Legal Representatives. This functionality enables Oracle Sales Contracts and includes

formal negotiation complete with internal approval and customer acceptance. Fundamental capabilities required for sales negotiation are supported, as well as additional contractual capabilities such as terms and conditions, price holds and the capability to enforce the agreed upon terms for future customer purchases. All Oracle Order Management transactions support the formal sales contract flows.

Incentive Compensation

Incentive Compensation (previously called Sales Compensation) pulls order lines from Order Management using a transaction collection API to calculate commissions and effectively align compensation with business objectives.

Order Capture

Order Management integrates with a few CRM products such as iStore, Quoting, and Depot Repair through Order Capture. The external teams can use the Order Management Process Order Group APIs to convert a quote to an order. Any changes to the Order Management Objects are communicated on-line to Order Capture via the Order Capture feedback queue. CRM products which are interested in the Order related information need to subscribe to the Order Capture queue to poll the messages.

Partners Online

Partners Online sends orders and lines entered through its user interface to Order Management by way of the Process Order API.

Telesales

Telesales' eBusiness Center has several integrations with Order Management. There is an Order tab to view order history and create new orders. The New button on the Order tab launches the Sales Order window. The Party, Account, Address and Contact information entered in the eBusiness Center are carried over and populated in the Sales Orders window. Order Management automatically creates an account, if an Account does not yet exist for the Party provided in TeleSales. The user can then enter the other details and process the Order.

Trade Management

Order Management can receive RMA orders and lines from Oracle Trade Management as part of its dispute handling functionality. In addition, Order Management leverages the Promotion Limits feature of Trade Management through Advanced Pricing calls.

Service Family

Depot Repair

Order Management is the ERP module used by Depot Repair to create RMA and Sales

Orders, validate customer accounts, and invoice customers for repairs.

See: Order Capture, page 20-12

Field Service

Field Service Report requires specifically that you setup Price Lists, Units of Measure (UOM), and two Inventory Item Attributes in Order Management. Price Lists contain the list price for an item. Items could be material, but also labor and expenses like units of driving distance. Once material, expense and labor transactions for a task have been taken down on the Field Service Debrief, this information is updated to Charges. In Charges the list price for the item is received from Order Management and is used to generate an invoice for a customer.

Install Base

Information about Install Base trackable items is interfaced to Install Base in the following ways:

- **Shippable Items:** For both orders and returns, information is interfaced to Install Base via Inventory Interface.
- **Non-Shippable Items:** For both order and returns, information is interfaced to Install Base via the Order Management Fulfillment workflow activity

Install Base also supports Internal Sales Order transactions by appropriately creating / updating item instances as a result of transactions between internal organizations such as pick transactions, shipments, and receipts.

Service Contracts

Service Contracts has an API which pulls information from the Install Base newly created customer records and creates an ownership record.

- **Warranty:** A Warranty contract is created when a Serviceable product is shipped. A Warranty contract is created when serviceable product with bill of material contains a warranty. Whenever possible, where multiple products are sold on one order, one warranty is created for all the products. Each different warranty item creates a separate warranty line on the contract.
- **Extended Warranty:** An Extended Warranty contract is created when an Extended Warranty is sold on a sales order. Extended Warranty contracts can also be consolidated. Order Management interfaces to Service Contracts via the Fulfillment workflow activity (Fulfill Line). This activity populates the Service Contracts interface table. You need to run the Service Contracts Order Processing concurrent program to process the interface records.

When a serviceable item is returned for credit, whether the customer is credited for the extended warranty depends on the setting for the profile OKS: Raise Credit

Memo for IB Instance Termination. Additionally the amount of credit issued is determined by the Global Contracts default setting. This can be overridden at the serviceable item return line level via the workflow activity Set Order Line- Service Credit. You can use this activity to set the service_credit_eligible_code to a value of Full, Pro-rated or None.

- **Subscription:** Fulfillment starts after the contract approval process. Driven by each subscription line's instantiated fulfillment template, a concurrent program creates a sales order in Oracle Order Management for each delivery. The order details are populated with information from the subscription agreement. Once the order is created in Order Management, you can release and ship them. The integration to Oracle Service Contracts is bidirectional. Service Contracts sends Item and fulfillment details to create a sales order. Delivery and status details are sent to Service Contracts, when the order is ship confirmed, to be stored in the Subscription contract.
- **RMA:** Service Contracts sends Order Management RMA information via the Process Order API.

In previous releases, Service Contracts used Order Capture as an integration point to create service contracts initiated by Order Management. In release 12, direct API calls from Order Management to Service Contracts replace Order Capture.

The Service Contracts (OKS) API processes one order line at a time, however it is also used for High Volume Order Processing for multiple lines.

This OKS API processes extended warranty/service (immediate or delayed) order lines.

The OKS Service Contracts Order Processing Concurrent program takes the data from the interface tables that have been populated by the API call and creates service contracts. You can run this concurrent program in multiple instances to create service contracts.

The Service Contracts Order Processing Concurrent program verifies that the instances are interfaced to Install Base before processing the interfaced service order lines.

Service Fulfillment Manager

Order Management integrates with SFM via workflow activities that can be inserted into the Order Management header and line flows. Order lines holding items that are marked as provisionable will be sent to SFM instead of through the Shipping Execution process for fulfillment.

Spares Management

As part of the Oracle Service suite of products, Spares Management is classified as an installable module provided with the Field Service solution. Oracle Inventory and Oracle Order Management are the only prerequisite products specifically required for a Spares Management implementation.

Integration with Oracle Order Management provides the ability to move parts among multiple inventory organizations and includes several sophisticated warehouse management features.

Oracle Spares Management supports the business processes involved in the management of spares parts in a field service organization. It is integrated with a number of Oracle's ERP and CRM applications. This integration provides extensive functionality to manage the business activities involved in the spares management process.

Oracle Order Management provides the functionality for the processing of an internal order to deliver parts to a field engineer for a specific task. An internal order is initiated in Spares Management in the Parts Requirement window. Within Order Management, the internal order is processed almost exactly like an order that is to be shipped to an external customer. This processing includes the picking, packing, shipping and receiving of the order.

Key integration features with Oracle Order Management include:

- Ability to create Internal Orders to transfer parts across inventory organizations
- Ability to use mobile applications in the warehouse
- Ability to use barcode and scanning functionality
- Ability to use pick, pack and ship functionality

Authoring and Negotiating Contract Terms

Overview

Oracle Order Management users can create long-term agreements or contracts for a one-time sale, including contract terms and conditions based on a library of pre-approved clauses and contract templates, using Oracle Sales Contracts functionality. This functionality includes formal contract terms negotiation complete with internal approval and customer acceptance. All Oracle Order Management documents provide access to the contract terms library, and to the contract terms negotiation features provided by Sales Contracts:

- Quotes: Sales Orders beginning with a Negotiation workflow
- Sales Orders: Sales Orders beginning with a Fulfillment workflow
- Release Orders: Sales Orders with a Sales Agreement reference governing items, price, and terms
- Sales Agreements: Long-term agreements which can be referenced on a single

transaction to leverage volume pricing, terms and conditions

Profiles

OKC: Enable Sales Contracts

This profile determines if an installation is authorized to use the contractual option provided in Order Management, and is set at the site level to enable terms and conditions integration in Order Management. If the profile option is set to Yes, you can author, negotiate and manage sales contracts including Agreements and Sales Orders and leverage Sales Contracts functionality such as Microsoft Word Integration and Collaboration, and Contract Expert to assemble your contract rapidly and efficiently.

Setup

To set up Oracle Sales Contracts for Authoring and Negotiating Contract Terms:

1. Set up the Contract Terms Library. Create any necessary:
 - Clauses
 - Contract Templates
 - Contract Expert Rules

See *Oracle Sales Contracts Implementation and Administration Guide*

2. You may create a Contract Template or you could add terms using the MS Word Integration functionality. Terms in the form of an MS Word document, pdf, or any format can be attached as well. If it is an Oracle generated document, terms are merged during preview of Sales Agreements / Sales Orders. Also terms are attached to notification for approval. Contract Templates can be enabled for different document types. You can have one or more Contract Templates per Document Type, such as for Sales Orders or Sales Agreements. It is not mandatory to define a default Contract Template on the Transaction Type. See *Oracle Sales Contracts Implementation and Administration Guide*.
3. Create at least one Layout Template. The Layout Template is part of Oracle Applications Technology Group (ATG) functionality. If you are using Preview and Print, a template must be available. The layout template is not mandatory to define on the transaction type. A layout template can also be chosen from Oracle Sales Contracts or defined as a default. The transaction type default will override Oracle Sales Contract default.

NOTE: During Layout Template setup, it is recommended to leave the end date

blank. Without an end date, Layout Templates will not become inactive thus preventing use of an inactive Layout Template with an open sales document.

See: Preview and Print Sales Documents, page 5-29

4. Set the profile option OKC: Enable Sales Contracts to Yes. See Setup Profile Options for more information.

Oracle Sales Contracts Implementation and Administration Guide

To set up Authoring and Negotiating Contract Terms:

1. Set up workflow extensions. Add the Sales Agreement/Sales Order Generation activity to the Negotiation with Approval workflow between Submit Draft and Internal Approval. This enables automatic attachment on the workflow notification to allow approvers to easily view the document and on the transaction itself as a reference in Contract Documents.

If your business process includes an additional approval layer for non-standard clauses, extend workflow to check the sales document for the existence of non-standard clauses, and if they exist, route the sales document to additional approvers. As an example, the workflow activity, "Non Standard Clause Exists?" can be inserted between "Get Next Approver" and "Approved" to route to additional legal approvers while the Quote or Sales Agreement is in the "Pending Internal Approval" status.

2. If needed, set the profile option OM: Printed Document Extension Class Name. Use this profile with a custom java code class path to enable printing from customized tables. See Preview and Print.
3. Set up the transaction type. This can include:
 - Contract Templates
 - Layout Templates
 - A setup list of approvers

Assigning default templates for Contract and Layout are not mandatory. If your workflow supports Approvals, set up an Approval list for each transaction type. See Approvals.

Note: Contract Templates and Layout Templates can be attached to any OM transaction type.

Related Topics

See: *Oracle Sales Contracts Implementation and Administration Guide* for more details on

authoring and negotiating Contract terms.

Sales Contracts Workbench

There are two ways to use the Sales Contracts Workbench: Sales Contracts Workbench Administrator and Sales Contracts Workbench User. Sales Contracts Workbench Administrator has additional ability to update Contracts Admin via Assign Contract Administrator functionality. Contract Administrators now can use the Contracts Workbench to carry out tasks like viewing and accessing contracts, and notifications. The Contracts Workbench is an HTML page that can be personalized by administrators. Bins or personalizable views are used in the Workbench page to enable administrators to displaying contract information, and additional seeded bins will display a user's notifications, and commonly used shortcuts to additional contract functions. Administrators can take actions on the contracts directly from the bins, depending on their access rights and the contract status. They can also bookmark contracts for frequent use.

The available functionalities for Workbench are listed below:

- Search Capabilities – you can perform simple and/or advanced searching in the Workbench. You can open and update documents from the search results.
- Contract bins - defines the contract bins shown on the Workbench, and how users can personalize each bin to determine bin content (results) based on different bin views.
- Notifications bins.
- Shortcuts – links to frequently used actions and reports like Creating Sales Agreements and Sales Orders, Clause Analysis and Assign Contract Administrator.

Please see the *Oracle Sales Contracts Implementation and Administration Guide* for more details.

