



Retek

Retek 9.0.0.0
Functions and Features Guide

TRRS-9000-F&F

Retek™

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Chapter 1 Retek Product Overview

Retek 9.0.0.0 combines leading-edge technologies with extensive retail experience to deliver the market's only completely web-enabled retail solution.

Retek 9.0.0.0 is designed for all retail formats from fashion to grocery to consumer direct.

Retek 9.0.0.0 includes the following products:

- Retek Merchandising System
- Retek Sales Audit
- Retek Competitive Shopping
- Retek Trade Management
- Retek Invoice Matching
- Oracle Financials
- Retek Predictive Solutions
- Retek Distribution Management
- Retek Data Warehouse
- Retek Active Retail Intelligence
- Retek RetailCRM
- Retek Price Management
- Design

The products in the Retek Retail Solution Circle can be integrated with each other and they are available as individual components. The following diagram shows the Retek Retail Solution Circle.



Retek Retail Solution Circle

Each of the solutions and the corresponding Retek products is described in the following sections.

Intelligence Center

The intelligence center helps Retek understand your business completely through real-time information about your company's performance, customers, products, vendors, competitors, and industry trends.

The intelligence center is comprised of three services:

- Market intelligence
- Business intelligence
- Exception management

Market Intelligence

Market intelligence helps you leverage both internal and external data to:

- Gain better information about what's going on in the marketplace
- Understand who your customer is and what their wants and needs are
- Build a strong brand
- Optimize your business

Business Intelligence

The Retek Data Warehouse (RDW) helps your business intelligence. RDW is the only enterprise-wide data warehouse tailored for the retail industry. RDW is the central repository for enterprise decision support and the foundation of Retek's decision support systems. It takes information derived from the operational data and presents it in a format that is suitable for analysis.

Business intelligence helps you:

- Compare actual performance of the corporate strategy with the expectations for the plan.
- Update operational programs and identify trouble areas.
- Prevent market share from eroding faster than profits are growing.
- Put the power of action-oriented data in the hands of those who must determine how to correct shortcomings and develop strategy via decision support capabilities.

RDW offers four workbenches. A workbench provides decision support analysis specific to a business area. For example, the store operations workbench provides decision support to store managers involved with various store activities and processes.

The four workbenches are:

- Category management, which focuses on managing product categories as strategic business units and on building a collaborative relationship between retailers and their suppliers.
- Marketing, which provides comprehensive analysis of customer-related data.
- Merchandising, which provides a high-level, organization-wide perspective for analyzing the effectiveness of merchandising strategies.
- Store operations, which provides operations-focused analysis to support strategic and tactical decisions.

Exception Management

Retek's Active Retail Intelligence (ARI) product helps with exception management. ARI is a strategic investment that helps retailers manage their business with rules tailored to their specific retail processes.

ARI acts as a highlighter pen and only gives users data that is useful to them and consistent with the global priorities of the business enterprise. In addition, ARI suggests appropriate actions to be taken on that information. These actions can be user-driven or they can be automated based on your best business practices. ARI then provides a foundation for continuous business improvement.

Produce and Design

The produce and design solution improves collaboration throughout the design and production lifecycle by linking retailers, suppliers, and manufacturers via the Internet.

Design is a product that assists you in the design process, with features that help you make design decisions, and make them more quickly. The Design product improves collaboration throughout the design and production lifecycle. This reduces the time it takes to produce products, deliver products, and coordinate events.

The Design product can:

- Let you creatively play with and compare design images
- Organize and track your design decisions
- Enable you to communicate with others in the design team
- Collect and maintain a complete history for every design

Buy

With the Buy solution, Retek can source products quickly and easily around the world and perform merchandise functions to maximize margins, improve turns, and gain total control of your day-to-day operations.

Two products comprise the Buy solution:

- Merchandising Systems
- Import management

Merchandising Systems

The Retek Merchandising System (RMS) is the industry's leading transaction system. RMS serves as the focus point for information flows throughout the enterprise, with key functions such as inventory control, purchasing and receiving, pricing and promotion management, and allocations and replenishment.

RMS sets the stage as a powerful, fully functional merchandise management system designed exclusively for retailers to support your daily operations and provide the foundation for decision support and predictive solutions.

Merchandise management involves all activities connected with buying and selling merchandise, including promotions, pricing, and buying. Successful category management means retailers ensure availability to their target consumers with an attempt to make the products interesting to buyers. The ultimate outcome of the process is the delivery of greater value to the customer. This is achieved by offering the customer the right mix of products at the right prices.

RMS is a friendly, intuitive graphical user interface (GUI) environment scaled for the performance required in high-volume retail organizations. All functions are tightly integrated and interfaced with all other Retek applications.

Import Management

Import management provides a complete business solution to source, manage, track, and expedite the flow of international purchases and capture actual landed costs. Retek Trade Management (RTM) facilitates import management.

RTM links partners in the supply chain, such as suppliers, agents, banks, transportation providers, and customs brokers, to move information as the product moves. By integrating all the players involved, companies have immediate online visibility into the pipeline for the status of products as they move through the trade cycle.

Move

The Move solution involves the following components:

- Shipping and transportation
- Warehouse management
- Inventory management
- Replenishment
- Reverse logistics

The Retek Distribution Management (RDM) product helps you with all aspects of moving your merchandise. You can optimize the flow of merchandise and resources at the distribution center or warehouse. RDM's flexible, table-driven functionality supports a variety of business formats and industries allowing the system behavior to change as the business changes.

RDM optimizes the tasks within the distribution center or warehouse by reviewing the entire work content and creating the most efficient plan to satisfy the customer's requirements. By providing this insight, managers have real-time visibility into the flow of goods through the distribution pipeline.

With RDM, retailers eliminate paper, reduce key entry errors, provide a highly accurate inventory balance, and reduce the overall cost per unit of each item in the supply chain. Retailers also see labor productivity gains, space utilization improvements, inventory reduction savings, improved resource use, and improved customer service.

RDM includes the following modules:

- Trailer/yard management
- Inbound freight scheduling
- Receiving and pre-distribution with inbound processing
- Cross-docking and flow-through
- Quality assurance with vendor compliance tracking
- Inventory control
- Inventory management
- Value-added services
- Distribution and resource planning
- Shipping and EDI manifesting
- Radio frequency picking and packing
- Task management for many components in the distribution process

Support

You can support your retail functions by integrating them with key operational areas such as finance.

The following products comprise the Support solution:

- Financial accounting
- Invoice matching

Financial Accounting

Support activities include the management of money and credit needed to obtain the goods and services that a consumer needs. Retek uses the best practices of the industry to support global expansion, reduce costs, and improve performance and control.

Retek 9.0.0.0 fully supports an interface with Oracle Financial Application 10.7's General Ledger (Oracle G/L) and Accounts Payable (Oracle A/P) systems for the exchange of financial data.

Retek Merchandising System (RMS) updates the Oracle G/L with sales transaction data, purchase orders, and receipts for retailers not using Oracle A/P.

Retailers who use Retek Invoice Matching (ReIM) can send invoices to Oracle A/P that are matched and approved for payment.

Retek Sales Audit (ReSA) sends Oracle G/L the total values for a store's daily sales, tenders, paid-ins, paid-outs, and taxes.

The financial interface between RMS and each financial application lets data be shared. Information is exchanged between RMS and the financial application through batch programs. For example, before you can access the most recent purchase order information from your financial software, the latest data must be transferred from RMS via a batch program. In most cases, the batch programs are run daily.

Oracle A/P updates RMS with reference data such as currency rates, freight and payment terms, and suppliers and supplier addresses.

Invoice Matching

Matching invoices to received shipment records helps corporations double check the supplier bill. Retailers want to confirm that payment is for merchandise actually received. When an invoice is received from a supplier, either on paper or via EDI, the corporation must find the receipt records from the invoiced goods and confirm that the invoice and associated receipts match.

You can save time and money by automating the invoice matching process using Retek Invoice Matching (ReIM). This traditionally manual process has been expedited by automatically matching invoices to the corresponding receipt records, using a cross-reference number. ReIM also gives you the option of automatically approving specific vendors or, conversely, requiring that certain vendors always be manually approved.

Sell

The Sell solution manages the entire customer experience for the maximum profit in a central system that spans all sales channels.

The Sell solution includes the following products:

- Retek RetailCRM
- Store Systems
- Selling Support

Retek RetailCRM

The Retek RetailCRM solution responds to customers' needs from any sales channel. Retek RetailCRM products focus the organization on selling by offering a tighter merchandise mix, optimizing inventory levels, pricing and promoting effectively, servicing the customer, and delivering key information to all levels.

Retek RetailCRM consists of two products:

- Global Commissions
- Order management

Global Commissions

Global Commissions provides real-time marketing information on sales, points, and commissionable volumes for multi-level sales representative and distributor compensation. It tracks and reports award eligibility for distributors who have achievements in accordance with the parameters set up in the distributor awards programs.

Order Management

Order Management is a high-speed, high-volume, and multi-channel consumer order processing system. Order Management features the following:

- Real-time sales activity
- Scripting and profiling
- Online payment processing
- Event pricing and flexible product discounting
- Consumer and order holds
- Returns processing, auto-ship, and continuity programs
- Suggestive selling
- Dynamic product linkage
- Substitution
- Product up-selling
- Real-time inventory and sales allocation with oversell capability

Order Management also features order fulfillment and many other robust features designed to maximize the potential of every transaction.

Store Systems

The Store Systems product manages store resources, maximizes efficiency, and optimizes the store supply chain. It provides store personnel with insight into their store's performance, productivity, loss prevention, and stock availability.

Use the Retek Sales Audit (ReSA) product to quickly and easily clean your transaction data from popular point-of-sale applications. Industry best practices are built into the system for the highest degree of data integrity. Because ReSA is integrated into the Retek product line, data flows easily between systems, turning a once time-consuming and tedious chore into an efficient process.

ReSA generates significant benefits for the retailer. Some of the benefits include:

- Increased productivity for sales audit analysts/clerks.
- Audited sales information can be posted to financial and merchandising systems faster.
- General ledger closings can be completed more quickly after month end.
- Sales information can be posted to merchandising systems more quickly.
- Employee theft/dishonesty can be detected, investigated, and resolved sooner.
- Sales data posted to all systems will be more accurate.

Selling Support

Retek offers selling support to optimize your profitability with controls in place to manage your markdown effectiveness, promotional analysis, and your competitor pricing strategies.

To meet this need, the Selling Support solution has two products:

- Retek Price Management
- Retek Competitive Shopping

Price Management

Retek Price Management provides a method of using business rules and exception-based markdown processes to improve your bottom line. It provides flexibility and is easily configured to your unique business needs. In addition, Retek Price Management integrates fully with RMS and/or your existing retail systems to radically improve the markdown process.

Competitive Shopping

Retek offers the Competitive Shopping module. Competitive Shopping is a component of the Competitive Pricing feature in the Retek Merchandising System (RMS).

Competitive Pricing helps RMS users plan a pricing strategy that is competitive with their competition. Competitive Shopping provides professional shoppers with an electronic tool for gathering the data that is needed to make competitive pricing decisions.

Plan

Planning services help you anticipate your customers' changing needs and develop the optimal mix of merchandise that meets corporate goals for sales, turn, and margin. You plan and forecast at all levels from high-level marketing and financial plans to lower-level assortment and key item plans.

Retek Predictive Solutions offer products that use predictive and advanced technologies to support traditional retail business processes such as merchandise and assortment planning, replenishment, marketing, and allocation.

Predictive Solutions products may take the form of specialized products, such as the Retek Demand Forecasting product; they may be embedded as enhancements or options for other products, such as the Behavior Profiling product; or may be used in conjunction with specialized services, such as the Replenishment Optimization product.

The following products are part of the Plan solution:

- TopPlan
- ChannelPlan
- Forecasting

TopPlan

Retek TopPlan is the key financial planning product. Retek TopPlan provides strategic and financial product planning functionality, which includes business rules to support industry standard best practice for pre-season and in-season processes. TopPlan also provides visibility to other plans, as well as a forum for reconciliation and approval of pre-season and in-season plans.

ChannelPlan

Retek ChannelPlan executes merchandise and financial plans by location and/or channel across time. ChannelPlan supports pre-season and in-season planning of the financial key elements including sales, markdowns, receipts, inventory, and density. Accurate channel planning maximizes sales and optimizes inventory.

Forecasting

Forecasting produces accurate sales forecasts for supply chain planning, allocations, and replenishment functions. Retailers can use automatic forecast generators and “what-if” engines to create the best sales predictions.

The Retek Demand Forecasting (RDF) product provides a competitive edge for retailers by producing accurate and productive forecasts for supply chain planning, allocation, and replenishment functions. The system can provide completely automated solutions as well as on-line "what-if" analysis tools based on the scalable multi-dimensional architecture. The predictive system is built from a retailer’s perspective to provide forecasting solutions for real-life retail problems.

RDF brings retailers the advantages of a multi-dimensional database architecture. Users can generate and view forecasts at any level in customer, product and location hierarchies. This functionality significantly improves day-to-day decision making.

RDF combines innovative forecasting techniques with Retek’s retail expertise. The system uses statistical and regression-based forecasting techniques, advanced data mining algorithms, and multi-dimensional database structure to quickly generate accurate, automated forecasts.

Chapter 2 Retek Merchandising System

Overview

The secret to greater profitability lies in using the knowledge you have about your customers to make the best business decisions and to ultimately exceed customer expectations. This is sophisticated retailing, and it means you need to start at the foundation level.

The Retek Merchandising System (RMS) sets the stage as a powerful, fully functional merchandise management system designed exclusively for retailers to support your daily operations and provide the foundation for decision support and predictive solutions.

RMS is the industry's leading transaction system. RMS serves as the focus point for information flows throughout the enterprise, with key functions such as inventory control, purchasing and receiving, pricing and promotion management, and allocations and replenishment.

RMS is a friendly, intuitive graphical user interface (GUI) environment scaled for the performance required in high-volume retail organizations. All functions are tightly integrated and interfaced with all other Retek applications.

RMS can be broadly described as having three parts: business foundation management, merchandise management, and financial management.

- RMS' *Business Foundation Management* sets the groundwork for everything you do in RMS. This includes everything from establishing your organizational structure to managing thousands of merchandise items and department levels for greater control and accuracy. This management includes vendors, multi-language/multi-currency, security controls, and item maintenance.
- RMS' *Merchandise Management* provides the power and processes behind a retailer's day-to-day buying and selling activities. These functions must be tightly integrated with the inventory assortment and encompass purchasing, receiving, distribution, replenishment, inventory control, and much more.
- RMS' *Financial Management* records and analyzes inventory results and merchandise processes daily to determine success and profitability. The results of the inventory and merchandise processes need to be recorded and analyzed. This is done in RMS' stock ledger, which provides the point of interface with the general ledger.

Features

RMS offers the following features:

- Advanced workload management and mass change facilities to manipulate large numbers of locations and items, which improve user efficiency and data integrity across the system.
- Friendly, intuitive user interface with a familiar, industry standard look and feel.
- Web-architected with proven capabilities to scale for large volumes and complex environments.

RMS provides a solid foundation on which to build the success of the company and promote future growth into new areas and retail channels. With RMS as your core merchandising transaction system, you can layer on other business critical systems such as a Data Warehouse, Exception Management, Planning, or Forecasting.

Business Challenges that RMS Addresses

RMS lets you address multiple business challenges through its business-oriented features and solutions, as described in the following table:

Challenge	Solution	Feature	Example
Non-integrated systems with redundant or incorrect data—disparate business practices across applications.	An integrated merchandising system that has been built exclusively for the retail business.	All day-to-day merchandising modules tightly integrated.	Inventory control, purchasing, pricing, promotion, replenishment, allocation, vendor and item maintenance are all integrated within the RMS product. Integration with other systems such as RDW, Planning, and RDF, which all pull information from one source: RMS. This maintains data integrity.
Users cannot gain access to reliable data to make key business decisions.	All information flows through one core system where users can react to business issues based on their individual needs.	RMS controls and records virtually all data in the retail enterprise and offers the information at the point the user needs it.	All sales, shipping/receiving, inventory, item, and vendor information is accessible in RMS. You can then make an informed decision and react to changing customer needs across retail channels through allocation, transfer, promotion, etc.

Challenge	Solution	Feature	Example
Difficult to profitably balance customer service and inventory levels.	Track inventory levels and sales information throughout the retail supply chain—execute actions real-time.	RMS supports the entire core inventory control processes, including allocation, replenishment, transfer, purchasing, and shipping/receiving.	Perpetual inventory gives you access to accurate inventory levels throughout the organization. This helps you maximize replenishment and allocation decisions to keep inventory levels low yet maintain the best service levels for your customer.
Users cannot easily manage groups of data (items, locations, etc.)—time wasted with redundant data entry.	Built in tools to help you execute transactions and mass changes on the fly.	<ul style="list-style-type: none"> • Item Lists • Location Lists • User Defined Attributes • Traits • Store Grouping tools 	You have the ability to transfer, purchase, price, promote, etc., a group of items based on any attribute of the item that uses the Item List functionality. This promotes efficiency and accuracy when executing transactions and entering or changing data across the system. Similar functionality is available with Location Lists.
Systems cannot scale or perform with large retail volumes.	Proven capabilities to scale for large complex environments and retail volumes, helping a retailer adapt and grow.	RMS currently operates in retail environments with many locations, items and users.	During the benchmark in Paris (summer '99), 16 million sales transactions were processed through RMS in three hours for the replenishment and sales uploads.
Retailers are challenged when growing globally and across retail verticals.	Support global requirement and multi-channel needs in one merchandising transaction environment.	<ul style="list-style-type: none"> • Internationalization • Multi-currency • Multi-channel support 	<ul style="list-style-type: none"> • Drive inventory and customer decisions across your brick and mortar, catalog, and Internet channels. • You can configure the language of the user interface.
Difficult to use systems, character-based, user training and productivity issues.	<ul style="list-style-type: none"> • Industry standard environment • Window-context sensitive help to aid users navigate through the system • Fast-path options for experienced users 	<ul style="list-style-type: none"> • Mass item change, quick entry and fast-path keys. 	RMS models an industry standard user interface. This decreases the training time and increases the usability of the system.

Benefits

RMS is the core foundation that records and controls virtually all data in the retail enterprise and ensures data integrity across all integrated systems. This gives users easy access to the information that is crucial to the day-to-day merchandising activities and the ability to focus on key decisions that help achieve sales and profit targets.

RMS lets you streamline your business systems and unify business practices across your retail channels to better serve your customers. Some benefits that can be achieved with RMS include:

- Improve consistency, availability, reliability and actionability of business information.
- Keep a profitable balance between customer service and inventory levels.
- Improve the merchandise management process with accurate execution of inventory control, purchasing, pricing, promotion management, allocation, and replenishment.
- Manage and grow your business globally and across multiple retail channels in one transaction system.

New in 9.0.0.0 Release

The areas of RMS 9.0.0.0 that are enhanced or changed include:

- Mass maintenance
- Security
- Item maintenance
- Ticketing
- Purchasing
- Complex deals
- Replenishment
- Purchase order receiving
- Inventory movement
- Pricing
- Competitive pricing
- Point of sale
- Sales tax

Enhancements made in the navigation and Web access are as follows:

Navigation Enhancements	Web Enhancements
Folder/forms based navigator	Web architected vs. Web enabled
Process-based flow	Follows the industry trend to Internet computing
Higher resolution (1024 x 768) for Web-based enhancement	
New color palette	
New font sizes	

Functional Areas

The following table gives an overview of RMS functional areas that are part of the Retek 9.0.0.0 release. Each functional area is described in further detail after this section.

RMS Functional Areas	Overview	Key 9.0.0.0 Features
Foundation Data	The foundation data functional area provides a home for all key data used throughout RMS. It provides the necessary data structures that support basic business processes and a means of recording data from operating processes. Each entity listed, such as Item, is supported by numerous attributes that describe the entity.	<ul style="list-style-type: none"> • Organizational hierarchy • Merchandise hierarchy • Vendor management • Buyers and merchandisers • Partners and outside locations
Item Maintenance	RMS maintains item information via an easy-to-use GUI interface that lets you track information by SKU for cost, hierarchy, location, Vendor, packs, allocation rules, and other attributes for each item.	<ul style="list-style-type: none"> • Default unit of purchase • Decimal size • Variable weight UPC and EAN
User and Grouping Tools	User and grouping tools includes how to set up and maintain required documents, group items and locations, and apply attributes to items, locations, Vendors and purchase orders. User tools also include define and apply traits to locations and Vendors, and define and apply timelines to items and purchase orders.	<ul style="list-style-type: none"> • Location lists to help you create, copy, edit, view, and use a group of locations that are identified by one ID • Two types of wastage: sales and spoilage
System Administration	System administration describes how to set up and maintain system variables, batch controls, system codes, and dynamic hierarchies. Also, you can set up and maintain currency, country, and language codes. You can set up and use electronic data interchange (EDI) information and audit trails. You can set up product and location security for users and user groups. You can also change the appearance of your desktop.	<ul style="list-style-type: none"> • POS module that helps you create configurations that are downloaded to the POS registers at stores • Security features to protect product, location, and price zone records • Added security levels that limit user access: location, zone and product

RMS Functional Areas	Overview	Key 9.0.0.0 Features
Purchasing	The purchase order process is the basis for much of the functionality within RMS functions. There is full integration with receiving, distribution, replenishment, vendor analysis, open to buy, and the stock ledger.	<ul style="list-style-type: none"> • Quick order entry • Redistribution of approved orders • Temporary distribution of approved orders
Contracts	In RMS, the contracting function fits closely with the replenishment and ordering functions. The main business benefit of contracting is achieving vendor involvement during the planning phase of your business.	<ul style="list-style-type: none"> • Multiple versions of a PO can be created
Deals Management	Deals management lets you create and maintain complex deals with deal partners and fixed deals with vendors.	<ul style="list-style-type: none"> • Replaces the deals, brackets, and allowances function from previous RMS releases • Create deals with deal partners for items or items at specific locations with multiple discounts and rebates • Create fixed deals and set up a collection schedule from which you can make claims against the vendor and receive payments
Allocations	An allocation is a distribution of merchandise from a warehouse that stocks that merchandise out to other locations, usually stores. Therefore, an allocation comprises the item being distributed, the warehouse from which it is being distributed, and the locations to which the item is destined.	<ul style="list-style-type: none"> • A standalone allocation, which lets you move merchandise stored in a warehouse out to other locations • Cross-dock allocations, which are tied to purchase orders

RMS Functional Areas	Overview	Key 9.0.0.0 Features
Cost and Retail Price Management	The cost and retail price management functional area controls the creation and maintenance of retail prices. It is designed to offer multiple pricing techniques such as zone pricing, clearance strategies, and multi-unit pricing. As price changes take effect, markdown or markup transactions are generated for companies using the retail method of accounting.	<ul style="list-style-type: none"> • What if price change analysis • Clearance reset date • Store lead time for price zone changes • RMS 9.0 has a security feature that provides a method for protecting price zone records. A database administrator sets up the security information for groups.
Promotion Management	Promotion Management lets you establish sales targets at SKU/store level and monitor performance daily. For better promotion management, a promotion history file is kept in addition to SKU level reporting. User-defined schedules drive promotion reporting.	RMS changes and tracks promotional price changes through a three-level hierarchy: <ul style="list-style-type: none"> • Event level • Promotion level • Detail level
Inventory Control	<p>The SKU numbering system is managed within RMS. Users generally access SKU level information by using drill downs and searches on descriptive information. Both unit and value histories are held at the SKU level, for a user-defined time period.</p> <p>The histories are divided into regular, promotion, and clearance totals. A perpetual inventory is maintained at SKU/store level. Below SKU level, Retek provides UPC and EAN control. RMS allows multiple UPCs for each SKU and has a provision for retailers to assign their own codes for house brand merchandise.</p>	<ul style="list-style-type: none"> • Warehouse/store assignments • Receiving • Product transformation
Replenishment	Replenishment balances on-hand inventory levels with customer service targets. Replenishment also prevents lost sales and reduces costly inventory holdings.	<ul style="list-style-type: none"> • Enhanced Vendor constraints • Due order processing • Vendor constraint scaling • Enhanced replenishment orders • Single location orders • Warehouse demand replenishment

RMS Functional Areas	Overview	Key 9.0.0.0 Features
Financial Management	Financial management describes how to use the stock ledger and calendar, set up and use estimated landed costs, create budgets, maintain open to buy and value added taxes, and match invoices against received goods.	<ul style="list-style-type: none"> • Sales tax module to define the tax codes applied to items at each store

Foundation Data

The Foundation Data functional area provides a home for all key data used throughout RMS. It provides the necessary data structures that support basic business processes and a means of recording data from operating processes.

After it is recorded, this operating data is available for all applications as necessary. Selected data from the foundation tables is also made available to the data warehouse for historical analysis.

The following modules are part of Foundation Data module:

- Organizational hierarchy
- Merchandise hierarchy
- Vendor management
- Buyers and merchandisers
- Partners and outside locations

Organizational Hierarchy

The Organizational Hierarchy module lets you create the relationships that are necessary to support your company's operational structure. You can create a preferred organizational structure to support consolidated reporting at various levels of the company. You can also assign responsibility for any level of the hierarchy to a person or persons to satisfy internal reporting requirements.

Default Levels

The following default levels are used within the Organizational Hierarchy module.

Default Level	Description
Company	The highest organizational and merchandise unit defined in RMS. Only one company can be defined.
Chain	The level below company. A chain can be used to group various store formats, concepts, and geographical locations within the organization.
Area	The level below chain. An area is used typically to define a geographical group within the organization. An area can belong to only one chain.
Region	The level below area. A region can be used to group geographical locations within the organization. A region can belong to only one area.
District	The level below region. A district is used typically to group geographical locations within the organization. A district can belong to only one region.
Store	The store is the physical retail outlet. The store is critical because it is the level at which business transactions are processed. These transactions include sales, receipts, adjustments, and cycle counts. A store can belong to only one district.
Warehouse	The warehouse is the physical storage, cross-dock, or distribution facility. A warehouse has all of the transaction capability of a store, except for sales and price changes. You can specify at which organizational level the warehouse is to be reported.

The definition of each level is based on your company's needs. You can rename the default organizational levels to suit your organization.

General Actions

You can perform the following actions in the Organizational Hierarchy module:

New	Edit	View
Define a default currency at each level in the organizational hierarchy. This facilitates an operational structure that requires a primary currency, regional currencies, and location-level currencies.	Change the currency associated with a chain, area, region, and district.	View the currency and manager associated with a chain, area, region, and district level.
Add chains, areas, regions, districts, stores, and warehouses.	Edit the information associated with a store location.	View information associated with stores and warehouses.
Customize the titles of each level in the organizational hierarchy to match those in your organization. For example, 'region' can be changed to 'territory'.		
Enter information about a store location, including: <ul style="list-style-type: none"> • Phone and fax number • VAT region • Promotion zone • Transfer zone • Store format, such as strip mall or kiosk • Default warehouse • Language • Total area and total selling area of the store 		
Identify a manager at each level of the hierarchy.		
Enter information about a warehouse, including: <ul style="list-style-type: none"> • Address • VAT region • Break pack warehouse status 		
Create and customize your own grouping and reporting characteristics for locations, using the location traits feature.		

Merchandise Hierarchy

To manage merchandise effectively, there must be a hierarchy, or a means of grouping merchandise. The Merchandise Hierarchy module helps you create the relationships that are necessary to support the product management structure of a company.

You can assign a buyer and merchandiser at the division, group, and department levels of the merchandise hierarchy. You can also link a lower level at the merchandise hierarchy to the next higher level.

RMS is flexible enough to let you rename the default merchandise levels, from company through subclass, to suit your organization.

Default Levels

The following default levels are used within the Merchandise Hierarchy module.

Default Level	Description
Company	The highest organizational and merchandise unit defined in RMS. Only one company can be defined.
Division	The highest category of merchandise within an organization. Typically, the division is used to signify the overall type of merchandise that a retailer offers, such as hardlines or apparel.
Group	The level below division. A division can have multiple groups.
Department	The level below group. A group can have multiple departments. Key information about how inventory is tracked and reported is stored at the department level.
Class	The level below department. A department can have multiple classes. A class provides the means to group products within a department.
Subclass	The level below class. A class can have multiple subclasses. A subclass provides the means to classify products within a department/class combination.
Style	The item-level classification of a fashion product. The style entity stores most of the information concerning fashion SKUs. A style belongs to a specific department, class, and subclass combination.
SKU (stock keeping unit)	The item-level classification of a staple product or a color and size combination within a style. A staple SKU belongs to a specific department, class, and subclass combination. A fashion SKU belongs to a specific department, class, subclass, and style combination.
UPC (universal product code)	An industry-assigned barcode. The barcode is typically a 12-digit code that is based on a combination of the manufacturer number and item number. A SKU can have multiple UPCs.

Features

The Merchandise Hierarchy module has the following features and benefits:

- Supports both average cost and retail profit calculations by department.
- Data is stored at the SKU/store or warehouse level to support flexible reporting through roll up capabilities.
- The titles of each level in the merchandise hierarchy can be customized to match those in your organization. This flexibility eliminates the need for modifications to the merchandise hierarchy, enhances the implementation process, and improves user training.

Note: For example, 'division' can be changed to 'sector,' if that is the term your company uses.

- You can select the levels of the merchandise hierarchy throughout the system to help minimize the workload in areas such as cost and retail price management, promotions, and item lists.

Note: For example, all SKUs within the women's apparel department are a level.

- Security is built in so that some options, such as new or edit, may not be available to certain users based on the privileges granted by the data base administrator or system controller.

General Actions

You can perform the following actions with the Merchandise Hierarchy module:

New	Edit	View
Associate buyers and merchandisers to the division, group, and department levels, identifying responsible individuals for reporting purposes.	Modify the name of a subclass, class, department, group, division, and company.	Drill down through the hierarchy to view a lower level.
Add divisions, groups, departments, classes, and subclasses.	Change the association between levels. For example, you can change the group that a department is associated with.	View the buyer and merchandiser associated with a division, group, and department.
Select the purchase type for a department for normal merchandise and consignment stock.	Change the following at department level: <ul style="list-style-type: none"> • Markup calculation type • Markup percentage of cost • Markup percentage of retail • Total markup amount • Record square footage area to be allotted for each department in the store 	View the following information associated with a department: <ul style="list-style-type: none"> • Purchase type • Profit calculation type • Open to buy calculation type • Markup calculation type • Markup percentage of cost • Markup percentage of retail • Total markup amount
Select the profit calculation type for direct cost and retail inventory.	Change the buyer and the merchandiser associated with a division, group, and department.	
Select the OTB calculation type for direct cost and retail inventory.		
Select markup calculation type for percentage of cost and retail.		
Specify department markup percentage of cost, markup percentage of retail, and total markup amount.		

New	Edit	View
Enter a user-defined attribute (UDA) and a UDA value.		
Specify that a UDA is required for all items within the department.		
Record square footage area for the department for each individual store. You can also specify the effective date of the square footage area.		
Connect one or more VAT regions and VAT codes, including VAT rate, with the department.		

Vendor Management

The Vendor Management module lets you add, edit, and view information about vendors.

Features

The following table lists the features of the Vendor Management module:

Feature	Description
Multiple contact persons and addresses	You can enter multiple addresses of different types, such as business, invoice, order, postal, and returned goods.
Financial arrangements	You can indicate the payment terms, freight terms, currency, settlement code, and payment method.
Inventory control parameters	<p>You can set up a replenishment cycle, order attributes, scaling attributes, order minimum constraints, and due order processing.</p> <p>You can indicate whether quality control checking is required and what percentage of received goods must be checked.</p>
Returned goods requirements	You can indicate whether returns are allowed, whether an authorization number is required, the minimum value of a return, the preferred courier, and the handling charge.
Required documents	You can select which documents the vendor requires.
Expense profiles	You can enter the vendor's costs by country or by cost zone.
Types of EDI transactions	You can indicate which EDI transactions the vendor management can process.
Generic attributes	You can indicate which attributes apply to the vendor, such as co-op agreement terms, volume rebate terms, whether a PO is required, or whether items are pre-ticketed.
Import attributes	You can enter import-related information such as agent, advising and issuing banks, lading and discharge ports, and beneficiary.
Invoice matching attributes	You can indicate when debit memos are sent, if invoices and debit memos are approved automatically, if vendors may charge freight, and whether invoices are pre-paid. (The Retek Invoice Matching product must be installed.)
Vendor management traits	Select traits by which you want to group the vendor with other vendors.
Payment types by store	Select methods by which the vendor can be paid, such as cash, money order, and invoice. You can indicate the payment type by store.
Delivery schedules at stores and warehouses	After you create a delivery schedule, you can specify which items are not to be delivered to the location on a specific delivery day.

General Actions

You can perform the following actions with the Vendor Management module:

New	Edit	View
Associate a vendor to an item at the location (store or warehouse) level.	Edit vendor minimums.	Contact information, such as name, telephone number, and e-mail address.
Indicate multiple countries for the vendor/item relationship.	Change vendor address and phone number.	Replenishment cycle information.
Enter multiple vendor addresses.	Change return parameters.	Quality control requirements.
Define the currency under which purchases are created for the vendor. The purchase price of an item is expressed in the vendor's currency.	Edit replenishment cycles.	Auto contract approval status.
Enter key information that is required to process return to vendor orders for the specified vendor, including: <ul style="list-style-type: none"> • Authorization indicator • Minimum return amount • Courier • Handling percentage 	Modify attributes and traits.	Details associated with the vendor, such as: <ul style="list-style-type: none"> • Payment terms • Payment method • Freight terms • Currency • VAT region • Payment method
Create your own grouping and reporting characteristics for locations, based on the vendor traits function.	Modify settlement codes.	
Record a user-defined vendor number.	Change freight and payment terms.	
Designate automatic approval of replenishment orders for selected vendors. This facilitates replenishment POs being created in approved status.	Edit quality control requirements.	
Define flexible replenishment and review cycles for each vendor to level the replenishment workload across multiple days.	Change auto replenishment approval status.	
Enter contact information such as contact name, telephone, and fax number.	Edit pre-mark status.	

Buyers and Merchandisers

The Buyer and Merchandiser module helps you create, edit, view, and delete buyers and merchandisers. You can record the name, phone number, and fax number for each buyer and merchandiser.

The Buyer and Merchandiser module lets you associate specific persons to areas or actions of responsibility, such as purchasing or the merchandise hierarchy.

Divisions, Groups, or Departments

After buyers and merchandisers are entered, you can assign them to a division, group, or department. A buyer can create for or store grade groups, masks, and purchase orders.

Because there can be many buyers and merchandisers at the division or group level, you may prefer to record the general merchandise manager (GMM) or division merchandise manager (DMM) at these levels.

General Actions

You can perform the following actions with the Buyers and Merchandisers module:

New	Edit	View
Enter the buyer or merchandiser name, telephone number, and fax number	Change the buyer or merchandiser name, telephone number, and fax number.	View the buyer or merchandiser information.
Link buyers and merchandisers to other entities, such as purchase orders and merchandise hierarchy.		
Enter contact information such as contact name, telephone, and fax number.		

Partners and Outside Locations

The Partners and Outside Locations module let you create, edit, view, and delete business partners and outside locations.

Partners

A partner is a person or entity that has an association with your organization in various areas of the procurement process. Partners can include banks, agents, freight forwarders, importers, brokers, applicants, consignees, manufacturers, distributors, and wholesalers.

For bank partners, you can track the status of your line of credit. You also can indicate whether the line of credit amounts should be displayed in the primary currency of your organization or the bank's currency.

If the Retek Sales Audit (ReSA) program is installed, you can add, edit, and view store relationships with a bank partner. The attributes for the bank can be exported to ACH (Account Clearinghouse) and UAR (Universal Account Reconciliation) systems.

Manufacturer, distributor, and wholesaler partners are considered part of the vendor hierarchy. These are default names and can be edited.

You can enter multiple addresses and contact persons for each partner. You can also track required documents and expense profiles for all partners except manufacturers, distributors, and wholesalers.

Outside Locations

Outside locations are locations that are not part of the organizational hierarchy.