Data Model Overview

This appendix covers the following topics:

- Overview
- Key Order Management Modules

Overview

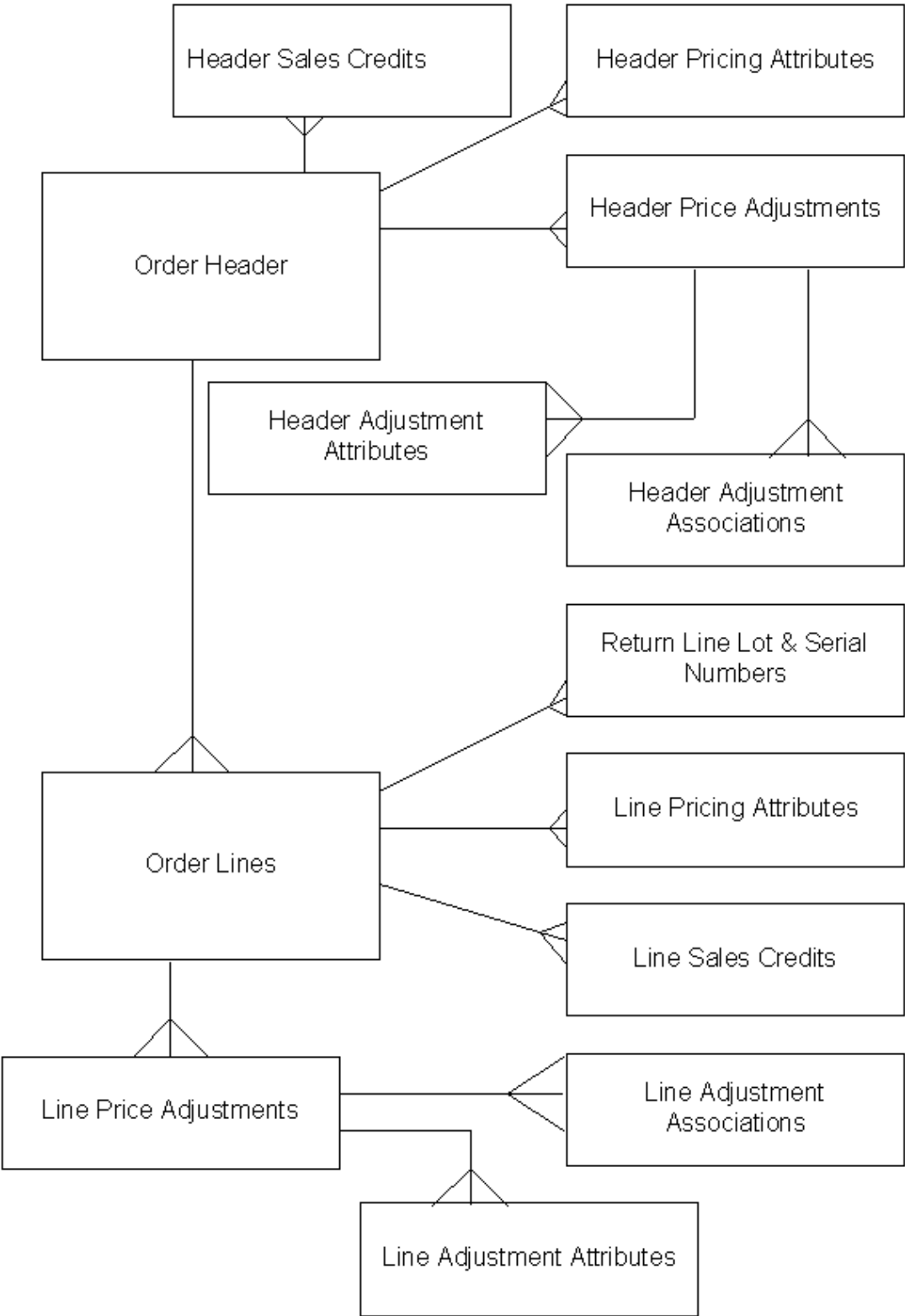
The Sales Order is modeled as a business object comprised of the following entities:

- Header Level
 - Order Header
 - Header Sales Credits
 - Sales Agreement Order Header
- Line Level
 - Order Lines
 - Sales Agreement Order Lines
 - Line Sales Credits
 - Line Price Adjustments
 - Line Pricing Attributes
 - Line Adjustment Attributes
 - Line Adjustment Associations

- Lot Serial Numbers.

Many of the attributes previously defined at the header level are now also defined at the line level. For example, Bill To is now defined at the line level. This allows for order lines on the same order to be billed to different bill-to sites. The attribute values at the header level are used to default attribute values at the line level. See: *Oracle Electronic Technical Reference Manual (eTRM)*

Order Management Entities



Order types were previously used for defaulting information on orders, establishing processing controls such as invoicing, and most importantly, determining the order cycle that an order would have. Order cycles, in turn, controlled the processing flow of an order. Order cycles have been replaced with Oracle Order Management Workflow Definitions, and order types have been replaced by Order Management Transaction Types. Oracle Order Management provides seeded workflow process definitions for both orders and lines and enables you to define both order header and order line transaction types.

The new Order Line differs functionally and technically from its R11 Order Entry counterpart. It contains attributes from old SO_HEADERS, SO_ORDER_LINES, and SO_LINE_DETAILS tables, in addition to some new attributes.

Order Management offers Line level independence; each line has its own flow.

Improvements of Order Management 11*i* over Order Entry:

- In Order Entry the line followed the same cycle as the Order Header it belonged to. Now a line follows a flow that is different from that of the Header. Each Line on an Order can follow a different flow, depending on the Workflow assignment tied to its Line Type.
- In Order Entry a shipment was different from the (shipment parent) line, now every Order Line is a Shipment. The Line quintuplet (Line Number, Shipment Number, Option Number, Component Number, Service Number) is displayed as 1.1.1.1.1 on the Sales Orders form.
- Ordered Quantity on the Line indicates Open quantity as opposed to the original ordered quantity. Cancellation is modeled as a decrement in the ordered quantity along with an increment in the canceled quantity. User and System defined processing constraints define the point in the Order flow, where Cancellations functionality becomes effective. That is you can define the point, where onwards you are required to provide a reason to reduce (cancel) the ordered quantity. The application records history for ordered quantity changes whenever a reason code is provided.
- Many of the Header attributes are now available on the line and their values can be different from that of the Header attribute, such as price list, salesperson, payment terms, shipping and packing instructions, agreement, invoice to and so on.
- Scheduled Order Lines are viewed as demand by the Advanced Planning System.
- Ordering can be based on requested ship or arrival date. Delivery lead time is used to determine the schedule ship date, and it can be user specified.
- When lines were partially processed in Order Entry, they reflected partial cycle states. Now an Order Line splits on partial processing. Order Management splits a line at the following activities: Ship-Confirmation, Return Receipt and Drop-ship receipt.

Order Entry did not support decimal quantities. Now decimal quantities are supported for standard items and configurations. Oracle Order Management also supports ordering, pricing and shipping in different UOMs.

- Shipping tolerances are supported. The tolerance value can be defaulted and adjusted at the line level.
- Order Lines can be entered using the Internal item number or the Customer Item number of one the Generic Item numbers (UPC, EAN, JAN, CLEI). Cross-reference types can be defined in Inventory and used to specify an item.
- Lines can be priced based on a date different from the creation date. The pricing date is exposed enabling you to re-price based on different dates until the Line is invoiced.
- Returns can be entered using Serial number information in addition to the original Order, Invoice or Purchase Order.
- The OE_ORDER_LINES_ALL table now stores Shipments, Options, Included Items Lines and Configuration Item Lines.
- Every line is a shipment and is identified via a line number and a shipment number. The user visible line number ties together all shipments belonging to a line. To split a shipment further use the Split Lines window. The LINE_SET_ID ties shipments from an original line. In Order Entry only a single attribute on SO_LINES_ALL stored the numbering. Depending on the kind of line, it stood for either the line number, the shipment number, the option number or the service line number. These numbers are now de-normalized in the separate column of the OE_ORDER_LINES_ALL table. Additionally, component number helps track included items under a given Line.
- The Category code on the line indicates whether it is an inbound ('RETURN') or an outbound ('ORDER') line. It defaults from the Line Transaction Type.
- Every line that is a part of the configuration, has the TOP_MODEL_LINE_ID pointing to the top Model. The Model line will have the TOP_MODEL_LINE_ID value set to itself. The LINK_TO_LINE_ID points to immediate parent for a line in a configuration. ITEM_TYPE_CODE identifies a item to be a STANDARD, MODEL, CLASS, OPTION or INCLUDED ITEM. For a subassembly (an ATO model within a PTO), the options, classes and included items under the subassembly has its ATO_LINE_ID column pointing to its ATO Model line.
- Order Entry used S and S Date columns to trace Order Cycle Status. In comparison, Order Management uses Workflow to track status. Core statuses are de-normalized onto the Line: Open/Closed, Booked, Fulfilled. The FLOW_STATUS column stores the Line Flow Summary Status, and its value changes as the Line progresses in its flow. The API OE_LINE_STATUS_PUB provides information about various

functional statuses including the completion of the line flow.

- Order Entry used SVRID columns to manage defaulting attribute values and cascading attribute changes. Order Management uses the PL/SQL based Defaulting Framework to provide default values for records but it does not retain an audit trail of how an attribute was defaulted.

Key Order Management Modules

Cancellations

Cancellations in Order Management is flexible. A line can be partially cancelled by directly changing ordered quantity on the line. The system seeded constraints preventing cancellations for standard item line are moved further down the order processing flow to ship-confirmation or invoice interface (for no-ship flows). If needed, you can define more restrictive constraints.

Cancellations is not tracked via workflow. The canceled quantity on the line indicates whether any cancellations have been performed on the line. The canceled flag on the Order and Line indicate whether they have been fully canceled. On a full cancellation, both the Header and Line flow are forced to the close activity.

Order Management enables you to set up rules that determine when a decrement in the ordered quantity is viewed as a cancellation. A cancellation reason is required only when the canceled quantity on the line is incremented over the specified amount. A copy of the old record is stored in OE_ORDER_LINES_HISTORY whenever a reason code is provided together with a quantity change.

Defaulting Framework

Order Management provides enhanced functionality with the PL/SQL based Defaulting Framework. Order attributes are defaulted based on generated PL/SQL Defaulting Rules. You can define a set of rules for each attribute on the order header or line, and you can define the conditions for when to use each rule.

Updates to records do not cause a cascading effect on existing child record. For example, changing the warehouse on the Order Header does not change the warehouse on existing Order Lines. This eliminates the need to store the rule that was used to default a value the first time around. You can use the mass change feature to update a certain value for a set of records. You can use the Mass Change feature to change the warehouse on all the lines of an Order to a different value.

The Defaulting Framework depends on the AK dictionary for object, object relationship and attribute definitions. Various objects can serve as defaulting sources; such as same record, related record, profile options, custom APIs etc. Defaulting Rules can be applied based on user defined conditions.

Fulfillment

Fulfillment is workflow enabled and driven off fulfillment events and sets that are system or user defined. Configurations are implicitly treated as fulfillment sets by the application. The following fulfillment events are seeded:

- Ship-Confirmation
- Purchase Release Receipt
- Return Receipt

You can define your own fulfillment event activities but must configure the seeded Fulfillment activity to recognize them. You can assign an Order line to one or more fulfillment sets. A line in a fulfillment set progresses past the fulfillment activity only when all the members of the fulfillment set(s) it is a member of have been fulfilled.

Columns on the Order Line (fulfilled flag, fulfilled quantity) indicate whether a Line has been fulfilled and the quantity that has been fulfilled. Over & Under shipment can result in a fulfillment quantity that is different from the Ordered quantity. The Over & Under Shipment tolerances control whether a line is considered fulfilled in cases of over or under shipment.

Mass Change

Mass Change enables updating attribute values against selected record sets. You can also copy, reprice, schedule, and apply holds.

Processing Constraints Framework

With PL/SQL based Processing Constraints Framework, Order Management provides enhanced and more flexible security. You can define constraint conditions based on various sources including Workflow Activity Statuses and custom APIs. Additionally constraints can be defined against responsibilities using both inclusion and exclusion rules.

The Framework depends on AK dictionary for object and attribute definitions. Order Management checks constraints for every update, insert and delete operation on the Sales Order object.

Order Management comes with fewer seeded and less stringent system constraints, which allows greater flexibility. You can define more restrictive constraints to better suit your business needs. Some constraints are seeded for backwards compatibility but can be deleted.

For example:

- A constraint that a line cannot be deleted once the Order is booked is seeded to support upgrading customers. This line can be deleted to better suit your business requirements.

- If a constraint prevents you from performing a certain action, you have the option of sending a notification to somebody who does have the authority to perform that action.

Sets

Order Management supports Ship and Arrival sets. The latter specifies which lines need to arrive together. Pick Release does not look at Ship or Arrival sets to determine what can be released. At Ship-Confirmation you are informed if you are breaking a ship set (and allowed to do so). If you partially ship lines from a Ship Set, they are automatically dropped from the Ship Set. When any of the lines from a Ship or Arrival Set is ship-confirmed the set is automatically closed.

There is no Shipment Parent entity. Every Line that is created is a shipment, and has both a Line and a Shipment Number. To break an existing Shipment Line further into multiple shipments you need to Split it. Splitting a Line creates a Line Set, with all the line records that were split from the original line pointing to the Line Set (via the `line_set_id`). The attributes that need to be common across such lines are stored on the Line Set (Item, Ordered Quantity UOM, Shipping tolerances). Line Sets are only created for outbound top level lines (standard item line, Kit Line, Top Model Lines).