Note: Some examples of outside locations are entry ports, discharge ports, lading ports, return centers, and bill-to locations.

General Actions

You can perform the following actions with the Partners and Outside Locations module:

Search for a	Create a	Add a	Edit/Delete	View
Partner to select the type you want	Partner with currency, language, status, and contact information	Partner's address including contact information	Delete the partner information	Partner information
	Outside location		Change the partner's address information	Outside location
			Edit an outside location	

Item Maintenance

RMS maintains item information via an easy-to-use interface that lets you track information by SKU for cost, hierarchy, location, vendor, packs, allocation rules, and other attributes for each item. The Item Maintenance functional area helps you manage multiple item types and their attributes to increase productivity and data integrity.

RMS also provides you with a way to create, view, and edit items. As items are sold, RMS reports on the remaining stock levels. This reporting facilitates the balance of stock so that you can perform fewer markdowns. It also protects your margins by helping you recognize the fast- and slow-selling items immediately.

General Actions

You can perform the following actions with the Item Maintenance module.

New	Edit	View
Create a staple stock item, a fashion style, a fashion SKU, or a pack item	Delete a group of items	View all item information including item headers, vendors, stores, etc.
Enter a short and long item description	Delete or add cost zone components, such as description, type and duty code	Create a customized view of the item level data
Designate a department, class, and subclass for an item	Delete or add sizes within the size range	View all SKUs that exist for the style while you are creating more SKUs
Choose the store grade multiple for shipping from the warehouse to the store, such as case, inner or eaches	Delete or add colors from the range	View all items that have gone through a reclassification
Select a retail zone strategy for organizing pricing procedures	Reclassify an item from one department/class/subclass to another	View vendors while creating UPC, EAN, and ISBN numbers
Select a cost zone strategy. A cost zone strategy groups stores by region.	Update a list of items or a single item for one or more stores and warehouses	Display the start and end week dates of each season and phase
Copy specifications of a similar item when creating a SKU or style	Reclassify an entire group of items at once	Print a summary report of end of season vendors
Use a quick item entry feature to set up a staple SKU		Track product sales for consignment merchandise
Use an item-add wizard during the item setup process for a staple SKU when you use quick item entry		Track the date of an item's last status change
Use an automated item maintenance process through EDI.		View the stores in each retail zone
Specify a VAT region and add additional VAT codes		View all orders for a particular item, with dynamic drill-down capability for viewing an individual order

RMS supports three types of items:

- Staple items—Items with no size or color variance
- Fashion items and SKUs—Items with a size and/or color variance
- Pack items—A group of items that can be sold and/or ordered as one item

RMS 9.0 includes these additions, which are especially beneficial to grocery retailers:

Default unit of purchase

Reclassification

Variable weight UPC and EAN

Staple Items

The Staple Items module helps you create and edit staple items. When you create a staple item, a random, eight-digit SKU is assigned to the item.

Because sales history is maintained for each selling location at the SKU level, full reporting capabilities are available at SKU level. RMS provides full information for each item at each location, including sales and stock on hand.

When creating a staple stock item, you must provide the following information about the item:

- Long and short descriptions
- Merchandise hierarchy (department, class, and subclass)
- Cost and retail price zone groups
- Vendor and vendor/origin country relationships

You are also required to review the default pricing strategy. If necessary, you can edit the pricing. Additional information can be recorded for each item depending on your company's requirements.

Default Unit of Purchase

The default unit of purchase function lets you sell items at one unit of measure, but order items in a different unit of measure.

Note: For example, you may sell some kinds of fruit by the pound, but you may order the fruit by the case.

When you create an item, you specify the default unit of purchase. The default unit of purchase can be the standard unit of measure for the item, case, or pallet.

When you order the item, you use the default unit of purchase and not the standard unit of measure.

Fashion Items and SKUs

In the Fashion Item and SKUs module, you can create, edit, and view fashion styles and fashion SKUs. A fashion style is an item that can be ordered and sold in a variety of colors and sizes. Each color, size, or color and size combination is assigned a SKU. When you create a fashion style, an item number is generated. Each unique color, size, or color and size combination is identified by a unique stock keeping unit (SKU).

When creating a fashion style, you must provide the following information:

- Long and short descriptions
- Merchandise hierarchy (department, class, and subclass)
- Size ranges
- Cost and retail price zone groups
- Supplier and supplier/origin country relationships

You are also required to review the default pricing strategy for the fashion style. If necessary, you can edit the pricing strategy. After creating the fashion style, you can create the SKUs by selecting the necessary colors and sizes.

Additional information can be recorded for each item depending on your company's requirements. Information that you enter for a fashion style applies also to the style's SKUs. Information that you enter for a SKU applies only to the SKU.

Color and Size Dimensions

The color and size dimension functions help you add, edit, view, and group colors and sizes, which then can be applied to fashion styles.

There is a logical progression for adding color and size dimension information.

1. Add each color and size.
2. Create size groups. You can use size groups to combine related sizes under one ID.

Note: For example, you might create a group according to inseam sizes, waist sizes, shoe sizes, shoe widths, hat sizes, or belt lengths.

3. Create color ranges and size ranges. You can use color ranges to group the colors that are usually associated with an item under one ID. You can use size ranges to group one or two size dimensions that are associated with an item under one ID.

Note: For example, you can create a range of widths for hats or a range of inseam and waist sizes for pants.

4. Create size ratios. A size ratio is a calculation of sales percentages by sizes at the store and subclass level. A size ratio is based on user-defined parameters and sales history for an item. You can use a size ratio to determine the best assortment of sizes to stock at a store.
5. Create fashion pack templates. You can group multiple color and size combinations, along with their default quantities, under one ID. Templates can be attached to the style component of a pack item. The color and size combinations are used to create the individual fashion SKUs for the style component.

Pack Items

A pack item is a group of items that can be ordered or sold as one item. Pack items are used to simplify the following processes:

- **Selling.** Several individual items are combined and sold as one item.
- **Ordering.** Several individual items are combined and ordered as one item.
- **Ordering and Selling.** Several items are combined and then ordered and sold as one item.

Pack items can contain staple SKUs, fashion SKUs, fashion styles with pack templates, and another pack item.

In the Pack Item module, you can create, edit, and view pack items. A pack item is used to buy or sell multiple component items under one item number. A pack item can contain any combination of staple SKUs, fashion SKUs, fashion styles with pack templates, and inner packs. When you create a pack item, an item number is generated.

When creating a pack item, you must provide the following information. The requirements vary depending on the type of pack item.

- Long and short descriptions
- Merchandise hierarchy (department, class, and subclass)
- Type of pack item
- Cost and retail price zone groups
- Supplier and supplier/origin country relationships

You are also required to review the default pricing strategy for a simple pack or sellable pack. If necessary, you can edit the pricing strategy.

Additional information can be recorded for each item depending on your company's requirements.

The four types of pack items are described in the following table.

Pack type	Description
Simple pack	<p>A sellable/orderable vendor pack with multiples of only one staple SKU or fashion SKU as the component item. If you want the component item to be ordered only as a simple pack, you can indicate that the simple pack serve as the primary replenishment pack.</p> <p>For example, the vendor might bundle six bottles of the same size and brand of fruit juice. For replenishment purposes, you might want to ensure that orders are placed for the pack containing six bottles, not for each bottle.</p>
Sellable pack	A grouping mechanism used to sell multiple component items as a pack item
Orderable buyer pack	A grouping mechanism used by the retailer in order to order multiple items as a single line item on a purchase order. Buyer packs can be ordered and received as component items or as a pack.
Orderable vendor pack	A grouping mechanism used by the vendor in order to sell multiple component items as packs to the retailer. Vendor packs can only be ordered and received as a pack.

Reclassification

Item reclassification lets you move an item or item list from one department/class/subclass to another. You can reclassify a staple SKU, fashion style, pack item, or a list of items. Fashion SKUs are reclassified by specifying the fashion style.

You determine which item or item list is to be reclassified, under which department/class/subclass, and the effective date. A batch process reclassifies those items whose effective date is the next day.

Reclassification Edit Checks

RMS performs a series of edit checks, both as you create the reclassification event online, and later as the event is processed.

Online edit checks

RMS performs online edit checks as you enter information in RMS screens. The following edit checks are performed as you set up a reclassification event. The event cannot be created if:

- The item exists in another reclassification event.
- The item is in a consignment department, but the new department is not a consignment department; or if the item is in a department that is not a consignment department, but the new department is a consignment department.
- One or more items on the reclassification event exist on approved orders.
- One or more fashion SKUs exist in the item list that is used to reclassify a group of items. Fashion SKUs are ignored.

Batch processing edit checks

Other edit checks that can cause a reclassification event to fail also occur during the batch processing of the event. Reclassification cannot occur if:

- The item is on a Unit and Amount stock count scheduled after the effective date of the reclassification event. The SKUs to be counted have already been determined based on the department, class, and subclass specified when the stock count was created.
- The item is forecastable, but the new hierarchy values with which the item is associated do not have an associated forecast domain. This check applies to staple and fashion items only.
- The new department, class, and subclass contain a required user-defined attribute that must be entered at the item level.
- The new department, class, and subclass contain a user-defined attribute that defaults at the item level, but the item does not have this UDA defined.

Effects of Reclassifying Items

When items are moved from one department, class, and subclass combination to another, several other functions can be affected:

- Sales history
- Stock ledger
- Open to buy
- Forecasts

Sales History

A reclassification event does not rebuild sales history automatically. Sales history is kept at the SKU level in RMS, so a reclassification does not affect these records. RMS maintains three levels of rolled up sales history: department, class, and subclass. Optional batch programs are available that can be used to rebuild the rolled up sales history.

Stock Ledger

Stock ledger transactions are written to move the inventory amount associated with an item from the old department, class, and subclass to the new. Existing stock ledger transactions are not updated to reflect the hierarchy change.

Open to Buy

Open to buy (OTB) records are updated for all orders that are approved, but have not yet been received.

Forecasts

If the reclassified item is forecastable and the new hierarchy values move the item to a new forecast domain, then an indicator is reset for the item at the item/store level.

This change tells the program responsible for extracting sales history that the next time sales history is extracted from RMS for that item and store combination, all sales history should be extracted. Normally, only the sales history that occurred since the last data export is extracted.

UPCs and EANs

The Universal Product Codes (UPC) and European Article Number (EAN) module lets you define product code and vendor relationships for staple items, fashion SKUs, and pack items.

Product Code Types

You can create and download variable weight UPCs and EANs to the point of sale and scales that communicate information about the weight of purchase for the product. With this feature, you can maintain UPCs and EANs for items and the amount paid for the item at the point of sale based on the purchased weight.

You specify the origin of the UPC, either the buyer or the vendor. A bar code is generated for the item at the scale that can be scanned at the register. You can perform the following additional functions:

- Assign internal UPC and EAN codes.
- Enter an ISBN to associate with a SKU.
- Use multiple UPCs, EANs, and ISBNs for a single SKU and inventory tracking at either level based on system options. The UPC is the primary indicator.
- Specify multiple vendors per SKU and UPC, EAN, and ISBN.
- Manage inventory at the SKU or UPC, EAN, and ISBN level based on a system parameter.

You can add, edit, and view the following types of product codes:

Code	Description	Additional Information
UPC-A	The regular version of a UPC with 12 digits	The code consists of a one-digit number system character, a five-digit company ID, a five-digit item ID, and a check digit.
UPC-E	The short version of a UPC with 8 digits.	The code is limited to small packages that do not support UPC-A. It is derived from a regular UPC code by suppressing some zeros.
EAN-13	The regular version of a EAN with 13 digits	EAN-13 is a superset of the 12-digit UPC. Countries other than the United States and Canada issue the EAN-13
EAN-8	The short version of an EAN with 8 digits.	The code is limited to small packages that do not support EAN-13. Countries other than the United States and Canada issue the EAN-8.
ISBN	International standard book number with 10 digits.	Identifies books, periodicals, and other published items.
Variable weight	A UPC code that accommodates items that are sold by weight.	Several digits are entered as zeros, which get overwritten by the weight and a check digit. Weight and check digit are added to the bar code for the item at the scale and then scanned at the register.

User and Grouping Tools

The User and Grouping Tools enhances the productivity and effectiveness of your human resources. These tools include:

Grouping Tools

- Item lists
- Location lists
- Attributes
- User-defined attributes (UDA)
- Masks
- Traits

User Tools

- Timelines
- Document maintenance

Item Lists

In Item Lists, you can create, copy, edit, view, and use a group of items that are identified by one ID. You can add items to a list one by one or you can enter criteria to group the items. It becomes much simpler to apply changes to multiple items when the items are grouped on an item list.

You can use an item list to enter, track, or create:

- Cycle counts
- Price changes
- Competitive shopping lists
- Cost changes
- Purchase orders
- Purchase orders with contracts
- Tax code changes

You can use an item list to make mass changes to:

- Reclassifications
- Item attributes
- Replenishment
- VAT rates
- Store locations
- Warehouse locations
- User defined attributes
- Seasons and phases
- Ticket types

General Actions

You can perform the following actions with the Item Lists module:

New	Edit	View
Enter additional comments in a free-form comment box.	Delete an item from a list.	View items in a list.
Use a static indicator to prevent the list from being rebuilt.		View criteria with multi-view functionality.
Create from an existing item list.		Display list number, description, total items in list and creation date.
Use all of RMS' item group options to create a list.		
Save criteria that have been used to create, or rebuild, an item list.		
Make mass item changes using item lists to update selected attributes without accessing each item separately.		
Link styles for maintaining coordinate sets (for example, skirt and top that can be sold together.)		
Link styles to define fashion themes or story lines.		

Location Lists

With the Location List module you can create, copy, edit, view, and use a group of locations that are identified by one ID. You can add locations to a list one by one or you can enter criteria to group the locations. It becomes much simpler to apply changes to multiple locations when the locations are grouped on a location list.

Location lists can be used when you:

- Edit warehouse and store attributes by item or by item list
- Edit the shipping schedule from a warehouse to multiple stores
- Edit the retail price of a store-priced item
- Edit replenishment parameters by item or item list
- Identify store locations for a fashion, pack, or staple item
- Add stores to a promotion
- Add stores to a price change event
- Add stores and warehouses to a mask
- Add stores to a store grade in a store grade group
- Apply a mask to an order, allocation, transfer, or contract
- View replenishment parameters by item
- Request a stock count for warehouses and stores

You can use a location list to make mass changes to:

- Price and cost zone groups
- Store attributes
- Location traits

General Actions

You can perform the following actions with the Location Lists module:

New	Edit	View
Enter additional comments in a free-form comment box.	Delete an item from a list.	View items in a list.
Use a static indicator to prevent the list from being rebuilt.		View criteria with multi-view functionality.
Create from an existing item list.		Display list number, description, total items in list and creation date.
Use all of RMS' item group options to create a list.		
Save criteria that have been used to create, or rebuild, an item list.		
Make mass item changes using item lists to update selected attributes without accessing each item separately.		
Link styles for maintaining coordinate sets (for example, skirt and top that can be sold together.)		
Link styles to define fashion themes or story lines.		

Attributes

The Attributes module provides a way to record specific information about stores, warehouses, items, and purchase orders. In some cases, attributes affect how the entity is handled throughout RMS. In other cases, the attributes feature is a way of simply tracking additional information.

Record Attributes

Using RMS reporting feature, you can create custom reports based on the attributes you record. You can record attributes for the following entities:

- Stores
- Warehouses
- Suppliers
- Fashion styles
- Staple items

Change Attributes

You can also change attributes for all the stores on a location list. You can record grocery attributes, such as wastage and ticket information, for staple items and fashion styles.

You can change information, such as item status and supplier, for the following relationships:

- Fashion style/store
- Fashion style/warehouse

Record Import and Purchase Order Information

You can record import attributes for the following entities:

- Purchase orders
- Staple items
- Fashion items

In RMS, you can record the bill-to location and the freight contract number for the purchase order. If Retek Trade Management is installed with RMS, you can also record the additional information about the purchase order, such as lading port, discharge port, factory, and agent.

Lading port, discharge port, agent, and factory affect HTS assessments and expenses. Changing these purchase order attributes causes the PO assessments and expenses to be recalculated.

Wastage Attributes

You can record wastage attributes for grocery items. You then can designate whether the wastage is due to spoilage or sales. You can also enter a wastage percentage for the item.

There are two types of wastage added in RMS 9.0: sales wastage and spoilage wastage.

- **Sales wastage.** Applies to items that shrink during processing. For sales wastage, the actual sales quantity is increased by the wastage percentage so that inventory is decreased by the correct amount. Increasing by wastage percentage ensures that replenishment of the item is based on the sales of the preprocessed item and not on the processed item where some wastage has occurred.
- **Spoilage wastage.** Applies to items that naturally lose mass as they age. For spoilage wastage, the stock quantity for the item is reduced by the wastage percentage everyday to reflect the average daily loss of inventory. You can also maintain a default daily wastage percent for a spoilage wastage item. This percentage is used when you create a new item/location relationships for the item if you do not specify a different daily wastage percentage.

User-Defined Attributes

The User Defined Attributes (UDA) module provides a method for you to define attributes and associating the attributes to specific items, items on an item list, or items in a specific department, class, or subclass. UDAs are useful for informational and reporting purposes. Unlike traits or indicators, UDAs are not interfaced with external systems.

To use UDAs effectively, you must first add the UDAs to the system. You can then add UDAs to a department, class, subclass, item, or item list. Alternatively, you can add departments, classes, subclasses, or items to a UDA.

Benefits

The UDA module offers the following benefits:

- Gives you some of the control and benefits of static attributes along with the flexibility of traits.
- Can be used as one of the grouping criteria for items.
- Can be used as information to be printed on tickets and labels.

General Actions

You can perform the following actions with the UDA module:

New	Edit	View
Create a UDA.	Add or delete a UDA.	A list of UDAs.
Choose from multiple UDA types, including list of values, free-form text, and date.	Delete items associated with a UDA.	All items associated with a UDA.
Specify the UDA be numeric, alphanumeric, or a date for a list of values.		All UDAs associated with an item.
Specify a maximum field length for a list of values.		All departments, classes, subclasses, or items associated with a UDA.
Add multiple values to a list of values UDA.		
Assign UDAs at the department, class, or subclass of the merchandise hierarchy, indicating whether the UDA is required. The UDA and corresponding values that are applied as new items are created within the given hierarchy.		
Associate a UDA with a staple item, fashion style, fashion SKU, or pack item.		

Masks

A mask lets you group locations using specified rules or criteria to create the locations and distribution quantities for a purchase order, contract, allocation, or transfer (where the transfer type is Stock Allocation). The Mask module is a reusable and flexible template that a buyer can use to distribute goods more accurately and efficiently to locations.

Masks can be used when creating new allocations, both stand alone and cross-dock, to add the destination locations and distribution quantities of the allocation.

Mask algorithms determine how the percentages or sales rates are calculated for masks. The algorithms are:

- Manual
- Sales history
- Days of supply
- Forecasted sales
- Planned sales

A buyer uses a mask to distribute a large quantity of merchandise to multiple locations more efficiently and accurately. The buyer can easily create multiple masks for different types of distribution and modify the criteria associated with the masks as distribution needs change.

The Mask module helps you create and manage allocations in transfers and purchasing. The allocation mask, when applied to a total quantity to allocate, determines how many units to allocate to each store.

General Actions

You can perform the following actions with the Masks module:

New	Edit	View
Create a new allocation mask, create a new mask from an existing allocation, or edit an allocation mask.	Purge a mask based on the creation or modification date.	Record and display the date the mask is created and the date of the most recent modification to the mask.
Create and store reusable allocation percentages by location.	Edit the individual location minimum and maximum amounts.	Display the mask locations, quantities and distribution percentages.
Store and reuse frequently used store breakout percentages for easy creation of standard allocations.	Edit the quantity for each location when a distribution quantity is manually entered for each location.	Select an algorithm to analyze information.
Apply a mask containing pre-existing locations and distribution percentages to facilitate distributing PO items.	Rebuild a mask.	
Use different algorithms when calculating mask location distributions.		
Associate a buyer with an allocation mask.		
Enter additional information in a free-form comment box.		
Create single use allocation masks, which are not stored for reuse.		

With this function, you can apply a mask to:

- A purchase order
- A contract
- An allocation
- A transfer allocation

Traits

The Traits module provides you with a way to group locations and vendors by common characteristics. There are two types of traits: location traits and supplier traits. Location traits are associated with areas, regions, districts, and stores. Supplier traits are associated with suppliers. The traits are user-defined.

Location Traits

With location traits, you can group areas, regions, districts, or stores by traits. When a trait is associated with an area, region, or district, the trait is applied automatically to the stores within those entities. A trait can be deleted only at the level of organizational hierarchy to which it was associated originally. You can create reports based on location traits.

At the store level, location traits also can be used when you:

- Add stores to a promotion.
- Add stores to a price change event.
- Add stores to a store grade in a store grade group.
- Add stores to a mask.
- Edit store attributes for an item or item list.
- Edit replenishment parameters by item or by item list.
- Edit the shipping schedule from a warehouse to multiple stores.
- Edit a retail price of a store-priced item.
- Identify store locations for a staple, fashion, or pack item.
- View replenishment parameters by item.

Supplier Traits

With supplier traits, you can group suppliers based on a trait. You can also group suppliers by associating them with a trait that indicates that they share a master vendor. A master supplier is an outside source that provides merchandise to your vendors, such as a manufacturer or distributor. You can also enter an external ID for the master vendor. Based on the traits you associate with your suppliers, you can create reports.

The trait function provides a mechanism for grouping locations or vendors together by common characteristics. The two types of traits supported within RMS are location traits and vendor traits. Location traits establish relationships between a trait and a group of stores. Supplier traits establish relationships between a trait or master vendor and a group of Retek vendors.

Supplier traits can be used when creating reports in Retek Data Warehouse (RDW) to track supplier activities.

General Actions

You can perform the following actions with the Traits module:

New	Edit	View
Assign unlimited traits to a location or a supplier.	Add or delete traits for a location or supplier while in Edit mode.	Lists of supplier traits and location traits.
Assign location traits to multiple levels of the organizational hierarchy (such as area, region, district, and store).	Add or delete suppliers or locations for a trait.	All traits associated with a supplier.
Use traits when initiating actions, such as creating price changes and promotion.		All suppliers associated with a trait and master vendor.
Use location traits to add stores when creating price changes and promotions.		All traits associated with a store, district, region or area.
Group together selected suppliers and designate a master supplier.		All stores, districts, regions, or areas associated with a trait.

Timelines

A timeline is a schedule of events. To track the life cycle of an activity, you can attach a timeline to the activity.

Some preliminary setup is required before timelines are available for use. First, you must define the steps that are included in the different types of timelines. Next, you must define the types of timelines. To do this, select the steps to include in the timelines.

Finally, you can associate timelines with a variety of activities in RMS and RTM. Timelines can be attached to activities in the following functions:

- Purchase orders
- Items
- Items on a purchase order

Note: Timelines can be associated with items on a purchase order through the purchase order function in RMS; however, if you are using RTM, you may want to use the transportation function to associate a timeline to items on a purchase order.

- Customs entry records
- Transportation records
- Containers
- Bills of lading or air waybills
- Commercial invoices

Document Maintenance

The Document Maintenance module lets you create, edit, and view documents required for letter of credit processing. You can then add or delete required documents associated with the following entities:

- Suppliers
- Partners
- Countries
- HTS chapters (when used with RTM)
- Letters of credit (when used with RTM)
- Staple items
- Fashion styles
- Fashion SKUs
- Pack items
- Purchase orders

Any documents associated with these entities are attached to a purchase order when you create it. When you attach a letter of credit to a purchase order, the required documents are then applied to the letter of credit. Required documents applied to the letter of credit are transmitted to the bank through an electronic exchange.

Note: Using RMS, you can add required documents to all of the entities above except letters of credit and HTS. To access the letter of credit function, you must have Retek Trade Management software installed on your system.

System Administration

One of the key benefits of RMS is that you can administer the system as best fits your store operations. This section describes the various ways you can set up RMS via the System Administration functional area. Topics include:

- System parameters
- Electronic data interchange
- Point of sale maintenance
- Audit trail
- Security
- Internationalization

System Parameters

In a similar way to setup options, you have numerous ways to specify how the system is to act under selected circumstances.

System Variables

RMS control function maintains relatively static information about your business. Many of the control indicators must be set when RMS is installed and cannot be changed without major implications.

Most system control variables are specific to functional areas such as ordering, pricing, transfers, stock ledger and history. While some indicators dictate the level at which these functions perform, others indicate the length of time that the data is maintained for these areas.

In addition to those control variables specific to a functional area, there are others that span over all functional areas and determine how the system performs as a whole. Some of these variables include the multiple currency indicator, primary language and system dates.

Code Maintenance

The code maintenance function lets you change the values displayed in the drop-down lists that exist throughout RMS. You can modify RMS to use your own terminology. However, use caution when customizing the descriptions that are displayed. If the system requires a code and uses it in performing certain functions, changing the description that your users see could have some implications.

Batch Maintenance

The batch function helps you monitor and control RMS batch programs. You can view the history of a certain batch program to see when it was run last or the length of time it took a run to complete. You can also maintain the number of threads used by a batch program or the number of saves performed within it.

Dynamic Hierarchies

The dynamic hierarchies feature lets you enter your own labels and abbreviations for the organizational, merchandise, and vendor hierarchies.

Note: For example, you may elect to change the name “Department” to “Category”.

The user-supplied label is substituted for the Retek label throughout RMS.

Tree Administration

The main menu in RMS is flexible. You can add and delete folders and elements on the tree structure. Some examples of elements are forms, internal items, Oracle reports, user applications, and Web pages. You can secure any type of element so only selected user roles have access to the element. Users inherit the permissions that are associated with their user role.

Electronic Data Interchange

Electronic Data Interchange (EDI) transmissions from vendors can be acted upon within RMS. You can review and accept both cost changes and changes to the item catalog.

To receive EDI transmissions from a supplier, you must select the appropriate EDI attributes for the supplier.

Cost Changes

You can view vendor cost changes by selecting the EDI Cost Changes option under Items on RMS main menu. After entering the vendor number and the date on which the vendor created the cost changes, all cost changes transmitted by the vendor are displayed. Cost changes can be accepted or rejected.

- If you accept a cost change, a cost change event is created based on the new cost and active date.
- If you reject a cost change, the cost change remains in the system for a pre-determined number of days before being removed.

Item Changes

You can view additions and edits to the item catalog. New items and edits to existing items can be accepted or rejected.

- If you accept a new item, records are created for the item in RMS.
- If you accept an altered item, the item details are updated.
- If you reject a new or edited item, the item information remains in the system for a predetermined number of days before being removed.

Point of Sale Maintenance

The point of sale (POS) configurations feature lets you create configurations that are downloaded to the POS registers at stores. You can create the following types of configurations:

You can associate stores with the configuration. The configuration then is downloaded to the POS registers of the associated stores in a nightly batch process. How the coupon configuration is interpreted depends on the type of POS system your organization uses.

Configuration	Description
Coupons	You can create and maintain configurations for expense coupons. You can link coupons to items through the merchandise hierarchy.
POS Buttons	You can create and maintain touch button configurations for the POS register.
Product restrictions	You can create and maintain restrictions for products, such as minimum age requirements and tender type restrictions.
Tender type	You can create and maintain acceptable tender types for each store.
Paid in/paid out	You can create and maintain acceptable paid in/paid out transaction types for each store.
Money orders	You can create and maintain a money order configuration for stores that sell money orders.
Vendor payment types	You can create and maintain valid methods by which a vendor can be paid. This information is sent to the store so those store employees can pay the vendor directly with the correct payment type.

Audit Trail

The Audit Trail module provides an extremely flexible way to monitor changes made within RMS. When setting up an audit trail, you specify which RMS tables are to be tracked and any specific fields on the table that should be monitored. By setting up the audit trail, you can track any changes to a table or field value along with the ID of the user who made the change.

Audit Tables and Triggers

As you identify the tables to be audited, both an audit table and an Oracle trigger are created for each RMS table that is tracked. The trigger created exists on the audited RMS table and writes a record to the audit table each time an update occurs to RMS table being monitored. Customized reports can then be created to report the changes that have occurred on the audited tables.

Purging Audit Tables

The purge frequency of the audit tables (daily, monthly, yearly) is determined at the time the user sets up the audit.

Security

RMS 9.0.0.0 adds security controls that limit user access to areas of RMS where security is enabled. There are two kinds of access for users:

- Full access to all areas of the system.
- Limited access to the areas of the system users need to do their jobs.

A new user is assigned to a group and has access to all areas approved for that group. A batch must run before any new settings take effect.

RMS has three levels of security. The table below lists the features of each security level.

Location Security	Product Security	Zone Security
Limits your access to merchandising functionality by store, warehouse, or zone	Lets you access items at the department, class, subclass, style, or SKU level	Gives you control over a particular zone group/zone level
Shipments	Pricing	Pricing
Ticket requests	Clearance	Clearance
Promotions	Promotions	
Transfers (both to and from)	Transfers	
Orders	Orders	
Stock counts	Stock counts	
Inventory adjustments	Allocations	
Return to vendor (RTV)		
Allocations (both to and from)		

Internationalization

The Internationalization module supports organizations that have differing native languages across the organization. You can translate and view most descriptive text into another valid language.

This subsection discusses primary language and country/currency rates.

Primary Language

English is the default primary language. The data users enter, however, can be entered in any language that your organization selects. All item descriptions, hierarchy names, lists of values, and other descriptive text should be entered first in the primary language. These values can then be translated into other beneficial languages.

If a value has been translated to a language that matches the preferred language of the current user, it is displayed in the user's preferred language. If it has not been translated, the user sees the information in the primary language.

RMS provides two options for translation:

- Several values can be translated into one target language
- One value can be translated into several target languages

If an organization supports a multiple language environment, members of the organization should plan for periodic review and translation of new text in RMS.

Multi-Language and Multi-Currency

To meet the needs of multinational and other worldwide retailers, RMS supports multiple languages, multiple value-added taxes, and multiple currencies across identical data. This support lets your worldwide selling entities use their own currency and language while retaining their primary currency and language. You can add and maintain an unlimited number of currency codes. RMS can also handle multiple exchange rates with different effective dates.

Foundation Data also supports the Euro currency. All exchange rate conversion routines meet the recommendation of the European Monetary Institute. You can also view retail prices in the local currency or the Euro. This is a helpful feature during the transition from local currencies to the Euro.

Country

RMS lets you maintain a list of country codes and names. The country code is held on all addresses within RMS as well as on purchase orders and contracts.

Currency

The currencies you enter into RMS are driven by the locations of the retailer's vendors, stores and warehouses. For each currency, the number of decimal places to display and the display format can be entered individually for both cost and retail amounts.

Currency Rates

Each currency code has two active rates used to convert currencies in RMS:

- Operational rate—used to convert currency values online.
- Consolidation rate—used to report if the system-level consolidation rate is set to Yes.

Note: If the consolidation rate is not set to Yes, the operational rate is also used in reporting.

You can view the histories of both the consolidation and operational rates. You can also enter pending rate changes. Pending rates become active during the batch cycle run on the night before the effective date

Purchase Orders

The Purchase Orders functional area in RMS is a central application within the merchandise management function. Purchasing involves obtaining the product from vendors and moving it through the retail supply chain to the customer.

Purchase orders (PO) can be initiated in various ways, including manual orders out of the buying office triggered from an assortment-planning tool and automatic orders from a replenishment system. The PO reflects any deal negotiated with the vendor as outlined in deals management. After the order is approved and communicated (usually via EDI), you can track the order's status.

The purchase order process is the basis for much of the functionality within RMS functions. There is full integration with receiving, distribution, replenishment, vendor analysis, open to buy, and the stock ledger. Orders can be directed to multiple drop points or to a single warehouse, distribution center, or store. Pre- and post-allocations are supported. Previous allocations can be re-used. The system automatically reallocates short-shipped quantities according to the reallocation method you choose.

RMS 9.0.0.0 includes the following new features for tracking purchasing information.

Quick Order Entry

In RMS 9.0.0.0, you can use the Quick Order Entry feature for direct-to-store orders that only need to be approved and received. The direct store delivery feature lets you create a purchase order and receive the order all at once. This feature is useful when a buyer has already purchased and received the goods from a vendor. You can also indicate when the vendor invoice was paid using Retek Invoice Matching.

Distributing Items

RMS lets you distribute items by color, size, location, and store grade. The RMS filter, which lets you limit the number of records displayed (depending on criteria entered into the fields in the filtering window), can be used to select the records to be distributed. Only style items may be distributed by color and size. Any styles being distributed simultaneously must be assigned the same size group.

The methods of distribution are by:

- Color and color range
- Size, size range, and size ratio
- Store grade
- Location

After creating a valid order record containing complete information for either style/color/size/location or SKU/location, RMS places the record on the order.

Redistribution of Approved Orders

In RMS 9.0.0.0 you can redistribute approved orders without going through the approval process again. You can select the items and locations on an order that must be redistributed. Deals are automatically reapplied to the order when it is distributed. The original OTB calculations are updated at a later time for the redistributed items.

Temporary Distribution of Approved Orders

In RMS 9.0.0.0 you can choose to distribute an order to a redistribution warehouse. A redistribution warehouse does not actually hold stock and cannot be used as a distribution center. It does let you create a purchase order before the distribution center is known. The order must be redistributed to actual warehouses or stores when the locations become known and before the merchandise is shipped.

Open to Buy

RMS 9.0.0.0 provides a dynamic open to buy process that is linked to the order approval process. Buyers can set purchase targets by subclass and by week. Purchase targets are shown against commitments as orders are approved. As goods are received, the outstanding amounts are adjusted.

Contracts

A contract is a legally binding agreement with a vendor to supply items at a negotiated price. In RMS, the contracting functions fit closely with the replenishment and ordering functions. The main business benefit of contracting is to achieve vendor involvement during the planning phase of your business.

The Contracts module lets you create a pre-defined contract at the vendor/SKU level, committing a particular volume of inventory over a specified period of time. After the system creates a contract, you view it by issuing calls (purchase orders within RMS). This feature is fully integrated with the purchasing and replenishment functions.

The Contracts function lets you set up contracts at style, option (style/color or style/size), and SKU level. This is referred to as *soft contracting*. Soft contracting improves vendor relationships by helping vendors set up their production plans well in advance. Soft contracting also helps buyers improve management of their financial commitments.

Note: For example, fashion retailers may be able to commit to a fabric for specified styles without knowing the exact sizes and colors that are manufactured from the fabric.

Contract costs can also be set up at the SKU, option, or style level. Contract costs for fashion items always defaults to the style level. However, they can be firmed up to option or SKU level, if the vendor requires different costs for each item.

Deals Management

The Deals Management module replaces the deals, brackets, and allowances functional area from previous RMS releases. Deals management lets you create and maintain complex deals with deal partners and fixed deals with vendors.

There are four types of deals:

Deal	Description
Annual	A year-long deal you have with a deal partner. Only one annual deal can be applied to an item at a time.
Promotional	Generally is shorter than an annual deal. Multiple promotional deals can be applied to an item at the same time.
Vendor-funded markdown	A markdown sponsored by the deal partner. The deal closes automatically on the end date.
PO-specific	Applied items on a specific purchase. A PO-specific deal supercedes any other deals for the items on the PO.

The deal class determines how the deal components are calculated in relation to each other. The deal class can be:

Deal Class	Description
Cumulative	The values of the deal components are added together and then applied to the total purchase amount to determine the discount or rebate.
Cascade	Each value of the deal components is applied to the total purchase amount minus the value of the previous deal component.
Exclusive	Supersede any other deal components, and only one exclusive deal component can be applied to an item at any time.

Deals with Deal Partners

You can create deals with deal partners for items or items at specific locations. Deal partners can be suppliers, wholesalers, distributors, and manufacturers. Within a deal, you create deal components, specify the items for the deal component, and define thresholds.

Deal components are discounts or rebates included in the deal. When you enter deal component information, you determine the billing type, the collection dates, how the deal component is calculated, and the value of the discount or rebate from the deal partner. You can create multiple deal components in a single deal.

After you create the deal components, you select the items to which the deal components are applied. You can also note specific locations for the items. Items and specific locations can also be excluded from deal components.