When a Line is partially processed the application splits it. All the child entities split as well, including the line flow. The fully processed part progresses along its flow and the partially processed part awaits processing in its flow.

Partial processing at the following points triggers a Line Split:

- Ship-Confirmation
- Drop- Ship Receipt
- Return Receipt

Partial processing of configurations can result in proportional or non-proportional splits. In the latter case the application also creates a remnant set that has both processed and unprocessed lines.

Order Management also supports Fulfillment Sets. A line in a Fulfillment Set is marked Fulfilled only when the all the members of the fulfillment set(s) have been fulfilled.

Set definitions are stored in `OE_SETS`. Membership in a Line Set, Ship Set and Arrival sets is de-normalized in the Order Line. Since a given Order Line can be in one or more fulfillment set, fulfillment set membership is stored in `OE_LINE_SETS`.

System Parameters

Some controls that drive application processing need to be definable at an Operating Unit level. Order Management simplifies the set-up of such controls via the System Parameters entity. You need to define the following controls via the OM System Parameters form:

- Item Validation Organization
- Customer Relationships Enabled Flag

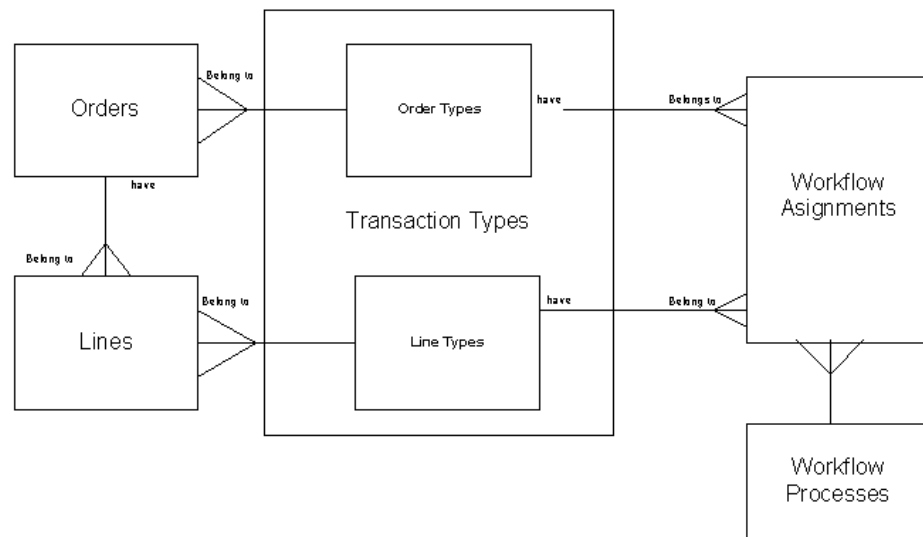
Order Management looks at Oracle Receivables set-up to determine your Ledger and does not require you to set the value redundantly via an OM specific profile option.

Transaction Types

The application has an entity similar to the Order Type for the Line: the Line Type. Transaction Types stores both Order Types and Line types. Most of the Transaction Type attributes are common to the two types. However there are some controls that are available only at the Header level (e.g.: Order Numbering controls) and some only at the Line level. For example, a control that dictates whether a Line is sourced internally or externally. The category code on the Order Transaction type (ORDER, RETURN, MIXED) lets you control whether you want to mix outbound and inbound lines on a given Order.

Transaction Types also determines the workflow that the Order Header or Line follows. Header workflow is assigned to an Order type and a Line workflow to an Order Type, Line Type and Item type combination. The same order can contain lines with different line types following different flows.

Relationship between orders, lines, order types, line types, and workflow processes



Windows and Navigator Paths

This appendix covers the following topics:

- Overview
- Windows and Navigator Paths

Overview

This appendix shows the default navigation path for each window. Refer to this appendix when you do not already know the path for windows you want to use.

Text in brackets ([]) indicates a button.

These abbreviations refer you to other Oracle Applications documentation:

- BOM: *Oracle Bills of Material User's Guide*
- Flex: *Oracle Applications Flexfields Guide*
- INV: *Oracle Inventory User's Guide*
- ONT: *Oracle Order Management User's Guide*
- SYS: *Oracle System Administrator's Guide*
- User: *Oracle Applications User's Guide*

Windows and Navigator Paths

Window	Navigator Menu Path
Account Generator Processes	Order Management > Shipping > Setup > Flexfields > Key > Accounts
Adapter Startup	ITM Adapter > Administration > Adapter Startup
Adapter Shutdown	ITM Adapter > Administration > Adapter Shutdown
Assign Calendars	Order Management > Shipping > Setup > Calendars > Assign
Assign Security Rules	Order Management > Shipping > Setup > Flexfields > Descriptive > Security > Assign > Find Descriptive Flexfield Segment [Find]
Auto-Pack Deliveries SRS	Order Management > Shipping > Auto-Pack Deliveries SRS
Defaulting Setup-Entity Attributes	ONT: Setup > Rules > Defaulting
Calendar	See Assign Calendar and Workday Calendar
Carriers	Order Management > Shipping > Setup> Freight Carriers, Cost Types > Freight Carriers
Choose Document and Label Printers	Order Management > Shipping > Setup > Documents > Choose Printers
Container-Item Relationships	Order Management > Shipping > Setup > Container Load Details
Create LPNs	Order Management > Shipping > Transactions > Data Entry > LPN Data Entry > Create LPNs
Cross-Validation Rules	Order Management > Shipping > Setup > Flexfields > Key > Rules
Define Security Rules	Order Management > Shipping > Setup > Flexfields > Validation > Security > Define > Find Value Set [Find]

Window	Navigator Menu Path
Define Shipping Exceptions	Shipping > Setup > Define Exceptions
Delivery	Order Management > Shipping > Transactions > Data Entry (folder) > Delivery Data Entry (folder)
Descriptive Flexfield Segments	Order Management > Shipping > Setup > Flexfields > Descriptive > Segments
Document Categories	Order Management > Shipping > Setup > Documents > Document Categories - Summary > [New]
Document Categories-Summary	Order Management > Shipping > Setup > Documents > Document Categories
Document Sequences	Order Management > Shipping > Setup > Documents > Document Sequences
Find a Role Definition	Order Management > Shipping > Setup > Grants & Role Definitions > Define Roles > Shipping Execution Role Definition > [Find]
Find Container-Item Relationships	Order Management > Shipping > Setup > Container Load Details > [Find]
Find Exceptions	Order Management > Shipping > Exceptions > [Find]
Find Grants	Order Management > Shipping > Setup > Grants & Role Definitions > Grants > Shipping Execution Grants > [Find]
Find Key Flexfield Segment	Order Management > Shipping > Setup > Flexfields > Key > Values
Find Personal Profile Values (See SYS)	Order Management > Shipping > Setup > Profiles
Flexfield Qualifiers (See Flex)	Order Management > Shipping > Setup > Flexfields

Window	Navigator Menu Path
Freight Carriers	Order Management > Shipping > Setup> Freight Carriers, Cost Types > Freight Carriers
Freight Costs	Order Management > Shipping > Transactions > [Actions]
Freight Cost Types	Order Management > Shipping > Setup > Freight Carriers, Cost Types > Define Freight Cost Types
Interfaces	See Shipping Interfaces
Inter-Org Shipping Methods	Order Management > Shipping > Setup > Regions and Zones > Transit Times
ITM Adapter Status Report	ITM Adapter > Administration > ITM Adapter Status Report
ITM Application Users	ITM Adapter > Setup > ITM User
ITM Error Classification	ITM Adapter > Setup > ITM Response Error Classification
ITM Parameter Setup	ITM Adapter > Setup > ITM Parameters
ITM Partners	ITM Adapter > Setup > ITM Partners
ITM Partner Service Types	ITM Adapter > Setup > ITM Service Types
ITM Service Parameters	ITM Adapter > Setup > ITM Partners > Service Parameters
Location	INV: Inventory > Setup > Organizations > Locations
Log Exceptions	Order Management > Shipping > Exceptions > [New]
Lookups	Order Management > Shipping > Setup > Lookups

Window	Navigator Menu Path
Oracle Shipping Lookup	Order Management > Shipping > Setup > Lookups
Oracle Shipping Lookups	ITM Adapter > Setup > Shipping Lookups
Organization Assignments	Order Management > Shipping > Setup > Freight Carriers, Cost Types > Freight Carriers > Service tabbed region > Organization Assignments
Organization Parameters (See INV)	Order Management > Shipping > Setup > Organization Parameters
Packing Workbench	Order Management > Shipping > Transactions > [LPNs] > [Actions]
Personal Profile Values (See SYS)	Order Management > Shipping > Setup > Profiles > Find Personal Profile Values [Find]
Pick Release	Order Management > Shipping > Release Sales Orders > Release Sales Orders SRS
Pick Slip Grouping Rules	Order Management > Shipping > Setup > Picking > Define Pick Slip Grouping Rules
Picking Rules	INV: Setup > Rules > Picking
Processing Constraints	OM: Setup > Rules > Security > Processing Constraints
Query Manager	Order Management > Shipping > Transactions [After the query is performed, the results display in the Shipping Transactions window.] Note: To perform a query from the Shipping Transactions window: Shipping Transactions window > [Flashlight icon]
QuickCodes (ITEM_TYPE) (See INV)	Setup > QuickCodes
Quick Ship	Shipping > Quick Ship

Window	Navigator Menu Path
Regions Interface	Order Management > Shipping > Setup > Regions and Zones > Regions Interface
Release Rules	Order Management > Shipping > Setup > Picking > Define Release Rules Form
Release Sales Orders For Picking	Order Management > Shipping > Release Sales Orders > Release Sales Orders
Release Sequence Rules	Order Management > Shipping > Setup > Picking > Define Release Sequence Rules
Requests (See User)	Order Management > Shipping > Requests > Find Requests [Find]
Resolve/ Purge Exceptions Parameters	Order Management > Shipping > Exceptions > [Tools] > Resolve/Purge Exceptions
Resubmit Errored Requests	ITM Adapter > Administration > Resubmit Errored Requests
Rollup Groups	Order Management > Shipping > Setup > Flexfields > Key > Groups> Find Key Flexfield Segment [Find]
Segment Values	Order Management > Shipping > Setup > Flexfields > Validation > Values > Find Value Set [Find]
Sequence Assignments	Order Management > Shipping > Setup > Documents > Assign Sequences
Ship Confirm Deliveries SRS	Order Management > Shipping > Auto Ship confirm Deliveries SRS
Ship Confirm Rules	Order Management > Shipping > Setup > Auto Ship Confirm Rules
Ship Method Lookups	Inventory > Setup > Organizations > Shipping Methods

Window	Navigator Menu Path
Shipping Document Sets	Order Management > Shipping > Setup > Documents > Document Sets
Shipping Execution Grants	Order Management > Shipping > Setup > Grants and Role Definitions > Grants
Shipping Execution Role Definition	Order Management > Shipping > Setup > Grants and Role Definitions > Define Roles
Shipping Interfaces	Order Management > Shipping > Interfaces > Run > Submit a New Request > [OK]
Shipping Parameters	Order Management > Shipping > Setup > Shipping Parameters
Shipping Reports and Documents	Order Management > Shipping > Reports and Documents > Submit a New Request > [OK]
Shipping Transactions	Order Management > Shipping > Transactions > Query Manager [Do a search in the Query Manager window. The search results display in the Shipping Transactions window.]
Shorthand Aliases (See Flex)	Order Management > Shipping > Setup > Flexfields > Key > Aliases
Skip Screening	ITM Adapter > Administration > Skip Screening
Stop	Order Management > Shipping > Transactions > Data Entry > Stop Data Entry > [Detail]
Submit Request	Order Management > Shipping > Reports and Documents > Submit a New Request > [OK]
Trip	Order Management > Shipping > Transactions > Data Entry > Trip Data Entry > [Detail]
UPS Address Validation	Order Management > Shipping > Transactions > [Actions]

Window	Navigator Menu Path
UPS Rate and Service Selection	Order Management > Shipping > Transactions > [Actions]
UPS Time in Transit	Order Management > Shipping > Transactions > [Actions]
UPS Tracking Summary	Order Management > Shipping > Transactions > [Actions]
Value Sets	Order Management > Shipping > Setup > Flexfields > Validation > Sets
View Exceptions	Order Management > Shipping > Exceptions
View Shipping Status	Order Management > Shipping > Transactions > Actions > View Shipping Status
Workday Calendar (See BOM)	Order Management > Shipping > Setup > Calendars > Enter

Pricing Profile Options

This appendix covers the following topics:

- Overview
- Profile Options
- Setup Profile Options Summary

Overview

This chapter contains information on profile options and system parameters specific to Oracle Basic Pricing.

Profile Options

During implementation, the value for each user profile option is defined to specify how Oracle Pricing controls access to and processes data. The system administrator typically sets up and updates profile option values. For more information, see *Oracle Applications System Administrator's Guide*.

Setup Profile Options Summary

The following table indicates whether you can view or update the profile option and at which System Administrator level the profile options can be updated:

- User
- Responsibility
- Application
- Site levels

The following terms describe the available permissions:

- View & Update: You can view and update the profile option.
- View: You can view the profile option.
- No access: You can neither view nor update the profile option.

The profile option may be either required or optional (Required column). If Required, you must provide a value; if the cell indicates Optional, you do not need to provide a value.

The profile options table indicates the default value for each profile option (Default Value column); you only need to change its value you do not want to use the default value. The phrase No Default indicates that there is no default value for the profile option; it does not indicate a default value of No.

After the table, the text describes the meaning of each profile option.

Profile Options for Oracle Pricing (Basic Pricing)

Profile Option	Sys Admin Site	Sys AdminApp	Sys Admin Resp	Sys Admin User	Required	Default Value
QP: Allow Duplicate Modifiers	View & Update	View Only	View Only	View Only	Required	Yes
QP: Blind Discount Option	View & Update	View & Update	No access	No access	Required	Yes
QP: Debug	View Only	View Only	View Only	View Only	Optional	Request Viewer Off
QP: Inventory Decimal Precision	View & Update	View Only	View Only	View Only	Required	10
QP: Item Validation Organization	View & Update	View Only	View Only	View Only	Required	No Default
QP: Negative Pricing	View & Update	View Only	View Only	View Only	Required	No Default

Profile Option	Sys Admin Site	Sys AdminApp	Sys Admin Resp	Sys Admin User	Required	Default Value
QP: Price Rounding	View & Update	View Only	View Only	View Only	Required	Blank
QP: Qualify Secondary Price Lists	View & Update	View Only	View Only	View Only	Optional	No
QP: Return Manual Discounts	View & Update	View Only	View Only	View Only	Optional	Yes
QP: Satisfied Qualifiers Option	View & Update	View & Update	View & Update	View & Update	Optional	Yes
QP: Security Default Maintain Privilege	View & Update	View Only	View Only	View Only	Required	Blank
QP: Security Default ViewOnly Privilege	View & Update	View Only	View Only	View Only	Required	Blank
QP: Selling Price Rounding Options	View & Update	View Only	View Only	View Only	Optional	Individual: = round(listp rice) + round(adj)
QP: Set Request Name	View & Update	View Only	View Only	View Only	Required	Blank
QP: Unit Price Precision Type	View & Update	View Only	View Only	View Only	Required	Standard

Profile Option	Sys Admin Site	Sys AdminApp	Sys Admin Resp	Sys Admin User	Required	Default Value
QP: Valueset Lookup Filter	View & Update	View Only	View Only	View Only	Optional	Yes
QP: Verify GSA Violations	View & Update	View Only	No access	No access	Required	No

OM: List Price Override Privilege

Default Value: None

This profile option enables you to override the list price of orders in the Sales Orders window and Quick Sales Orders windows in Oracle Order Management. You can override the list price for imported orders and orders entered directly in the Sales Orders windows.

Note: If Enforce List Price is selected for the order type, the list price cannot be overridden--even if the profile option is set to Unlimited. You can check if Enforce List Price is selected in the Transaction Types window.

If the list price has been overridden, you can "unfreeze" the changed list price by first clearing the List Price field. Once cleared, then the value from the *original* list price field is copied to the List Price field. Then choose Actions > Price Line or Actions > Price Order in the Sales Orders window to change the unit list price to the price list setup.

Example 1

1. Enter Item AS54888 for a quantity of 10.
Unit List Price: \$1
Unit Selling Price: \$1
2. Change the unit list price to \$200 for the following results:
Original list price is now \$1.
Unit Selling Price is now \$200.
3. When you save the order, a 10% additional discount is applied. The Unit Selling Price becomes \$180.

Example 2

1. Enter Item AS54888 for a quantity of 10.
Unit List Price: \$1
Unit Selling Price: \$1
2. Save the order. The Unit Selling Price becomes \$0.90 due to a 10% discount.

Overtyping the unit list price to change the price to \$200. The original list price field becomes \$1. Unit selling price becomes \$180.

Values

The values for this profile option are:

- None: The unit list price field cannot be updated.
- Unlimited: Enables you to update the unit list price in the Main tab of the Sales Order window.

When the unit list price is overtyped, the new value is stored in the unit list price field, and the original value is stored in the original list price field. Even if the order is repriced, these values will not change.

When the Pricing Engine is called, if there is a value in the original list price field, the pricing engine will not change the list price.

QP: Allow Duplicate Modifiers

Default Value: Yes

Used by Basic Pricing Only. The profile option QP: Allow Duplicate Modifiers, which is typically set by the System Administrator, determines if duplicate modifiers are permitted. If set to Yes (the default), an existing modifier can be duplicated. If set to No, you must change the new modifier line before you can save it. A modifier line is considered a duplicate if any of the following attributes of the original and duplicated line match within the same modifier list:

- List Line Start Date Active
- List Line End Date Active (Lines with overlapping dates are considered duplicates)
- Modifier Level Code (Order/Line)
- Automatic Flag (Selected/Cleared)
- Product UOM code
- Product Attribute

- Product Attribute Value
- Pricing Attributes
- Set of Qualifiers

Values

The possible values for this profile option are:

- Yes: Duplicate modifiers can be copied within the same modifier list for Basic Pricing.
- No: Duplicate modifiers cannot be copied within the same modifier list for Basic Pricing.

This profile option is visible and can be updated at the site level.

QP: Blind Discount Option

Default Value: Yes

The default value for this profile option should only be changed if you never define blind discounts.

If you never define blind discounts, set this profile option to No to bypass part of the search engine processing. A blind discount is a modifier that has all of the following qualities:

- No List Qualifiers on the Modifier List Header
 - No Line Qualifiers on the Modifier
 - No Products or Pricing Attributes

Note: If your business must define blind discount modifiers, make sure that this profile option is set to Yes. Otherwise these modifiers will not be selected by the Search Engine.

Values

The possible values for this profile option are:

- Yes: Blind Discounts are enabled.
- No: Blind Discounts are disabled, that is, bypass Blind Discount processing in the Search Engine.

This profile option is visible and can be updated at the site and application levels.

QP: Debug

Default value: Request Viewer Off

Values

- Request Viewer On: When set to on, the Request Viewer captures pricing request details into the pricing debug tables and debug log information into the debug log table. The debug log text file is also created.
- Request Viewer Off: When set to off, nothing is written into pricing debug tables and debug log table. The debug log text file will not be created.
- Request Viewer On, but Debug Log is not visible in Viewer: When this is set, the Request Viewer captures pricing request details into the pricing debug tables, but debug log information is not written into the debug log table. The debug log text file will be created.

Note: Another profile option, QP: Set Request Name, can be used in conjunction with the QP: Debug profile option. When the QP: Set Request Name is set to Yes, the Request Name field will be prefixed with the Order ID.

This profile option can be updated at the user level and is active for the transactions of the user who set this profile option—other users' transactions are not affected.

QP: Inventory Decimal Precision

Default value: 10

Used to set maximum decimal precision for unit of measure (UOM) conversion when calculating pricing quantity. If not set, the default is set to 10 digits decimal precision.

Example 1

Consider the following set up:

- Primary UOM = YR (year)
Order UOM = MTH (month)
Order Quantity = 12

The pricing engine rounds the pricing quantity based on the decimal precision setting. If the default precision is 10 digits, then the resulting pricing quantity will be $12 * (1/12) = 0.9999999999...$ the number will be rounded to 1YR.

Example 2

Consider the following set up:

- Primary UOM = DZ (dozen)

Order UOM = EA (each)

Order Quantity = 16

The pricing engine rounds the pricing quantity based on the decimal precision setting. If a user sets the Profile QP: Inventory Decimal Precision to 6 digits, then the resulting pricing quantity is calculated as follows: $16 * (1/12) = 1.33333333333333...$ which is rounded to 1.333333 DZ.

QP: Item Validation Organization

Default Value: None

Set this profile option, by site or responsibility, to an organization at the level in your organization hierarchy at which you set prices for items.

This profile option indicates the Oracle Manufacturing organization that items are validated and viewed against when entering items in the Price List or Modifier windows. The possible values for this profile option are all inventory master organizations currently defined.

This profile option is visible and can be updated at the site and responsibility levels.

QP: Negative Pricing

Default value: No

The default value should only be changed if your business needs to define a negative price on a price list line.

Note: Controls whether a negative price can be entered in the Price List setup window.

Values

- Yes: Enables a negative price to be entered.
- No: Does not enable a negative price to be entered.

This profile option is visible and can be updated at the site and application levels.

QP: Price Rounding

Default value: Blank

This profile option controls how the value for the rounding factor is derived and used in price lists and related windows. The Price List window rounds, stores and displays the list price based on this profile option setting.

The value entered in the Round To field from the price list is used to store the rounded value, while Currency Precision determines the displayed list price.

For example, if the Round To value is -2 and the Currency Precision is -5, the following

list prices display:

- 115.24000
9.23000
100.00000

If the QP: Price Rounding profile option is set to Enforce Currency Precision, then the value in the Round To field in the Price Lists window cannot be updated. Also, the values permitted for the rounding factor will be limited to the price list currency precision.

The following table shows how different settings for QP: Price Rounding affect the list price. For this example, assume that the price list price = 6.15 and the Markup = 1.52% resulting in 6.24348.

Rounding Example

List Price	If the QP: Price Rounding value is: Blank (Default)	If the QP: Price Rounding value is: Enforce Price List Rounding Factor	If the QP: Price Rounding value is: Enforce Currency Precision
-	Round To value on Price List: -2	Round To value on Price List: -2	Round To value on Price List: -4
List Price	6.15	6.15	6.15
Markup	1.52 %	1.52 %	1.52 %
List Price (new)	6.24348	6.24	6.2435

Values

Blank (Default): If this option is selected, the following occurs:

- No limit is imposed on the number of places that can be entered on the price list after the decimal point.
- The value for a price list line is not rounded.
- The list price that displays will not be rounded by either Currency Precision or the Round To value.
- Static formula calculation results will not be rounded.
- The Round To value specified for the price list rounds the pricing engine results.

Enforce Price List Rounding Factor: If this option is selected, the value entered in the Round To field of the Advanced Pricing - Price Lists window is used for:

- Rounding the value on the price list line.
- Rounding the pricing engine calculation results.
- Calculating the results for static formula calculations.

Note: The currency precision setting determines the display of the list price.

Enforce Currency Precision: If selected, the Rounding Factor field on the price list cannot be updated by the user. Instead the Rounding Factor value defaults from the profile QP: Unit Price Precision Type (either Standard/Extended precision) for the price list currency. The decimal places that display for the list price is determined by the Currency Precision.

Rounding Behavior

The profile option settings for QP: Price Rounding affect the rounding behavior as described below:

Formula Prices

For dynamic formulas, the calling application passes the rounding factor and the resulting rounding factor displays regardless of the profile setting.

Price List

- The Round To value is used to round and store the list price if the profile option QP: Price Rounding is set to Enforce Rounding Factor or Enforce Currency Precision.
- Currency Precision is used to display the list price if profile option QP: Price Rounding is set to Enforce Rounding Factor or Enforce Currency Precision.
- The Round To can not be modified if profile option QP: Price Rounding is set to Enforce Currency Precision.

Adjust Price List

The list price, after adjustment by amount or percent, will be rounded and stored using Rounding Factor if the profile option QP: Price Rounding is set to Enforce Rounding Factor or Enforce Currency Precision.

Add Items to Price List

The list price will be rounded and stored using Rounding Factor if the profile option

QP: Price Rounding is set to Enforce Rounding Factor or Enforce Currency Precision and Set List Price Equal to Cost From is checked on the window.

Update Formula Prices

The list price will be rounded and stored using Round To if the profile option QP: Price Rounding is set to Enforce Rounding Factor or Enforce Currency Precision.

Agreement

The Round To is used to round and store the list price if the profile option QP: Price Rounding is set to Enforce Rounding Factor or Enforce Currency Precision.

- Currency Precision displays the list price if the profile option QP: Price Rounding is set to Enforce Rounding Factor or Enforce Currency Precision.
- The Round To cannot be modified if the profile option QP: Price Rounding is set to Enforce Currency Precision.