When you define thresholds, you specify how much must be purchased or sold to receive a discount or rebate. You also indicate the value of the discount or rebate.

When you work with purchase orders, you can view all of the deal components that apply to an individual item on the purchase order. You can also view the projected cost of the item with all the valid deal components applied.

Fixed Deals with Vendors

With fixed deals, your organization receives payments from vendors in return for mentioning their products in promotions or for displaying their products on prime shelf space. You can create fixed deals and set up a collection schedule from which you can make claims against the vendor and receive payments. Fixed deal payments can be claimed from the vendor either periodically or all at once.

Allocations

An allocation is a distribution of merchandise from a warehouse that sends that merchandise to other locations, usually stores. Therefore, an allocation comprises the item being distributed, the warehouse from which it is being distributed, and the locations to which the item is distributed.

There are two types of allocation: standalone and cross-dock.

Standalone Allocation

A standalone allocation lets you move merchandise stored in a warehouse out to other locations.

Note: For example, a buyer may need to purchase an item in advance from a vendor to get a particular deal. Therefore, the buyer purchases the item from the vendor to one of the store warehouses. When the merchandise is needed in the stores at a later date, an allocation of that merchandise is then sent from the warehouse to the stores that need it.

Note: To create a standalone allocation, the warehouse must have the stock on hand, or available stock, of the item to distribute the stock to the stores. A standalone allocation also has a release date associated with it. This marks the date in which the warehouse starts to pick the merchandise for distribution.

Cross-Dock Allocation

Cross-dock allocations are tied to a purchase order.

Note: For example, a buyer may need to purchase a total of 1000 units of a single item and then divide that up among the stores that need it. A purchase order is created for the 1000 units were sent to a warehouse. An allocation is then created and associated with the purchase order number, warehouse, and item on the purchase order. The allocation initiates the movement of the item from the warehouse to all of the stores that need that item. Therefore, the merchandise flows from the vendor through the warehouse and out to the final destination locations.

A cross-dock allocation prevents the buyer from having to create the purchase order for the item directly from the vendor out to all the locations that need the item. Instead, the vendor sends all of the items to one location, the warehouse, and the retailer uses an allocation to the items from the warehouse out to the desired locations.

Creating Allocations

Allocations can be created in three RMS areas:

- Allocations
- Transfers
- Purchasing

Allocations primarily maintain the optimal amount of a product at every store through efficient distribution. Allocations are used against the item associated either with a PO or against warehouse stock. Locations that are to receive the item are then determined, followed by determining how much to send to each location.

You can determine how much of a product to send to each location in two main ways. The first is to manually record the amount by location. The other is to use patterns (masks) that are largely based on sales history.

The Allocations functional includes the following:

- Allocations for orders can have multiple ship-to location currencies.
- Pre-allocation and post-allocation of import orders can have multiple ship-to location currencies.
- The quantity that has been allocated to locations and a variance percent of the items that have been allocated from the total order quantity for a SKU is automatically calculated.
- There is an approval process. Valid statuses include:
 - Approve
 - Unapprove
 - Close
- The percentage difference between the amount allocated and the amount ordered is automatically calculated and displayed.
- You can use a tool to automatically create an allocation (mask or copy allocation function) or you can manually assign items to locations.

General Actions

You can perform the following actions with the Allocations functional area:

New	Edit	View
Choose a reallocation method to be used if a purchase order is short shipped, including: <ul style="list-style-type: none"> • Prorate—ensures that all stores receive some merchandise if the shipment arrives short of stock • Allocation quantity—received items go to the location with the greatest demand • Custom—you define the allocation locations and percentages 	Edit an allocation after it has been approved and re-approve the changed allocation	View stand-alone allocations and allocations that are created through the purchasing dialog
Copy an allocation	Filter items by style, color, size dimensions, and location for viewing or editing purposes	Display the quantity of any items that have already been transferred to a selected location
Enter a description for the new allocation		Filter items by style, color, size dimensions and location for viewing or editing purposes
Select the warehouse from which the allocation originates		Customize the display by filtering the data according to style, color, size dimension, and location
Enter the date to release the allocation from the warehouse		
Specify the PO type		

Cost and Retail Price Management

The Cost and Retail Price Management functional area helps you manage your pricing strategy to drive higher gross margins and increase profitability. Cost and retail price management includes five key features as described in the following table.

Feature	Description
Competitive pricing	Helps you track prices at your competitors' stores and compares the prices with your stores.
Cost changes	Made when the cost from a vendor changes.
Retail price changes	Usually permanent at least until a need for a change is identified again. The reasons for a retail price change are many and varied, such as to meet or beat the competition or to increase in-store traffic with a loss leader.
Promotions	Typically considered to be temporary price reductions that are designed to support an ad event. The items return to their normal price at the end of the event.
Clearances	Designed to support end of season or product life strategies in preparation for new merchandise.

This subsection describes the following topics in the Cost and Retail Price Management functional area:

- Retail prices and costs
- Competitive pricing
- Estimated landed costs
- Clearances

Retail Prices and Costs

Pricing includes both retail prices and merchandise costs. Event level information for both retail pricing and cost changes is similar. Both types of events contain an event description, an effective date, and a reason code.

The effective date for a retail or a cost price change is when the new price is reflected in the stores, in your company's stock ledger, and in RMS system tables. Although the purpose of the reason code for cost and retail changes is basically the same (both used primarily for reporting purposes), retail and cost price changes use two different lists of reasons.

Cost changes use cost change reasons, and retail changes use markdown reasons. Both types of reason codes are user-defined.

Pricing

The Cost and Retail Price Management functional area controls creating and maintaining retail prices. It is designed to offer multiple pricing techniques such as zone pricing, clearance strategies, and multi-unit pricing. As price changes take effect, markdown or markup transactions are generated for companies using the retail method of accounting.

RMS 9.0.0.0 has a security feature that protects price zone records. A database administrator sets up the security information for groups.

RMS 9.0.0.0 has been enhanced to support:

- What-if price change analysis
- Clearance reset date
- Store lead time for price zone changes

What-If Price Change Analysis

You can analyze the impact of a price change before implementing it.

You can look at the effects of the proposed change through forecasted sales figures and planned receipts. You can also see the total impact to the price and to the stock on hand using an online worksheet. RMS 9.0.0.0 also calculates the retail impact of a promotion based on the estimated sales. You can view this information in RMS 9.0.0.0 to create a promotion with the most profitable sale.

Clearance Reset Date

You no longer have to specify a clearance reset date when you create a clearance item. Items can remain on clearance indefinitely so that they can be phased out of inventory permanently.

Store Lead Time for Price Zone Changes

You can now specify when a price zone change takes effect for a store. This allows time for the store personnel to re-ticket items in accordance with the price changes that may occur.

Cost Change

RMS provides an orderly and efficient framework for authorization and control of initial pricing, markdown/markup, and general price management.

The initial cost of an item is established when an item is set up. After the unit cost of an item has been confirmed during the item set-up, any change to the supplier unit cost must be completed by initiating a cost change.

After a cost change is approved, the system updates the item/supplier cost record, and you can indicate that the system should recalculate any outstanding purchase orders not yet received.

Cost changes from suppliers can be entered into the system via EDI or manually.

Manual Cost Change

In the manual mode, you record cost changes and then submit them for approval.

There are two ways to manually initiate a cost change:

- Enter a cost change by supplier
- Enter a cost change by SKU or style

General Actions

You can perform the following actions with the Retail Prices and Cost module:

New	Edit	View
Specify that a cost change changes the corresponding retail price to maintain a specific margin	Edit the price change per item	View all items for the supplier selected for the cost change
Set the cost at the SKU level		Display the primary or supplier currency
Select a reason for the cost change from a user-defined list		Look at the old and new single markup percent of retail or the old and new unit cost
Select the effective date of the cost change		
Modify the unit cost by a percentage or by an amount using the supplier's currency		

Automated Cost Change

In the automated mode, the EDI transactions are received from the supplier and edited against predefined tolerances. If the transactions pass the edit, they are used to recalculate any outstanding purchase order amounts not yet received. You can modify rejected transactions.

Retail Price Change

Retail prices can often be different, based on such information as geographic area, demographics, and store size. RMS pricing application lets you select an item or group of items and tie them to price zones. You can then define the price change. The price change impact is computed, and the change is submitted for approval.

After the price change has been approved, it is made available for downloading to the stores and ultimately to the POS terminal when the effective date has been reached. The financial impact is also registered in the stock ledger.

The pricing module uses pricing zones to implement the most effective pricing strategy for each item. Pricing zones can vary from product to product.

You can assign each SKU to one of three levels of pricing. SKUs can be reclassified between pricing levels on demand. The three levels include:

- Corporate pricing – The item has the same retail price at all stores.
- Zone pricing – Stores are grouped into price zones, and the item's price is set and maintained for each zone, then exploded down to the store level automatically.
- Unique store pricing – The item may have a unique retail price at each store.

Retail price change events are used to modify the price of a single item or an item list in one or more zones. RMS provides various methods for adjusting prices, including:

- Ends in – Adjusts the new retail price so that it ends in a specified amount. For example, you can specify that all prices end in \$0.99.
- Price point – Adjusts the new retail price to a specific price based on the range that the original price falls into.

Note: For example, you can specify that all items between the range of \$5 and \$10 are being priced a \$7.99. Therefore, when a price change increases the price of a SKU from \$4 to \$5, the new retail price is \$7.99.

- Rounding – Adjusts the new retail price according to rounding rule that you define.

Competitive Pricing

Competitive Pricing is a new module in RMS 9.0.0.0. Competitive pricing lets you track pricing at competitors' stores. You can define competitors and competitor stores, and maintain competitor pricing information at the SKU/competitor/competitor store/day level. Maintaining this information leads you to make more informed decisions when pricing your own products.

You can also use the Retek Competitive Shopping product to create competitive shopping lists and historic records of competitors' prices. Each competitor's store must be associated with a specific competitor organization and can also be associated as a competitor of one or more of your company's merchandising stores.

You can create competitive shopping lists--guides for obtaining competitor pricing information--from a standard RMS item list. You can also store information about the individuals who perform your competitive shopping.

Estimated Landed Costs

The Estimated Landed Cost module lets you define expenses, assessments, and combinations of both to track the costs for purchasing and moving goods from the manufacturer to the distribution center or store.

Within RMS, estimated landed cost is defined using expenses and assessments. Expenses and assessments are more generically referred to as cost components.

- Computation value bases (CVB) expenses describe how expenses and assessments are combined to provide a base for the calculation of other expenses and assessments.
- Assessments specifically refer to taxes or fees that must be applied to goods in accordance with specific laws.

General Actions

You can perform the following actions with the Estimated Landed Cost module.

Define assessment	Define CVB	Define expense
Enter a unique identification code and description of the assessment	Enter a unique identification code and description of the assessment	Enter a unique identification code and description of the expense
Choose the assessment type, such as a tax or fee	Select the types of calculate the CVB should be included in	Select the expense type, either zone or country
Select the country the goods are being imported from	Select the expenses and assessments to be included in the CVB	Indicate the expense category, such as administrative or miscellaneous
Specify whether the assessment is based on the quantity of goods or on a percentage of the value of the goods	Indicate whether to add or subtract expenses and assessments	Specify whether the expense is based on the quantity of goods or on a percentage of the value of the goods
Select the currency in which the assessment is denominated		Select the currency in which the expense is denominated
Select the status of the assessment in relation to the other components in a CVB		Select the status of the expense in relation to the other components in a CVB

Clearances

The Clearances module let you authorize and manage clearance markdowns. For clearances, RMS uses *events*, similar to the events used in Pricing and Promotions. Clearance events consist of any combination of SKU/zone level markdowns that are functionally linked together.

Each clearance event in RMS must pass through an approval process that includes the following status types: Worksheet, Submitted, Approved, Rejected, Cancel, and Delete.

The Clearances module lets you:

- Set up clearance default strategies.
- Create clearance events.

Set Up Clearance Strategies

You can specify class level defaults in advance for maximum clearance efficiency. Class level defaults let you set up a template for progressive markdowns. You then apply this template to a clearance event.

A class level default applies to all items in that class. Only one default can exist for a class.

Clearance default settings include:

- **Markdown percent:** The percent taken from the original price before the clearance.
- **Target sell through percent:** The percent of stock on hand that the store plans to sell during the clearance event at each markdown level.
- **Days after out of stock date:** The number of days after the out of stock date when the price is reset to the original price.
- **Days after first markdown:** The number of days after the original markdown that the subsequent markdowns occur.

Create Clearance Events

You can also set up clearance events to move remaining merchandise out of the store. Clearance events consist of any combination of SKU/zone level markdowns that are functionally linked together. Each clearance event in RMS must pass through an approval process. You can associate user-defined markdown reasons for reporting purposes.

Each clearance event must be associated with a pricing zone group. Pricing zone groups are identical to those in Pricing: Corporate, Store, and Zone. However, the pricing zone group associated with an event need not be the same zone group ordinarily associated with the item or items in the event. This lets you apply a different pricing strategy on the clearance event than the strategy normally applied to the item.

RMS requires you to provide other information to a clearance event, besides the pricing zone group. This information includes a clearance number, description, and a markdown reason code. Markdown reasons are user-specific and are used primarily for reporting purposes.

Clearance, like Pricing, has other functions, including:

- **Margin visibility** to support pricing decisions.
- **Ability to track price history** by SKU/store and type (regular, promotion, or clearance).
- **Calculation of required and actual sell through percent.**

Clearance also uses multiple methods to adjust prices, such as Ends In, Price Point, and Rounding.

- **Ends In.** Adjusts the new retail such that it ends in the amount specified (for example, \$ 0.99).
- **Price Point.** Adjusts the retail price to a specific price based on the range into which the new retail price falls.

Note: For example, if your RMS system includes a price point range that requires all retail prices in the range \$5- \$10 to be set to \$7.99, then a clearance markdown decreased the price of a SKU from \$15 to \$9 would set the clearance retail price to \$7.99. You can set your Price Point rules by selecting Price Point from the Control menu.

- **Rounding.** Adjusts the retail price based on client-defined rules.

General Functions

After a clearance event is created, other functions within the system are affected as follows:

- **Replenishment.** Auto replenishment is deactivated when an item is placed on clearance.
- **Ordering.** A warning is displayed if you attempt to order an item on clearance. However, you have the option to proceed.
- **Cost and retail price management.** Regular retail price changes can be made during clearances. The system holds the changes until the retail price for the item is reset at the completion of the clearance event. This lets you set next season's prices while you are clearing out the current season's merchandise.
- Multi-unit retail prices for items on clearance are turned off during the clearance event. After the clearance event is over, the multi-unit pricing is reactivated.
- **Promotion.** A promotion can exist concurrently with a clearance event, but only if the promotion start and end dates do not overlap with the date of a clearance markdown.
- **Contracts.** Orders can be drawn off a contract even if the contract items are on clearance. This lets you fulfill contract agreements.

General Actions

You can perform the following actions with the Clearances module.

New	Edit	View
Designate a reason for a clearance event.	Add styles and SKUs to a clearance event.	Conflicts for the SKU/style.
Create clearance events where items are set up with multiple markdowns that are designed to reduce the on-hand quantity to zero at the end of a selling season.	Edit the effective date and single unit retail at the SKU level.	All items included in the clearance event.
Use an approval process. Statuses for clearance events include: worksheet, submit, approve, reject, cancel or delete.	Add new locations to a clearance event and then apply the markdown information to those locations without affecting the original locations.	Effective date and single unit retail at the SKU level.
<p>Select Locations</p> <p>Apply the clearance event to individual zones or all zones within the zone group.</p>	View the primary or local currency.	Display of the quantity sold, sell through percentage, and markup percentage retail for each markdown date.
Apply the markdowns to all SKU/zone combinations when using a style.		Stores involved in the clearance event.
<p>Define Dates</p> <p>Specify the out of stock dates.</p>		<p>Stock information by store, such as:</p> <ul style="list-style-type: none"> • Stock on hand and in transit • Last weeks sales • Out of stock date • Required rate of sale per week • Quantity on order
Select the first effective date for the clearance event.		
<p>Set/Reset Prices</p> <p>Specify the reset of price to pre-clearance level after the merchandise has been cleared.</p>		

New	Edit	View
Select from multiple price reduction types, including: <ul style="list-style-type: none"> • Reduce price by amount • Reduce price by percent • Set price to a percentage of base • Set price to a set amount 		
Adjust the amount reduction by: price point, round, ends in.		

Promotion Management

The main purpose of retail promotions is to reduce the price of merchandise and to track sales at one or more locations for a given time period. Another purpose of promotions is to track the sales of merchandise with no price reductions at given locations for a set time period.

The Promotion Management functional area lets you establish sales targets at SKU/store level and monitor performance daily. For better promotions management, a promotion history file is kept in addition to SKU level reporting. User-defined schedules drive promotion reporting. Promoted SKUs can be grouped for price changes and analysis.

The Promotion Management functional area lets you temporarily reduce prices and track sales of individual items or groups of items within any department/class/subclass combination at one or more locations. Unlike pricing and clearance markdowns, which revalue a company's entire inventory immediately, markdowns in Promotions revalue your inventory item by item, as stock is sold.

RMS changes and tracks promotional price changes through a three-level hierarchy.

- **Event level.** Groups individual promotions within an event, with a start date and an end date.
- **Promotion level.** All individual promotions. Each promotion's start and end dates must fall within its event's dates.
- **Detail level.** Item groupings, price change types, and locations for individual promotions.

General Actions

You can perform the following actions with the Promotion Management functional area:

New	Edit	View
Use multi-unit pricing, such as: <ul style="list-style-type: none"> • Mix and match—to set a specified amount of an item that must be purchased to receive another item for free or at a discount • Multi-unit—to set a special price for purchases of more than one of the same item • Threshold—to create promotional discounts that increase as either the total purchase or the number of items a customer purchases increases 	Change the price of an item on a promotion after it has been initially entered at any time.	View a summary of the departments or items included in the promotion.
Send promotion information to the POS system, based on user-defined lead times.	Copy items of one promotion to a new promotion.	Use a filter to view certain items within the promotion.
Use an approval process. Valid statuses for the promotion included: worksheet, submit, approve, reject, cancel, delete.	Change the ad information of items, such as a new page, block, or segment.	View start and end dates and the status and currency of the promotion when adding information.
Ensure that the same item is not overlapping promotions for the same store/time frame.		Display the calculated forecasted units and amount.
		Use performance reporting of actual to forecast at item/store level.

Inventory Control

Tracking and managing inventory can be a challenge. RMS helps you track inventory status to identify where merchandise is at all points in time so you can maximize your supply chain efficiencies.

The SKU numbering system is managed within RMS. You generally access SKU level information by using drill downs and searches on descriptive information. Both unit and value histories are held at the SKU level for a user-defined time period. The histories are divided into regular, promotion, and clearance totals.

A perpetual inventory is maintained at SKU/store level. Below SKU level, Retek provides UPC and EAN control. The package allows multiple UPCs for each SKU and has a provision for retailers to assign their own codes for house brand merchandise.

In RMS 9.0.0.0 Inventory Control is updated with the following modules, which are discussed in the subsections that follow:

- Shipping and receiving
- Transfers
- Inventory adjustments
- Returns to vendor
- Stock counts
- Bills of lading
- Layaways
- Tickets and labels

Shipping and Receiving

Receiving lets you receive items into inventory that buyers ordered from an outside vendor. Receiving also lets you transfer items to another location within your organizational hierarchy.

Receiving uses shipments and transfers to move items within the organization.

Distribution and Receiving

The distribution processes are handled on an event basis. Events such as receiving, all varieties of transfers, shipments from distribution centers and warehouses, cross-docking, returns to vendors, and ASN/EDI transactions allow the retailer transaction management of typical functions. Transfer zones and multiple store allocation are also available. With transfer allocations, you can allocate an item or item list from a warehouse to one or several stores or warehouses.

The replenishment function within RMS provides a solid basis for controlling inventory in an automated manner. The replenishment function is designed to determine demand at the lowest level (the SKU/store level) and consolidate the demand for all stores that are sourced from a given warehouse or vendor.

Replenishment is designed to support warehouse stocked merchandise, cross-docked merchandise, or direct to store orders. Purchase orders, allocations, and requisitions can be generated automatically to source demand. Allocation methods are defined at item level, with forecasted allocation masks as an option.

Shipments

A *shipment* lets goods be tracked as they pass through the various delivery stages, and to be related back to the original order or transfer to allow quick and efficient follow up searches for discrepancies.

Shipments must be created before any items are received on-line because all items on orders or transfers are received against a shipment. Upon receipt, the quantity received can be entered against the line items listed in the shipment.

Receiving Shipments

In RMS 9.0.0.0 you can receive items that were not entered on the original purchase order. This might happen when you receive a substitute item or when a pack item is received with the wrong components. Substitute items are supported in batch receiving. To receive pack items with incorrect components, you can receive the component items that were delivered to you instead of the pack item.

The receiving dialog lets you receive shipments on-line. When you have entered a valid shipment number, the system displays item level details about the shipment. The quantity received is entered for each item on the shipment.

Accounts Payable

If the vendor is set up to use Evaluated Receipt Settlement payment method, accounts payable (AP) transactions are written out to a table upon receipt of a shipment, if receipt can be matched to an ASN shipment. ASN shipments can be entered manually or created automatically in the EDI ASN upload batch function.

Transfers

A transfer is any movement of stock from one location within the company to another. All transfers in RMS have a source location (either a store or warehouse), that currently has stock on hand of the items being transferred, and one or more destination locations (either store or warehouse) where the stock is sent. Transfers may contain one or more items that is transferred from the source location to the destination location.

The following transfer types are available in RMS:

- Administrative
- Combined
- Confirmation
- Cross-dock PO
- Customer order
- Manual requisition
- Non-salable
- Return to vendor
- Stock allocation
- Store requisition

Store requisitions transfers and cross-dock PO transfers are system-generated. These types of transfers, along with stock allocation transfers, can be consolidated into a combined transfer. Combined transfers can be maintained by item or by location (store or warehouse). By consolidating transfer requests into a combined transfer, one manifest is created for each source/destination location combination.

General Actions

You can perform the following actions with the Transfers module:

New	Define the transfer	View
Create store to store, store to warehouse, warehouse to store, and warehouse to warehouse transfers.	Define the freight type: normal, expedite, hold.	Details of an item while entering it into the transfer.
Choose the type of transfer.	Choose a transfer type: cross-dock, stand-alone allocations, return to vendor, requisition, manual.	Merchandise in transit.
Manage transfer request quantities, ship quantities, and received quantities at the item level.	Enter additional comments in a free-form comment box for any additional information.	ASN number, ship date, and receive date.
Use transfer zones to control store to store transfers. A store can only transfer inventory to other stores within the same transfer zone.	Enter a reference code from an external system.	Transfer after printing.
Use an item list to transfer items between stores.	Receive a shipment for a transfer online.	
Enter items onto a transfer, using the style or style/color.	Use an approval process. Statuses for transfers include: input, approve, ship, close, delete.	
Associate a store with a date on which the store can expect.	Specify the customer for a customer transfer order and enter customer information such as: <ul style="list-style-type: none"> • Customer name • Customer number • Title • Address (regular and delivery) • Contact phone numbers • Delivery date and type • Salesperson 	
Include several transfers on one bill of lading to view the transfer that the SKU belongs to.	Transfer merchandise at the carton level to decrease the handling within the distribution channels and, in turn, increase the speed of merchandise flow between locations.	

Stock Allocation Transfers

Stock allocation transfers let stock be allocated from one warehouse to multiple locations. When creating a stock allocation, you can either specify a date on which stock on the allocation should be reserved or reserve the stock immediately. Also, a different date on which the allocation is released to the warehouse can be specified.

Stock allocation transfers and store requisition transfers, along with cross-dock PO transfers, are combined in the nightly batch process (according to the store ship schedule) to create one transfer record per destination/source location. Stock allocations do not have to merge with the cross-dock POs and store requisitions.

This function offers you the following benefits:

- Automatically creates a transfer number, but the number is editable and users can change it.
- A bill of lading is created for every transfer source location and destination location possibility.
- PO warehouse receipt functionality automatically creates transfer orders for cross-dock items received at the warehouse.

Inventory Adjustments

To keep inventory accuracy high, you can make inventory adjustments by item or location. Adjusting by item lets you select an item and adjust the inventory at one or more stores and warehouses. You can also adjust the inventory of one or more items at a specific store or warehouse.

To create an inventory adjustment, you enter an inventory status type to determine whether the adjustment is made for unavailable inventory (non-salable merchandise) or for stock on hand (salable merchandise).

The total stock on hand status is reserved for salable goods. User-defined status types are reserved for non-salable goods. Applying a user-defined status to items does not adjust total stock on hand; it places the specified item quantity into an unavailable category at the store or warehouse.

Both salable and non-salable inventory adjustments affect RMS stock ledger.

- A salable inventory adjustment is written to the stock ledger as a stock adjustment and revalues the inventory.
- Non-salable adjustments write out transaction level records to the stock ledger as unavailable inventory transfers. They do not revalue the inventory at the specified location.

Product Transformation

In RMS you can transform one product into several products and apportion the costs of the original product across the resulting products at various rates. You decide the calculation for the cost distribution. These transactions are normal stock adjustments in the stock ledger. This feature lets you purchase a side of beef and then transform it into multiple products for sale.

With the Inventory Adjustments module, you can:

- Perform inventory adjustments at the SKU level.
- Enter the adjustment by location or by item.
- Move inventory into and out of the user-defined inventory types to track inventory that is not available for sale.
- Enter inventory adjustment reason codes for tracking inventory adjustments by type.
- Record the reason for the adjustment.

Returns to Vendor

The returns to vendor (RTV) module lets you create, edit, view, and search for RTV orders. You specify the vendor to which the items are being returned and the location from which the items are being returned. Items can be returned from stores or warehouses. You can return items from inventory, or you can return items that have failed quality control.

When you return items from inventory, you can return individual items or all of the items on an item list. You also select the reason that the item is being returned from inventory and indicate the quantity being returned. You can return all the stock on hand for an item at a location.

When you return items that have failed quality control, you must indicate the shipment that includes the items and enter the quantity that failed quality control.

The status of the RTV order changes as it passes through the approval process and is shipped. Depending on your user role, you can change the status of the RTV order. The status can be Input, Approved, Cancelled, or Shipped.

General Actions

You can perform the following actions with the RTV module:

New	Define Return Details	Edit	View
Use an approval process. Statuses for RTV include: <ul style="list-style-type: none"> • Input • Approve • Unapprove • Ship order • Cancel 	Enter additional handling charges.	Add items to the RTV until the RTV is approved.	Display the vendor's currency or the primary or local currency.
Enter shipping information about the RTV request.	Specify whether the return comes from on-hand inventory or from a quality control process.		View the minimum return amount required by the vendor.
Select one of the pre-defined return addresses as the return address for a particular RTV.	Enter a return authorization number and the per item percentage charge by the vendor for handling the return.		View the total order amount of all the items on the order.
	Use the SKU or UPC/EAN/ISBN.		View the total cost charge by the vendor for the order.
	Return a single item or multiple items, using an item list. You can rebuild an item list within the RTV dialog.		Display details of an item connected to the RTV.
	Enter a reason and the inventory status.		Display the date the RTV was created and completed. RMS automatically tracks the dates.
	Enter the cost at which the item is being returned.		

Stock Counts

The stock counting process has two major phases. The first phase is to initiate the request and communicate it to the counting location. The second phase is for the counting location to begin the count.

The system plays an active role in freezing inventory in a manner that allows counts to be accurate, considering activities that take place while the count is under way (such as a receipt in the back room while stock is being counted in the display areas).

After counts have been taken and adjustments made, the results are recorded in the appropriate databases and financial applications.

General Actions

You can enter stock count results in two ways:

- Using a batch upload program
- Manually

You can perform the following actions with the Stock Counts module:

Create Count	Record Count	Identify/Resolve	Edit	View
Choose a stock counting type: <ul style="list-style-type: none"> • Unit stock count, which generates adjustment to on-hand quantities when budget shrink is used • Unit and amount stock count, which generates adjustment to both on-hand quantities and the inventory value 	Enter new counts for an existing stock count, edit existing counts for a stock count, or view counts for a given stock count.	Perform trial variance reporting, including unit and amount threshold parameters in reporting count variances.	Adjust the amount (stock cost) of the stock on hand at a store/department or warehouse/department level.	View the stock count results in amounts.
Use item lists in unit-only stock counting.	Enter the count location, such as stock room or sales floor, and count quantity for the stock count.	Make count adjustments after the initial count entry and before the final update.	Create a trial variance report or item stock adjustments for a specific stock count.	
Choose the merchandise level for the stock count: <ul style="list-style-type: none"> • All departments • Department • Class • Subclass 	View the SKU details.			
	View primary or local currency.			
	Specify the processing of any adjustments or leave a requested adjustment in an input status.			

Bills of Lading

The Bills of Lading module helps you document items that are shipped from a warehouse or distribution center to another location in the organization. The actual bill of lading is a listing of merchandise shipped within the organization for every transfer location origin and destination possibility.

A bill of lading is generally printed at the shipping location and then accompanies the goods through the journey to the destination point, where the document serves as a confirmation of the shipment.

Layaways

The Layaways module helps you maintain a record of items reserved (placed on layaway) by customers and to track their payment history on the items placed on layaway. You can place any merchandise that the store stocks on layaway for any customer.

This subsection discusses the following aspects of layaways:

- Defining and tracking payments
- Impact on other areas of RMS
- Interaction with other RMS functions
- Replenishment process
- Physical stock counts
- Stock ledger
- System indicators supporting layaways

Define and Track Payments

You can define the following payment plans for layaway transactions:

- Weekly
- Bimonthly
- Monthly payments

You can also track:

- Minimum payment amount
- Service fees
- Deposit amount

You can also make and track payments, return merchandise that was on layaway, and obtain a refund of payments made. In addition, an indicator is available to flag employee layaways.

Many reports support the layaway function, including the daily totals for layaways and a reminder letter to customers who have missed payments.

Impact on Other Areas of RMS

The Layaway function does not directly impact any other major functions in RMS, but relies on the Item Maintenance and Location Maintenance functional areas of RMS.

Note: For example, an item cannot be placed on layaway unless it has been defined in RMS and is stocked at that store.

A layaway is a contract with a customer. Therefore, the retail prices associated with a layaway are not affected by any subsequent retail price change in RMS.

Interaction with Other RMS Functions

The sale of a layaway item is reported to RMS through the Point of Sale (POS) upload program (posupld). Consequently, the sale of a layaway item is not recorded to the Stock Ledger until you enter the sale into the POS.

You have the option of reporting this sale immediately and handling it as a credit account or waiting until the final payment and handling interim payments as liabilities. As in any other reported sale, if the layaway sale amount does not correspond to the current retail price for the item at that location, a markdown is recorded at the time of sale.

Replenishment Process

The replenishment process in RMS calculates the future available inventory for each item on replenishment. This calculation excludes quantities on open layaway accounts. RMS assumes that items on an open layaway account have not been reported as a sale by the POS, since an item reported as sold is immediately subtracted from the stock on hand. If the retailer chooses a different process for reporting sales, a modification to the available inventory calculation may be required.

Physical Stock Counts

Physical stock counts of layaway items are determined by the sales reporting process. After being reported as sold through the POS, layaway items must not be counted as inventory. If items are not reported as sold through the POS until the customer takes possession, items on layaway should be counted as unavailable inventory.

Stock Ledger

The Stock Ledger recognizes the layaway items as inventory, but it values these items at the current cost or retail price at that location, not at the layaway contract price.

System Indicators Supporting Layaways

The system administrator can set system control values and indicators that influence how the Layaway function operates, such as these:

- Minimum deposit percentage – Calculates the minimum deposit amount required in order to open a layaway account.
- Weekly payment percent – Calculates the number of payments and the payment amount weekly.
- Fortnightly payment percent – Calculates the number of payments and the payment amount fortnightly.
- Monthly payment percent – Calculates the number of payments and the payment amount monthly.
- Maximum duration allowed for completion of a layaway (in days) – The purge process uses this to determine how long a closed layaway account remains in RMS database. The purge process deletes closed layaway accounts that are at least twice this number of days old.
- Message to be included on customer contracts and receipts for layaways – A message that is available for use on the reports and receipts generated by RMS.

Layaways let you place merchandise on hold for a customer. Customers can use a payment plan of weekly, bimonthly, or monthly. Customers can return merchandise that was on layaway and obtain a refund. Multiple reports are available for review, including daily totals for layaways and reminder letters to customers who have missed payments.

General Actions

You can perform the following actions with the Layaways module:

New	Edit	View
Enter the customer's name, initials, and address information.	Edit the customer information.	View the payment history of an item on layaway, including the payment date, amount, and payment method.
Enter a staff identification number of the person making this transaction	Access price adjustment for the layaway.	View the items on layaway, including the quantities and prices.
Specify whether the customer is an employee.		View by SKU, UPC, or VPN.
Enter multiple items and multiple quantities.		Select a trading day to view layaway financial activity.
Track financial details of the transaction, including: <ul style="list-style-type: none"> • Total amount • Service fee • Grand total • Minimum deposit required • Actual deposit paid • Amount tendered • Change due • Balance owing 		Print a daily totals report.
View the primary or local currency.		

You can also perform the following additional functions with the Layaways feature.

Payment

- Enter payment amounts, including the payment method.
- View the primary or local currency.
- View the customer and layaway information, with the financial details.

Fixture

- Specify whether the goods are stored at the selling location or at a warehouse.
- Enter or change details of the store or warehouse, and the fixture (shelf, bay or rack number) where the goods relating to this layaway are stored.
- Specify a fixture number.
- Enter the fixture information to use when the final payment is made to allow rapid retrieval of the items for delivery to the customer.

Return

- Use validation process for a layaway selected for return to stock. On approval, the customer's record is updated.
- View the customer information and the customer's financial status, including:
 - Sales amount
 - Deposit
 - Payments
 - Total payments made
 - Unclaimed payments
 - Forfeited service fee

Refund

- Validate a layaway selected for refund action, and on approval, to update the customer's record with the action taken and provide appropriate receipts.

RMS automatically provides a customer refund receipt and refund pick request for a return to stock.

Tickets and Labels

Most items that are for sale at a store have a ticket or label attached to them. The ticket contains information about the item, such as the SKU number, UPC number, size, and retail price. Multiple ticket types can be associated with a single item.

Note: For example, a turtleneck sweater may need both a hanging ticket with the UPC and retail price and a sticker label with the size and color.

There are two steps for setting up tickets and labels:

Define the ticket or label.

Associate the ticket with an item.

Tickets can be generated when any of the following events occur:

- A purchase order is approved.
- Items are received.
- A price changes.
- A manual request is made.

Ticket requests can be batched and then transferred to an external ticket printing system in the warehouse, at the store, or at the vendor site.

Ticketing

The ticketing function in RMS 9.0.0.0 is expanded to better support grocery retailers and organizations that operate in multiple countries. These additions include:

- Grocery ticket attributes
- Shelf edge labels
- Multiple sizes on tickets
- Multiple currencies on tickets

Grocery Ticket Attributes

Ticket attributes calculate the price per unit of measure. The price per unit of measure can then be printed on tickets. You can enter the unit of measure (UOM), the size of the item in the specified unit of measure (Size of Each), and the size that the item is priced at on the ticket in the unit of measure selected (Size of Price Per). The price by unit of measure is calculated as follows: Price / (Size of Each / Size of Price Per).

Note: For example, if you have a five-pound bag of rice that you are selling for \$3.20US, you would enter the following information so that the price per ounce is displayed on the ticket:

- The unit of measure is ounces.
- The size of each bag of rice in ounces is 80, as there are 80 ounces in five pounds.
- The size that the item is priced at is 1 because you want the price of the item per one ounce printed on the ticket.

In addition to the other ticket information, the ticket displays that the price of the bag of rice is \$0.04 per ounce.

Shelf Edge Labels

You can specify that a ticket is a shelf edge label. This feature accommodates many types of shelf labels, letting you create labels for many different types of displays and fixtures.

Multiple Sizes on Tickets

You can print multiple sizes on a single ticket. You can define which sizes and the number of different sizes to be printed on the ticket. This feature lets retailers customize tickets for international business.

Multiple Currencies on Tickets

You can specify a secondary currency for a store. Then, when tickets are printed for an item, the price of the item is printed in both the primary and secondary currency of the store.

With RMS, you can define attributes of a product that you want to see on tickets and labels. You can then request a selected quantity of tickets or labels when in the appropriate business process, such as receiving.

General Actions

You can perform the following actions with the Tickets and Labels module:

New	Edit	View
Associate more than one ticket type with a SKU.	Change the quantity of tickets for a print request.	Filter on a SKU to view ticketing information, such as the different locations the tickets are printed at.
Request tickets for a single item, an item list, or a purchase order.		
Require a ticket by an individual location or a group of locations.		
Set up and define ticket types.		
Request a quantity of tickets above the quantity of items ordered and received.		

Replenishment

Replenishment is an automated feature that monitors inventory conditions and creates orders to fulfill consumer demand according to pre-defined parameters. Replenishment profitably balances on-hand inventory levels with customer service targets. Replenishment also prevents lost sales and reduces costly inventory holdings.

RMS also supports emergency replenishment by allowing manual warehouse pick requests outside of the regular replenishment requests from stores. Warehouses can also be reserved for potential replenishment requests from other stores.

Replenishment automatically rounds purchase orders up to the nearest vendor pack size and transfers up to the nearest store order multiple.

If an order does not meet the vendor minimum or maximum requirements, the order is created in worksheet status. You can then review and manually update the order to make it meet the requirements.

At the vendor level, stock levels are replenished based on the vendor review cycle. At the store level, stock levels are replenished based on either the vendor review schedule or the item review schedule.

The benefits of automated replenishment include:

- Improved customer service
- Reduced lost sales
- Reduced inventory carrying costs
- Increased inventory turns
- Improved buyer productivity

Replenishment Phases

There are two major phases in the replenishment function:

Set up the instructions for replenishment

Determine what product has to be replenished and in what quantity

The replenishment function lets you assign the appropriate level of sophistication depending on the product and its selling environment. You can use one of several replenishment methods against a user-selected group of SKUs and locations. Many instructions are recorded in the system that outline dates and dictate the source of the stock to be used when replenishment is required.

You have the option to identify substitute items that can be used for replenishment if the SKU that is the focus of the replenishment is not available. You can select what buyer or system initiates replenishment. Then you determine how much product is needed, if any, in each replenishment cycle.

There are two types of replenishment schedules:

- **Store ship schedule.** If the item is being replenished from the warehouse, the system reviews the stock levels based on the store ship schedule.
- **Vendor review cycle.** If the item is being replenished from the vendor, the system reviews stock levels based on the vendor review cycle.

Due Order Processing

RMS 9.0.0.0 now supports due order processing. Due order processing can be performed at either the purchase order level or item level. If due order processing is performed at the purchase order level, the processing is based on the combined service level of all the items on the order. At the item level, an item is considered due if the accepted stock-out level of the item is less than the estimated stock-out level.

At the purchase order level, the stock-out and expected stock-out levels for all the items on the order are summed and compared to determine if the order as a whole is due. At the item level, if the stock-out level is less than the estimated stock-out level for only one item on the order, the order is considered due. You also can determine whether the stock-out calculations are performed using item cost, profit, or units.

Vendor Constraint Scaling

You can define up to two scaling constraints with minimums, maximums, and tolerances for a vendor. Amount, weight, volume, pallets, cases, and eaches can define vendor-scaling constraints. With scaling constraints, an order can be scaled within the constraints to meet a vendor's minimum or maximum requirements.

A scaling objective flag indicates whether the minimum or the maximum amounts are the primary objective of the scaling algorithms. You can change some of the vendor scaling constraints and re-scale the order based on these new constraints.

Enhanced Replenishment Orders

You can indicate whether replenishment orders should be automatically generated in approved status or automatically generated but requiring approval.

When orders are created through the replenishment process, you can review the orders, change parameters such as vendor constraints and item/location replenishment parameters, and recalculate the orders based on the changes you have made.

You can also define how pack size rounding is performed. You can round to the case, pallet, or both case and pallet.

You can maintain the inventory control information at either the vendor or vendor /department level. This information is used for replenishment orders; however, you can edit this information at the order level.

Single Location Orders

You can indicate that replenishment orders must be created for single locations. This helps in building truckloads where a truck, due to distances involved, only delivers to one location.

In RMS 8.0, replenishment orders included as many locations as were valid as long as the vendor and department (for departmental orders) were the same. The locations could be a combination of cross-dock warehouses, warehouses, and stores.

In RMS 9.0.0.0, you can indicate that the orders for a specific vendor must be single location orders. This functionality is available for automatic replenishment only.

Warehouse/Store Assignments

You can assign one or multiple stores to a warehouse. You also indicate the date on which the assignment begins. RMS verifies that assignment dates are not in conflict with any existing assignments. If there is a conflict, you can view the conflicting assignments.

Warehouse Demand Replenishment

You can select one of nine replenishment methods for an item. You can select from stock-oriented or service-oriented methods. Each location that stocks the item can use a different replenishment method. The following table describes each replenishment method.

Replenishment method	Description
Constant	Stock-oriented method in which the item is replenished when the memory level falls below a specified level, or the maximum stock level.
Min/Max	Stock-oriented method in which the item is replenished when the inventory level falls below a specified minimum stock level.
Floating point	Stock-oriented method in which the item is replenished when the inventory level falls below a specified minimum stock level.
Time supply	Stock-oriented method in which replenishment is based on the number of days of supply for the item you want in inventory. The item is replenished when the net available inventory falls below the quantity required for the specified minimum days of supply.
Time supply-seasonal	Identical to the time supply method; however, you can specify a season and phase during which replenishment is performed for the item.
Time supply-issues	Stock-oriented method in which replenishment is based on the number of days of supply for the item you want in inventory at a warehouse. The item is replenished when the net available inventory falls below the quantity required for the specified minimum days of supply.
Dynamic	Service-oriented method in which recommended order quantities are dynamically calculated. The complex calculation considers current sales, sales trends, seasonal demand patterns, service level objectives, and a lost sales factor.
Dynamic-seasonal	Identical to the dynamic method; however, you can specify a season and phase during which replenishment is performed for the item. This method is only available for the replenishment of items at stores.
Dynamic-issues	Service-oriented method in which recommended order quantities are dynamically calculated. This method is only available for the replenishment of items at warehouses.

Enhanced Vendor Constraints

In RMS 9.0.0.0, vendor constraints include both vendor minimum and vendor scaling constraints. You can specify up to two vendor minimums in the same units of measure as vendor scaling constraints. The constraints can be by amount, weight, volume, pallets, cases, and eaches.

If two minimums are specified, you can define whether both must be met for an order to be approved or if only one of the two has to be met. For replenishment items, you can indicate whether line items on an order should be purged when they fail to meet vendor minimums or if the order should be set to worksheet status when it fails to meet vendor minimums.

General Actions

You can perform the following actions with the Replenishment module:

New	Edit	View
Specify which items you would like to have on automatic replenishment.	Activate or deactivate a replenishment cycle.	Display vendor information.
Indicate how often you want the items for a particular vendor to be reviewed, such as every day, week, or two weeks.	Change the activate or deactivate dates.	View replenishment cycle parameters.
Indicate the day of the week that you want the review to take place.	Change vendors.	Look at activate and deactivate dates.
Enter activate and deactivate dates for the replenishment cycle.	Edit the replenishment cycle parameters.	View the recommended order quantity and what is actually ordered for an item at a particular location.
Enter presentation stock and demonstration stock values.		
Enter lead times.		
Specify a vendor.		
Choose the replenishment vendor and the review cycle for an item at each store or warehouse.		
Use numerous workload management features to control large numbers of SKUs or stores through item lists, store lists, user-defined attributes, and mass item updates.		
Use flexible location cycles to support store shipping schedules.		
Prioritize stores for requisitions.		
Choose which orders to include in on-order calculations.		

Financial Management

RMS can help you control and maintain your company's finances. The series of financials features record and analyze inventory results and merchandise processes daily to determine success and profitability. The system uses a stock ledger and provides the point of interface with the general ledger.

This section describes the following Financial Management functional area modules:

- Budgets
- Stock ledger
- Open to buy
- Sales taxes
- VAT maintenance

Budgets

The RMS Finance section has several windows for viewing and maintaining budget information. RMS maintains two different types of budget information: month-level and half-level. Both month and half-levels maintain the budget information at the department/location level. However, the actual fields that are tracked for both are very different.

Month-Level Budget Information

Month-level budget information mimics the inventory fields kept on the monthly stock ledger. Most of the budget information tracked at the month level is kept in monetary amounts as opposed to the percentages kept at the half-level.

Note: Examples of month-level budget fields are opening stock (cost and retail), net sales (cost and retail), closing stock (cost and retail) and gross margin percent.

All budget information captured at this level is for informational and reporting purposes only.

Half-Level Budget Information

Half-level budget information lets you enter budgets for cumulative markon percent, markdowns as a percent of sales, shrinkage as a percent of sales and gross margin percentage. These budget fields apply for the entire half for a particular department and location.

All of the budget fields at the half-level are for reporting purposes only, with the exception of shrinkage percent. A system option can be set that determines whether budgeted shrink or calculated shrink is used to calculate ending inventory.

If the system option is set such that budgeted shrink is used, then shrinkage as a percent of sales budgeted at the half-level for a department/location is used to calculate the shrinkage amounts, which is used to reduce the ending inventory for a period. If budgeted shrink is not to be used, then this field becomes informational only.

Stock Ledger

RMS Stock Ledger monitors the actual financial performance of the retailing operations.

Transactions

The financial transactions associated with all merchandising activities, such as sales, purchases, transfers, and markdowns, are captured in the Stock Ledger, and inventory and gross margin are calculated on a weekly and monthly basis.

Supported Accounting Methods

The stock ledger supports both the retail and cost methods of accounting, which can be different for different departments.

- With the cost method of accounting, you have the option of implementing either average cost method or standard cost method, by setting a system level option.
- With the retail method of accounting, you can choose to implement the retail components of all transactions as either VAT inclusive or VAT exclusive, by setting a system level option.

Budgeted Shrinkage

Another system-level indicator, budget shrinkage indicator, is used to determine whether budgeted shrinkage amount or actual shrinkage amount is used to reduce ending inventory amount as ending inventory amount for each week or month is calculated.

Calendars

RMS Stock Ledger supports both the 454 and regular calendar. If you use the regular calendar, inventory and gross margin is not available on a weekly basis. That is, the Stock Ledger batch process can only be run on a monthly basis.

Implementation

You implement the Stock Ledger module at subclass/location level, which means that subclass/location is the **lowest** level at which inventory, cumulative markon, and gross margin numbers are calculated. These numbers are stored on the Stock Ledger tables at this level, and can be consolidated to higher levels, such as department/all locations, for viewing and reporting.

You can view the consolidated Stock Ledger information online at higher levels, such as department/all locations. However, it requires customization work to calculate and store inventory and gross margin at any level other than subclass/location.

Stock Ledger offers you the following benefits:

- Maintains a stock ledger that can be interfaced to the general ledger to maintain data integrity between merchandising retail amounts and financial retail amounts.
- Provides opening and closing stock levels by department, class, or subclass and by month or week.
- Makes gross profit calculations, using either retail or cost-based (average, last cost, or custom per client specifications) accounting.
- Provides stock-take and shrinkage allowances.

General Actions

You can edit and view Stock Ledger information as follows:

Edit	View
All transaction activity is centralized in a single function.	View information for a store, a warehouse, or all locations.
<p>The stock ledger enables item reclassification. A feed to the stock ledger is used to transfer the inventory amounts associated with the re-classified item from the old department/class/subclass to the new department/class/subclass.</p> <p>If active orders exist for the reclassified item, the OTB is updated.</p>	Choose to search by months, weeks, or days.
<p>Stock ledger transactions include:</p> <p>Cost and Retail Methods</p> <ul style="list-style-type: none"> • Net Sales • Customer Returns • Purchases • RTV • Transfers In • Transfers Out • Stock Adjustment • Reclassification • Cost Variance 	View amounts by thousands or single amounts.
<p>Cost Method Only</p> <ul style="list-style-type: none"> • Freight • Gross Margin Amounts 	View the local or primary currency.
<p>Retail Method Only</p> <ul style="list-style-type: none"> • Markup • Markup Cancel • Markdown • Markdown Cancel • Promotional Markdown • Clearance Markdown • Cost Variance • Employee Discount • Workroom/Other Cost of Sales • Cash Discount 	<p>View stock ledger information using different viewing options. These include:</p> <ul style="list-style-type: none"> • Retail summary • Cost summary • Merchandise handled • Retail reductions • Retail this year versus last year • Cost this year versus last year • Inventory report • Markdown report • A user-defined saved view • Custom (multi-view)

Open to Buy

The Open to Buy (OTB) module monitors the available weekly purchasing budget at a subclass level and provides a warning before approving orders that exceed this budget. Generally, purchasing budgets are maintained outside of RMS, using data extracted from RMS by a planning tool.

Revised budget figures can be transferred to RMS in a flat interface file. The new OTB position is immediately reflected in the purchasing function budget checks and can be viewed in the OTB reports provided.

There are three order and budget categories:

- Order of non-basic goods (N/B) for manual orders.
- Buyer replenishment of basic goods (BRB) for buyer controlled replenishment.
- Automatic replenishment of basic goods (ARB) for automated replenishment.

Budgeted purchases in each of the three categories are held separately.

To allow management control of future commitments, you can impose forward limits to put a ceiling on the amount of the budget that can be committed in the form of purchase orders at any point in the future. This prevents buyers from committing too much of their available funds too early in the season, leaving no flexibility if conditions change or profitable opportunities arise unexpectedly.

General Actions

You can perform the following actions with the OTB module:

New	Edit	View/Analyze
Set forward limits to prevent spending entire budget too early in the season.	Perform an outline update of OTB, based on changes to PO quantities and to commitments and contracts.	View and print daily reporting of current OTB position.
Use an interface point from a planning system that updates the budgeted purchase amount.	Have the OTB updated in primary currency for all POs created in a foreign currency.	Have an automated check performed against the OTB when a purchase order or contract call is submitted or approved.
Maintain OTB at the subclass/week level.		

Sales Taxes

The Sales Tax module lets you specify the tax codes that apply to an item at a specific store. To ensure that stores have accurate sales tax information, the tax codes are sent through the nightly batch process two days in advance of when they are effective at the stores.

When you define sales tax information, first you must add geocodes to RMS. A geocode is a geographical region, such as a state or county, with its own tax codes. You can add geocodes for the following:

- Countries
- States
- Counties
- Cities
- Districts

You then create the tax codes. A tax code consists of a tax jurisdiction and a tax type with associated tax rates. The tax code determines the tax rate that is applied to an item at the store. You can then associate tax codes and stores with a geocode and apply tax codes to items.

The association of the tax codes and stores with a geocode determines which tax codes are effective at a specific store. All of the tax codes associated with geocode are effective at all of the stores associated with a geocode.

You apply a tax code to items, departments, and item lists. The tax codes that are ultimately applied to an item at a store are determined by the tax codes that the item share with the store. The tax codes of a store are determined by the tax codes that are associated with the geocode to which the store belongs.

You can view the tax rates that apply to the item at a specific store, or you can view all of the tax codes associated with an item, department, or item list. You can only view tax product group item lists.

You can also generate four types of sales tax reports:

- **Tax Rate** -This report displays the tax jurisdictions, tax levels, tax types, and tax rates that apply to the item, department, or item list.
- **Items with No Tax Codes** - This report displays all of the items without a tax code applied to them at a store or geocode level. You can generate the report by store or by geocode.
- **Tax Rates by Location** - This report displays the geocode level, stores, and the tax codes effective at the stores. You can generate the report by store or by geocode.
- **Tax Rates by Item/Department** - This report displays the geocode level, stores, departments or items, and the tax codes associated with the item or department.

VAT Maintenance

RMS supports the use of value-added tax (VAT). Before you use this, two indicators must be set during the installation of RMS:

- An indicator that applies VAT throughout the system
- An indicator that determines how it is recorded in the stock ledger

To use the this feature, VAT codes must be set up first. All of these codes are user-defined. You can designate a code type as Cost, Retail, or both. Cost VAT codes are applied when purchasing items. Retail VAT codes are applied when selling items. The code type of 'both' indicates that the VAT rates for purchasing and selling are the same.

VAT rates are associated with VAT codes. VAT rates indicate the specific rate of the VAT applied to an item. These rates can be updated as needed, and an active date specifies when the VAT is valid.

You also need to establish VAT regions. When creating them, you designate VAT regions as one of the following types:

- **Base EU Region** – Indicates that the VAT region encompasses the entire European Union. Only one VAT region can be designated as the Base EU Region.
- **EU Member** – Indicates a VAT region located within the European Union.
- **Non-EU Country** – Indicates that the VAT region is located within a country that is not a member of the European Union.

The VAT region type determines which VAT region's rates are applied and if VAT is charged to an invoice.

VAT regions are associated with departments, stores, warehouses, vendors, and bill-to locations. When you associate a VAT region with one of these entities, you also include the VAT codes used in that region with that entity. The combination of the VAT region, VAT code, and entity determines what VAT is applied to an item. However, the VAT rate applied to an item can also be modified at the item level.

Chapter 3 Retek Sales Audit

Overview

Retailers are looking for ways to reduce the time and expense that they spend on the sales auditing process. Retek has responded to this business opportunity by expanding the functionality within Retek Sales Audit (ReSA). Retek's mission is to simplify the entire sales audit process, ensure the integrity of audited data, and integrate well with other retail applications.

ReSA provides a seamless and integrated flow of data from data collection at the point of sale (POS) to the Retek Merchandising System (RMS), Retek Data Warehouse (RDW), and Retek Invoice Matching (ReIM). Your business' best practices are used with ReSA for the highest degree of data integrity.

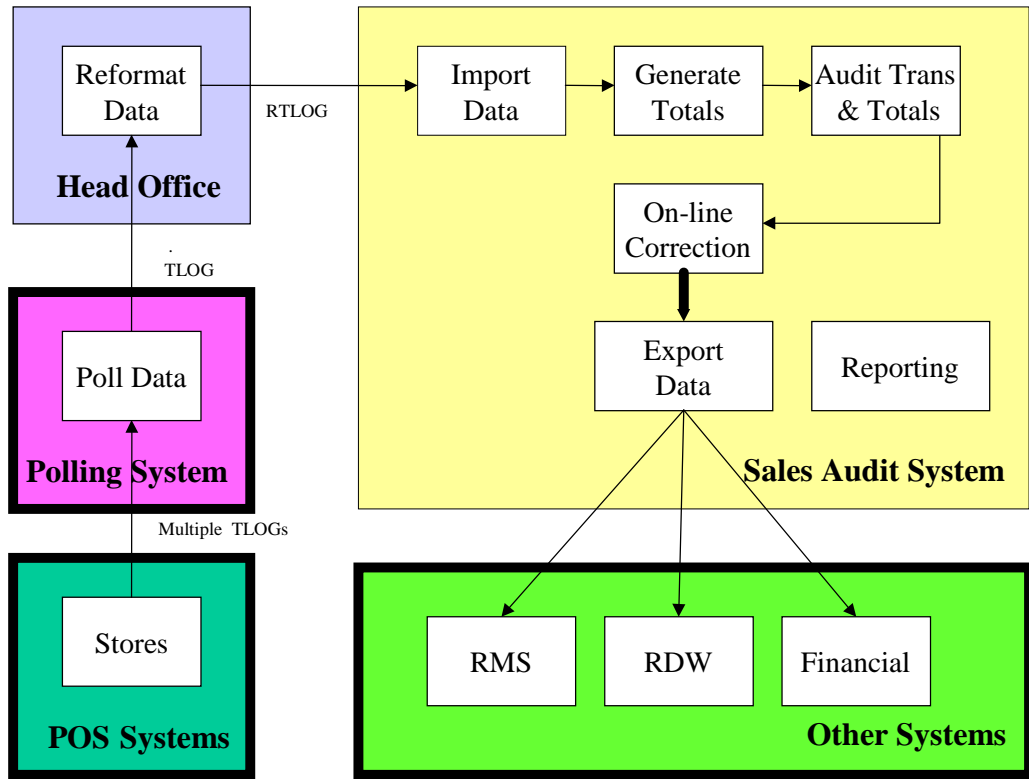
ReSA accepts transaction log (TLOG) data from your POS program. From any source system (in-store point-of-sale, Web, or order management systems), your organization would then reformat the data in the Retek transaction log (RTLOG) format. ReSA then moves the data through a series of processes that culminates in clean data. The system flags inaccurate data so that sales auditors can correct the errors. ReSA provides a seamless and integrated flow of data from the POS to external systems.

Because ReSA is integrated into the Retek Predictive Enterprise Solution, the data flows easily between systems, turning the previously time-consuming and tedious task of sales auditing into an efficient process.

ReSA is a tool that also monitors the reliability and accuracy of transaction data gathered from the POS and compares the data to the rules and guidelines that your organization requires.

Sales Audit Process

The following diagram shows the process flow for sales audit information. Each process is described following the diagram.



Sales Audit Process

Poll Data

Polling is the process used by retailers to transmit store level POS data to the corporate office. Sales data from the POS terminals and other means of processing sales (Web, order management systems, etc.) are collected from the TLOGs prepared by the POS software and other sales applications and consolidated at a central location.

The assumption is that the retailer already has the appropriate communications infrastructure in place between the store and the home office. The retailer assembles the polled data into a consolidated TLOG file in a central location.

Reformat Data

Collected sales data is formatted into a Retek standard format that the rest of the ReSA modules recognize. Retek provides the standard format (RTLOG). Retailers are responsible for either converting their TLOG into RTLOG or modifying the import program to handle their format.

Import Data

To import data, ReSA receives the RTLOG, performs an initial validation on the data, and then loads the data into ReSA database tables. ReSA accepts trickle polling of RTLOGs. A valid store and date from this point are necessary to load the ReSA database.

Generate Totals

ReSA provides retailers with flexible, table-driven totaling and auditing applications. With this model, retailers can define the types of totals they would like to collect and use to validate against and report on dynamically.

Audit Transactions and Totals

ReSA compares the collected sales transactions and totals data against auditing criteria defined by the retailer, and separates transactions with errors from those that are without errors. Data free of error is immediately ready for export to external systems, while erroneous data must be reviewed and corrected in the on-line correction process. The system provides a flexible framework for most types of validation to be performed on the data.

On-Line Correction

ReSA provides multiple facilities the Sales Audit team can use to investigate and correct sales data errors. Once corrected, the clean data is exported to external applications.

Export Data

The exporting function facilitates moving data to other applications such as merchandising, data warehouse, and financial systems for use in computing on-hand data, evaluating inventory, market basket analysis, customer profiling, sales fraud detection, etc. ReSA provides standard data interfaces to the following applications:

- Retek Merchandising System (RMS)
- Retek Data Warehouse (RDW)
- Retek Invoice Matching (ReIM)
- Oracle[™] Site Fuels Management (SFM)
- Oracle G/L systems
- Account Clearinghouse (ACH). A file is provided for interfacing with the banking system.
- J. Driscoll & Associates Universal Account Reconciliation (UAR)

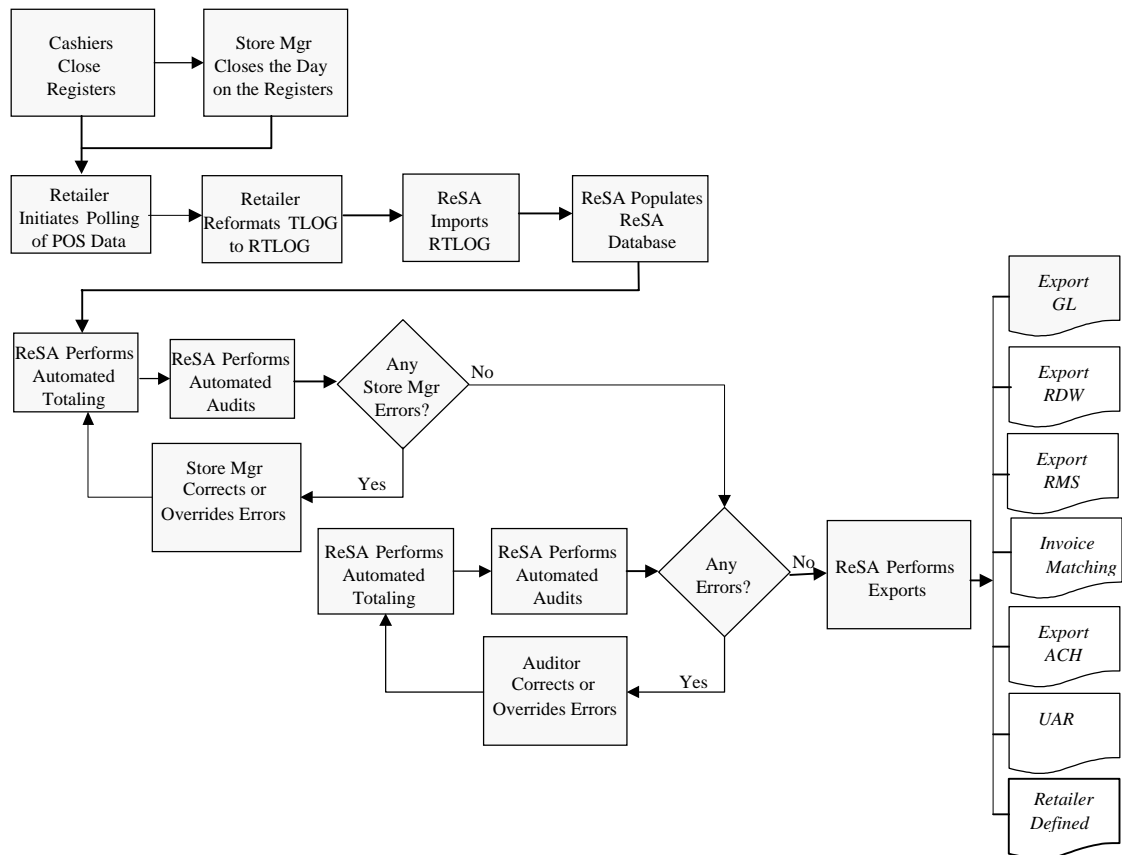
The retailer can also easily add other exports from the ReSA database tables.

Reports

Reports are generated at many stages throughout the sales audit process. They are used to summarize flash sales, track number of transactions processed, and report on transactions in the correction queues, among other things.

Batch Process Flow

The following diagram shows the ReSA batch process flow.



ReSA Batch Process Flow

Functions

ReSA performs a variety of online and batch processing functions.

Online Processing

- Foundation data set-up
- Interactive total/audit process
- Reporting process
- Additional operations

Batch Processing

- Import process
- Automated audit process
- Automated totaling process
- Sales Audit export process

Benefits

ReSA can help increase productivity for sales audit analysts by decreasing the time required to process a store's data.

By using ReSA, you eliminate the temptation to continue using your legacy sales audit systems, which are likely very labor intensive and prone to leave errors in the data stream. ReSA significantly reduces the time and expense of the sales audit source.

Additional benefits include:

Benefit	Description
Post information accurately and quickly	With ReSA, audited sales information can be posted to financial and merchandising systems quickly and accurately. Data generally can be posted one to two days following the actual sales date.
Speedier G/L closings	ReSA speeds up the general ledger closing process. General ledger closings can be completed within days after the end of the month instead of weeks.
Detect employee theft	ReSA can help you detect employee theft and dishonesty so that these situations can be investigated and resolved sooner. Loss prevention personnel and regional management can quickly and easily detect and investigate cash shortages and other sales-related theft by using ReSA.

ReSA Modules

ReSA is divided into the following modules:

- Foundation data
- Import and export data
- Automated totaling
- Automated audit
- Interactive audit
- Audit trail
- Reports

Foundation Data

Foundation data is any reference or master information used to support the sales audit process. This includes valid store numbers, discount types, item numbers, and so on, against which transaction level fields are validated. Reference tables from RMS are accessed to retrieve some of this data, while other tables are specific to Sales Audit.

From Sales Audit, you can maintain transaction types, tender types, discount types, and reason codes. This information must be synchronized with information in the POS system's database. This makes it easier to map between the POS transaction log (TLOG) and the Retek transaction log (RTLOG).

In the Foundation Data module, you set up the system preferences required to run ReSA. You define the following data that is used to interpret errors in transaction files:

- Control setup
- Control system
- System options
- Escheatment
- Employee maintenance/setup
- Store and company close
- Error resolution
- Additional system variables

Control Setup

Use the Control Setup folder to set up system preferences. These include:

- Employee information
- Company closings
- Store exceptions

Control System

The Control System folder contains windows where you set up:

- System options
- System parameters that interpret errors in transaction files
- Error code definitions
- References
- Field level access for employee types

System Options

With the ReSA System Options function, you can set up options that control the Sales Audit program. You generally set the system options once, but some values can be modified at any time after the initial setup.

With System Options, you can perform the following functions:

Enter	Select	Specify	Other
<p>Number of days that ReSA data should be stored in the databases after being posted to other systems. After the indicated number of days, the data are purged from the database.</p>	<p>Level at which you want to balance the declared totals against the system-summarized totals. The balancing levels are store, register, or cashier</p>	<p>Whether or not a sales auditor is required to work store/days in order, closing the oldest days before the current ones can be edited.</p>	<p>Instruct ReSA to check for missing or duplicate transactions. This assumes that transaction numbers that the POS generates are sequential. A maximum gap value is defined, and more transactions than this amount are found to be missing during processing, ReSA logs the block as an error rather than each individual transaction. These gaps would exist between one day and another or within a given day.</p>
<p>Number of days of data that you want ReSA to check for duplicate transaction numbers.</p>	<p>Event that you want to use as the comparison date for Flash Sales reporting, such as remodel date, store open date, or acquired date.</p>	<p>Whether or not the retailer practices escheatment on vouchers.</p>	<p>Choose whether or not a retailer would like to run the audit rules against the partially loaded data. If set to No, the data is only validated after all data is received for a store/day.</p>

Enter	Select	Specify	Other
<p>Number of days of data that must be collected before ReSA starts comparing a previous time period with the current time period for Flash Sales reporting.</p>	<p>Unit of Work (UOW) to determine when data is ready for export.</p> <ul style="list-style-type: none"> • If Store is selected, all transactions must be error-free for a store/day to qualify for export. • If Transaction is selected, those transactions without error may be exported during the batch export process, while those with errors are suspended in ReSA until they have been corrected. 	<p>Default Partner ID associated with the retailer to facilitate income adjustments made when vouchers expire.</p>	<p>Define the Fuel department so that sale transactions containing fuel items can be directly exported to the Oracle's Site Fuels Management (SFM) system</p>
		<p>Whether or not the cashier and salesperson fields should be validated against the Employee table defined in ReSA. Due to high cashier turnover at some retailers, this validation is not desirable. For loss prevention purposes, however, this may be mandatory, especially if cashier balancing is selected.</p>	

Escheatment

ReSA was enhanced to support a new function, the escheatment of vouchers. Escheatment is the process of forwarding monies of outstanding, non-expiring vouchers to the proper governing authorities after a defined period of time from the date of issuance. ReSA helps you determine the following:

- If the company practices escheatment
- The states or countries the store escheats to
- How long after issuance an unredeemed voucher escheat.
- How long after a voucher is redeemed, escheated, or claimed as income the system purges the data

Employee Maintenance/Setup

The Employee Maintenance feature lets you enter, maintain, and display employee information.

Store and Company Close

You can use the Store and Company Close feature to view and log the dates and descriptions of company-planned closings. If you have edit authority, you can add and delete company-closing information.

If you have editing authority, you can add and delete store exceptions to company closings. Use Store and Company Close to view and log the dates and descriptions of store exceptions. These are occasions when an individual store is open even though the company is closed.

Error Resolution

The Error Resolution feature lets you create, maintain, and display error code information. Users can add recommended solutions to the error.

The error codes are used in the Automated and Interactive Audit modules of ReSA. If a user-defined audit rule does not pass validation, the system generates the error code associated with that audit rule.

An error impact is also defined for each error code. This is used to restrict transactions with that error from export to the affected system.

As discrepancies are recorded, the Automated Audit module handles errors in the following manner:

- Records all reasons for a failed transaction. Auditors use that information to correct errors.
- Passed the corrected data to external systems.
- Updates the status of transactions.

Additional System Variables

Foundation Data has two additional system variables that you can use:

- Unit of work. This parameter indicates whether an entire store/day file is passed to RMS or if an individual transaction is passed
- Close store days in order. This parameter indicates whether or not the store employees are required to close the oldest open store days first

Import and Export Data

In ReSA 9.0.0.0 the import process has been enhanced to accept a variable number of import files that represent the data for one store day.

Transactions that have been corrected in the interactive audit process are extracted from the database tables in the Sales Audit program. The information is written to interface files that can be used by external systems. A batch program updates the staging indicators, which indicate to which external systems the transaction details were exported.

The products that are interfaced with the export data process are:

- Retek Merchandising System (RMS)
- Retek Data Warehouse (RDW)
- Retek Invoice Matching (ReIM)
- General Ledger (GL)
- Site Fuels Management (SFM)
- J. Driscoll and Associates Universal Account Reconciliation (UAR)
- Account Clearinghouse (ACH)

If a previous revision of a transaction was exported, a reversal of the revision is also included in the transmission. Transactions that have a status of Deleted are also selected. If they were already transported to the Retek applications, a reversal entry is sent.

This section discusses the following functions that you can use in the Import and Export modules:

- Import data
- Export data
- Bank/store relationship
- Store/bank ACH maintenance

Import Data

In ReSA 9.0.0.0 the expanded interface now includes several additional systems external to Retek 9.0.0.0 applications, as well as some new internal interfaces. In addition to merchandising (RMS) and data warehouse (RDW), ReSA provides standard data interfaces to:

- Oracle Site Fuels Management (SFM). ReSA 9.0.0.0 can capture transactions from pump controllers, either from the controller via the RTLOG or, in the case where no electronic feed of fuel data was received, the data can be entered into SFM and transmitted to ReSA as an adjustment.
- Oracle general ledger (G/L) systems.
- Account Clearinghouse (ACH). A file is provided for interfacing with the banking system.
- J. Driscoll and Associates Universal Account Reconciliation system.

Additional enhancements to the Import module in ReSA 9.0.0.0 include:

- Processing adjustments imported from external systems. ReSA treats all adjustments as online entries, so that they generate exports to other Retek systems. For Oracle's SFM or J. Driscoll's UAR system, adjustments are not re-transmitted.
- Variable import fields. For retailers who use trickle polling, ReSA 9.0 can accept a variable number of import files that represent data for one store day.
- Multiple threads processing. Retailers with large sales volumes can split the consolidated TLOG fields for multiple-threads processing.
- Lottery support. ReSA 9.0.0.0 lets retailers who sell lottery tickets use the feature to define automated lottery audit rules.
- Log capture. A log is captured showing the source, date, and time for data transmission to ReSA.

Export Data

The export process exports data that has passed the audit rules for a given error category. Any changes that are made in the ReSA database after the data has been exported is re-exported as correcting entries, using full disclosure adjustments or some other method.

The programs that interface with the export data process are:

- Oracle general ledger (G/L) systems
- Retek Invoice Matching (ReIM)
- Account Clearinghouse (ACH). A file is provided for interfacing with the banking system.
- J. Driscoll & Associates Universal Account Reconciliation system

All adjustment transactions and totals are made with full disclosure. When a transaction or total is reversed, ReSA 9.0.0.0 processes a complete reversal of the original transaction or total followed by the corrected transaction or total.

Consistent with the current RMS procedure, exports of adjustments made for prior accounting periods are reflected in the current accounting period. Note that exports of ReSA data to the general ledger apply to the proper period. It is up to the general ledger application to address issues of timing.