QP: Qualify Secondary Price Lists

Default value: No

This profile option enables secondary price lists to be checked for qualifiers when the primary price list is not validated. If the profile is set to Yes an item on a non-validated line will not be picked up from secondary price lists when the primary price list is not validated.

Values

- Yes: Secondary price lists will be checked for qualifiers when the primary price list is not validated.
- No: Secondary price lists will not be checked for qualifiers when the primary price list is not validated.

QP: Return Manual Discounts

Default Value: Yes

This profile option determines how the pricing engine should perform incompatibility processing for manual discounts.

Values

The possible values for this profile option include the following:

- Yes: All the manual discounts will be returned. All unapplied manual discounts are returned and all automatic discounts not considered are returned as manual discount.

- No: All unapplied manual and automatic discounts undergo incompatibility processing and one per incompatibility group is returned. In this process an automatic discount can get deleted and a manual discount can get selected.

The Pricing Engine does not consider applied manual modifiers during incompatibility processing. Discounts (automatic or manual) deleted as part of incompatibility processing will not be returned as manual discounts.

This profile option is visible and can be updated at the site, application, responsibility, and user levels.

QP: Satisfied Qualifiers Option

Default value: Yes

The profile option QP: Satisfied Qualifiers Option impacts performance when entering and booking an order. It controls whether satisfied qualifiers are returned to the calling application or not.

Values

Yes (Default): The pricing engine returns all the satisfied qualifiers to the calling application. This increases pricing engine processing time.

No: Processing time is reduced because the pricing engine does not return the satisfied qualifiers to the calling applications.

QP: Security Default Maintain Privilege

Default value: Global

This profile option controls the default maintain privileges for NEWLY CREATED price lists and modifiers after security is turned on. For example, if the profile option is set to Operating Unit, then the maintain privileges for a newly-created price list or modifier are restricted to the operating unit where the price list or modifier was created.

Values

Global: Includes all users with access to pricing menus.

Operating Unit: Includes users within the named operating unit.

None: No-one can maintain the entity.

QP: Security Default ViewOnly Privilege

Default value: Global

This profile option determines the default view-only privileges for NEWLY CREATED price lists and modifiers after security is turned on. This controls which users (if any) have access to view specific price lists and modifiers.

View and maintain responsibilities are controlled separately by different profile options.

Values

Global: Includes all users with access to pricing menus.

Operating Unit: Includes users within the named operating unit.

None: No-one can view the entity.

QP: Selling Price Rounding Options

Default value: Individual: = round(listprice) + round(adj)

This rounding option rounds the selling price after adding unrounded list price and adjustments: selling price = round (list price + adjustments)

Note: The profile OM: Round Unit Selling Price has been migrated to QP: Selling Price Rounding Options.

Values

- NO: = unrounded listprice + unrounded adjustments: No rounding.
- Individual: = round(listprice) + round(adj): Rounds selling price and adjustments.
- Additive: =round(listprice + adj); unrounded Freight: Rounds selling price after adding unrounded list price and adjustments.

This profile option can be viewed and updated at the site level.

Freight Charge Rounding:

If the QP: Selling Price Rounding Options profile is set to NO or ADDITIVE then freight charges will not be rounded. If the profile is set to INDIVIDUAL then freight charges will be rounded. The rounding flag in the control record passed by calling application may have one of the following values:

- Y (Yes): Rounds selling price and adjustments.
- N (No): No rounding.
- Q: Behavior depends on the profile setting for QP: Selling Price Rounding (NO, INDIVIDUAL, ADDITIVE). If rounding flag is passed as Q, but QP: Selling Price Rounding Options is NULL, the default behavior is no rounding.
- Null: Rounds selling price and adjustments.

Case 1

Rounding Flag = Q

Profile QP: Selling Price Rounding Options = NO

List Price = 12.60, Rounding Factor = 0, Discount 25%

Adjustment amount = -3.15

Selling price = 12.60-3.15=9.45

Case 2)

Rounding Flag = Q

Profile QP: Selling Price Rounding Options = INDIVIDUAL

List Price = 12.60, Rounding Factor = 0, Discount 25%.

Adjustment amount = -round (round(12.60)*0.25) = -3

Selling price = round(12.60) - 3 = 10

Case 3)

Rounding Flag = Q

Profile QP: Selling Price Rounding Options = ADDITIVE

List Price = 12.60, Rounding Factor = 0, Discount 25%.

Adjustment amount = -3.15

Selling price = -round(12.60 - 3.15) = 9

Case 4)

Rounding Flag = N

List Price = 12.60, Rounding Factor = 0, Discount 25%.

Adjustment amount = -3.15

Selling price = 12.60-3.15=9.45

Case 5)

Rounding Flag = Y

List Price = 12.60, Rounding Factor = 0, Discount 25%.

Adjustment amount = -round (round(12.60)*0.25) = -3

Selling price = round (12.60) - 3 = 10

Case 6)

Rounding Flag = NULL

List Price = 12.60, Rounding Factor = 0, Discount 25%

Adjustment Amount = -round (round(12.60)*0.25) = -3

Selling price = round(12.60) - 3 = 10

QP: Set Request Name

Default value: Blank

This profile option is used in conjunction with the QP: Debug profile option. Set QP: Set Request Name to Yes if you want the value in the Request Name field prefixed to the OrderID.

Values

Any valid values such as the Name or User ID of the user submitting the price request. The QP: Set Request Name profile option is visible and can be updated at the site, application, responsibility, and user levels.

QP: Unit Price Precision Type

Default Value: Standard

This profile option determines the Round To value that defaults in the price list. The Round To value is limited by the number of positions allowed in the standard or extended precision format of the price list currency.

Values

The possible values for this profile option are:

- Extended: Rounding Factor is defaulted to the currencies extended precision
- Standard: Rounding Factor is defaulted to the currencies standard precision

This profile option can be updated at the site and application levels.

QP: Valueset Lookup Filter

Default Value: Yes

Use this profile option to enable or disable a search criteria window for qualifier value lookups in qualifiers, price lists, and modifiers. Some qualifiers use large valusets, for example, those based on all customers, and searches may take a long time. If you want to reduce the number of items that display in the list of values, you can enter search criteria. If you do not enter search criteria and click the list of values indicator for the fields Value From or Value To, you see a window which advises that you have not entered search criteria and that the search may take a long time.

Values

The possible values for this profile option are:

- Yes: The message displays.
- No: The message does not display. Use this value is you do not expect to have large qualifier valuesets and do not need to enter search criteria to reduce the display.

This profile option is visible and can be updated at the site level.

QP: Verify GSA Violations

Default Value: No

This profile option indicates whether the pricing calculation engine should test for GSA violations. You can change the value to Yes if you require GSA pricing functionality.

The evaluation is performed if: 1) a request is for a non-GSA customer, and 2) GSA rules are violated if the selling price of an item is calculated to be less than the price of the item on any GSA price list.

Values

The possible values for this profile option are:

- Yes: Pricing engine tests for GSA violations, and any violating request lines are returned to the calling application with a status of GSA violation.
- No: Does not test for GSA violations.

This profile option can be updated at the site level.

Lookups

This appendix covers the following topics:

- Advanced Pricing Lookups
- Shipping Execution Lookups
- Header to Line Cascade Attributes Lookup

Advanced Pricing Lookups

This appendix lists the predefined Oracle Pricing Lookups.

Agreement Type

Access Level: Extensible

Allows the user to optionally categorize agreements by defining unique agreement types. For example, the user could setup an agreement type per contract type, or use the categorization for reporting purposes. An agreement type is optional on a pricing agreement.

The user can choose to use the seeded agreement types or add new types.

Seeded Agreement Types

Code	Meaning	Function
GSA	Government Services Agreement	Used to categorize pricing agreements.
STANDARD	Standard Terms and Conditions	Used to categorize pricing agreements.

Code	Meaning	Function
VPA	Volume Purchase Agreement	Used to categorize pricing agreements.

Arithmetic Operator

Access Level: System

The method by which a price or modifier is calculated. Used in the Price List and Modifier Setup U.I.s.

Arithmetic Operator

Code	Meaning	Function
%	Percent	Modifier value is calculated as a per unit percentage of the List Price.
AMT	Amount	Modifier value is calculated as per unit amount +/- the List Price.
LUMPSUM	Lump Sum	Modifier value is a fixed amount, i.e. is not per unit.
NEW PRICE	New Price	Modifier value overrides the selling price.
PERCENT PRICE	Percent Price	List Price is derived as a percentage of an associated item.
UNIT PRICE	Unit Price	List Price is a per unit price.

Comparison Operator

Access Level: System

Used when setting up Qualifiers and Pricing Attributes to define the rule as to how the search engine should evaluate the attribute on the request line.

Comparison Operator

Code	Meaning	Function
=	Equals	Qualifier/Pricing Attribute value on the incoming request should match the Qualifier/Pricing Attribute value.
BETWEEN	Between	Qualifier/Pricing Attribute value on the incoming request should be in the range defined by the Qualifier / Pricing Attributes.
Not =	Not Equal	Qualifier Attribute value on the incoming request should NOT match the Qualifier Attribute value.

Currency Precision Type

Access Level: System

Valid values for the profile option QP: Unit Price Precision Type. Indicates whether the currencies standard or extended precision should be used.

Currency Precision Type

Precision Type	Rounding Factor
Extended	Rounding Factor is defaulted to the currencies extended precision
Standard	Rounding Factor is defaulted to the currencies standard precision

Effective Date Types

Access Level: System

Effective date ranges of these types can optionally be defined on some types of Modifier Lists. The Search Engine will use these dates, if passed by the calling application, in addition to the pricing effective date to determine which Modifier Lists are eligible.

Effective Date Types

Code	Meaning	Function
ORD	Order Date	Order Date must be within the date range.
SHIP	Requested Ship Date	Customer requested Ship Date must be within the date range.

Incompatibility Groups

Access Level: Extensible

Incompatibility Groups allow the user to define which Modifiers cannot be applied to a request line with which other Modifiers, i.e. are incompatible, and which Modifiers cannot be applied to a request line with any other Modifier, i.e. are exclusive.

All Modifiers in a Phase which are incompatible should be assigned to the same Incompatibility Groups, LVL1 - LVL3, and any Modifier in a Phase which is exclusive should be placed in the EXCL - Exclusive Group.

Users may define additional incompatibility groups, but only the seeded EXCL - Exclusive group is treated as incompatible with ALL.

Incompatibility Groups

Code	Meaning	Function
EXCL	Exclusive group	Incompatible with all other Modifiers in a Phase.
LVL1	Level 1 Incompatibility	Incompatible with other Modifiers in this incompatibility group in a Phase.
LVL2	Level 2 Incompatibility	Incompatible with other Modifiers in this incompatibility group in a Phase.

Code	Meaning	Function
LVL3	Level 3 Incompatibility	Incompatible with other Modifiers in this incompatibility group in a Phase.

Incompatibility Resolution Code

Access Level: System

Methods of deciding which Modifier should be selected when multiple Modifiers in the same incompatibility group are eligible to be applied to a request line in the same pricing phase. The method for resolving incompatibility is specified by pricing phase when maintaining pricing phases in the Event to Phase Mapping Setup Up.

Incompatibility Resolution Code

Code	Meaning	Function
BEST PRICE	Best Price	Search Engine selects the Modifier which gives the lowest price to the customer.
PRECEDENCE	PRECEDENCE	Search Engine selects the Modifier with the lowest precedence, i.e. the highest specificity.

List Line Type Code

Access Level: System

Defines the behavior of a List Line; a List Line maybe a Price List Line or a type of Modifier, i.e. price adjustment, benefit or charge.

List Line Type Code

Code	Meaning	Function
PLL	Price List Line	Sets the base price of an item or level in product hierarchy.

Code	Meaning	Function
PBH	Price Break Header	A series of base price or price adjustments which are eligible for application to the pricing request according to a delimited break unit range and the rules of the break type.
PMR	Price Modifier	One or more pricing attributes, whose value or range of values is used to derive a factor on a formula line.
DIS	Discount	Reduces the list price, or selling of the previous pricing bucket, according to the calculation rules of the arithmetic operator.
SUR	Surcharge	Increases the list price, or selling of the previous pricing bucket, according to the calculation rules of the arithmetic operator.
OID	Other item Discount	A discount for which eligibility can be qualified by one or more request lines, but is applied to the same or different request line/s which are on the request.
PMG	Promotional Goods	A discount for which eligibility can be qualified by one or more request lines, but for which a new request line is created for the discounted item.
CIE	Coupon Issue	Creation of a coupon which qualifies for a discount or promotional goods on a future request.