ReSA 9.0.0.0 can move data to other applications to:

- Compute on-hand data for financial systems
- Evaluate inventory
- Analyze market baskets
- Profile customers
- Detect fraud

You can also create custom exports from the ReSA database tables, such as:

- Commission systems for salesperson compensation
- Payroll systems for money order payments
- Expense A/P system for 1099 vendor information
- Expense A/P system—money order/cash paid-out information
- Merchandise A/P system—payments to direct store delivery (DSD) vendors

Bank/Store Relationship

You can use the Bank/Store Attributes feature to enter and maintain the store/bank relationships and bank attributes. The bank attributes are exported to external ACH and UAR systems.

Store/Bank ACH Maintenance

You can use the Store/Bank ACH Maintenance feature to view ACH transactions for all store days. In addition, you can add manual adjustment values that override the ACH amount. Once the amounts go through the ACH for a particular store day, you can no longer modify the transactions.

General Actions

This feature lets you support, view and edit ACH transactions as described in the following table:

Support	View	Edit
Estimated deposit for store/day	Complete batch programs	Maximum value for the commit counter
Current day's total	Restart name	Number of threads
Previous day's total	Thread value	
Rolling average of the last four weeks	Start time	
ACH amount for consolidating bank	Restart time	
Create a compliant file in Bank Administration Institute II (BAI II) format	Finish time	
	Batch programs that are not completed	
	Status of batch programs that are not completed	

Automated Totaling

The Automated Totaling module uses the Totals Calculation Definition wizard to set up how totals are calculated and sets required conditions that source data must match.

Source data is read from the database table, which is populated during the import process, and can include transaction logs, entries from ReSA or external data such as money order totals, lottery ticket sales, and so on. A total definition can include data from any location in the Enterprise, or for more complex totals, a PL/SQL package can be created and referenced by the totaling process.

You can choose the tables and columns for the audit, build query statements to yield the desired information, and associate totals to categories, such as stores.

Users can define totals to evaluate data and determine whether transactions meet the defined tolerances. Totals can also be used to determine over/shorts, and exports them to external systems.

The four components of Automated Totaling are:

- Totals calculation setup
- Location traits
- Group details
- Total usage

Automated Audit

ReSA has been enhanced to better support the automated audit process for retailers.

Difference Between Corporate and Store-Level Audits

It is helpful to understand the difference between auditing at the corporate level versus the store level.

At the end of the day, transactions are transmitted from the store up to the head office, loaded to the database, totaled, audited, and reviewed before the data is exported. Any errors that are generated as part of the validation process must be either corrected or overridden by both the store employee performing the review as well as a corporate auditor.

To indicate to the corporate employee that the store has reviewed the data and is satisfied when the store employee has completed the correction process, he or she sets the store/day status to Closed. Prior to this, the data is only viewable by the corporate auditor. Once the store/day has been closed, the corporate auditor can edit the data, but store employees can only view the data.

The corporate auditor must review any errors that the store did not correct or override by the store. The auditor can then either correct the errors at that point, if possible, or else override the errors, at which point the store/day audit status is set to Audited, and becomes available for export to external systems.

General Actions

Using ReSA with other Retek products, you can perform the following functions within the Automated Audit module:

View	Edit	Perform	Validate
Complete batch programs	Maximum value for the commit counter	Table-driven audits	RTLOG files and file levels
Restart name	Number of threads	Field validations	Duplicate transactions, gaps in sequence number and incomplete records
Thread value	Batch controls	Field comparisons	Transaction types
Start time		Sequence number validation	Sale and return transactions that require item, tender, tax and customer information
Restart time		Standard look up on RMS master data	Transaction levels
Finish time		Custom table-driven audits	Store numbers, which must be the same for all transactions within a single file
Batch programs that are not completed		Custom subprogram audits	Record levels
Status of batch programs that are not completed		Changing data resets to re-audit	Type of tax
			Tender types
			Discount validation
			Type of discount
			Tax and customer types

In the Automated Audit module you can also perform the following additional functions:

- Audit rules—search for audit rule definitions: associate rules to store groups and process steps.
- Location traits—the location traits added to a rule definition determine for which locations the rule is evaluated.
- Built-in validation—the Automated Audit performs validation tasks on the RTLOG files
- Error handling—the Automated Audit handles errors as discrepancies are recorded by recording all reasons for a failed transaction

Interactive Audit

The Interactive Audit module helps auditors investigate and correct errors in POS transactions. You can review the transactions that were flagged by the Automated Audit process.

You can use Interactive Audit to:

- Correct transaction errors and edit data of individual transactions.
- Investigate and correct missing transactions by store or balancing level.
- Delete transactions that meet certain criteria.

ReSA 9.0.0.0 enhances the interactive audit process by enabling an auditor to focus on exceptions. Also, a store employee can review adjustments that headquarters made. Since totals are stored at four levels, the differences between the totals that ReSA calculates—POS reported, store reported, or headquarters reported—are clearly visible.

General Actions

You can perform multiple functions with ReSA Interactive Audit, as described in the following table.

Function	Description
Create a sales audit transaction	Enter the following information: <ul style="list-style-type: none"> • Transaction date, type, sub-transaction type • Chain store • Comments • POS transaction number • Reason code • Salesperson, register, and cashier • Item type, description, quantity, and discounts • Tender and tax information
Delete a transaction	After performing a search you can delete a selected transaction.
Delete multiple transactions	After performing a search, you can delete all the transactions that met the search and filter criteria at once.
Edit reference information in a transaction	Edit transaction, item, discount, and tender level.
Edit a discount in a transaction	View and maintain discount information for a selected item in a transaction.
Edit a missing transaction	Missing transactions can occur when a transaction number, but no details, gets generated at the POS. You can search for missing transactions at either the store or balancing level.
Maintain credit card details	The Credit Card function helps you more easily maintain credit card transactions and related information.
Maintain over/short totals	Use the Over/Short Totals function to maintain total amounts that make up the over/short amount for a selected store day.
Maintain store day	The Store Day Maintenance function displays status information for the selected store day.
Maintain transactions	The Transaction Detail function lets you view, edit, and create new transactions. You can create a transaction to account for a missing transaction. You can view and edit the errors in a transaction.
Perform day close	Either the store employee or a store manager closes the store. A store closing signifies that all required errors have been worked (fixed or overridden) before exporting the data in ReSA.
Perform miscellaneous totals	The Miscellaneous Totals function lets you edit an existing total and maintain totals for a particular store day.
Review cashier/register	A cashier can review totals and adjust them as necessary.

Function	Description
Search for a sales audit transaction	Search for the following information: <ul style="list-style-type: none"> • Auditor who revised the transactions • Transaction original and revision dates, type, status • Chain and store • Register and cashier for a specified chain and store • ReSA or POS transaction number or range of numbers • Customer information
View discount detail information	The Discount Detail function lets you view and maintain discount information for a selected item in a transaction.
View item details in a transaction	View item and merchandise hierarchy information for a selected item in a transaction.
View transaction totals by store	View transaction totals at the store level within a chain.
View the transactions in a summary	View the transactions included in the totals at the store level.
View tender summaries	The Tender Summary function lets you view tender level information for a particular store day.
View an audit trail	View the following audit trail information: <ul style="list-style-type: none"> • Item details • Tender details • Tax details • Error details • Revision details • Comments

You can view summaries of transaction totals, calculated by store, balancing level, and tender. Also, you can drill down and view the details of the individual transactions included in the summary.

The Interactive Audit module lets you, the auditor, investigate and correct errors in POS transactions. You can review the transactions that the Automated Audit process flagged. The Automated Audit process flags those transactions that do not meet the predefined validation and tolerance criteria or that fail certain system tests for accuracy.

Methods of Interacting

There are several ways for you to interact with the transactions. You can search for individual transactions and correct the errors or edit the data. Depending on the system parameter setting, you can view transaction totals by store, balancing level, or tender.

You can investigate and correct missing transactions by store or balancing level. You can view the transactions included in a summary by store, balancing level, or tender. You can delete all transactions for a single store/day in the situation where re-polling is preferred to modifying several hundred transactions in the mass modification process.

The audit trail process lets you view the revisions made to transactions and totals. The auditors responsible for the revisions are tracked, as are the changes to the details in a transaction. Auditors can make comments explaining a particular correction.

Store, balancing level, and tender calculate transaction totals. You can view summaries of these calculations. You can also drill down and view the details of the individual transactions included in the summary.

Interactive Process

The following actions are part of the interactive process.

- Facilitate auditor's investigation and correction of POS data
- Review data that failed audit rules
- Focus on exceptions
- Assist auditors with corrections
- Provide workflow tools

Audit Trail

The Audit Trail module lets you view the revisions made to a transaction and the auditors responsible for the revisions. After selecting a revision, you can do the following:

- View the detailed information associated with the revision
- View revision information for detail records at the item, tender, tax, and error level
- Use the View menu to change your view of this window
- Customize the Transaction Audit Trail Popup from View menu.

You can use the following functions in the Audit Trail module:

- Audit trail maintenance
- Revisions
- Transactions
- Tender history
- Discounts

Audit Trail Maintenance

The Sales Audit Totals - Audit Trail function lets you view any changes made to totals and the corresponding errors and exports for a particular cashier/register and store day, or for an entire store day.

You can display totals in the primary currency or the local currency. Select primary or local in the Options menu.

The Transaction Search feature lets you enter search criteria for transactions, execute the search, and view the results. To further refine your search, you can filter the results.

Revisions

The Revisions function helps store and headquarter employees track all changes to transactions (who made them, why they were made, and when they were made). If modifications are made to a transaction, upon saving these changes, the original version is moved to revision tables and the modified transaction is inserted into the transaction tables.

The ID of the user that made the changes is inserted on the transaction table. All versions of a transaction are stored on the revision tables until the data meets the purge criteria and is removed.

Transactions

You can view transaction header level information, such as the reason codes, cashier number, and reference number information that was updated.

Tender History

The Tender History feature shows the type of tender used in the transaction.

Discounts

The Item Discount Details feature lets you view the discount revisions and revision numbers associated with the selected item and all revisions of the transaction.

Reports

When using ReSA with RMS and RDW, you can generate several levels of reports. The types of reports are grouped as follows:

- Flash sales
- Sales total analysis
- Transaction details
- Financial reports

Flash Sales

You can view flash sale information on three reports:

- Daily flash sales
- Daily flash to date comparison
- Daily flash totals

Daily Flash Sales

The Daily Flash Sales report provides an overview of the previous day's sales. The report includes both error-free transactions as well as those that were suspended in ReSA (not exported because of errors). Note that suspended transactions only occur when the ReSA system option Unit of Work is set to transaction, not store.

The previous day's activity is summarized in a single sales total figure for each store, along with the weather and temperature for that day. These totals are compared to the previous year's totals and the variances are displayed. The previous year's weather is also displayed. The week-to-date, period-to-date, and season-to-date totals are provided on this report.

Reports are generated at many stages throughout the sales audit process.

Example: To summarize flash sales, track numbers of transactions processed and report on transactions in the correction queues.

Totals are displayed separately for comparative and non-comparative stores. A comparative store is user-defined in the system options generally and has been open for one year or two.

Daily Flash to Date Comparison

The Daily Flash to Date Comparison report shows the current date's flash sales totals compared to the prior year's.

Daily Flash Totals

The Daily Flash Totals report, new in ReSA 9.0.0.0, is a dynamically created report. As totals are defined via the Total Calculation Rule Wizard, a usage can be associated with each total definition. This usage can include display on this Daily Flash Totals report. Examples might include Total Merchandise Sales, Total Fuel Sales, Total Sales Tax, Total Money Order Sales, and Over/Short.

Sales Total Analysis

Sales totals can be summarized for a given date by cashier on the Cashier Close report, or for the entire store/day on the Day Close report. Both reports are new in ReSA 9.0.0.0 and display variances between the totals that were 'accountable for' and those that were 'accounted for.' You can use this information to verify that the totals balance.

Transaction Details

You can view transaction detail information on four reports:

- Credit Card Summary
- Tender Type Summary
- Transaction Audit Trail
- Totals Audit Trail

Credit Card Summary/Tender Type Summary

Reports are available that summarize transaction details, for example by individual credit card on the Credit Card Summary report, or by other distinct tender types on the Tender Type Summary report.

- The Credit Card Summary report summarizes totals for all transactions in which a credit card was used as the form of payment. Summaries can be generated for a single date or range of dates by store.
- The Tender Type Summary report summarizes totals for all transactions by type of tender. Summaries can be generated for a single date or range of dates by store.

Transaction Audit Trail/Totals Audit Trail

These reports, new in ReSA 9.0.0.0, display all revisions made to transactions for a single store/day on the Transaction Audit Trail report or all revisions made to totals on the Totals Audit Trail report.

Financial Reports

You can view financial information on two reports:

- Document Activity
- Fee Summary

Document Activity

This report gives an overview of gift certificates or credit vouchers, showing assigned, issued, and redeemed information for each

Fee Summary

This report provides summaries of fees for paid-in or paid-out transactions.

Chapter 4 Retek Invoice Matching

Overview

You can save time and money by automating the invoice matching process using Retek Invoice Matching (ReIM). This traditionally manual process has been expedited by automatically matching invoices to the corresponding receipt records, using a cross-reference number. ReIM also gives you the option of automatically approving specific vendors or, conversely, requiring that certain vendors always be manually approved. ReIM:

- Simplifies the entire invoice matching process
- Ensures the integrity of audited data
- Automates what has largely, in the past, been performed manually
- Integrates well with other retail applications

ReIM lets you manage the following types of invoice documents:

- Merchandise invoices
- Non-merchandise invoices
- Debits and credits

Standard RMS security settings can be applied to ReIM to ensure that only users with the appropriate privileges can perform actions such as approving invoice documents and force-paying merchandise invoices.

After an invoice document is matched and approved, it is ready to be reported into your accounts payable (AP) system for processing. System users can also force-pay a merchandise invoice, approving payment before the invoice has been matched.

All invoice matching uses a set of cross-reference numbers, including receipt numbers, purchase order numbers, proof of delivery, and proof of service numbers, location numbers, and/or advance shipping notice (ASN) numbers.

Features

ReIM 9.0.0.0 offers you the following features:

ReIM Feature	Description
Stand-alone debit memo/credit request	Enables entry of stand-alone debit memo/credit note requests.
Direct store delivery receipts / invoices	Supports receipt of direct store delivery (DSD) receipts and invoices. An additional indicator reflects whether the supplier was paid at the time of receipt.
Non-merchandise invoices	Enables non-merchandise invoices to be entered. At present, non-merchandise invoices can be ordered through the RMS purchasing dialog. When this is for a service, such as cleaning the store or radio advertising, there is no 'receipt' in the formal sense, only the verification that the service did take place.
Retek Trade Management—Obligations and Customs Entry	Enables Obligations to be imported into the system. Currently Obligations must be recorded in RTM and separately recorded in ReIM. This enhancement allows the obligation to be recorded and to simultaneously update ReIM and RTM in one step.
Enterprise integration to other applications	Integrates with Sales Audit - DSD Payments, Virtual Back Office / Receiving DSD Invoices, and RTM Obligations
Partner invoice matching attributes	Specifies how invoices from the partner are handled. You can indicate where an invoice is received and where an invoice is paid. You can also indicate that the stores must confirm that the service was performed before the invoice from the partner is approved. <ul style="list-style-type: none"> • Service confirmation • Invoice location
Pay invoice location	Displays the location at which the invoice is paid, either at the store or corporate office. When you record invoice-matching attributes for the supplier, select the location.
Sales Audit interface	Invoices are automatically created in RMS from informatin downloaded from Sales Audit
Supplier invoice matching attributes	ReIM was enhanced to enable setup of various invoice-matching attributes by supplier as well as supplier tolerances. These attributes include the following: <ul style="list-style-type: none"> • Invoice approval—manual or system approval • Resolution of discrepancies—whether a debit memo can be raised or if a credit request must first be sent to the supplier • Billing of freight charges—whether or not the supplier includes freight in its invoice • Pre-paid status—whether or not the supplier's invoices can be pre-paid <p>A supplier option indicates whether discrepancies are settled with a debit memo or the retailer must request, and wait for,</p>

ReIM Feature	Description
	credit notes from the supplier.
System variables	<p>ReIM system variables:</p> <ul style="list-style-type: none"> • Match invoices to receipts from other suppliers for payments to a supplier's factor or to brokers • Provide debit memo conversion days • Allow maximum debit memo warning percent • Close open shipment days <p>Other features of system variables maintenance include:</p> <ul style="list-style-type: none"> • Corporate-level default tolerance • Supplier tolerances • Total invoice cost or quantity • Line item cost or quantity • Tolerances by amount range <p>An existing indicator, supplier settlement, is also used in the ReIM process. This indicator determines whether the Advance Shipping Notice (ASN) is used in lieu of an invoice. If the ASN (also known as evaluated receipt) can be used, EDI ASN receipts from that supplier automatically write matching invoices that are posted to the accounts payable staging tables to be paid immediately.</p>
EDI processes	<p>ReIM uses the following EDI processes:</p> <ul style="list-style-type: none"> • EDI 810: EDI entry of invoices and credit notes • EDI 812: EDI entry of debit memos and credit note requests
Financial interface	<p>Approved force-paid and matched invoices are placed in the staging tables to be pulled into a financial system at each retailer's discretion. ReIM also provides an initial entry of each invoice that comes in, posting the invoice in hold payment status so that potential liability can be determined.</p>
History reporting	<p>ReIM provides the following history reports:</p> <ul style="list-style-type: none"> • Force-Paid Invoices by Supplier • Unmatched/Partially Matched Invoices by Supplier • Matched Invoices by Supplier • Discrepancies by Supplier • Unmatched/Partially Matched Receipts by Supplier • Debit Memo/Credit Note Request • Debit Memo/Credit Note Requests by Discrepancy Type • Activity by User ID

ReIM Feature	Description
Tolerances	<p>Supplier tolerances indicate whether receipts and invoices must match exactly, and if not, by how much they may vary from one another. Tolerances may first be defined for the company as a whole and used to default to the suppliers. Exceptions can be entered for suppliers where a different tolerance definition is required. Tolerances are kept at a total invoice cost, total invoice quantity, invoice line item cost, and invoice line item quantity levels.</p> <p>Tolerance values are either a percent or an amount. If no tolerances are specified for a particular level for a supplier, the receipts and invoices must match exactly. If specified for quantity but not for cost, then quantity differences can occur up to the level of the tolerance but no cost differences can exist. Additionally, the tolerance can either be in the retailer's favor or in the supplier's favor.</p>

Benefits

ReIM provides the following benefits:

- Reduces cost by automating the matching process
- Saves time and focuses time on discrepancy management
- Lets multiple purchase order and/or receipt numbers be associated with the merchandise invoice
- Manages multiple types of invoice documents
- Matches only quantity received and creates debit memos for discrepancies or credit note requests
- Allows designation of different tolerances for differences in the supplier's favor rather than for the differences in the retailer's favor

Merchandise Invoices

Retek Invoice Matching lets you verify your received vendor shipments (receipts) against merchandise invoices, to confirm that the goods received are within cost and quantity tolerances defined for that vendor.

Matching invoices to received shipment records lets retailers double check the supplier bill, confirming that they are paying for merchandise actually received. When an invoice is received from a supplier, either on paper or via electronic data interchange (EDI), the retailer must find the receipt record(s) from the invoiced goods and confirm that the invoice and associated receipt(s) match. Threshold tolerances are set up by one supplier to allow a specific margin of error.

Merchandise invoice matching can take one of several approaches:

- Invoices can include goods from several receipts or purchase orders.
- Several invoices can be written for a single receipt, complicating the matching process.
- Several invoices can be written for multiple receipts, provided a shipment line is not invoiced multiple times.

Invoice matching for merchandise invoices is performed in one of two ways:

- ReIM performs automatic invoice matching without user intervention.
- Employees perform manual invoice matching. Employees with the proper authorization can approve specific invoice matches.

Invoice matching lets you define tolerances for specific suppliers and to perform summary-level and detail-level matches between invoices and receipts. RMS lets you define different tolerances for discrepancies in the supplier's favor rather than for discrepancies in your favor:

Summary-level matching involves total monetary amounts. If applicable, value added tax (VAT) amounts can also be used.

Summary-level matching can also involve total merchandise quantity amounts if the system variable is set to Yes.

Detail-level matching involves reconciling discrepancies in invoice line items' unit costs, quantities, and VAT rates (if used).

Summary and detail level matching; matching invoice line items according to unit cost and quantity

Merchandise Invoice Matching Process

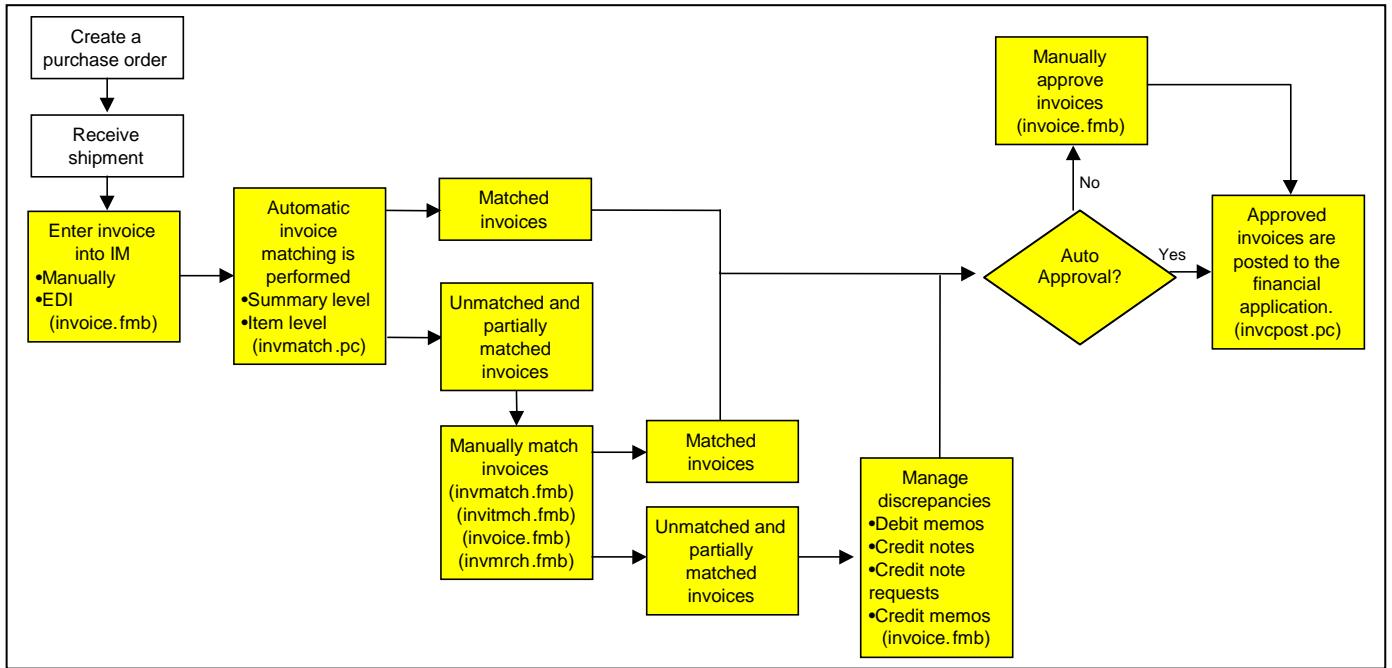
ReIM can match merchandise invoices and receipts at two levels:

- First, ReIM tries to match the summary of total cost and, optionally, total quantity on the invoice to the total cost and total quantity on the receipt.
- If these values do not match, the program attempts to match on a line-by-line basis. That is, it tries to match the item cost and quantity for one line on the invoice to the item cost and quantity for the same line on the receipt.

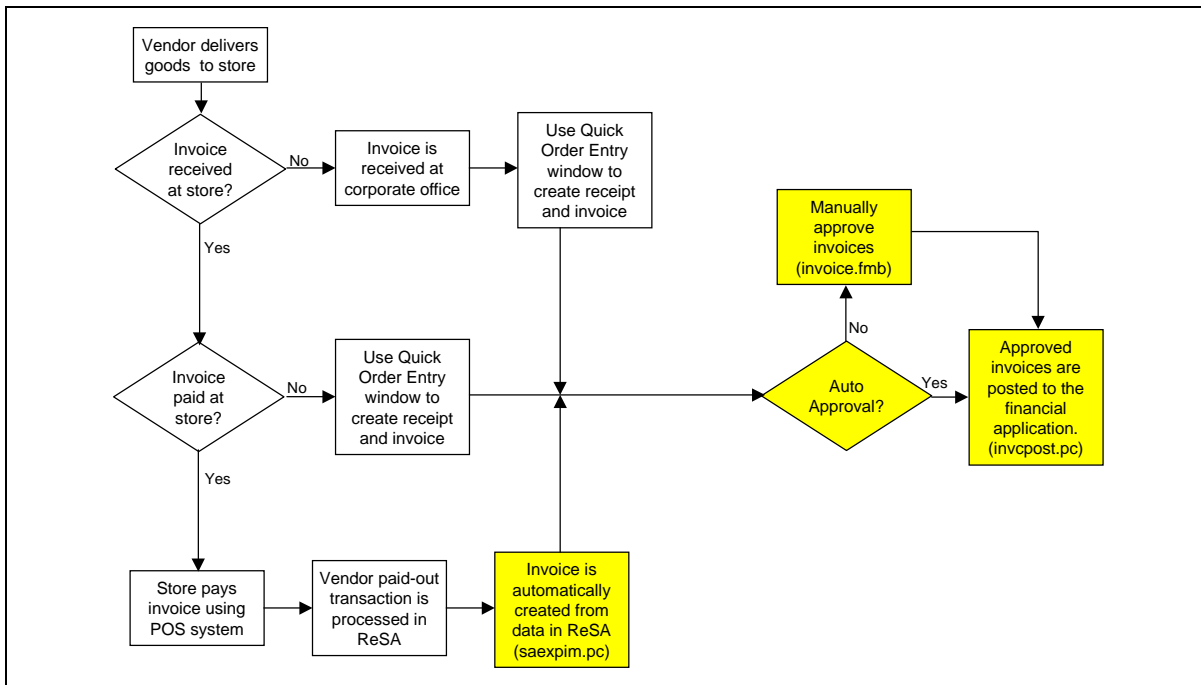
Invoices that are unmatched remain in that status until they are completely matched to receipts or until they are resolved with a debit memo or credit note from the supplier. After matching, they receive a status of matched. After they have been matched, based on a setting in the supplier dialog, you can approve them manually or have them automatically approved by the program.

The invoice matching process involves automatic and manual invoice matching.

The following two diagrams show the typical merchandise invoice matching processes. The first diagram shows the process that is generally used by a fashion retailer; the second is generally used by a grocery store.



Merchandise Invoice Matching Process for a Fashion Retailer



Merchandise Invoice Matching Process for a Grocery Store

Automatic Invoice Matching

The automatic matching process attempts to match invoices to the corresponding receipt records using a set of cross-reference numbers (receipt, ASN and/or purchase order numbers). The total invoice cost and, optionally, total invoice quantity is first compared to the total receipt cost and quantity.

- If the totals both match within specified tolerance and all items on the invoice are on the receipt(s), the invoice and receipt(s) are considered matched.
- If the totals do not match, the automatic matching process attempts to match the invoice at the item level.
- If all line items match, the invoice and receipt(s) are considered matched. If only some of the line items match, the invoice and receipt(s) are considered partially matched.

The automatic matching process completely matches as many line items as possible, but requires partial matches of line items to be handled manually.

Another step in automating the matching process involves the setup of an automatic approval option for specific suppliers. Invoices received from vendors with the automatic approval option are approved upon matching. Invoices from other suppliers need to be manually approved by a user with approval privileges before they are ready to be imported into the financial system.

After a matched invoice is approved, the information is written to staging tables where it is then ready for an external financial package to pull it into the AP system.

Factors ReIM uses when automatically matching invoices include:

- Matching without user intervention
- Tying a receipt to invoices according to a set of cross-reference orders and/or receipts specified for each invoice
- Summarizing cost and quantity matching
- Matching line item cost and quantity
- Balancing partially matched invoices

Manual Invoice Matching

Invoices and receipts that cannot be matched automatically require manual user intervention. You need to look at the invoices and receipts, decide which matches need to be made, and manage any discrepancies that fall outside of system-specified tolerances.

Requesting credit notes, writing debit memos, and force-paying invoices are methods of managing discrepancies.

- Credit notes are requested and, in some cases, debit memos written for the difference between the invoice and the receipt. This is the most common way of resolving discrepancies outside of tolerance.
- Force-paying an invoice marks the invoice as ready to be paid, even if it is not tied to any matching receipts.
- Open receipts, which are receipts with items that cannot be matched to an invoice, are automatically closed after a user-managed system variable indicating the period of time.

ReIM matches receipts to invoices manually as follows:

- Match unmatched and partially matched invoices immediately
- Summary cost and quantity matching
- Line item cost and quantity matching
- Create debit memos for discrepancies

Direct Store Delivery

The direct store delivery (DSD) feature lets you create a purchase order and receive the order all at once. This feature is useful when a buyer has selected and authorized merchandise. It's also useful when a store has purchased and received the goods from a vendor.

Direct store delivery information on the purchase order or receipt is entered through RMS in the quick order entry screen. Payment information can first be entered in the quick order entry screen and then transferred to ReSA. Any of this DSD information is then sent to ReIM.

ReIM confirms the invoice for the direct delivery of merchandise to a store.

Non-Merchandise Invoices

ReIM was enhanced to let you enter non-merchandise invoices. Entering non-merchandise invoices involves both verifying the invoice entry and the verifying that service was actually performed.

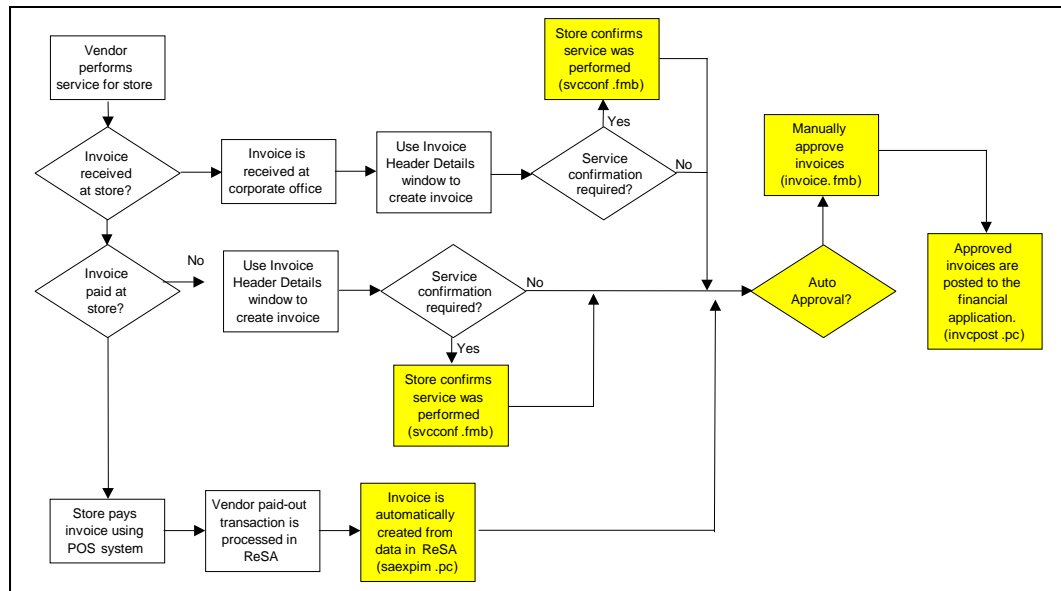
When the non-merchandise invoice is for a service such as cleaning the store or radio advertising, there is usually no paper receipt; only the observation or verification that the service was performed. ReIM offers a checkbox in which you can indicate that the service was verified.

Non-merchandise invoices received from partners through Retek Trade Management (RTM), both from Obligations or Customs Entry, are matched and approved automatically.

Invoices received from partners—where payments have already been made at a selling location—that are passed through Retek Sales Audit (ReSA) are matched and approved automatically.

ReIM confirms the invoice for non-merchandise such as services performed at a store.

The following diagram shows the process flow for direct store delivery for non-merchandise invoices.



Non-Merchandise Invoice Process for Service

Debits and Credits

ReIM was enhanced to enable entry of stand-alone debit memo/credit note requests. Previously, a debit memo/credit note request could only be entered into ReIM tables if there was an associated merchandise invoice or return to vendor (RTV) transaction ready on file. Often—especially with supplier bill backs and rebates, such as slotting fees, cooperative monies, and performance-related achievements—the transaction is not related to a particular invoice/RTV, but is related to one or more of the following:

- A group of purchase orders over time; for example, year-to-date purchases entitle the retailer to a rebate
- An event; for example, co-op money for advertising or achieving a negotiated sales threshold
- Penalties related to supplier non-performance; for example, shipping late, providing flat goods when goods on hangers were specified
- Vendor-funded retail markdowns

A flag in the Supplier dialog determines which document to issue: a debit memo or a credit note request. This can be overridden at the time of document creation.

If the vendor is a partner (such as a manufacturer, wholesaler, or distributor) rather than a supplier, then only a stand-alone credit note request can be issued. The exception is for a debit/credit attached to a non-merchandise invoice from that partner.

Chapter 5 Retek Competitive Shopping

Overview

The ability to track competitive pricing information is critical. This information assists retailers in pricing products.

To meet this need, Retek offers the Competitive Shopping product. Competitive Shopping is a component of the Competitive Pricing feature in the Retek Merchandising System (RMS).

Competitive Pricing helps RMS users plan a pricing strategy that is competitive with their competition. Competitive Shopping provides professional shoppers with an electronic tool for gathering the data that is needed to make competitive pricing decisions.

In RMS, the Competitive Pricing module provides a way to:

- Enter information about competitors
- Enter and maintain information about specific competitors' stores
- Associate the competitors' stores with your own stores
- Track individual shoppers
- Associate shopping lists with shoppers by location
- Enter, view, analyze, and edit competitors' prices
- Create shopping lists of items to be bought
- Track a different range of competitors for each of your stores

The Retek Competitive Shopping product captures competitors' prices using a personal digital assistant (PDA). Shopping lists for a specific shopper are downloaded from RMS to this handheld device

The shopper researches the prices of items on the shopping list at a competitor's location or from other sources. The shopper indicates the price type as regular, promotional, or clearance, and enters the price. For promotional prices, the shopper also enters the first and last days of the promotion.

The researched items are then uploaded to RMS. From there, the competitors' prices can be viewed and analyzed.

Features

Competitive Shopping and PDA features include:

Feature	Description
Scanning capability for quick entry	<p>If the shopping list for a store is very long or you are not sure which item description to use, you can enter the UPC of the item to select it.</p> <p>The SPT 1500 Palm Terminal PDA helps you scan the UPC on an item's tag. You can scan the competitor's item to find the matching item on the shopping list.</p>
Enter promotional prices	If you select Promotional Price as the price type on the Enter Price screen, you are prompted to enter the first and last day of the promotion.
Option to add a new item	Occasionally, you might want to add an item that is not on the shopping list.
Share the results	<p>After the prices of items on the shopping lists are captured, the data must be automatically uploaded to RMS (eliminates the manual entry process).</p> <p>From there, the prices can be analyzed and compared against your own prices. Results can be shared with all of your company's stores.</p>

Set Up User Tools

You can set up four tools where you gather, store, and access competitive shopping data:

- Competitors
- Competitor stores
- Competitive shoppers
- Shopping lists

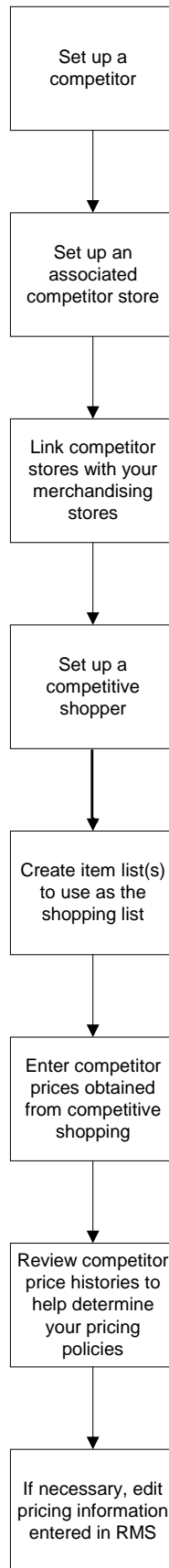
Competitors

The Competitive Pricing function in RMS helps you track pricing at competitors' stores. You can define competitors, competitor stores, and store competitor pricing at the SKU/competitor/competitor store/day level. Maintaining this information lets you make more informed decisions when pricing your own products.

Competitive Pricing also helps you create competitive shopping lists and historic records of competitors' prices. Each competitor's store must be associated with a specific competitor organization and can also be associated as a competitor of one or more of your company's stores.

You can create shopping lists—guides for obtaining competitor-pricing information—from a standard RMS item list. Information about the individuals who perform your competitive shopping is also stored.

Workflow



The typical workflow for Competitive Pricing is:

- Set up a competitor
- Set up an associated competitor store
- Link competitor stores with your merchandising stores
- Set up a competitive shopper
- Create item list(s) to use as the shopping list
- Enter competitor prices obtained from competitive shopping
- Review competitor price histories to help determine your pricing policies
- If necessary, edit pricing information entered in RMS

Create Competitors

The Competitor Maintenance function lets you enter and maintain basic information about competitors, such as name, address, phone and fax numbers, and Web site address. After you enter the required information, you can enter information about individual stores for the competitor.

Competitor Stores

You can create lists of your competitors' stores for each of your competitors. This helps you link competitor prices to a specific store.

Add a Competitor's Stores

The Competitor Store Maintenance function helps you enter and maintain basic information about competitor stores. This information includes store name, address, phone and fax number, Web site address, store total and selling area, plus store open and close dates. Each competitor store is associated with a competitor through the competitor number.

Assign a Competitor Store to an Existing Store

The Competitor Store Association function lets you create associations between your company's merchandising stores and the stores of competitors. These associations facilitate reporting, reviewing, and comparing pricing information efficiently.

You can select competitor information already entered in RMS and assign the competitor to the store(s) you want.

Competitive Shoppers

You can enter a list of the people who serve as shoppers for your company at your competitors' stores.

The Competitor Shopper Maintenance function lets you enter and maintain basic information about your company's competitive shoppers. This information includes shopper name, identification number, and phone and fax numbers.

Shopping Lists

To begin competitive shopping, a shopper needs a shopping list. Shopping lists are created and maintained in RMS. You can create competitive shopping lists from a standard RMS item list.

On the designated shopping date, lists are downloaded to the appropriate snapshot site, usually a PDA. At the snapshot site, the shopping lists must be downloaded to the appropriate shopper's PDA. A shopper can be responsible for multiple competitors' stores. Each store can have multiple items.

Create a Shopping List

The Competitor Shop Request function lets you create a shopping list (based on an RMS item list) and specify stores where the shopping should be performed. This lets you associate a specific shopper with certain competitor stores. The competitive shopper then uses the shopping list to collect pricing information from the competitor stores.

Acquire a Shopping List

On the designated shopping date, lists are downloaded to the appropriate snapshot site. At the snapshot site, the shopping lists must be downloaded to the appropriate shopper's PDA device. A shopper can be responsible for multiple competitors' stores. Each store can have multiple items.

Competitor Price History

Through the Competitive Price History function you can enter pricing information about competitor's items after that information is collected from the competitors.

Record Competitor Prices

The Competitive Price History function lets you enter pricing information about competitor's items after that information is collected from the competitors. After the information is entered, the records are stored on tables in RMS. Incompletely entered records are saved on the system for a specified number of days. If complete information is not entered, RMS deletes the incomplete records from the database.

Note: RMS does not maintain shopping lists if they are not used. This prevents large amounts of unneeded data from being collected in RMS.

For displaying and working with records that are incomplete, the Competitive Price History function lets you enter search criteria, such as shopper ID, shop date, competitor, and competitor store.

Note: Your company might not use this function. Some companies download shopping lists to personal digital devices (PDAs) to gather competitors' prices. The completed shopping lists are then uploaded into RMS where they can be edited, viewed or analyzed.

Chapter 6 Retek Trade Management

Overview

The classic version of the import process is a series of unrelated, non-integrated functions that are labor and paper-intensive, create pockets of information only available within a specific functional area, and are full of redundant activity and data entry.

Additionally, retailers traditionally place international orders weeks or months in advance to hedge the uncertainties of the international procurement process, resulting in extra inventory and carrying costs. Today's retailers need to manage the international process as carefully as they manage the domestic process, for quick response and high service levels.

Retek Trade Management (RTM) gives retailers the tools needed to manage the flow of merchandise and information across the extended enterprise of the international supply chain.

RTM links partners in the supply chain, such as suppliers, agents, banks, transportation providers, and customs brokers, to move information as the product moves. By integrating all the players involved, companies have immediate online visibility into the pipeline for the status of products as they move through the trade cycle.

Retek Trade Management is an international purchasing and import transaction processing system. It provides a comprehensive, automated approach to international import transaction planning, management, and tracking.

RTM helps you with the following processes:

- International sourcing
- Purchasing
- Timeline event tracking
- Letter of credit processing
- Transportation management
- Customs clearance and compliance
- Obligations management
- Payment tracking
- Expense allocation
- Estimated and actual landed cost comparisons

Features

The following table lists the primary new features for RTM modules in the 9.0.0.0 release.

RTM Module	Overview	Key 9.0.0.0 Features
Transportation	The Transportation module tracks information from trading partners as the sourced merchandise makes its way from the port of lading to the port of discharge.	<ul style="list-style-type: none"> • Supports the actual departure date in addition to the estimated departure date. RTM uses the actual departure date as the export date in Customs Entry module. • Supports transmissions from trade partners by shipment, PO, and item. The finalization process transitions shipment data to the Customs Entry module.
Customs Entry	The Customs Entry module tracks the preparation and processing of goods through customs.	<ul style="list-style-type: none"> • Adds the customs release date. This is the date merchandise is released from customs and is available for pickup. • Adds the ability to selectively finalize duty and other assessments from Customs Entry to ALC. • Adds the ability to lock duty and other assessments in the Custom Entry module after finalizing, while allowing update of other fields.
Obligations	You can record the expenses.	<ul style="list-style-type: none"> • Removes the necessity to create obligations for duty to transfer to ALC. Instead, duty feeds directly to ALC from the Customs Entry module.
Actual Landed Cost	Actual Landed Cost (ALC) is the sum of all of the incurred expenses involved in the movement and storage of an item for a particular purchase order.	<ul style="list-style-type: none"> • Improves ALC accuracy. • Improves ALC calculations for partial shipments permitted. • Updates stock ledger and OTB by PO. • Provides selective updating of weighted average cost (WAC) by purchase order.

RTM Module	Overview	Key 9.0.0.0 Features
Harmonized Tariff Schedule	The new release of RTM offers enhancements to the program for loading HTS data. Retek provides a fee-based service for converting customs data to the Retek file format. Also new is the ability to update item and order HTS classifications based on newly loaded HTS revisions.	<ul style="list-style-type: none"> • Enhances HTS upload support. • Adds flexibility to choose whether the system automatically updates the items and/or purchase orders. • Produces reports of items and purchase orders that have been automatically updated.

Benefits

RTM is unique in its application of innovative technology to forge a comprehensive international sourcing and import management specific business process from a series of often unrelated, non-integrated functions.

The following table summarizes the areas where cost, revenue and margin performance can be improved when you implement RTM.

Benefit	Description
Provide a central repository for import information	<p>Through centralization of import information, data is standardized and reliable. There is one version of the truth, and all feeds of data to and from the system are validated to your standards.</p> <p>All data from external and internal parties is routed to one data hub, reducing time spent on redundant key entry, promoting collaboration, and helping buyers to focus on their core responsibilities.</p>
Online access to the HTS for up-to-date rate and special program status	This allows more accurate classification of merchandise with a corresponding duty reduction. Customers can realize a decrease of the total duty paid through tighter control of this process. This bridges the import and buying groups to promote effective classification and duty reduction initiatives.
Track and audit freight bills	This yields significant savings on charges billed, proper freight schedule utilization, and an enhanced negotiation position on renewals or alternative service vendor selection. Customers can save on transportation-related charges through avoidance and improved planning.
Generating letters of credit (LC) directly from the purchase order	The automatic management of drawdowns and amendments plus electronic filing with the banks has eliminated errors and costly discrepancies while reducing the average PO/LC generation cycle.

Benefit	Description
Support growth in import buying	Existing headquarters and foreign office personnel can process increasing business volumes with improved control without a corresponding increase in head count as a result of implementing RTM. Process automation has positioned companies to convert indirect purchases to direct import purchases, resulting in significant increases in gross margin.
Support standardized business rules	Tight control of the import process and accurate order status information permits quick response disciplines to be applied to imported merchandise. This allows customers to streamline the fulfillment cycle and thereby reduce inventory carrying costs and related expenses while maintaining proper stock levels.
Reduce quota category exposure	The shipping and projected US entry date of quota category merchandise can be automatically checked against the program status. Orders can be expedited or canceled as a result of change in category status with sufficient lead time to avoid entry restrictions. Alternate sourcing decisions can be made if necessary.
More informed sourcing decisions	RTM provides the ability to generate “what if” estimated landed costs prior to ordering merchandise. Analyzing all the associated expenses including variables such as freight and duty allows for more accurate and profitable sourcing decisions. Margins can be accurately estimated and improved based on previous purchases.
Visibility to in-transit merchandise	In-transit reporting from information provided by freight partners allows the logistics department to accurately forecast human and facilities resources based on the planned receipt of merchandise and to manage the distribution of goods up to date of entry. Proactive management ensures that goods arrive when needed and reach the stores in time for seasonal or promotional events.
Improvements in gross margin	<p>RTM provides the opportunity to track product costs to a greater level of detail, and supports the calculation actual landed cost right down to the domestic ship-to location (rather than just estimating costs as an average over all receiving locations).</p> <p>Factors that contribute to landed cost are transportation, commissions paid to agents, fees paid to consolidators, tariffs and customs duties, insurance, fines for regulatory noncompliance, shrinkage, inland freight costs, dutiable charges, etc.</p> <p>With better information on each of these factors, retailers should be able to reduce or eliminate unnecessary costs.</p>
Reduce markdowns	Retailers can reduce markdowns by predicting early on where issues occur with merchandise arrival. Through a more predictable supply chain, planning is much more effective, and expectations can be set appropriately for the buying community.

Benefit	Description
Reductions in outside services	Many retailers see RTM as an opportunity to reduce or eliminate fees that are paid to third party service providers, such as agents, consolidators, and brokers. Centralizing the capture of data reduces the amount of administrative work these parties provide, and therefore can focus their efforts on the actual service they provide, letting the system manage the tasks of data management.
Reductions in inventory carrying costs	Many retailers carry millions in import inventory. Since importers typically pay for merchandise at the time it ships, the inventory carrying cost begins to accrue at that time. Through elimination of days of lead time from inbound pipeline, retailers should be able to eliminate an equivalent number of days of supply of unnecessary inventory. Better visibility also helps reduce padding of inventories for just-in-case anticipation.

Module Overviews

Import data can be entered into RTM manually or received electronically from a buying office, headquarters, another in-house system, or a trading partner. The data is accessible to multiple user groups in the organization including buyers, finance, logistics, and compliance.

Data collected and validated with RTM can be directly linked with other major corporate systems, including a merchandising system, such as Retek Merchandising System (RMS), warehouse management systems such as Retek Distribution Management (RDM), and accounting systems. Retek's Active Retail Intelligence (ARI) can also be used with RTM to monitor transactions and to deliver exceptions and workflow opportunities to the appropriate user.

RTM consists of the following modules:

- Letters of Credit
- Transportation
- Customs Entry
- Obligations
- Actual Landed Cost

Also, RTM uses the following reference tables and associated processes:

- Harmonized Tariff Schedule
- Estimated Landed Cost
- Purchase Order

These are all described in the following sections.

Letters of Credit

Letters of credit are a widely used form of payment when dealing with imported goods. They provide importers with a secure method to pay for merchandise and vendors with a secure method to receive payment for merchandise. Letters of credit can be created and applied to purchase orders. Activity against the letter of credit can also be tracked.

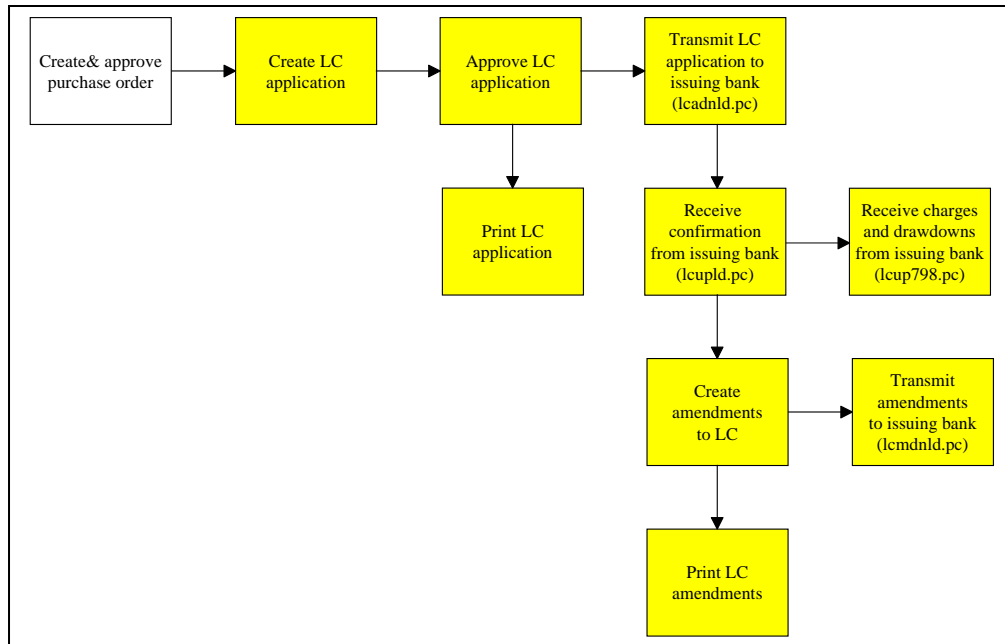
A letter of credit (LC) is a bank instrument used by most retailers to finance purchasing imported goods. LCs are a preferred method of international settlement because the conditions of the purchase, such as required documents and special instructions, can be detailed in the text of the LC and reviewed by the bank for compliance before release of payment. This provides security to the retailer that goods have shipped according to the specified conditions and title has been transferred before payment is made.

Because almost all LCs are irrevocable, an LC also provides guarantees to the seller that once goods are shipped and the conditions of the LC are satisfied, payment is released. Either the retailer or seller may request amendments to the LC, but both parties must agree to the new conditions. It is also possible for the retailer to waive discrepancies in the LC without amendments where it is more cost-effective to do so.

Once goods have shipped and shipping documents are available, the seller presents documents at the desk of the advising bank, and if there are no discrepancies, collects the specified payment amount. The advising bank debits the issuing bank for the amount of the negotiation as well as any charges, and the issuing bank makes payment and notifies the retailer of the amount of the principal drawdown and associated charges.

Typically, banks provide their retail clients with LC programs that facilitate managing LC documents and support electronically exchanging information. A shortcoming of most of these programs is the failure to integrate with client purchasing systems, which would streamline the LC application and amendment management, and also tie back drawdown amounts and charges to specific POs. That's where RTM's Letters of Credit module helps.

The following diagram shows the process flow for letters of credit.



Process Flow for Letters of Credit

Types of Letters of Credit

You can choose from two letter of credit formats. The long form includes details at the purchase order and item level. The short form includes details at the purchase order level.

The following types of letters of credit can be created:

- Normal. The letter of credit is applied to one purchase order.
- Master. The letter of credit is applied to multiple purchase orders.
- Revolving. Multiple purchase orders may be added to the letter of credit until the letter of credit is closed.
- Open. A letter of credit that is created with no purchase orders. The purchase orders can be added at a later date.

Completed applications and amendments can be transmitted to bank partners. Confirmations, drawdowns, and charges can also be received from bank partners.

Steps Involved in Using a Letter of Credit

A letter of credit involves the following:

- The buyer and seller agree on the terms of the sale. The sales contract (purchase order) determines that a letter of credit is used to finance the transaction.
- The buyer completes a letter of credit application and submits it to the issuing bank, which issues the actual letter of credit.
- The issuing bank forwards the letter of credit to the advising bank of the seller in the foreign country.
- The advising bank forwards the letter of credit to the seller.
- The seller makes the necessary shipping arrangements for the goods.
- The seller prepares any documents required in the letter of credit and delivers them to the advising bank.
- The advising bank negotiates the required documents with the seller. If the advising bank finds that all required documents are in order, it sends them to the issuing bank. If the advising bank is named as the paying bank, it pays the seller in accordance with the terms in the letter of credit.
- The issuing bank examines the required documents when received. If the required documents are in order, the issuing bank charges the buyers account and sends the documents to the buyer. The issuing bank also reimburses the paying bank.
- The buyer receives the documents and can make arrangements to pick up the goods from the shipping firm.

Apply Purchase Orders to Letters of Credit

You can select one or more purchase orders and attach them to a letter of credit. You can attach a purchase order to an existing letter of credit or you can generate a new letter of credit based on the selected purchase orders.

With the Letters of Credit module, you can perform the following functions.

Add	View	Other
Add or edit information for purchase orders that are paid using a letter of credit	Information for purchase orders that are paid using a letter of credit	Modify a confirmed letter of credit by adding a purchase order
Add bank charge and drawdown to the letter of credit	View the net effect of each amendment on the letter of credit	Search for an existing letter of credit or create a letter of credit
Add purchase orders to existing letters of credit	View purchase orders that are paid with the letter of credit	Select one or more purchase orders and attach them to a letter of credit
Add terms to a new letter of credit or change the terms for a letter of credit		

Maintain Letters of Credit

You can add, edit, or view information for purchase orders that are paid using a letter of credit. You can add the following activities to the letter of credit:

- Bank Charge
- Drawdown

You cannot add letter of credit or amendment activities. RTM automatically adds these activities when the issuing bank confirms the letter of credit and when you add an amendment that affects the dollar amount of the letter of credit.

Amendments

You can modify a confirmed letter of credit by adding amendments to the letter of credit. RTM tracks all amendments made to a letter of credit. You can then decide which amendments to accept for the letter of credit.

Types of Amendments

RTM can create an amendment from a change in a purchase order, on an item as an order, or you can enter an amendment manually. This is called a Fixed-Format Amendment.

For certain changes made to a purchase order that is associated with a letter of credit, RTM automatically creates an amendment for that letter of credit. The letter of credit must be in Submitted status before the amendment can be written to it. Some examples of changes that would trigger an amendment include a unit cost charge, an order quantity change, or a ship date change.

Amendments generated by changes to the purchase order cannot be modified on the amendment form. However, you can delete an amendment generated by a change to a purchase order. You can also add comments to an amendment generated by a change to a purchase order.

Fixed-Format amendments are amendments that you make to the letter of credit header information. You can enter amendments manually for a letter of credit that is in confirmed status only.

Accepting Amendments

You can determine which amendments to accept for the letter of credit to send to the issuing bank. Once you have accepted the amendments, you can generate and send them to the issuing bank.

Terms

You can add terms to a new letter of credit or change the terms for an existing letter of credit. Many terms default based on system set up information.

Required Documents

Required documents contain text that should be included in a letter of credit. This text may cover a particular purchase order or item, or be applicable to all merchandise covered on the LC. Each segment of text has an associated code that is established at system set up. Text is then attached to the LC application at creation by association to a supplier, partner, country or by manual addition.

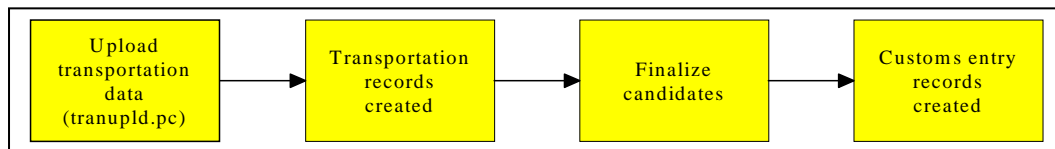
Transportation

The Transportation module lets you track information from trading partners as merchandise is transported from a foreign manufacturer to the port of discharge in the importing country. This information is recorded at various levels:

- Vessel/voyage
- Bill of lading (B/L)
- Container
- PO/Item
- Commercial invoice

Although you can enter this information manually, that scenario is the exception. The transportation interface is provided with the product. Once information is entered, either manually or electronically, you can edit the information as it changes. This facet of the Transportation module is especially important in the import context because orders are often placed six to nine months ahead of the expected delivery date.

In RTM, Transportation data is used to generate the customs entry in the CE module. The following diagram shows the process flow for the Transportation module.



Process Flow for the Transportation Module

General Actions

In the Transportation module, you have the following features:

Record and View	Enter/Create	Other
Basic commercial invoice information, such as the date and amount	Create and maintain a transportation record	Indicate which currency and rate exchange to apply to the invoice amount
Freight information for inland shipments	The entry number, import country, broker, and currency code that you want to assign to the finalized transportation records	Define and maintain the freight sizes and types used in RTM
Claim information		Define and maintain the Standard Carrier Alpha Codes (SCAC) used in RTM
The estimated arrival, actual arrival, and delivery dates of the shipment		Store license and visa information associated with a transportation transaction
Delivery information at the destination level		
Packing information at the destination level		
The component SKUs of a fashion style by color, size, and quantity		
The total units, weight, dimension, and value of a shipment at several levels		

You can also perform the following functions in the Transportation module:

- Set up user tools
- Track transportation of goods
- Finalize transportation records

Set Up User Tools

- **Freight Sizes and Types.** Freight size is the size of the freight type in which goods are shipped. For example, the goods may be shipped in a 40-foot container.

Freight type is the method by which goods are shipped. For example, FCL for full container load. The method determines how an importer is charged.

- **Standard Carrier Alpha Codes.** SCAC codes can be applied to both vessels and containers. If a SCAC code is used in a transportation record, it cannot be deleted.

Track Transportation of Goods

- **Deliveries.** You can record and view delivery information at the destination level for a transportation record
- **Licenses and Visas.** You can store license and visa information associated with a transportation transaction
- **Claims.** Claims can be made against a partner or supplier for damaged merchandise and inadequate quantities. A single claim can span multiple cartons.
- **Missing Documents.** You can track documents required by customs for an order/item combination, which may be missing or delayed. Action can then be taken to obtain these documents prior to customs entry.
- **Packing.** You can record and view packing information at the destination level
- **Dates.** You can record and view the estimated arrival, actual arrival, and delivery dates of the shipment
- **Fashion SKUs.** You can record the component SKUs of a fashion style by color, size, and quantity. The consolidator often provides such information.
- **Timelines.** Timelines are used to track events associated with the transportation process.
- **Commercial Invoices.** The system displays the number of the commercial invoice that is associated with the transportation record
- **Inland Freight Information.** Inland shipments move goods from the discharge port to the final destination such as the distribution center
- **Totals.** You can view the total units, weight, dimension, and value of an order and item combination at several levels. You can convert a measurement by changing the unit of measure for a field.

Finalize Transportation Records

You can transition transportation records to the Customs Entry module. You can also enter the entry number, import country, broker, and currency code that you want to assign to the finalized transportation records. By entering this information, you add the information to all records that match the vessel, voyage, and estimated departure date criteria.

Customs Entry

The movement of goods from through customs in the import country can be tracked through the Customs Entry module. A customs entry download batch program transmits data to brokers so they can prepare the necessary documentation. As additional information is acquired, it can be entered manually. When you finalize Transportation records in the transportation module, the customs entries are created automatically.

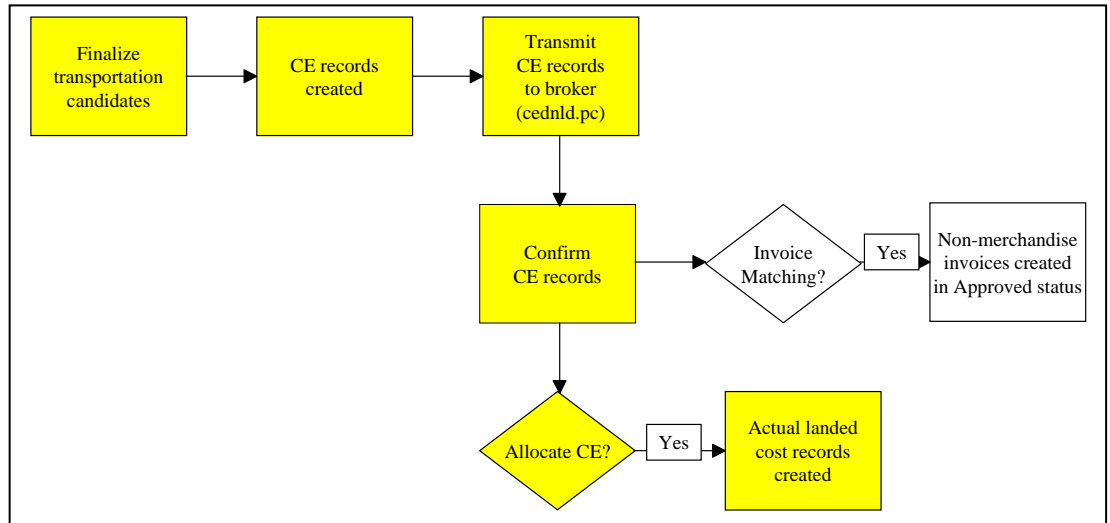
You can track the following information in the Customs Entry module:

- Forms
- Protests
- Timelines
- Shipments, orders, and items
- Departure, arrival, export, and import dates
- Missing documents
- Bills of lading and containers
- Charges and assessments
- Licenses and visas

When the charges and assessments are complete, you can choose to allocate the costs to the Actual Landed Cost module. When the customs entry is complete, you can confirm the record. If you have access to the ReIM product, non-merchandise invoices are created automatically from confirmed customs entries.

The following diagram shows the process flow for the Customs Entry module.

Process Flow for the Customs Entry Module



General Actions

With the Customs Entry module, you do the following:

Create and Maintain	Track	View
Custom entry records	Customs charges for a selected order/item in a selected shipment	Bill of lading and container information for a selected order/item in a selected shipment
System feeds duty directly to ALC from Customs Entry	Forms required by customs or other government agencies	
Retailers can allocate duty and other assessments for a given Customs Entry to ALC	Order/item information for a selected vessel, voyage, and estimated departure date combination	
After corresponding ALC records are finalized, duty and other assessments is not allocated from Customs Entry to ALC	Licenses and visas for a selected order/item in a selected shipment	
The Merchandise Processing Fee (MPF) is correctly calculated in this version	Protests filed with customs against a customs entry	
	Shipments by vessel, voyage, and estimated date of departure covered by the entry	
	Documents required by customs for an order/item combination, which may be missing or delayed.	

Obligations

The Obligations module include all invoiced expenses for the shipment of merchandise except for the merchandise cost. Typical obligations are charges for transporting merchandise from the manufacturer to the retailer.

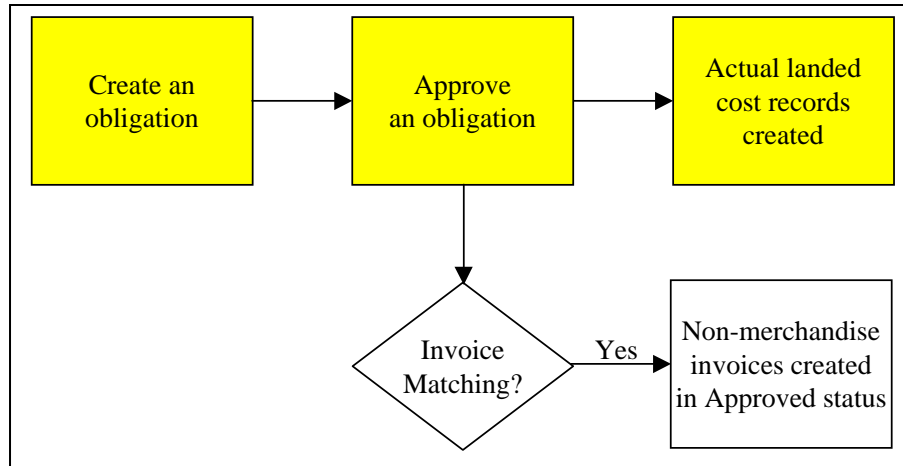
As commercial invoices are received from trade partners and suppliers, they can be recorded in the Obligations module. The expenses can be recorded at a variety of levels. The levels are:

- Trans Container: Applies to a unique shipment and container combination.
- Trans Container PO/Item: Applies to a unique shipment, container, purchase order, and item combination.
- Trans BL/AWB: Applies to a unique shipment and bill of lading or air waybill combination.
- Trans BL/AWB PO/Item: Applies to a unique shipment, bill of lading or air waybill, purchase order, and item combination.
- Trans Vessel/Voyage/ETD: Applies to a unique shipment.
- Trans Vessel/Voyage/ETD PO/Item: Applies to a unique shipment, purchase order, and item combination.
- Purchase Order Header: Applies to a unique purchase order.
- Purchase Order/Item: Applies to a unique purchase order and item combination.
- Customs Entry Header: Applies to a unique customs entry.

Each shipment is designated by a unique combination of vessel, voyage, and estimated departure date. You can also record the allocation of items and expenses at one or multiple locations when the obligation is recorded at the PO level.

When the obligation is complete, you can approve the costs. The costs are allocated to the Actual Landed Cost module. If you have access to the Retek Invoice Matching product, non-merchandise invoices are created automatically from approved obligations.

The following diagram shows the process flow of the Obligations module.



Process Flow for the Obligations Module

The Obligations module includes the following features:

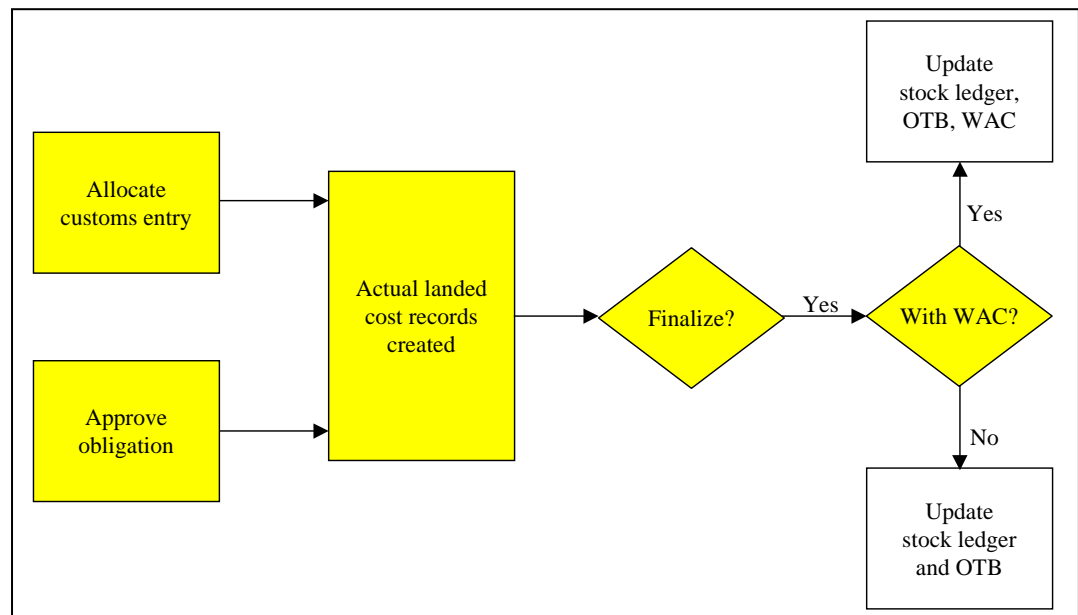
- Create an obligation
- Edit obligation records
- View an obligation
- Add and maintain information about a store or warehouse associated with an obligation
- Create non-merchandise invoices automatically from approved obligations in ReIM
- Maintain obligations. RTM lets you search for and maintain obligation records at various levels. This means that you can choose from various types of information to use when you search for an obligation record or when you create an obligation record.

Actual Landed Cost

The Actual Landed Cost (ALC) module lets you view information about the actual and estimated landed cost for any item on a purchase order. You can view landed cost information organized by obligation, obligation cost component, shipment (identified by a vessel/voyage/estimated departure date combination), or location (warehouse or store).

Actual Landed Cost (ALC) is the sum of all of the incurred expenses involved in the movement and storage of an item for a particular purchase order. The incurred expenses are received in the form of shipping charges, duty assessments, and commercial invoices provided by trading partners and third-party shipping and handling companies.

The following diagram shows the process flow of the Actual Landed Cost module.



Process Flow for the Actual Landed Cost Module

In RTM 9.0.0.0, the finalizing process is improved as follows:

- You can finalize at the PO level.
- You can select the ELC and ALC variance and finalize an entire PO or multiple POs at once.

Note: For example, you can choose to examine and finalize only exceptions that are out of a variance range.

- The ability to choose not to finalize the ALC. You have this option when there is a significant time between receipt of goods and receipt of Obligations and ELC that is considered accurate enough for all values (stock ledger, weighted average cost, etc.).

General Actions

With the ALC module, you can do the following:

View	Other actions
Information about the actual and estimated landed cost for any item on a purchase order	Roll up the SKU/location records in a PO summary screen
Landed cost information organized by obligation, obligation cost component, shipment (identified by a vessel/voyage/estimated departure date combination), or location (warehouse or store).	Select the ELC and ALC variance percent
Detailed information about the various components of an obligation	Choose to examine and finalize only exceptions that are out of a variance range
ALC information itemized by the location (warehouse or store) to which the goods were delivered	Finalize an entire PO or multiple POs
Any errors that occurred during the processing of charges	Decide whether or not to update the WAC
Information about a particular item, including supplier, department, unit cost, unit retail price, and percent markup	Find and display actual landed cost records associated with a specific purchase order/item combination
Shipment information by vessel, voyage/flight, and estimated departure date	Each shipment is designated by a unique combination of vessel, voyage, and estimated departure date
Purchase order, item, pack item, shipment, and obligation or customs entry	

Finalize Actual Landed Cost

Previously in RTM, you finalized an ALC by PO/item. Now you can finalize by only PO. This reduces the data entry effort for users.

Finalizing updates the stock ledger and OTB. If you choose, finalizing can also update the average weighted cost.

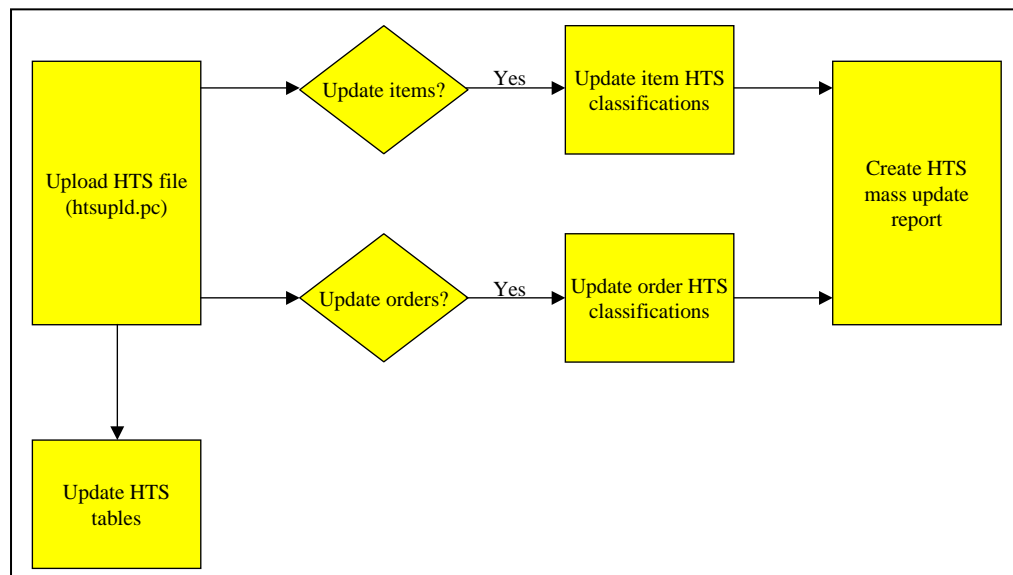
Harmonized Tariff Schedule

Imported merchandise must be classified and assessed duty based on its description, country of origin, and other criteria. RTM provides a way to easily access the classification codes of the Harmonized Tariff Schedule (HTS), and subsequently use that information throughout the import process.