Code	Meaning	Function
IUE	Item Upgrade	Substitution of one item for another on a request line, according to the pre-defined promotional Upgrade relationship between the two items.
TSN	Terms Substitution	Changing value of qualifier attribute in terms context on request line. Seeded qualifier attributes in terms context are Freight, Shipping, and Payment Terms.
Freight Charges	Freight and Special Charges	Monetary charges which are calculated based on attributes of a request line, but which do not effect the selling price on the request line.

List Type Code

Access Level: System

Used to categorize the type of list which groups price list lines or modifiers. Used for validation, including which types of lines can be included on the list, and reporting purposes.

List Type Code

Modifier Line Types	Price List	Discount	Surcharge	F&S	Promotion	Deal	Price Modifier
Price List	X						
Discount		X			X	X	
Surcharge		X	X		X	X	

Modifier Line Types	Price List	Discount	Surcharge	F&S	Promotion	Deal	Price Modifier
Freight Charge				X			
Price Break Header		X	X		X	X	
Item Upgrades					X	X	
Other Item Discount					X	X	
Terms Substitution					X	X	
Promotional Goods					X	X	
Coupon Issue					X	X	
Price Modifier							X

Modifier Level Code

Access Level: System

Determines what qualifiers and pricing attributes are considered by the search engine when deciding if a request line qualifies for a modifier. This code also determines at what level, i.e. individual line or summary, a modifier should be applied to the request.

Modifier Level Code

Code	Meaning	Function
Line	Line	Line Group
Line Group	Group of lines	The quantity, in the pricing UOM, and amount spent on an item is summed across all request lines. Hence the total item quantity and amount, on the request, or total quantity and amount at a level in the product hierarchy, is considered by the search engine when deciding if a modifier is qualified or not. Modifier application is at the request line level.
Order	Order	Only qualifiers or pricing attributes of the summary request line, or header, are considered by the search engine when deciding if a modifier is qualified. Note: it is not possible for a header level modifier to be qualified by a request line. Modifier application is at the summary request line, or header level.

Price Break Type Code

Access Level: System

Rules which determine which delimited break unit range/s the qualifying break unit quantity falls into.

Price Break Type Code

Code	Meaning	Function
POINT	Point	Volume break in which each volume of break unit gets price/discount in the break range into which it falls.
RANGE	Range	Volume break in which each volume of break unit gets base price/modifier in the break range within which the <i>total</i> volume falls.
RECURRING	Recurring	Volume break in which the modifier is given <i>for each</i> volume of break unit that falls into the break range. Used for modifiers only.

Price Formula Line Type Code

Access Level: System

Defines the behavior of a formula line. are the defined lookups for basic pricing in OM, and are the lookups defined for Oracle Pricing.

Price Formula Line Type Code

Code	Function	Meaning
ML	Factor List	Formula uses a price modifier list to derive the value for the formula line. A price modifier list is a grouping of price modifier lines, each line having one or more pricing attributes, whose value or range of values is used to derive a factor.

Code	Function	Meaning
NUM	Numeric Constant	Fixed value
PRA	Pricing Attributes	Formula takes as input the pricing attribute for the item referenced by the formula line.

Code	Function	Meaning
FUNC	Function	Formula uses a function to derive the value for the formula line
LP	Price List Line	Formula takes as input the list price of the price list line to which it is attached
PLL	Price List Line	Formula takes as input the list price from the price list line (any price list line) referenced by the formula line.
PRA	Pricing Attribute	Formula takes as input the pricing attribute for the item referenced by the formula line.
ML	Factor List	<p>Formula uses a price modifier list to derive the value for the formula line.</p> <p>A price modifier list is a grouping of price modifier lines, each line having one or more pricing attributes, whose value or range of values is used to derive a factor.</p>
NUM	Numeric Constant	Fixed value

Pricing Events

Access Level: System

A point in the process flow of the transaction system/calling application at which a call is made to the Pricing Engine (analogous to a Workflow Event).

The following seeded lookup codes are for Oracle Order Management integration with pricing; each event represents a stage in the order cycle at which pricing is performed. The information returned by pricing; base prices, price adjustments, promotions, freight charges, etc. depends on the pricing phases which are processed for this event.

Note: in this release it is not possible to create new pricing events.

Pricing Events

Code	Meaning	Function
PRICE	Fetch List Price	Calls pricing engine to get base price as user enters item, quantity and unit of measure on the order line.
LINE	Enter Order Line	Calls pricing engine to get line level modifiers as user saves the order line.
ORDER	Save Order Event	Calls pricing engine, as user saves order, to get order level modifiers and other benefits which depend on multiple order lines.
BOOK	Book Order	Calls pricing engine as order is booked.
SHIP	Enter Shipments	Calls pricing engine as order is shipped.
BATCH	Batch Processing	Calls pricing engine when orders are processed in batch, replaces 'Line' and 'Order' events.

Pricing Group Sequence

Access Level: Extensible

A Pricing Group Sequence is a mechanism to control the application order of price adjustments and retrospective discounts, i.e. accruals. The sequence of application of these modifiers becomes important when the adjustment or accrual value is derived from the selling price (the price resulting from applying prior price adjustments) rather than the list price. This is known as discounts on discounts or cascading discounts. The sequence number of the group determines which order the calculation engine will apply the modifiers.

The pricing group sequence allows the user to place all price adjustments and retrospective discounts in a pricing bucket; all modifiers in a bucket are additive, i.e. the adjustment amount for all modifiers in a bucket is calculated off the final selling price, or subtotal of the previous bucket.

The user can add additional pricing group sequences / buckets if they require further subtotals or cascading of modifiers. Pricing Group Sequence 0 is reserved for base price calculation.

Pricing Group Sequence

Code	Meaning	Function
0	Base Price	Base Price calculation
1	Price Adjustments Bucket 1	First modifier subtotal
2	Price Adjustments Bucket 2	Second modifier subtotal
3	Price Adjustments Bucket 3	Third modifier subtotal

Related Modifier Group Type

Access Level: System

Used by Oracle Pricing internally to identify relationships between, and functional groupings, of modifiers.

Related Modifier Group Type

Code	Meaning	Function
QUALIFIER	Qualifier	Identifies those modifiers which the request must qualify for in order to get a benefit.

Code	Meaning	Function
BENEFIT	Benefit	Identifies those modifiers which are given as a benefit once the qualification criteria has been met.
COUPON	Coupon	Identifies the benefit which is given for a Coupon Issue.
PRICE BREAK	Price Break	Records which modifiers are price break lines for a price break.

Request Type

Access Level: Extensible

A Request Type indicates to the pricing engine the type of transaction being priced. This is important to pricing, as the engine will use this information to only consider data created specifically to price this particular type of transaction.

The following seeded lookup codes are for Oracle Order Management integration with pricing. Any application which wishes to use Oracle Pricing should create a request type lookup code to identify their transaction.

Request Type

Code	Meaning	Function
ONT	Order Management Order	Used to price an Order Management Order.

Source System

Access Level: Extensible

The Source System is used to identify the origin of the pricing data. The pricing engine will use this information to restrict it's search to pricing information which originated from a particular application depending on the Request Type to Source System Setup.

Any application which wishes to use create pricing information should create a source system lookup code to identify their pricing data.

Source System

Code	Meaning	Function
QP	Oracle Pricing	Use Oracle Pricing tables as data origin.

Shipping Execution Lookups

This section lists the key lookups in Oracle Shipping Execution. Consult the Oracle Shipping Execution Lookups form (Setup > Lookups) for complete information on all of the lookups.

Key Lookups

DELIVERY_STATUS: Delivery status
DOCUMENT_TYPE: Shipping document types
EXCEPTION_SEVERITY: Exception severity
EXCEPTION_STATUS: Exception status
EXCEPTION_TYPE: Exception type
FREIGHT_COST_TYPE: Freight cost type lookups
INSPECTION_STATUS: Inspection status
LOGGING_ENTITY: Exception logging entity
OPN_SORT_BY: Sort Order for Open Deliveries Report
PACK_PRINT_ALL: Packing slip print all option values
PACK_SORT: Packing slip print sort option values
PACK_TYPE: Packing slip types
PICK_STATUS: Pick status
REPORT_USAGE: Report usage
SECURITY_PRIVILEGE: Security privileges in shipping transactions
SOURCE_SYSTEM: Source system from which delivery details are imported
TRIP_STATUS: Trip status
TRIP_STOP_STATUS: Trip stop status
UPS: UPS service levels

Header to Line Cascade Attributes Lookup

The following attributes are in the Lookup OM_Header_To_Line_Cascade:

Name	Enabled by Default
Accounting Rule	No
Agreement	Yes
Customer PO	Yes
Blanket Number	No
Deliver To Contact	No
Deliver To	No
Demand Class	No
FOB Point	No
Freight Terms	No
Bill To Contact	No
Bill To	No
Invoicing Rule	No
Order Firm Date	Yes
Payment Term	Yes
Price List	No
Request Date	No
Return Reason	No
Sales Person	No

Name	Enabled by Default
Shipment Priority	Yes
Shipping Method	Yes
Warehouse	No
Ship To Contact	No
Ship To	Yes
Customer	No
Tax Exempt	No

Seeded Pricing Formulas

This appendix covers the following topics:

- Overview of Seeded Formulas

Overview of Seeded Formulas

Pricing provides two types of seeded formulas that you can use when setting up freight charges:

- Cost to charge conversion formulas (simple pass-through formulas)
- Cost to charge markup formulas (simple markup formulas)

Each seeded formula is customized with its own formula expression. So rather than create a new formula and expression, you can select an existing seeded formula when setting up freight charges: for example, you could select the QP: Cost to charge conversion of Administration Cost formula to convert the Administration Cost pricing attribute to a charge.

Alternately, you can update the formula header or formula lines for an existing seeded formula.

You can review the available seeded and non-seeded formulas in the Pricing Formulas window. The Seeded box indicates if the formula is seeded or not.

Note: If the name of a seeded formula is updated then the formula will no longer be identified as seeded.

Seeded Cost to Charge Conversion Formulas

The following list describes the names and setup details about the seeded cost to charge conversion (pass-through) formulas:

1) QP: Cost to charge conversion of Administration Cost

Description: Formula to convert Administration Cost to charge.

Field Name	Value	Field Level
Formula	1	Header
Formula Type	Pricing Attribute	Line
Pricing Attribute Context	Pricing Attribute	Line
Pricing Attribute	Administration Cost	Line
Step	1	Line

2) QP: Cost to charge conversion of Duty Cost

Description: Formula to convert Duty Cost to charge.

Field Name	Value	Field Level
Formula	1	Header
Formula Type	Pricing Attribute	Line
Pricing Attribute Context	Pricing Attribute	Line
Pricing Attribute	Duty Cost	Line
Step	1	Line

3) QP: Cost to charge conversion of Export Cost

Description: Formula to convert Export Cost to charge.

Field Name	Value	Field Level
Formula	1	Header
Formula Type	Pricing Attribute	Line

Field Name	Value	Field Level
Pricing Attribute Context	Pricing Attribute	Line
Pricing Attribute	Export Cost	Line
Step	1	Line

4) QP: Cost to charge conversion of Freight Cost

Description: Formula to convert Freight Cost to charge.

Field Name	Value	Field Level
Formula	1	Header
Formula Type	Pricing Attribute	Line
Pricing Attribute Context	Pricing Attribute	Line
Pricing Attribute	Freight Cost	Line
Step	1	Line

5) QP: Cost to charge conversion of Handling Cost

Description: Formula to convert Handling Cost to charge.

Field Name	Value	Field Level
Formula	1	Header
Formula Type	Pricing Attribute	Line
Pricing Attribute Context	Pricing Attribute	Line
Pricing Attribute	Handling Cost	Line
Step	1	Line

6) QP: Cost to charge conversion of Insurance Cost

Description: Formula to convert Insurance Cost to charge.

Field Name	Value	Field Level
Formula	1	Header
Formula Type	Pricing Attribute	Line
Pricing Attribute Context	Pricing Attribute	Line
Pricing Attribute	Insurance Cost	Line
Step	1	Line

7) QP: Cost to charge conversion of Transportation Price

Description: Formula to convert Transportation Price to charge.

Field Name	Value	Field Level
Formula	1	Header
Formula Type	Pricing Attribute	Line
Pricing Attribute Context	Pricing Attribute	Line
Pricing Attribute	Transportation Price	Line
Step	1	Line

8) QP: Cost to charge conversion of Transportation Charge

Description: Formula to convert Transportation Charge to charge.