HTS data is often available electronically from customs agencies. It can also be entered and maintained manually. This makes it easy to add and maintain fees, taxes, countervailing and anti-dumping duties, requirements of other government agencies, and tariff treatments by HTS classification. You can also track goods that are subject to quotas.

Note: Any orders associated with the HTS codes on the input file that are in the middle of the scaling process is no longer un-scalable after running the HTS Upload program.

The following diagram shows the process flow for HTS:



Process Flow for Harmonized Tariff Schedule

General Actions:

You can perform the following functions with HTS:

Add	Enter	Maintain/Select
HTS chapter	HTS chapter number	Maintain chapter restraints
Restraint to an HTS chapter	The description of the HTS chapter	Maintain required documents
Quota category	Description of the restraint	Search for an HTS classification
HTS classification	Identification code and description of the quota category	Select the country importing the goods
Tax and fee to an HTS classification	Number, description and effective dates of the classification	Select the origin country of the goods
Tariff treatment to an HTS classification	Country where the goods are manufactured	Select the quote category
Another government agency to an HTS classification	Tax identification number of the manufacturer of the goods	Select the export and entry dates for when the countervailing duty is effective
Reference to an HTS classification	Case number assigned by the customs agency	Select the duty calculation
Countervailing duty to an HTS classification	Rate provided by the customs agency	Select a vendor
Anti-dumping duty to an HTS classification	Case number of any related case	Select the country where the goods are manufactured
	Export and entry dates for which the anti-dumping duty is effective	Select the tariff

Estimated Landed Cost

The Estimated Landed Cost function lets you set up cost components in RMS to account for the transportation expenses and duty assessments acquired in RTM.

Purchase Orders

The purchase order dialog provides standard PO information, including supplier, quantities, country of origin, and payment terms. While purchase orders are created in RMS, you track the movement of ordered items (by PO/SKU) in RTM.

The purchase order dialog also provides several features specific to importing.

Shipping windows are set up for each order, along with countries of origin and destination.

Detailed *landed costs* are calculated and maintained for each item on an order.

Purchasing is integrated with *Letters of Credit* to manage the international letter of credit documentation, amendment and payment process.

The system supports *multiple currency translation* for orders when dealing with a supplier that operates in a different currency than the retailer. As the order is created, the order cost and retail figures are displayed in the order currency. If the order currency differs from the primary currency, then the user has the option to toggle to the primary currency and recalculate the order totals.

- The *Attributes* feature provides a way to record specific information about stores, warehouses, items, and purchase orders. In some cases, attributes affect how the entity is handled throughout RTM.
- *Timelines* are used to track events associated with the transportation process.

Chapter 7 Retek API to Oracle Financials

Overview

Retek 9.0 fully supports an interface with Oracle Financial Application 10.7's General Ledger (Oracle G/L) and Accounts Payable (Oracle A/P) systems for the exchange of financial data.

Retek Merchandising System (RMS) updates the Oracle G/L with sales transaction data, purchase orders, and receipts for retailers not using Oracle A/P.

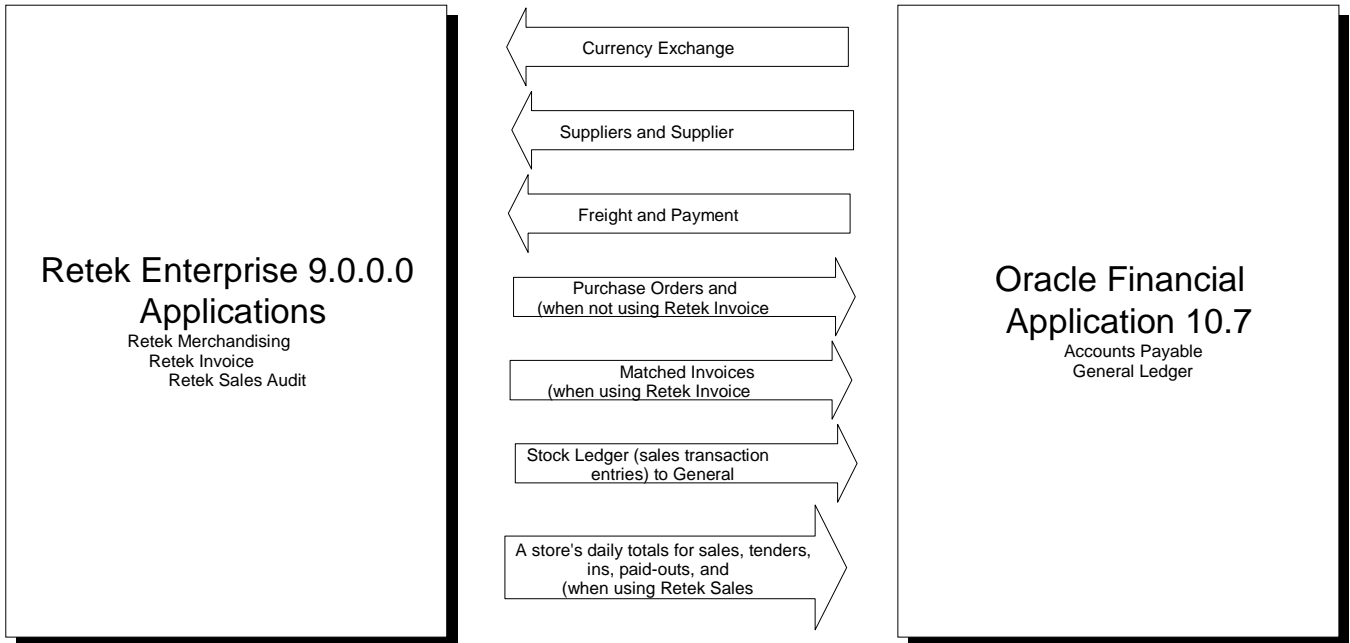
Retailers who use Retek Invoice Matching (ReIM) can send invoices to Oracle A/P that are matched and approved for payment.

Retek Sales Audit (ReSA) sends Oracle G/L the total values for a store's daily sales, tenders, paid-ins, paid-outs, and taxes.

The financial interface between RMS and each financial application lets data be shared. Information is exchanged between RMS and the financial application through batch programs. For example, before you can access the most recent purchase order information from your financial software, the latest data must be transferred from RMS via a batch program. In most cases, the batch programs are run daily.

Oracle A/P updates RMS with reference data such as currency rates, freight and payment terms, and suppliers and supplier addresses.

The following diagram shows the data that is shared between Retek 9.0.0.0 and Oracle Financial Application 10.7.



Direction of Data Flows

Knowing the Flow: Who Owns the Data

Use the table that follows to keep track of the direction that data flows between Retek 9.0.0.0 and Oracle Financial Application 10.7. Knowing which source application owns the data helps you understand the flow or direction in which data moves. For instance, RMS owns purchase orders, meaning you can only create purchase orders in RMS. For this reason, there is an RMS batch module that updates Oracle Financial Application 10.7 with purchase order data.

Financial Data Ownership (Data flow from the owner application to the recipient application.)		
Kind of Data	Owned by	Updated to
Exchange rates (Note: Currencies are manually entered into both Oracle and RMS. Only exchange rates are transferred via batch processing.)	Oracle A/P	Retek Merchandising System (RMS)
Suppliers and supplier addresses (called “vendors” in Oracle)	Oracle A/P	RMS
Invoice pay site addresses	Oracle A/P	RMS
Freight and payment terms	Oracle A/P	RMS
Purchase orders and receipts (when not using Retek Invoice Matching [ReIM])	RMS	Oracle A/P
Matched invoices (when using ReIM)	ReIM	Oracle A/P
Stock ledger (sales transaction data)	RMS	Oracle G/L
Total values for a store’s daily sales, tenders, paid-ins, paid-outs, and taxes	Retek Sales Audit (ReSA)	Oracle G/L

Chapter 8 Retek Predictive Solutions

Overview

Retek Predictive Solutions are products that use predictive and advanced technologies to support traditional retail business processes such as merchandise and assortment planning, replenishment, marketing, and allocation. These products bring in historical data and combine it with business rules and methods to generate forecasts and plans.

The products include:

- Retek Demand Forecasting—provides a competitive edge for retailers by producing accurate and productive forecasts for supply chain planning, allocation, and replenishment functions.
- Retek TopPlan—provides strategic and financial product planning functionality, which includes business rules and support of industry standard best practice for pre-season and in-season processes. TopPlan also provides visibility to other plans, as well as a forum for reconciliation and approval of pre-season and in-season plans.
- Retek ChannelPlan—executes merchandise and financial plans by location and/or channel across time. Supports pre-season and in-season planning of the financial key elements including sales, markdowns, receipts, inventory, and density.

Features

Key features in the Retek Predictive Solutions include:

Feature	Description
Multidimensional databases and planning	Provides fast access to product, location, and time data needed for planning and forecasting.
Common user interface	Lets you view and manipulate the data stored in the multidimensional database.
Reporting capabilities	Give you a choice of multiple reports faster than your legacy system.
Exception management and alert capabilities	<p>Highlight opportunities that might, because of the volume of data that needs to be managed, otherwise go unnoticed. You can set up business rules to alert users about OTB opportunities, stock outages, sales performance against plan, margin opportunities, etc.</p> <p>Each of these alerts has a role within a business process that demands highly accurate management of large amounts of business information. These alerts go beyond exception reporting, as the Alert Manager takes you directly to the area of the plan that needs action.</p>
Workbooks	Provide a user-defined subset of data that includes selected dimensions. These workbooks consist of worksheets and graphical charts for planning, viewing, and analysis of business measures.
Worksheets	Provide a multidimensional spreadsheet and a view of data within a Workbook.
View access	Gives view access to plans other than your own (such as executive and manager plans).
Wizards	Help in creating and formatting workbooks and worksheets.
Menus, quick menus, and toolbars	Help in working with forecast and sales data.

Retek Demand Forecasting

Retek Demand Forecasting (RDF) provides a competitive edge for retailers by producing accurate and productive forecasts for supply chain planning, allocation, and replenishment functions. The system can provide completely automated solutions as well as on-line "what-if" analysis tools based on the scalable multidimensional architecture. The predictive system is built from a retailer's perspective to provide forecasting solutions for real-life retail problems.

A large retailer may operate hundreds, or even thousands, of stores, and might use sales channels other than brick-and-mortar stores. Retailers also offer tens of thousands of items to maximize customer satisfaction through product differentiation. Each sales channel or store might have different characteristics (different seasonal patterns, different product mix, etc.). Similarly, products might have different characteristics (seasonal products, key items, items going on promotion, etc.).

RDF considers all of these factors and evaluates multiple forecast models to determine the optimal forecast method to use for a given set of data. Each of these forecasting techniques is further optimized to find the best forecasting parameters such as seasonal coefficient, life-cycle patterns, and smoothing factors for the given data set.

RDF brings retailers the advantages of multidimensional database architecture. Users can generate and view forecasts at any level in customer, product, and location hierarchies. This functionality significantly improves day-to-day decision making.

These high-level forecasts are then spread into final forecasts using product and location attributes such as color, fabric, vendor, or store type. Multiple aggregation levels and attributes can be utilized for generating the final forecast.

RDF has a mechanism to automatically select the optimal levels and attributes to generate the forecast. You can also view a demand prediction for a customer segment, region, or sales channel. This capability has immediate effects in marketing, planning, replenishment, allocation, and warehouse management functionality.

RDF Features

RDF provides you with the following features:

Feature	Description
Relationship hierarchy for products	<p>Product, time, and business location hierarchies.</p> <p>A hierarchy can be defined that shows the relationships between the company's various products. Products identified at their lowest level by SKU or UPC can be grouped at the next higher level by common style, at the level above that by product class, and so on up to the product division level.</p>
Customize according to your organization's structure	<p>With RDF, you can customize the system to reflect the terminology and structure unique to your organization. You determine and build the vocabulary of the system and the hierarchical relationships that exist among products, store locations, and forecasting time periods.</p>
Specify time periods and forecasting horizons	<p>Base-level time periods can be rolled up along hierarchy lines to higher levels of aggregation. For example, sales or forecast information that is presented at the weekly level can be rolled up and presented in an aggregated monthly, quarterly, or yearly format.</p>
Aggregation and spreading of forecast data	<p>The data necessary for forecasting can be quickly accessed, pulled together, and made available throughout your system.</p>
Ability to handle large data volumes	<p>RDF is constructed to handle very large volumes of data. This is done by separating an organization's products and locations into different domains, one or more of which can reside on a single server.</p> <p>After the products and locations are split into domains, the forecasting processing times are no longer an issue. Different forecasting domains can generate forecasts at different times throughout the day.</p>

Feature	Description
Promotional variables	<p>Promotions such as free gifts with a purchase, percentage off sales, and buy-one-get-one-free sales can have a significant impact on a product's sales history. Promotional models of forecasting can be developed to take these and other factors into account when forecasts are generated.</p> <p>Promotional forecasting attempts to identify the causes of different patterns in sales behavior, quantify these effects, and then use the results to predict future sales. Promotional factors, such as certain advertising campaigns and their resulting sales, can be used as variables in a promotional model of sales prediction if you use a similar advertising campaign in the future.</p>
Client server architecture	<p>RDF is characterized by client-server architecture, which is composed of two main components: the centrally located server machine, and multiple client stations. All of an organization's data is stored in the master database on the server, and this data can be accessed and manipulated on any of the client machines.</p>
Online forecasting analysis	<p>RDF lets you view forecasting data in three ways:</p> <ul style="list-style-type: none"> • Intuitive Windows GUI • Chart and graphing features • Multidimensional views and editing
Leveraging the predictive foundation	<p>RDF helps you make the best use of the predictive foundation because it is:</p> <ul style="list-style-type: none"> • Scalable to the Store/SKU/Week level • Scalable across multiple users • Designed for different types of users
Profile management	<p>Profiles are generated using historical data and phase definitions, based on your system configuration. RDF offers three types of profile management:</p> <ul style="list-style-type: none"> • Time profiles: seasonal profiles, life cycle profiles, day of week/day of month/hourly profiles • Location profiles: store profiles • Product profiles: size profiles, color profiles

Benefits

The benefits you can receive from RDF include the following:

- Revenue increase by reducing lost sales
- Cost reduction by lowering excess inventory
- Forecasts to use as input to merchandise planning
- Payback evaluation on past promotions and forecast sales for future promotions
- Multiple statistical forecasting models with automatic selection of best model
- Multiple level forecasting with automatic selection of best level
- Automatic optimization and selection of control parameters, forecasting model, forecasting level, seasonal profile, and trend
- Multiple-level forecasting with export capability

Retek TopPlan

Retek TopPlan is an easy-to-use, flexible application with the ability to fully reconcile and approve plans. It is scalable enough to plan at levels of detail appropriate for any business. Built on powerful predictive engines, TopPlan uses integrated demand forecasting to provide an accurate view of customer demand quickly, with little human intervention. Exception management functionality flags affected areas of a plan that may otherwise go unnoticed when managing large amounts of data.

Managing data often requires labor-intensive exercises with lots of manpower in multiple technologies. Plans need to be based on accurate predictions of the future not simply previous year's history. TopPlan helps create the model for the future.

TopPlan Features

Retek TopPlan includes the following features:

Feature	Description
Product planning	Retek TopPlan provides strategic and financial product planning functionality, which includes business rules to support industry standard best practice for pre-season and in-season processes.
Strategic targets	The Strategic Targets Plan workbook is used to develop a high-level view for the Executive level planner to set targets for lower-level planners. The strategic targets plan can be used for the entire planning horizon, for example, for developing a five-year plan.
Financial planning	Financial planning is the workhorse of the product planning process. Multiple users perform their planning duties using the financial planning workbooks. Pre-season and in-season processes are supported with sales and profit projections, Open to Buy (OTB) management, and full value and unit calculations. The process always brings the plans together through reconciliation and ultimately plan approval.
Planning levels from total company to sub-class	Multiple planning levels give you flexibility to plan for one store or all of your stores.
Plan reconciliation and approval	Reconciliation of planned data and promoting the data to Approved status is an important final step of the financial planning process performed through TopPlan.
Planning key metrics	Planning of all key metrics for values and units including sales, receipts, inventory, costs, turn, and margin.
Time horizon	Includes planning down to the lowest level of week and all standard levels above week (year, season, quarter, month).
Support for multiple plan versions, including historical data	TopPlan keeps a historical record of multiple plan versions, which helps in forecasting for an upcoming season or promotion.
Built-in business rules	Support industry standard best practice for pre-season and in-season processes.
Built-in workflow	Supports both pre-season and in-season planning, plus integrates all planning levels from strategic targets to financial plans.
Ability to reconcile with Retek ChannelPlan	Data flows between Retek TopPlan and ChannelPlan to make both products beneficial for you to use.

Feature	Description
Integrates with RMS	This integration provides: <ul style="list-style-type: none"> • Base hierarchy details • Hierarchy maintenance • All actual data, which includes actual on order information • Provides inventory for OTB functionality from product plans to RMS
Integrates with RDW	Retek TopPlan feeds original and current plan data to RDW at the subclass/week level.
Integrates with RDF	<ul style="list-style-type: none"> • RDF's hybrid causal and time series algorithms can suggest a sales forecast that is automatically approved, making it available to Retek TopPlan. • Forecast Driven Planning: a connection to RDF is built directly into the business process through an automatic approval of a forecast that is fed directly to Retek TopPlan. This lets you accept all or part of a Sales Value forecast. Once that decision is made, the remaining business measures are planned within Retek TopPlan.

Benefits

The benefits you can receive from TopPlan include the following:

- Ability for customer demand to drive accurate planning.
- Activation with lower cost of ownership and faster return on investment.
- Process-driven solution eliminates organizational silos through a consistent disciplined process.
- Ability to execute to one version of the plan.
- Ability to easily manage large amounts of data by highlighting business opportunities and issues that may otherwise go unnoticed.
- Utilize the power of the Internet to connect real-time with suppliers and trading partners.
- Process large volumes of data quickly with Retek's proven scalability.
- Ability to easily adapt to organizational needs via multiple product hierarchies, alternate time frames and customized business rules.

ChannelPlan

Channel planning is a preseason process for planning sales value and average inventory for the multiple channels in a business, from stores to Internet-based sales. Sales value can be planned by using comparable and non-comparable store data in addition to planning percentage variances to historical data, product plan data, and the projected demand forecast.

Retek ChannelPlan provides financial location functionality for pre-season plans, which includes business rules to support industry standard best practice for pre-season processes.

ChannelPlan Features

Retek ChannelPlan includes the following features:

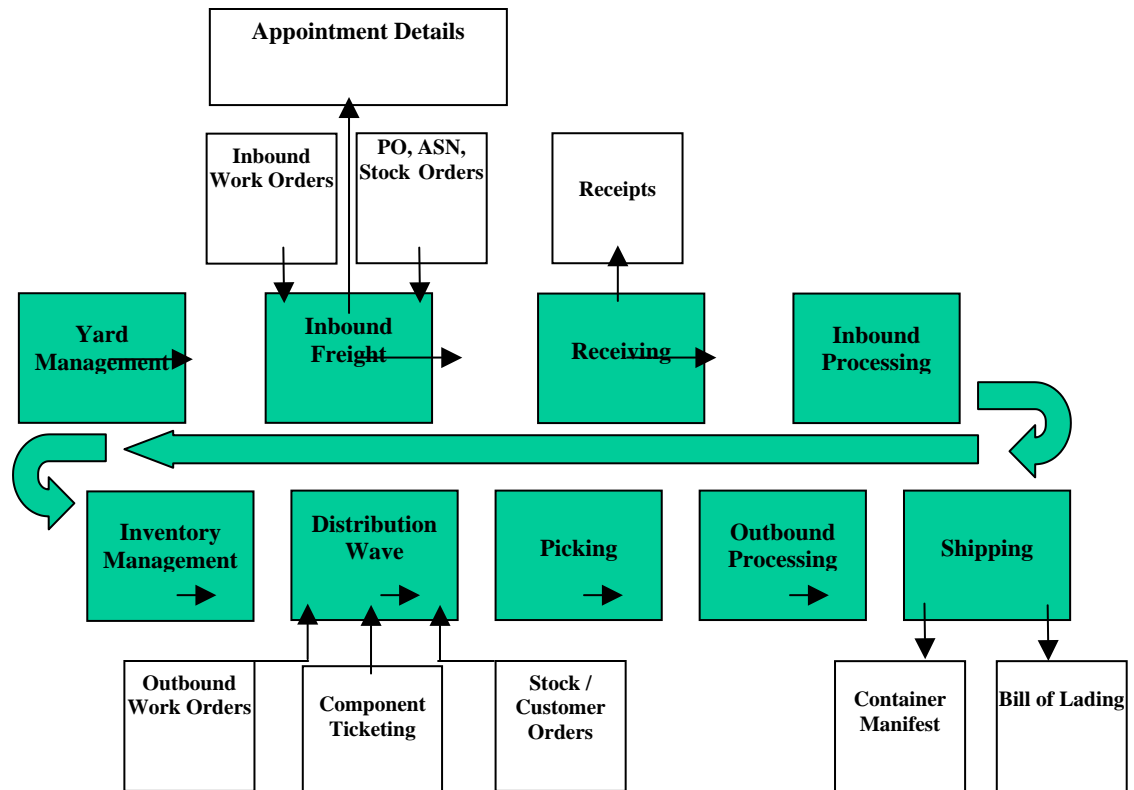
Feature	Description
Business process for developing channel plans	Built into the product and reinforced within the product.
Location planning down to the store	Characteristics of the location plan include: <ul style="list-style-type: none"> • Location hierarchy: total chain to store • Time hierarchy: total time to month • Metrics: values only • Plan versions: original, working, forecast, last year
Planning levels from chain to store	You can use ChannelPlan's multi-level planning feature to facilitate a variety of plans.
Allow comp and non-comp stores to be segregated	This feature lets you plan separately for standalone stores and chain stores, thus you do not need to use the same plan for all stores.
Time horizon	Includes planning to the lowest level of month and all standard levels above month (year, season, quarter), with flexibility to plan weeks.
Plan version	Supports pre-season planning by referencing only historical data (original, working, last year).
Built-in business rules	<ul style="list-style-type: none"> • Support base sales and average inventory planning for pre-season • Support industry standard best practice for pre-season and in-season processes
Ability to reconcile with Retek TopPlan	Data flows between Retek ChannelPlan and TopPlan to make both products beneficial for you to use.
RMS provides information to Retek ChannelPlan	<ul style="list-style-type: none"> • Base organizational hierarchy details • Hierarchy maintenance
Built-in workflow	Supports both pre-season and in-season planning, integrates all planning levels from strategic targets to financial plans.
Integrates with RMS	This integration provides: <ul style="list-style-type: none"> • Base hierarchy details • Hierarchy maintenance • All actual data, which includes actual on order information • Provides inventory for OTB functionality from product plans to RMS
Integrates with RDW	Feeds original and current plan data directly to RDW at the location/month level.
Integrates with RDF	RDF's hybrid causal and time series algorithms suggest a sales forecast that is automatically approved, making it available to Retek ChannelPlan.

Chapter 9 Retek Distribution Management

Overview

Retek Distribution Management (RDM) is a distribution management system that provides all the tools necessary to control a modern distribution center, fulfillment center, or warehouse. RDM optimizes the flow of merchandise and resources at the distribution center, fulfillment center, or warehouse. Robust, sophisticated functionality enables fulfillment across multiple channels. Decision support tools help plan using facility resources efficiently and monitoring existing activities and merchandise flow. Radio frequency (RF) terminals make real-time inventory control and task management possible.

RDM's flexible, table-driven functionality supports a variety of business formats and industries, enabling the system to change as the business changes. The following diagram shows the RDM functional flow.



RDM Functional Flow

RDM has three environments: GUI, radio frequency (RF), and character. RDM is user-friendly and menu-driven; it provides a complete menu hierarchy to access each operation window.

RDM Interaction with Other Systems

RDM can be interfaced with an outside merchandising system or used with Retek Merchandising System (RMS) for an enterprise-wide solution. RDM provides a host interface and a material-handling subsystem interface.

- RDM provides robust, sophisticated Warehouse Management System (WMS) functionality to distribution center (DC) personnel for fulfillment across multiple channels, including stores, e-commerce, and catalog. Web architecture extends WMS functionality and visibility to remote facilities and trading partners via the Internet using a standard Web browser.
- Decision support tools help plan for the efficient utilization of facility resources, as well as monitor existing activities and merchandise flow. Inventory control and task management are facilitated through using RF terminals, as users are guided through the operations.
- Integration within Retek 9.0 further strengthens RDM's value. Merchandise management and order management work with RDM to drive the receipt and subsequent shipment of merchandise to stores or customers. Information exchange with retail.com services—such as Webtrak for event tracking and scheduling—and returns information in support of the reverse auction service further help you benefit from collaboration in the supply chain.
- Finally, when coupled with Active Retail Intelligence (ARI), RDM gains a powerful exception management capability that lets you focus on specific trouble areas and alleviate bottlenecks in the distribution and fulfillment process.

Technically strong, RDM is an Oracle-based product, featuring a powerful graphic user interface (GUI) front-end. A character-based front end is also provided for use with ASCII terminals on the distribution center floor. RF hand-held and truck-mount formatted screens provide real-time updates for operational activities. RF interface runs on any RF vendor's hardware that supports terminal emulation.

The following table briefly enhancements to RDM:

RDM Enhancement	Overview
Enhanced Web ASN	Lets you enter ASN information directly into the system with a standard Web browser and Internet connection.
Consumer-direct returns	When processing consumer-direct orders, you can process any returns that result after delivery of the product.
Personalization and gift wrap	RDM offers personalization, gift card and gift wrap services to customers.
FPL management functions	RDM can enable movement of inventory from a FPL to another FPL, or to a reserve location, without having to deactivate the FPL.
Put to order slotting	Enhanced to support direct-to-consumer shipments. Provides support to alternate unit pick systems.
Logistics activity cost	To track the costs of processing merchandise through a warehouse, RDM was modified to associate costs to activity codes along with costs associated with storing merchandise in the warehouse.
Field expansions for international contacts	Addresses and other contact-related data were expanded to meet requirements for international enterprises and trading partners.
Forms upgrade	Upgraded to Oracle Developer Release 6.0 to remain current on Oracle tools for customer support.
Reports, labels, and tickets upgrade	
Enhanced returns processing	Provides greater flexibility in receiving and processing returned merchandise.
Enhanced return to vendor processing	Provides better insight into tracking and aging merchandise awaiting return to vendor processing.
Multiple unit pick zones per item	Enhanced to permit assigning an item to multiple unit pick locations.
Grouping unit pick containers	Enhanced to group unit picking containers together based on factors, such as number of common items and types of orders being picked.
Enhanced order selection	Wave planning enhanced to automatically build waves based on user-defined wave size and order selection criteria. Order selection capabilities expanded to provide more flexibility to define content of pick/pack waves.
Ship complete	Outstanding Orders report provides insight into orders not yet distributed or partially distributed.
Order status tracking	Enhanced to maintain a specific status for each order.
Paper picking by exception	Paper picking may be enabled or disabled by wave to provide flexibility in using it in conjunction with or in place of RF unit picking.
Enhanced primary pick location management	Increased flexibility of merchandise movement to, between, and from primary pick locations.

RDM Enhancement	Overview
Enhanced host communication scripts	Improved host communication scripts to improve performance and provide better error checking for third-party job scheduling.
Logistics activity cost metrics	Enhanced to provide both activity and storage-based cost metrics to measure the costs of processing merchandise through a facility.
Outbound load sequencing	Enhanced to provide the option of directing pick and load sequencing based on a route-based schedule
Multiple UPC/EANs per item	Enhanced to support multiple UPC/EANs for a given item.
Processing by UPC/EAN	Enhanced to support processing by UPC, EAN, or item.
Multiple UPCs for each item	You can look up items by UPC. Multiple UPCs can be stored for each item

Benefits

By using RDM to organize and automate tasks and reduce inefficiencies, you eliminate paper, reduce data entry errors, maintain a highly accurate inventory balance, and reduce the overall cost per unit of each item in the supply chain. Benefits you gain from RDM include:

- Labor productivity gains
- Space utilization improvements
- Inventory reduction savings
- Improved resource utilization
- Improved customer service
- Interface with Retek RetailCRM

RDM Modules

RDM is composed of the following modules:

- Web ASN
- Inbound/outbound workload planning
- Return processing
- Distribution and resource planning
- Inbound freight scheduling
- Inventory control
- Space utilization
- Support functions
- Appointments
- Receiving allocation
- Receiving
- Inventory management
- Processing
- Distribution
- Shipping
- Trailer/yard management
- Task management
- Value-added services

Web ASN

The Web-enabled architecture of RDM creates opportunities for collaboration between DC personnel and suppliers. This is particularly true for advance shipment notices (ASN). The complexity and cost of traditional EDIs have presented a significant barrier to DC personnel's full realization of ASN's benefits.

RDM lets you enter ASN information directly into the system with a standard Web browser and Internet connection. PO and allocation level information is validated to ensure connection. The low cost and global access to an existing Internet infrastructure lets DC personnel extend the use of ASNs to suppliers previously unable to provide traditional EDI. Increased use of ASNs can dramatically improve distribution centers' ability to streamline the processing and flow of goods through the facility.

Inbound/Outbound Workload Planning

DC personnel are looking for better visibility throughout the supply chain, particularly with regard to impact on the DC. The DC has specific processing capabilities that can be managed to ensure the timely and efficient flow of merchandise. RDM is enhanced to provide this visibility on both inbound and outbound merchandise.

DC managers have an increasing desire/need to readily assess how the facility is doing. As a result, several processing indicators are monitored for a given facility. These processing indicators include receipts, value-added services, space utilization, picks, and shipments. Information is displayed in graphical format.

Inbound Impact Analysis

Workload analysis tools assess the impact of pending receipts on the DC. Impact is measured in terms of workload (receiving and value-added services requirements) and capacity (cube) based on the facility's current space utilization. The DC may then adjust the scheduling of inbound freight deliveries in a manner that levels the load for the DC, as well as staff accordingly.

Outbound Impact Analysis

Workload analysis tools assess the impact of pending distributions on the DC. Impact is measured in terms of workload (picking and store/customer order-specific processing) and capacity (cube) based on the shipping/dispatch schedule. The outbound view encompasses both allocations from stock and cross-dock merchandise from receiving.

Many enterprises require a specific shipping/dispatch schedule for daily routes. A trailer of merchandise for a particular route must arrive in a particular region by a particular time. In the case of stores with minimal back room space, it is critical to coordinate the arrival of merchandise with the availability of resources at the store to perform the necessary stocking activities.

For consumer-direct business, this enables management of order fulfillment to meet specific delivery schedules required to maintain customer-service level commitment. Such coordination requires the DC to manage the wave creation relative to the dispatch schedule. Merchandise picking gets coordinated with the availability of trailer and staging space for shipments within a wave.

Return Processing

Consumer-direct fulfillment typically results in a higher return rate than brick and mortar retail. As such, RDM was enhanced to provide greater flexibility in receiving and processing returned merchandise.

For returns, there are two primary objectives:

- Reconcile the customer account
- Determine disposition of returned merchandise and process accordingly

The first step in reconciling the customer account is to identify the appropriate customer and order information to acknowledge the return. To assist in this process, assign a return merchandise authorization (RMA) number to any shipment to a customer. Returns may be processed with or without an RMA number.

Ideally, the customer includes the RMA with the returned merchandise. However, if the RMA is not included, RDM provides multivariable query tools to assist in identifying the customer based on limited available data such as item, name, or postal code. If the order information is no longer retained in RDM, the order management system—including Retek Retail CRM—may be used for additional lookup queries.

If available, the RMA number may be used to access the list of items associated with the original shipment. The returned items are then selected from the list. If the returned item is not found on the list, then further investigation may occur to determine the appropriate RMA, or the item may be entered manually.

The returned merchandise is inspected to determine its disposition and any subsequent processing or routing requirements. RDM helps track user-defined reason costs and action codes.

Distribution and Resource Planning

The Distribution and Resource Planning module does the following for you:

- Prioritizes and manages operator workflow
- Supports pre- and post-allocations plus post-allocation by PO
- Makes numerous user-definable distribution and resource planning models available
- Provides a decision tool that lets you test ‘what if’ scenarios
- Supports space and time conservation pick planning model
- Prioritizes emergency orders automatically
- Provides automatic prime picking from warehouse storage to prime pick location

Distribution and Resource Planning prompts the daily planning activities weekly, daily or by individual waves. The distribution plan is constructed by user defined queries promoting complete outbound flexibility. The distribution planner selects from one of the following control attributes: customer destination, product ID, allocation reference, ship not before, ship not after, city, state or province, postal code, vendor number, vendor style, department and class.

Replenishment

When the number of units of an item in the distribution center drops below the pre-assigned replenishment level, a replenishment pick is automatically initiated. Replenishments are done on the bulk or container level. You can indicate the following information regarding replenishment:

- Reserve zone. The zone you want to pick from.
- Unit pick zone. The zone you want to pick to.
- Item ID. The specific item to replenish.

RDM offers two methods of replenishment:

- Re-order point replenishment feature
- Pre-planned replenishment feature

Distribution Methods

DC personnel have multiple ways to select merchandise to fulfill order/wave requirements. The primary driver in the current selection method used by RDM is the least number of picks, with secondary consideration given to cleanup of locations. Bulk picks are selected over case picks, which in turn are selected over unit picks. RDM is enhanced to create picks based on the following drivers:

- First in, first out (FIFO). Picks are generated based on selection of merchandise with the earliest receipt timestamp.
- Pick to Clean. Picks are generated with the objective of cleaning out as many locations as possible.
- Best-Before Date. Grocery retail requires consideration of best-before dates to select merchandise to fulfill orders. Best-before dates are captured for perishable merchandise on receipt. A perishable indicator has been added to the item table.

For each perishable item, a safety period (in days) can be maintained that specifies the minimum number of days prior to the best-before date. A formula date (or pick-not-after date) can then be calculated. The pick-not-after date is the latest date the merchandise can be picked to ensure stocking in the store sufficiently prior to the best-before date. Perishable merchandise is distributed with pick-not-after date as the primary selection criterion.

RF Put to Store Multi-Store Pick Confirmation

RDM supports RF-based Put to Store picking, in which SKUs are moved past stationary store cartons. Currently, picks (actually puts) are presented to and confirmed by the DC personnel one store at a time to ensure accuracy. Accuracy in this situation comes at some expense to speed.

RDM is enhanced to provide an alternate means of presenting and confirming put to store pick directives. A picker is responsible for a range of stores. Replenishment containers are passed to the picker.

Upon scanning the license plate of the replenishment container, the picker is given a list of all pick requirements within their range of stores that can be satisfied by the contents of the replenishment container. If no exceptions are encountered, the picker may confirm all the displayed picks at the same time, as opposed to individually confirming each store's notes.

Wave Preview Based on Selected Orders

Current RDM wave review is based on actual picks generated during the distribution process. This means that the orders have been selected and distribution has been run. While this approach provides the most accurate picture of the wave workload, it requires processing time for the actual creation of the picks.

From a planning perspective, there would be a benefit to a quicker—albeit less accurate—estimate of the wave workload based on the selected orders. Using this tool, wave planners can get a feel for the size of the wave and make adjustments in their order planner's ability to properly size the wave in advance of the distribution process, while retaining the ability to fine tune the wave size and resource requirements after distribution has run, if necessary.

Multiple RF Put to Store Systems

Currently, RF Put To Store functionality may be used for a single set of store positions. This was done because RF Put to Store was seen as an alternative pick method for merchandise that could not be processed through a facility's primary, automated unit pick sorting system. For example, fragile merchandise may be prone to damage if sent through an automated sorter. In addition, non-critical or low-volume items may be directed to the RF Put to Store area to avoid consumption of available bandwidth of the automated sorter.