Field Name	Value	Field Level
Formula	1	Header
Formula Type	Pricing Attribute	Line

Field Name	Value	Field Level
Pricing Attribute Context	Pricing Attribute	Line
Pricing Attribute	Transportation Charge	Line
Step	1	Line

Seeded Markup Formulas

The following list describes the names and setup details about the seeded cost-to-charge with markup formulas:

1) QP: Cost to charge markup of Administration Cost

Description: Formula to convert Administration Cost to charge.

Field Name	Value	Field Level
Formula	1*2	Header
Formula Type	Pricing Attribute	Line 1
Pricing Attribute Context	Pricing Attribute	Line 1
Pricing Attribute	Administration Cost	Line 1
Step	1	Line 1
Formula Type	Numeric Constant	Line 2
Component	1	Line 2
Step	2	Line 2

2) QP: Cost to charge markup of Duty Cost

Description: Formula to convert Duty Cost to charge.

Field Name	Value	Field Level
Formula	1*2	Header
Formula Type	Pricing Attribute	Line 1
Pricing Attribute Context	Pricing Attribute	Line 1
Pricing Attribute	Duty Cost	Line 1
Step	1	Line 1
Formula Type	Numeric Constant	Line 2
Component	1	Line 2
Step	2	Line 2

3) QP: Cost to charge markup of Export Cost

Description: Formula to convert Export Cost to charge.

Field Name	Value	Field Level
Formula	1*2	Header
Formula Type	Pricing Attribute	Line 1
Pricing Attribute Context	Pricing Attribute	Line 1
Pricing Attribute	Export Cost	Line 1
Step	1	Line 1
Formula Type	Numeric Constant	Line 2
Component	1	Line 2
Step	2	Line 2

4) QP: Cost to charge markup of Freight Cost

Description: Formula to convert Freight Cost to charge.

Field Name	Value	Field Level
Formula	1*2	Header
Formula Type	Pricing Attribute	Line 1
Pricing Attribute Context	Pricing Attribute	Line 1
Pricing Attribute	Freight Cost	Line 1
Step	1	Line 1
Formula Type	Numeric Constant	Line 2
Component	1	Line 2
Step	2	Line 2

5) QP: Cost to charge markup of Handling Cost

Description: Formula to convert Handling Cost to charge.

Field Name	Value	Field Level
Formula	1*2	Header
Formula Type	Pricing Attribute	Line 1
Pricing Attribute Context	Pricing Attribute	Line 1
Pricing Attribute	Handling Cost	Line 1
Step	1	Line 1
Formula Type	Numeric Constant	Line 2
Component	1	Line 2

Field Name	Value	Field Level
Step	2	Line 2

6) QP: Cost to charge markup of Insurance Cost

Description: Formula to convert Insurance Cost to charge.

Field Name	Value	Field Level
Formula	1*2	Header
Formula Type	Pricing Attribute	Line 1
Pricing Attribute Context	Pricing Attribute	Line 1
Pricing Attribute	Insurance Cost	Line 1
Step	1	Line 1
Formula Type	Numeric Constant	Line 2
Component	1	Line 2
Step	2	Line 2

7) QP: Cost to charge markup of Transportation Price

Description: Formula to convert Transportation Price to charge.

Field Name	Value	Field Level
Formula	1*2	Header
Formula Type	Pricing Attribute	Line 1
Pricing Attribute Context	Pricing Attribute	Line 1
Pricing Attribute	Transportation Price	Line 1

Field Name	Value	Field Level
Step	1	Line 1
Formula Type	Numeric Constant	Line 2
Component	1	Line 2
Step	2	Line 2

8) QP: Cost to charge markup of Transportation Charge

Description: Formula to convert Transportation Charge to charge.

Field Name	Value	Field Level
Formula	1*2	Header
Formula Type	Pricing Attribute	Line 1
Pricing Attribute Context	Pricing Attribute	Line 1
Pricing Attribute	Transportation Charge	Line 1
Step	1	Line 1
Formula Type	Numeric Constant	Line 2
Component	1	Line 2
Step	2	Line 2

Multimodal and Consolidated Shipments

This appendix covers the following topics:

- Introduction
- Definitions
- Business Scenario 1: Multimodal Shipment
- Business Scenario 2: Consolidated Shipment
- Creating Locations and Stops
- Executing the Shipments

Introduction

This appendix presents two business scenarios:

- Business Scenario 1: Multimodal Shipment, page F-2: An order needs to ship by a different modes before arriving at its final destination.
- Business Scenario 2: Consolidated Shipment, page F-9: An order sourced from various locations needs to be staged at an intermediate location before arriving at its final destination.

Definitions

Consolidation: The collection of packages to be either dropped-off in a set or to share transportation costs. Consolidations may include shipments for an individual ship to location or for multiple different customers within the same vicinity.

Ship confirmation: To enter shipped quantity and inventory controls for specific shippable lines. You can ship confirm the same delivery/trip repeatedly until you close the delivery/trip. Once it is closed, no more changes can be made to a delivery/trip.

Ship-to location: The delivery point for consolidated shipments, gathered from multiple

locations, that will be shipped to an intermediate and/or ultimate ship to location.

Delivery: A set of order lines to be shipped to a customer's ship-to location on a given date in a given vehicle. Multiple deliveries can be grouped into a single trip. A single delivery may include items from different sales orders and may include backorders as well as regular orders.

Ship confirmation: A process in Shipping Execution that enables you to identify shipped quantities, assign inventory control information for released lines, assign freight charges, and specify whether or not to backorder unfulfilled quantities of released line items.

Trip planning: The process of planning the necessary vehicles and grouping the scheduled shipments that will be included in a given trip. Planning the trip requires consideration of vehicle load capacities, container capacities and, in certain cases, the loading order for the customer's specified unload order.

Trip: An instance of a specific freight carrier departing from a particular location containing deliveries. The carrier may make other stops on its way from the starting point to its final destination. These stops may be for picking up or dropping off deliveries.

Stop: A location at which the trip is due for a pick-up or drop-off.

Shipment: An individual package sent to a customer. Thus, a shipment might contain an entire order, if all items in that order are pick released and packed together. A shipment might contain just part of an order that is pick released and packed. A shipment might also contain only part of a released order line, where some of the items on the picking slip are not in stock.

Ultimate ship-to location: The final destination of a shipment.

Business Scenario 1: Multimodal Shipment

Overview

When a customer's order needs to ship by different modes (for example, air, ocean, truck) to arrive at the final destination, multimodal shipping must be used. This business process starts when your company receives an order from your customer, the items are picked, and you need to ship them using multiple modes of transportation.

Once the order line reaches the Order Management workflow Shipping Activity, Order Management calls Shipping Execution to identify the line as ready to import. When shipping imports the order line, Shipping Execution picks the items and autocreates a delivery. Once a delivery has been created, it can be assigned to the corresponding carriers via trips. Shortly after assigning the delivery to the trips, the delivery can be shipped.

A few quick setup steps can be followed to execute this scenario. Setting defaults in the Organization and Shipping parameters will enable the streamlined pick process to occur. Trips can be created to represent multiple carriers either before the order has

been placed or during the order flow from entered to shipped.

Required Setup

To accomplish Multimodal Shipment, the following setups are required:

Organization Parameters

1. Navigate to the Organization Parameters window.
2. On the ATP, Pick, Item-Sourcing tab, ensure that the Pick Confirm Required check box is deselected.

This will allow Oracle Inventory to automatically pick confirm each move order line.

Shipping Parameters

1. Navigate to the Shipping Parameters window.
2. On the Pick Release tab, check Autocreate Deliveries to use the delivery grouping rules that you have defined to group delivery lines into deliveries.
3. Check Auto Allocate to use the picking rules that you have defined in Oracle Inventory to determine the source.

Note: If you prefer to manually create a delivery ahead of time to assign delivery lines to, the Autocreate Deliveries box must be deselected.

4. Navigate to the Delivery tab.
5. You can define delivery grouping rules, based on conditions that make sense to your business process. Ship from location and ship to location are mandatory. These are the additional conditions:
 - Customer
 - Freight Terms
 - FOB Code
 - Intermediate Ship To Location
 - Ship Method

Picking Rules

1. Navigate to the Picking Rules, page B-1 window.
2. When you define an item you choose a picking rule to determine the order in which revisions, lots, subinventories, and locators are picked for sales orders. Shipping Execution submits requests to Inventory, which uses the information you enter in the Picking Rules window to generate pick lists for sales orders. If you select None for any of the criteria fields, then Inventory ignores that criterion. For example, if you select None for Revision, then Inventory picks units of an item without regard to revision levels. Inventory looks at the picking criteria in the order in which they appear in the Picking Rules window. Then, Inventory looks at the options (except for None options) for each criterion in the order in which they appear beneath each criterion.

See: *Oracle Inventory User's Guide*

Defaulting Rules

1. Navigate to the Defaulting Setup - Entity Attributes window.
2. Freight Terms and FOB are fields that appear on the order header that could be helpful to default during order entry. They may also be entered or the defaults overridden at the time the order is created. These fields can be entered until the delivery has been ship confirmed. Once the delivery has been ship confirmed, changes can not be made to the mentioned fields.

See: *Oracle Order Management User's Guide*

Define Location

1. Navigate to the Location window.
2. An intermediate address can be assigned to a trip once a location has been defined. This address will be used as the pick-up or drop-off location defined when a delivery is assigned to a trip. Upon saving the newly created location, the system will generate a number which corresponds to the location. In many cases, the location may represent a port or an airport.

See: *Oracle Inventory User's Guide*

Process Steps

1. Enter and book your order
2. Launch pick release.
3. There are several ways to launch pick release; however, the most streamlined method is to set up pick release to run as a concurrent process. Navigate: Shipping >

Release Sales Orders > Release Sales Orders SRS.

Other methods for launching pick release include the following:

- From the Shipping Transactions form, select a specific delivery line for pick release by selecting one or multi-selecting many delivery lines, then select one of the following: Pick and Ship or Pick Pack and Ship.

Additionally, you can navigate to the Release Sales Order window while in the Shipping Transactions form by using the Tools menu and selecting the Pick Release form.

- Finally, pick release can be run manually. Navigate to the Release Sales Orders window.

Note: When pick releasing using the Release Sales Order window, any of the defaults set in the Organization and Shipping parameters can be overridden for that particular pick release.

- Create your Trips. Navigate to the Shipping Transactions form.
- Populate the trip information. At minimum, Name and Ship Method.
- Save each trip.

Example

When a delivery requires transportation on multiple carriers, the creation of a trip is required for each carrier.

Create Trip 2 to follow Trip 1

Trip - 6078

Trip

Name Status

Ship Method Activity

Carrier Service Level

Mode of Transport ☐ Planned

☐ Consolidate Exceptions ☐

Vehicle

Organization

Item Name

Number Prefix Number

Arrive after Trip Tender Status

Routing Instructions

Actions

Assign Delivery to Trips

1. Find your delivery.
2. Select the action Assign to Trip.
3. Click Go and assign the delivery to each newly created trip.

Assign Delivery to Trip 2 (same procedure for each Trip)

Assign Deliveries to Trip

Trip **6078**

Pick-up Stop

☐ New Location

Planned Arrival Date

Planned Departure Date

Stop Sequence Number

Drop-off Stop

☐ New Location **1190 : 34 River Street-Cleveland**

Planned Arrival Date

Planned Departure Date

Stop Sequence Number **20**

OK Cancel

View the Stops

1. Navigate to the Shipping Transactions form.
2. Find your trip.
3. Click the Path by Stop tab and verify that there are two stops associated with each trip.

View Path by Stop tab

The screenshot shows the 'Shipping Transactions' form with the 'Path by Stop' tab selected. The form displays a table of shipping transactions for 'Line - 1474'. The table has five columns: Location, Trip, Status, Activity, and Planned Arrival Date. The data is as follows:

Location	Trip	Status	Activity	Planned Arrival Date
M1- Seattle	ML Trip 1	Open	Awaiting Pickup	18-DEC-2000 00:00:00
ML Port of NY	ML Trip 1	Open	Awaiting Drop off	
M1- Seattle	ML Trip 2	Open	Awaiting Pickup	18-DEC-2000 00:00:00
ML Airport - CI	ML Trip 2	Open	Awaiting Drop off	
M1- Seattle	ML Trip 3	Open	Awaiting Pickup	18-DEC-2000 00:00:00
Nanterre1065	ML Trip 3	Open	Awaiting Drop off	

At the bottom of the form, there are tabs for 'Lines/LPNs', 'Delivery', 'Path by Stop' (selected), and 'Path by Trip'. There is also an 'Actions' dropdown menu set to 'Update Status' and a 'Go' button.

Ship Confirm the Delivery

1. Navigate to the Shipping Transactions form.
2. Find your delivery.
3. Highlight the desired delivery.
4. Select the action Ship Confirm.
5. Click Go.
6. When the Ship Confirm window appears, click OK to complete the process.

Process Order API runs after the delivery has been ship confirmed.

Note: The options in the Auto-create Trip Options box are grayed out.

7. Update the status of the stops to Closed.

The Inventory Interface will be submitted when the pick-up stop has been Closed. The delivery lines will now be available to the Receivables Interface.

Business Scenario 2: Consolidated Shipment

This scenario presents a solution in support of a process where items on a customer order are sourced from different geographical locations. The shipments containing the items are to be merged or consolidated at an intermediate location with the final delivery being made to the customer's ultimate ship to destination.

You can create a multileg shipment and to manage the activities at each stop along the shipment's journey.

A sales order is placed for two items: a desktop CPU and a monitor. The order lines are booked and scheduled in Order Management. The inventory for the desktop CPU resides in the M1 Inventory organization and the Monitor resides in V1 Inventory organization.

The objective is to create a plan that enables the shipments of the individual items to be made from their respective Inventory organizations, merge or consolidate at an intermediate distribution center location, and deliver to the customers ultimate ship to location as a single shipment.

Creating Trips

Once the order is booked, the order lines are imported into Shipping Execution where the Transportation Planner has visibility to the lines. At this point, the planner creates Trip 1 (consisting of carrier and vehicle information) for the desktop CPU located in Warehouse 1 in Seattle, WA. The key element depicting the trip is the ship method. The creation of the trip can be done in a variety of ways depending on your business process.

Autocreate Trip

When a trip is created using the Autocreate Trip functionality, two stops are created. The first stop consists of the location where the shipment is picked up, (ship from) and the second stop is the location where the shipment is dropped off (ship to). In the business scenario described here, an intermediate stop needs to be defined and assigned to the Trip 1.

1. Navigate to the Shipping Transactions form.
2. Enter criteria for the lines to ship.
3. Multi-select lines.
4. Select the action Autocreate Trips.
5. Click Go.

Oracle Shipping Execution creates the trips, creates the pick up and dropoff stops, autocreates the deliveries, and assigns the deliveries to trips.

Create Trip Manually

One of the two processes described would need to be performed in order to create Trip 2 for the monitor originating from warehouse V1 located in New York, and an ultimate destination of Chattanooga, TN. In the case of a manually created trip, deliveries could either be auto created or manually created and subsequently assigned to the trip.

1. Navigate to the Shipping Transactions form.
2. Expand the Data Entry tree (click the expand bar on the left side of the window).
3. Expand the Data Entry link.
4. Open Trip Data Entry.
5. On the Trip form, enter Name, Ship Method, and Vehicle Info.
6. Click Done.

Trip - New Window

Trip

Name: Status:

Ship Method: Activity:

Carrier: Service Level:

Mode of Transport: ☐ Planned

☐ Consolidate Exceptions: ☐

Vehicle

Organization:

Item Name:

Number Prefix: Number:

Arrive after Trip: Tender Status:

Routing Instructions:

Actions:

Creating Locations and Stops

Creating Locations

In order to perform the merge or consolidation of the shipments originating from warehouse M1 and V1, a stop must be defined to represent the distribution center in

Troy Michigan. (A stop is a location within your network where a shipment can be picked up or dropped off.) In this scenario, this is a non-Oracle location. The location of the distribution center must also be set up in Oracle Inventory in order to be used when defining a stop.

1. Navigate to the Location window.

Location Window

Location

Scope
☐ Global ☒ Local

Name **Troy DC**

Description **Distribution Center, Troy MI**

Inactive Date

Address Details Shipping Details Other Details

Address Style **United States**

Address

Extra Inform...

2. Enter a Name.
3. Enter a Description.
4. Optionally, enter an Inactive Date.

Note: The Address Style will default to United States. Use the list of values to change the Address Style.

5. Within the Address Details tab, enter the Address.
6. Within the Shipping Details tab, enter a Contact and Ship-To Location Detail, and select the type of site.

Note: Once the location is defined, the distribution center can be define as a stop and ultimately assigned as intermediate stops to

Trip 1 and Trip 2.

Creating Stops

To create and assign Trip 1 with the intermediate Stop (for example, Distribution Center Location), the following process can be followed.

1. Navigate to the Shipping Transactions form.
2. Expand the Data Entry link.
3. Open the Stop Data Entry.
4. On the Stop form, select Location and Trip from their lists of values.
5. Enter Planned Arrival and Departure Dates.
6. Click Done.

Follow this same process for Trip 2.

At this point of the consolidation solution, a delivery has been created for the material being sourced from warehouse M1 and the delivery has been assigned to Trip 1. A delivery has also been created for the material being sourced from warehouse V1 and the delivery has been assigned to Trip 2. The intermediate stop (for example, Distribution Center Troy Michigan) has also been defined and assigned to Trip 1 and Trip 2.

A stop consisting of the location of the distribution center has been assigned to Trip 1 and Trip 2. The data at this point is represented in the following table.

Trip Data

Trip	Pick up	Dropoff
1	M1 Seattle WA	Troy DC
2	V1 New York NY	Troy DC

This screen represents similar data to Trip 2 described in our business scenario. The trip is awaiting pick up at M1 warehouse.

The solution at this point is represented by a Trip 1 originating at warehouse M1 (Seattle) and dropping off at the Troy distribution center and Trip 2 originating from warehouse V1 (New York) and dropping off at the Troy distribution center stop.

The final step is to create a Trip 3 that originates at the Troy distribution center, assign

the deliveries that are on Trip 1 and 2 to Trip 3 and have the final drop off be the customers ultimate ship to destination.

To create trip 3:

Shipping Transactions

1. Navigate to the form.
2. Expand the Data Entry link.
3. Open Trip Data Entry.
4. On the Trip form, enter Name, Ship Method, and Vehicle Info.
5. Click Done.
6. Query the deliveries from trip 1 and trip 2.
7. Select the action Assign to Trip.
8. Select trip 3, select New Location.
9. In Pickup Location, enter DC; in Dropoff Location, enter Cust.

Executing the Shipments

Pick Releasing the Trip

Because the shipments are originating from two separate locations, it is assumed that the execution processes would be performed independently. However, a single user can execute the releases from both locations.

What has been done up to this point is a plan. The plan cannot take effect until actual inventory is allocated to the deliveries and trips. At the highest level, this can be accomplished by pick releasing the trip. The individual delivery can be pick released as well.

To pick release a trip:

1. Navigate to the Shipping Transactions form.
2. Query Trip 1.
3. From the Action menu, select Launch Pick Release.
4. Click Go.

The same process is performed at warehouse V1 for Trip 2.

See: *Oracle Shipping Execution User's Guide*

Pick slips will print at each of the warehouses indicating the items to be picked for their respective trips.

There are many options as part of the Shipping Execution setup steps to allow each organization to set up how picking is done. For example, pick slip grouping rules can be used to determine how released lines are grouped on to pick slips.

Once the trips from each warehouse are released, a bill of lading and packing list can be generated for each delivery in the trip. The bill of lading can be generated at ship confirmation as part of the Ship Confirm Doc Set or it can be generated before ship confirm.

Document categories and document sequences must be set up before bills of lading or packing slips can be generated.

See: *Oracle Shipping Execution User's Guide*

The bill of lading for Trip 1 and Trip 2 will indicate the Ship From address as the M1 and V1 locations and the Ship To address of the distribution center.

The order line should already contain the intermediate ship to information before being imported into shipping execution. For example, if the shipment from warehouse M1 had the intermediate ship to information on the line prior to it's being imported into shipping execution, and there wasn't an intermediate stop assigned to the M1 trip, the bill of lading would print with three addresses: The ship from address of warehouse M1, the intermediate address indicated on the shipment line, and the final destination ship to of Chattanooga TN.

In the scenario we're defining, if intermediate ship to was used, the bill of lading for Trip 1 would print with the ship from address of warehouse M1, an intermediate address of the Troy DC and the final ship to of the Troy DC. For Trip 1 the ultimate destination for Trip 1 is the Troy DC.

A packing slip can be generated prior to ship confirmation similar to the bill of lading. The following process can be used to generate the packing slip.

See: *Oracle Shipping Execution User's Guide*

Ship Confirming the Trip

The next step in the consolidation process is to Ship Confirm Trip 1 and Trip 2. This must be done at Inventory organization M1 and V1 in order to recognize revenue, decrement inventories, update Order Management and initiate the receivables interface to generate invoices.

The following depicts how the trip originating in the M1 (Seattle) warehouse would look prior to ship confirmation and closing the stop at M1. In this example the trip is named Trip 1.

1. Navigate to the Shipping Transactions form.

2. Query Trip 1.
3. Select the action Ship Confirm.
4. Click Go.

Closing the stop sets the trip to an In Transit status.

See: *Oracle Shipping Execution User's Guide*

Changing Stop Status

At this point in the process, it is assumed that the delivery from the M1 warehouse and the delivery from the V1 warehouse are on the carrier's truck and in transit to the Troy distribution center.

In order to perform the next step in the process, a communication mechanism must be in place that lets the Oracle user know that the shipment has reached the Troy distribution center.

When the user is notified that the shipment has reached the distribution center, the following process can be used to update the stop.

1. Navigate to the Shipping Transactions form.
2. Query the Stop (distribution center.)
3. Select the action Update Status.
4. Click Go.
5. Select Arrive and click OK.

The same process should be performed for Trip 2 after it reaches the Troy distribution center.

The arrive step indicates the drop off of the trip. The deliveries from M1 warehouse and V1 warehouse are now at the Troy distribution center.

Since the deliveries were assigned to trip 3 in the planning process, all that has to be done is print the new bill of lading for the final leg from the Troy DC to Chattanooga TN.

Once the bill of lading from the Troy distribution center to the final drop off in Chattanooga is printed, the Troy distribution center stop can be closed. Updating the status of the stop closes the stop. Use the following process to close the stop.

1. Navigate to the Shipping Transactions form.
2. Query your Stop.
3. Select the stop for the Troy distribution center.

4. Select the action Update Status.
5. Click Go.
6. Select Close.

See: *Oracle Shipping Execution User's Guide*

Item Attributes

Inventory Item Attributes

Order Management looks either in the Item Validation Organization or the Shipping Warehouse (organization) to retrieve the value of an item attribute. The Item Validation Organization is defined by the OM System Parameter Item Validation Organization.

In Order Management, some item attributes are derived and used internally, while other attributes are defaulted on the Sales Order Line by using the seeded defaulting rules. Customers can change the defaulting rules to suit their business needs. Attributes are categorized as Only Source and Defaulting Source to differentiate the usage.

Item Validation Organization

The following item attributes are taken from the organization specified in the Item Validation Organization parameter.

Only Source

- Assemble To Order
- BOM Item Type (Model, Class..etc)
- Build in WIP
- Customer Orders Enabled*
- Inventory Item
- Internal Orders Enabled*
- Pick Components
- Primary Unit of Measure
- Ship Model Complete

- Serviceable Product Flag (Enable Contract Coverage)
- Service Item Flag (Derived from Contract Item Type)

Defaulting Source

- Accounting Rule
- Default Shipping Organization
- Invoicing Rule
- Over/Under Shipment Tolerances
- Over/Under Return Tolerances
- Payment Terms
- Tax Code

* - Also validated in the Shipping Warehouse.

Shipping Warehouse

The following item attributes are taken from the organization specified in the Warehouse field of a sales order line or the Receiving Warehouse of a return line.

Only Source

- ATP components
- ATP Rule
- Check ATP
- Customer Orders Enabled
- Internal Orders Enabled
- Invoice Enabled **
- Invoiceable Item **
- Lot Control
- Purchasable Flag
- Reservation Control
- Returnable
- Revision Control

- Shippable
- Serial Number Control
- Stock Locator Control
- Stockable
- Subinventory Restrictions
- Transactable (Inventory)
- Pricing Quantity Source
- Tracking Quantity Indicator
- Secondary UOM Code

** - If the Shipping Warehouse is not specified on the sales order line, then these attributes are fetched from Item Validation Organization.

Defaulting Source

- Charge Periodicity
- COGS Account
- Default SO Source Type

Bill of Material Item Attributes

- Mutually Exclusive
- Optional
- Include on Shipping Documents
- Required for Revenue
- Required to Ship

All Bill of Material item attributes are taken from the organization specified in the System parameter Item Validation Organization.

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