Subsequent interest in the RF Put To Store as a primary pick method for a facility has driven the request for support of more than one RF Put to Store area. This is particularly critical when a facility has merchandise with diverse, unique processing requirements such as freezer, high value, flat and hanging, or when volume of RF Put to Store picking necessitates the support of multiple pick faces for the same store through the facility. To meet this growing demand, RDM is enhanced to support multiple RF Put to Store areas within a facility, each replenished separately and each with its own full set of store pick faces.

Inbound Freight Scheduling

RDM schedules inbound freight and workflow plans, thus eliminating distribution conflicts. The Inbound Freight Scheduling module schedules all incoming merchandise in preparation for receipt. This significant pre-receiving function optimizes warehouse resources and promotes smoothly executed operations during shipment arrivals for both pre- and post-allocated, domestic and international merchandise.

- Increases productivity by scheduling inbound freight
- Manages both reserve and cross-dock or flow-through merchandise
- Saves time by preprinting receiving labels for incoming merchandise
- Provides Appointment Schedule and Compliance reports
- Ensures order accuracy
- Provides PO and ASN inquiries
- Assists in work flow management
- Equips the user with complete door schedule including utilization graph

Appointments are made within an established time frame known as the receiving window. This window is based on the early and late receive date as established by the buyer from the purchase order and/or ASN. Purchase order, ASN, and allocation inquiries are available through RDM.

Advance shipment notices may come directly from the carrier or supplier through the Retek Trade Management (RTM) system. RTM is an import and customs tracking product that supports the letter of credit, purchase order tracking, customs tracking, cross border requirements, landed costs and transportation analysis up to the arrival at the distribution center.

RDM assists operators in managing dock doors for inbound trailers or containers, assigning merchandise for cross-docking or flow-through distribution while providing the work-flow plan required for each trailer. By permitting the receiving associate to include all details of a pending receipt without assigning the specific door, unscheduled appointments get support from date and time.

RDM uses workload planning and the current appointment schedule to determine a time, date and door for receiving the scheduled appointment. The effort requirements are based on the merchandise mix and using labor management service standards.

Should the scheduled quantity not match the allocated quantity, RDM can re-allocate or notify the buyer of the change in advance of the receipt through the Retek Active Retail Intelligence (ARI) system, allowing time to re-allocate the merchandise and optimize the distribution workflow.

A variety of reports are available supporting workflow planning, scheduled and unscheduled receipts, ASNs, trailer information in the yard and at the door, as well as many others. Information provided in report format is also available online.

Inventory Control

The Inventory Control module manages merchandise in the distribution center. It provides system and RF screens for directed putaway and movement of inventory, inventory adjustments, returns processing, and cycle counting.

The Inventory Control does the following:

- Maintains inventory tracking and queries
- Supports system-selected and exception-based cycle counting
- Provides task interleaving of functions and cycle count
- Defines locations and associated attributes throughout the warehouse
- Provides daily audits of warehouse statistics
- Supports multiple SKUs in the same storage or prime picking location
- Suggests putaway based on location attributes, consolidation opportunities and need and system setup
- Supports multiple casepack quantities of the same SKU in the same location
- Supports multiple user-defined trouble codes on containers in the same reserve

When merchandise is to be putaway, RDM uses the product location attributes and preferred zone to suggest the location that best conserves space in the Reserve locations. Inventory Control uses three putaway methods: cube, capacity, and unit.

- Cube—dimension derived from the length, width, and height
- Capacity—capacity measured in units
- Unit—number of units to return

The container ID tracks information associated with the product including receipt number, receipt date and time, purchase order number, lot number, expiration date, putaway date, last user to move the product, current status, distribution number and physical dimensions and weight. Within a single location, RDM can support multiple products and multiple case packs of the same product.

RDM offers a variety of cycle counting options. System cycle counting permits automatically scheduled cycle counts based upon user defined parameters. Exception cycle counting is activated upon the system discovering discrepancies during the course of picking and processing.

Pack and Hold Store Reassignment

DC personnel may use a pack and hold philosophy in preparing goods for shipment to a new store or for major store expansions. After being picked and processed, the merchandise gets staged to await shipment to the new or expanded store.

At times a store misses its opening or expansion date. In such instances, DC personnel must be able to undo the picks and free up the merchandise for reassignment. RDM enables the distribution center to immediately reassign the merchandise to another store or return the merchandise to stock for subsequent reallocation.

Paper-Based Picking

Using radio-frequency (RF) devices to execute DC tasks maximizes inventory accuracy and enables real-time task management. RF devices do, however, have associated costs that may be prohibitive to some enterprises. At the very least, some DC personnel may want to reduce the number of RF devices to minimize their initial system costs.

Additionally environmental factors in particular areas of a facility may necessitate using a non-RF solution. RDM currently permits using low-cost, hard-wired ASCII terminals as an alternative to RF. This alternative is viable for stationary tasks, but is not optimal for tasks requiring mobility. In such situations, a low-cost, paper-based alternative to RF is desirable.

To meet this need, a paper-based picking solution is supported as an alternative to RF. Paper picking is activated on a zone-by-zone basis. Each of the pick types is supported on paper, including bulk, case, and unit picks. Picking instruction worksheets are generated to direct the picking process. The worksheets are broken out by an articulator zone that may be assigned to a given user, permitting multiple pickers for a given pick type within a given zone.

Any exceptions encountered during the picking process are noted on the worksheet, and then confirmed into the system. All merchandise movements and pick confirmations are posted only upon confirmation of the worksheet.

Space Utilization

One of the primary operating constraints for many DCs is the availability of physical space. As such, it is critical to effectively use that space. Current RDM location management is based on numbers of containers. This has been expanded to account for volumetric considerations; for example, cube for flat, units per standard length for hanging, etc.

Putaway Based on Space Availability

Putaway logic has been modified to use the volumetric data when specifying a location for putaway. The specified putaway location is temporarily reserved to account for available space in the location to subsequent putaway attempts. Upon confirmation of the putaway, the user may either confirm to the specified location or override with a separate valid location. While the system does not direct movements that would exceed location capacities in storage, the user is permitted to exceed the available space in a location on override.

Space Utilization Reports

A report is available that assesses current space utilization and identifies poorly utilized locations that DC personnel can use to relocate merchandise manually. RDM assesses utilization based on the following parameters:

- Item
- Current on-hand
- Current orders outstanding/seasonality
- Cube/units per standard length
- Primary, secondary and tertiary location types

Support Functions

The Support Functions module houses the main functionality of RDM and serves as a valuable aid in the efficient supervision of vital distribution center data. It helps top privilege level users to maintain specifications for every integral part of RDM through separate editors. With the Support Functions module, you can view information about company vendors, designate print queues, and generate user/activity productivity reports.

Management Reports

RDM offers full labor management support and tracking. All associates logged on to the system are tracked through user-definable activity tasks.

- User-definable activity tasks are supported through the service standard table.
- Labor management screens are available online, providing management with current tasks assigned, tasks assigned during the current day, task beginning and completion time, task reference number, numbers of units moved, and productivity of the associate.
- Management reports are available by user and activity by range of dates as determined by the manager.

A variety of management reports are available in printed form as well as online, including distribution center statistical reports, inventory aging and control reports, and many others.

Item DC Characteristics Setup by Merchandise Hierarchy

Traditional host systems may not be able to maintain certain item characteristics specific to the DC processing, including: dimensions, weight, unit pick system, roundable, preferred zone, etc. DCs currently must maintain these attributes on an item-by-item basis, which can be particularly difficult for DC personnel with a high rate of SKU turnover.

To ease this process, RDM is enhanced to let you enter default values for categories of items based on various item hierarchy attributes including department, class, and subclass. The DC specifies default values for a specific combination of these criteria. This table is scanned upon download of new items to determine the desired default attributes for the item, significantly reducing the item maintenance overhead for the DC.

Company/Division

Some enterprises require inventory tracking by company/division within a given distribution or fulfillment center. Since the same SKU may be tracked across company lines, purchase orders, allocations and stock orders, the ID must include a company/division attribute to provide differentiation at the inventory level. Similarly, inventory adjustments and inventory balance uploads must include the company/division to ensure proper balance with the host system.

Appointments

The Appointments module manages the receipt of future or incoming merchandise. It controls and sets up the flow of merchandise into the distribution center and determines where and when merchandise is received.

The Appointments module tells you what merchandise is coming in, what carrier is delivering it, what vendor it is coming from, what purchase order it was purchased under, and at which door the trailer arrives. The module also calculates how much time it takes to unload the trailer, which increases productivity and scheduling management.

Receiving Allocation

The Receiving Allocation module accepts receiving downloads from an outside system such as RMS and prints reports and labels while updating the allocation files it maintains. You can print labels and reports, monitor receiving package printing, and view pre-distribution data.

Receiving

Through the Receiving module, RDM logs in and receives merchandise, conducts and tracks vendor compliance sampling, resolves troubled shipments, and manages the pre-allocation of any merchandise.

The Receiving module does the following:

- Offers receiving workload planning tool
- Manages both reserve and flow-through merchandise
- Provides real-time status of current receiving processing
- Permits adjustment to the receipt quantity after the receipt is closed
- Offers user defined trouble conditions for tracking vendor compliance issues
- Directs merchandise to user-defined stations for trouble resolution

The Receiving module uses the three RDM systems: RF, character, and GUI.

Associates receive merchandise from vendors, with the aid of the RF or system terminal, at the receiving door. RDM manages the merchandise that is destined for reserve as inventory or for processing and shipping as pre-allocated flow-through merchandise.

RDM provides the flexibility to handle both pre-allocated and post-allocated merchandise in one DC, especially pre-allocated, flow-through merchandise. User-definable, value-added services may be associated with and sequenced for merchandise as a standard feature, reducing turn times through the distribution center.

Receiving Workload Planning summarizes the daily appointments assigned to a door and provides an estimated unload time to help the receiving supervisor best utilize resources.

RDM offers a complete receiving solution for UCC-128. A label option solution is also available, permitting the application of labels to merchandise at the time of receipt. These features are driven by the Retek algorithm just prior to the arrival of the merchandise, accommodating last minute changes in the distribution.

Vendor compliance issues, or trouble issues, are managed through user-definable parameters online without interruption in the receiving process. Trouble conditions may be marked at the appointment or container level, and directed to a value-added or holding area for resolution or putaway in storage to be called out later.

RDM receives an authorized adjustment to the receipt quantity for trouble resolution or other adjustments after the receipt is closed. After adjustments occur, appropriate files are transferred to the merchandise system for updates to the on-hand balance.

The receiving process starts when the trailer arrives at the receiving door. While a trailer is being unloaded, the system keeps track of all expected cases in the shipment by ASN, or purchase order and item identification.

RF Environment Receiving

The RF receiving option lets you open appointments and receive merchandise, scan merchandise using bar code labels and RF terminals, perform quality control, mark merchandise or appointments for trouble, close appointments, release trailers, build containers, and track lot identification for dated merchandise.

RF Environment Palletization

The palletization option lets you build containers of merchandise and consolidate mixed products and troubled merchandise.

Catch Weights

Grocery retail requires capturing catch weights for perishable merchandise. For each perishable item, it is assumed that the host assigns a standard weight for a unit. All host directives (such as purchase orders, allocations, stock orders, etc.) for the item are in multiples of the standard weight. Actual weights are captured prior to shipment; inventory adjustments and balances are in terms of the weight to account for any weight discrepancies (such as wastage) relative to the received weight.

Optional Trailer ID Confirmation in Receiving

RDM currently validates the inbound trailer ID when initiating the receipt of an inbound delivery. The trailer ID is a unique identifier tied to the shipping container. Unless a DC personnel is using a private fleet, it is likely that the trailer ID is not available in barcode format on the trailer itself. In fact, it may or may not be readily identifiable in a human-readable format.

Blind Receiving of Variable Case Packs

The blind receiving process is quite flexible. PO and item are validated, but the case pack is specified at the time of receipt, rather than being restricted to the expected case pack entered when scheduling an appointment.

However, to use blind receiving for this flexibility, DC personnel must forego the door management and inbound workload planning benefits associated with the appointment scheduling process in RDM. Therefore, RDM is enhanced to provide a new receipt method permitting variable case pack receiving in conjunction with a scheduled appointment.

Inventory Management

The Inventory Management module lets you perform inventory inquiries, transfer items, return merchandise to the vendor, maintain locations and location types, and print inventory reports.

Inventory Management in the RF Environment

The Inventory Management module lets you move merchandise, putaway single or multi-SKU containers, cycle count, mark trouble, and confirm merchandise to be returned, using an RF terminal.

Container Consolidation/Deconsolidation

RDM is enhanced to enable picked merchandise to be moved, in part or in whole, from one container to another for the same destination via hand-held radio frequency terminals. This feature facilitates consolidation of multiple containers of merchandise to maximize container fill, thereby minimizing transportation costs. This functionality may also be used to convert flat-pack merchandise to hanging, so that it may be delivered floor-ready to the store.

Order Status

RDM is enhanced to maintain a specific status for each order. The status is readily available upon inquiry by buyers, DC personnel, and customers. As it is possible for positions of an order to be at various states of processing, assumptions must be made on the overall order status when multiple statuses actually apply.

Valid order statuses include:

- Open unprocessed
- Selected for inclusion in a wave for distribution
- Pending picks generated but not yet confirmed
- Picked picks completed
- Loaded/manifested loaded onto trailer, awaiting shipment
- Shipped shipped

Host-Driven RTV

Current return to vendor (RTV) processing is fully initiated by the DC. Merchandise is marked for return and moved to a processing area to await return to vendor processing. The DC then performs the Return to Vendor function to remove the merchandise from the facility and post the transaction to the host.

In an implementation, it is helpful to use RMS to control the RTV transfer of merchandise from stores to the distribution center, and the subsequent return to vendor from the DC. To satisfy this requirement, RTV transfers for the return of merchandise from stores to the DC are downloaded to RDM.

Upon receipt at a DC, the merchandise is consolidated with other return merchandise to await RTV processing. An RTV request is then downloaded to RDM to initiate the return of the staged merchandise to the vendor.

Processing

The Processing module contains value-added services features. The Processing module enables the efficient tracking and directed movement of merchandise throughout various user-definable processing steps, as specified by the DC or the end customer. Process codes can be specified for purchase orders or ASNs for inbound processing upon receipt, or specified for pre/post allocations for outbound processing prior to shipment.

The Processing module also features special functionality for quality control and ticketing. Kitting, the assembly of multiple items into a new item, is also supported within RDM. Processing start/stop times are maintained for each container in the system for tracking and auditing purposes.

Processing is associated with an order using the WIP codes to direct warehouse personnel to perform the necessary operations on the merchandise that satisfies the order.

Merchandise receipt planning processing, warehouse merchandise processing, and stock distribution processing are just three of the many scenarios in which WIP codes become associated with containers. Various operations, such as ticketing, putting on hangers, applying patches, and assembling merchandise into kits, are codified and associated with physical locations in the warehouse.

Processing in the RF Environment

The work order processing operation changes the values of the start and end time stamps on each container's WIP list. Each processing operation is responsible for setting the appropriate values to that operation.

In the RF environment, you can:

- Process a container's WIP code.
- Assemble a Master Item ID from its components. After the merchandise moves to the assembly location (the location associated with the Master Item ID's kit WIP code), you can start building kits.
- Choose and print tickets.
- Use the RF interface to guide you to containers throughout the warehouse marked with a specified WIP code for moving them to a staging area where a work order takes place.

Distribution

The Distribution module lets you perform wave planning, set up a packing schedule, view pending picks, inquire about stock order allocations, create stock orders, and print reports. The distribution process is started by a stock order download from RMS, or by creating manual stock orders.

There are three types of distribution:

- Pre-allocation
- Post-allocation
- Post-allocation by PO

There are five order types:

- Automatic
- Wave
- Predict
- Manual
- PO

Distribution Planning

In the GUI environment only, you can:

- Manually select orders to send through distribution. This option provides flexibility in picking orders, which are flagged by the merchandising system as manual (orders created manually).
- Select the method of order processing by permitting the creation of orders independent of an outside system download.

Picking in the RF Environment

The RF Picking module is divided into three sections:

- Picking
- Put to Store (PTS)
- No Pick Package

Picking

During the distribution process, the system assigns master container IDs to group picks. For example, it can allow or prevent the mixture of destinations on an individual pallet. However, zone and pick type (bulk, case, or unit pick) always divide the pick package of labels. The pick package is intended to be picked by one individual, which restricts the number of picks of the same type in the same zone at the same time. The break label packet removes this restriction by allowing the pick package to be subdivided as desired.

RDM processes the stock allocations and available inventory to create four types of picks:

- Bulk picks. You can pick an entire pallet of a single item for shipment to a single ship destination or unit pick system, based on a wave. Bulk picks can be used for either conveyable or non-conveyable merchandise.
- Container (or case) picks. You pick one or more full cases from a bulk container in a reserve location for shipment or to a unit pick system, based on a wave. You can also use break label packets, which let you subdivide large picking packages, thus keeping locations from being visited more than once to fulfill an order.
- Unit picks. You pull individual units out of forward picking locations. Pick quantities can be adjusted downward and problem locations can be marked.
- Replenishment picks. You can pull containers from the stock/reserve inventory to the unit picking locations. These containers are opened and used to restock the unit pick bins.

Put To Store

With the PTS feature, you can determine the first PTS zone, perform a put to store pick, and close a PTS carton. RDM helps you determine the first PTS zone that contains a store that needs the item in the container. This information alerts the first contact user to determine onto which physical lane to push the container.

The PTS area is a set of fixed store locations where each location is associated to a single store.

No Pick Package

Picking without pre-printed labels eliminates the need for operational processes that track preprinted labels and also offers users the flexibility to manage pick assignments.

There are several advantages to doing without labels: you do not depend on operational processes to keep track of preprinted labels and you have the flexibility of being able to manage pick assignments using distribution management. You can perform four types of picking through the no pick package screen:

- Bulk picking
- Case picking
- Bulk replenishment picking
- Case replenishment picking.

Volumetric-Based Determination of Outbound Container Requirements

Distribution processing is enhanced to include an option to pre-determine outbound container requirements based on volumetric data (cube for flat, units per standard length for hanging, etc.) and weight. Volumetric data and weight capacities are maintained for each container type. For each pick zone, a default container type is specified.

- If picking with a pick package, the package is generated to correspond to the pre-determined container requirements.
- If picking without a pick package, the picking process indicates to you when the pick-to container is full. At the start of the picking process, the picking screen prompts the picker for the container type being used. The system displays the default container type for the pick zone, but the picker may override this value.

During the picking process, the system tracks the fill level of the container. The picker is notified when the pick to container has reached capacity. At that point, the picker closes out the current container, drops it off if necessary, and opens a new container.

Shipping

The Shipping module directs the loading and shipping of trailers. Both fluid and staged loading, for conveyable and non-conveyable items, are supported by the system. RF terminals are used to verify the loading process and provide real-time data for manifesting, electronically and with paper. All necessary shipping documents are created at the time of shipping to ensure order accuracy.

The Shipping module does the following for you:

- Supports fluid and staged loading processes
- Supports multiple carrier, service, routes available for each customer
- Supports loading customer cartons through multiple doors concurrently
- Provides real-time shipping and loading status
- Supports print and apply feature of UCC-128 compliant shipping labels
- Ensures order and loading accuracy
- Creates EDI and papermanifest for customers
- Lets trailers be closed and re-opened for optimal shipping and trailer management
- Supports pack and hold merchandise

For UCC-128 manufacturer labeled cartons, RDM gives the operator the option of printing and applying an address-shipping label on a local label printer.

Merchandise arrives at the shipping doors by conveyor or by manual delivery. Shipping doors are opened by carrier, service, and route codes for all customers scheduled to ship merchandise by this code.

Multiple carrier, service, and route codes may be assigned to any customer. Conveyable cartons are diverted to the proper shipping door by the sorting system defined by the carrier, service and routing codes. The sorting system controller verifies the diversion of the carton, adding the carton to the current open manifest.

For non-conveyable merchandise, product arrives by pallet, trolley, or cart and may be scanned on to the trailer by simply scanning the master tracking ID and the trailer ID. Because of the unique parent/child relationship between the carton ID and the master ID, the carton level details are retained in the manifest.

RDM permits the loading of multiple customers or destinations on the same trailer creating separate paper and electronic manifests for each one. Trailers may be closed and re-opened to accommodate the management of shipments and trailers. Upon sealing and final shipment of a trailer, final electronic and paper manifests are created for the distribution center and the carrier. The EDI 856 manifest created at the close of the trailer may be passed to the customer providing carton level detail for every carton, item and order shipped.

Outbound QC Audit

Picking errors create many different problems throughout the supply chain. One issue can be store confidence in the integrity of shipments from the DC. As such, RDM is enhanced to help you verify the accuracy of your pickers prior to shipment of merchandise. Each audit maintains user ID, units audited, units over, and units short. The DC auditor staff determines the actual workload and number of units audited manually.

Trailer/Yard Management

The Trailer/Yard Management module tracks all trailers at the distribution center or drop lot (if the trailer has an RDM specific location ID) from check-in to checkout. Once a container is in the system, RDM tracks the container no matter where it is.

The Trailer/Yard Management module does the following for you:

- Tracks all trailers in the yard
- Provides location, appointment number and status of each trailer
- Improves yard and fleet management
- Lets trailers be taken in and out of service
- Supplies trailer and yard status reports
- Provides location and trailer inquiries on RF terminals
- Uses yard, trailers, and dock doors more efficiently
- Provides content visibility that lets trailers be used as temporary storage locations

RDM supplies the complete status information of each trailer resulting in increased efficiencies in the yard and in dock door utilization. Yard and trailer status is updated for inquiry at the system level as well as through the RF terminal defining each trailer's current activity and location. Real-time status changes are updated in the system as the associates perform a variety of operations and trailer movements.

The Trailer/Yard Management module acts as a tracking monitor for the trailer fleet of the distribution center. It keeps track of each trailer by means of the trailer identification. This identifier provides you with the current activity of trailers in the yard. Up-to-date activity information encourages smooth merchandise flow and promotes a more productive, profitable distribution center.

Trailer/Yard Management Module in the RF Environment

The RF Trailer/Yard Management module provides you with the capability to view and update information about specific trailers by yard location.

In the RF environment, you can:

- View trailer information for a specific yard location.
- Move a trailer from one yard location to another.

Task Management

In the GUI environment, you can access the Task Management module. This functionality promotes the dramatic increase to labor efficiency by controlling the delegation of work to individuals in a real-time, interactive manner.

Each task eligible for assignment must be defined in the task queue. This task queue uniquely defines a specific task or group of tasks.

The following tasks are eligible for task management:

- Bulk picking
- Bulk replenishment picking
- Container picking
- Container replenishment picking
- Unit picking
- Move
- Putaway
- Cycle count
- Container loading

Task Administration in the RF Environment

The RF Task Administration module provides you with the capability to dramatically increase labor efficiency by controlling the delegation of work to individuals in a real-time, interactive manner. At the start of a RF session, you enter the type of equipment being used and a starting location. Tasks are assigned based on the rules defined by the distribution center.

Value-Added Services

The Value-Added Services module offers user defined value-added service functionality in the distribution center. These value-added services, or works in progress (WIP) codes, let you define physical locations and activities in the DCs. You can then offer a completely flexible directed workflow while managing the task.

The Value-Added Services module does the following for you:

- Tracks labor content by user, task and sequence
- Links trouble merchandise to WIP codes for resolution and vendor compliance tracking
- Supports pack and hold through WIP functionality
- Tracks continuous, real-time work in process status by container identification and user
- Supports integrated, user-definable ticketing functionality

In practice, these value-added services might include ticketing, kitting, re-packaging, flat to hang, and others. Processes are associated with each container ID or license plate that is sequenced to permit an orderly process to the tasks. As operators are directed through the processes and move merchandise from one workstation to the next, the WIP codes are cleared and container status is updated and tracked.

The WIP processing operation changes the values of the start and end time stamps on each container's WIP list. Each processing operation sets the appropriate values, time stamps the task upon initiation, and updates the status and time stamp upon conclusion of the task. The quality assurance (QA) process, a part of vendor compliance, is an example of an operation where the start and end time are set.

RDM offers full multi-level bill of material functionality. Tracking is managed at both the component level as well as at the kit or group level. Merchandise may be assembled into kits or pre-packs as part of an inbound or flow-through process, or may be assembled for outbound orders or allocations from inventory. For merchandise maintained in pre-packs in primary picking locations, components are automatically directed to be pulled and assembled into pre-packs for distribution via the WIP process. Merchandise may be assembled or disassembled into product sets.

Multi-Price Ticketing

A distribution facility may supply stores across multiple countries. As such, it is necessary to be able to ticket merchandise with prices corresponding to the desired region/destination. RDM already supports a single store-specific retail price ticket for outbound merchandise. However, this step requires ticketing as a back-end process in the DC (for example, after-pick), inhibiting the use of supplier-ticketed merchandise. As a result, some DC personnel require support of tickets with multiple prices, corresponding to the countries in which the merchandise is distributed.

The tickets are either applied by the supplier or as part of inbound processing, on receipt. At picking, the tickets are only regenerated if the price changes for the destination for which the merchandise is being picked.

Chapter 10 Retek Data Warehouse

Overview

RDW is an Online Analytical Processing (OLAP) program. It serves as the central focus point for analysis and reporting throughout the enterprise. RDW includes key functions such as sales analysis, inventory management analysis, stock ledger analysis, pricing analysis, vendor compliance analysis, and customer analysis. RDW is an intuitive, Web-enabled environment scaled for the performance required in high-volume retail organizations.

RDW is organized into the following role-based workbenches:

- Category Management
- Marketing
- Merchandising
- Store Operations

Each workbench contains its own set of reports, metrics, and dimensions.

RDW contains more than 2,300 predefined KPIs and more than 400 predefined reports in the following areas:

- Sales analysis
- Inventory management
- Merchandise analysis
- Margin/profit analysis
- Price/promo analysis
- Vendor analysis
- Customer analysis

RDW is integrated with:

- Retek Merchandising System
- Retek Sales Audit
- Retek Behavior Profiling
- Retek Predictive Planning

RDW is also available as a stand-alone application, supporting the needs of retailers using any transaction system. As with all Retek products, RDW is scalable and volume-tested to meet the needs of the largest retail institutions and transaction volumes.

Technical Overview

From a technical perspective, RDW operates in a client/server, wide area network (WAN) deployable environment. Information from RMS and other systems is loaded into RDW and aggregated via batch processes. An Oracle database provides the data storage component for the data warehouse. On the front end, the analytics, reports, and interface were developed using MicroStrategy's suite of products.

RDW has enhanced data warehouse technology, including:

- Oracle 8i
- MicroStrategy 6
- New custom end-user Web interface that supports Netscape and Microsoft Internet Explorer browsers

Because RDW is built specifically for retailers, the implementation process is made easier. The interface points to your existing systems are based on retail operations and best practices, not generic entry points that need to be customized to retail.

RDW adds value immediately upon installation with an end-to-end data warehouse architecture. Intuitive and flexible analysis tools make its use easy and fast.

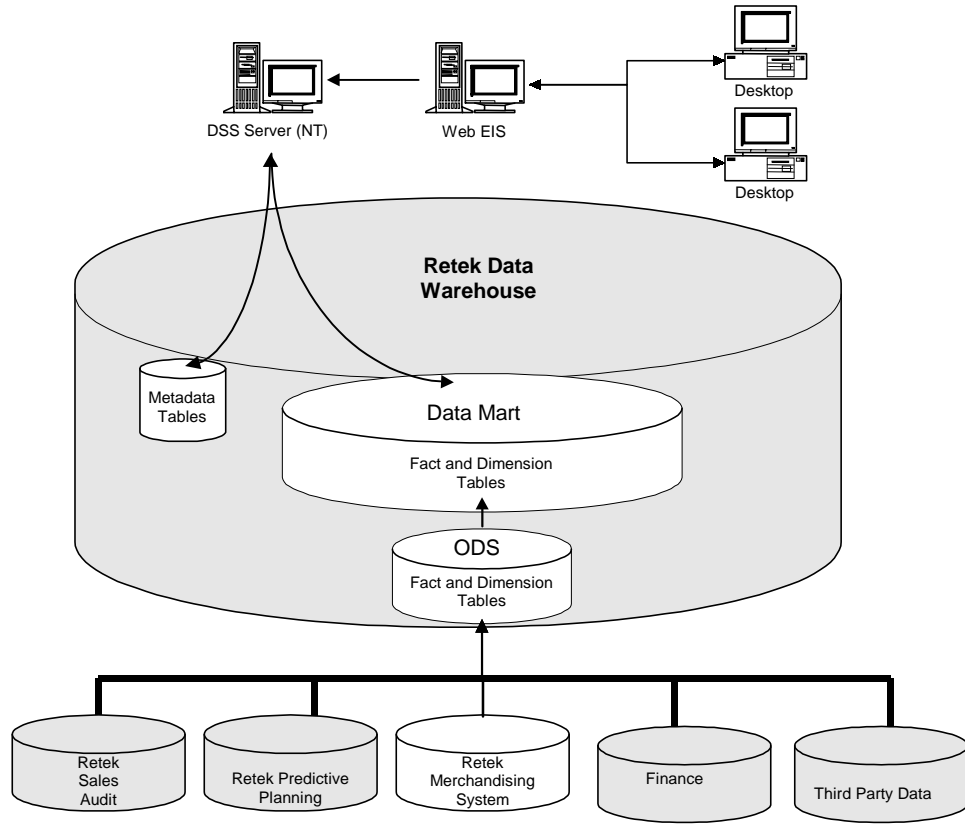
RDW Architecture

Internally, RDW contains three components:

- *Operational data store (ODS)*, which contains transaction level data
- *Datamart (DM)*, which contains aggregated data for reporting and analysis
- *Metadata*, or data about data

Transaction data is loaded into the ODS from standard RMS interfaces and other external systems as specified by the client. ODS to DM batch processes aggregate the data and transfer the results from the ODS to the DM. The MicroStrategy toolset uses the metadata and datamart for reporting and analysis.

The following diagram shows the RDW internal architecture.



RDW Internal Architecture

Features

RDW comes with three user interfaces: the Retek Web Executive Interface System (EIS), Decision Support System (DSS) Web, and MicroStrategy's DSS Agent for power user report creation.

The user interfaces consist of a large number of powerful features and report types that include:

- Exception reporting in the form of text-based, easy-to-read headlines.
- Flexible report formatting, including multiple charts, text exceptions, cross-tabular reports, and tabular reports.
- Prompted reports that provide finely detailed analysis through definition of filtered results.
- Full drilling power on dimensions and attributes of the data model.
- Drill governing ability so that users can view only a desired subset of data through filtered drills.
- Ad hoc query creation (on-the-fly filter and template combination).
- Report scheduling and caching to provide rapid query times.
- Easy report exporting to other applications (word processor, spreadsheet, e-mail).

Web EIS Interface

The goal of RDW is to provide the decision-maker with the right information at the right time. The Web EIS Interface is your window into the information in RDW. You can use Microsoft Internet Explorer or Netscape to access reports via the Web EIS Interface. Using the Web EIS Interface, you can:

- Select reports by category and report description.
- Display report data in a grid or graphic format.
- Obtain detailed information by drilling into a report.
- Save reports in your own folder.
- Export data to a spreadsheet or other applications.
- Create your own reports, using report templates and filters.

Category Management Workbench

Category Management is a business process that is widely used by convenience store and grocery retailers. It focuses on managing product categories as strategic business units and on building a collaborative relationship between retailers and their suppliers. The ultimate objective of this process is the delivery of greater value to the customer. This is achieved by offering the customer the right mix of products at the right prices.

The National Association for Convenience Stores (NACS) has developed a framework for Category Management. The NACS framework has been established as the best practice for the convenience store and fuel retailing industry. This framework encompasses a six-step approach to category management:

1. Select a category and supplier partner.
2. Analyze the performance of this category.
3. Determine category roles.
4. Develop strategic and tactical plans for the category.
5. Communicate and implement the plan.
6. Review and evaluate category performance.

The RDW Category Management Workbench is a support tool for the Category Manager and other decision-makers. It consists of many predefined reports that support NACS standards and an ad hoc reporting capability.

Predefined reports are grouped under the following functional areas:

- Assortment Efficiency (includes assortment efficiency reports, competitor pricing, space allocation and store traffic)
- Customer
- Inventory
- Supplier
- Promotion
- Scorecards

Reports

Each folder contains predefined reports or scorecards that support key Category Management processes. These reports or scorecards are built from metrics, filters, and dimensional attributes.

The Category Management workbench has the following reporting areas and types of reports:

Reporting Area	Types of Reports
Trend analysis	Monitors the progress of category business plans to improve category planning and decision-making including: <ul style="list-style-type: none"> • Trend reports • Category scorecards • Market sales analysis
Customer analysis	Identifies target customers, using demographics and behavior-based customer clusters to attract and retain the right customers, including: <ul style="list-style-type: none"> • Demographic composition • Customer affinity
Assortment efficiency	Identifies top and bottom performing items in your store and compares them to top and bottom items found in market data, including: <ul style="list-style-type: none"> • Assortment analysis • Competitive pricing • Space allocation • Store traffic • Net cost, net net cost, dead net cost
Promotion efficiency	Analyzes sales, cost of goods sold and profit before, during and after a promotional period to maximize the uplift of promotions: <ul style="list-style-type: none"> • Promotion impact analysis • Market promotion comparison
Supplier analysis	Analyzes: <ul style="list-style-type: none"> • Supplier performance • Supplier compliance
Stock availability	Analyzes stock on hand, on order, and commitments to gain control over the flow of inventory and reduce out of stocks: <ul style="list-style-type: none"> • Contracts and availability • Unavailable inventory • Stock adjustments by reason

Marketing Workbench

The Marketing Workbench provides comprehensive analysis of customer-related data. This workbench incorporates data from Retek Merchandising System (RMS), Retek Behavior Profiling, as well as third-party sources. The third-party data includes Census and Demographic data, which can be purchased from data providers. Retek's Behavior Profiling engine has been integrated with the RDW to provide sophisticated data mining technology to business users through customer and product segmentation analysis.

In addition, the Marketing workbench supports analysis of sales performance, location performance, effectiveness of promotions, and profit analysis. It also supports targeted marketing based on customer and product lists generated by the RDW. In the retail industry, it is important for retailers to be able to study market trends and the performance of their competitors. This workbench also allows trend analysis based on merchandise analysis and comparisons with the market performance and competitors' data. The competitors' data and market data, as provided by syndicated market data providers, is independently interfaced with the Marketing Workbench.

Reports

All Marketing Workbench reports are Level 1, with the exception of the Market Composition reports, which are all Level 2. Level 1 reports contain retailer data only. Level 2 reports contain retailer and market data.

For all predefined reports, you are prompted to select the data set that is used. After you run the report, you can drill down to different levels of detail, and change the display of the report to grid, graph, or alert.

Predefined Marketing workbench reports are grouped into the following functional areas:

- Multi Channel
- Customer Segmentation
- Product Affinity
- Target Marketing
- Campaign Performance

Reporting Area	Types of Reports
Profiling and segmentation	<ul style="list-style-type: none"> • Customer segmentation, which provides better understanding of your customers, using Recency, Frequency, Monetary and Profitability (RFMP) methods • Customer profiling, generates behavior-based customer clusters, using integrated data mining tools found in Retek Behavior Profiling • Product affinity
Target marketing	<p>Generates promotional campaigns catered to customer preferences to improve customer response rates and satisfaction, including:</p> <ul style="list-style-type: none"> • One to one marketing • Cross sell/up sell • Defection marketing • Relationship marketing
Promotion analysis	<p>Improves return on investment (ROI) through better expense management and a more targeted approach that focuses on your most important customers, including:</p> <ul style="list-style-type: none"> • Promotion sales and uplift
Customer information	<p>Analyzes the market demographics in which you compete, including:</p> <ul style="list-style-type: none"> • Gender, age band, income band, number of children • Geocode analysis
Loyalty program performance	<p>Looks closely at the shopping behaviors of your most loyal customers to help you retain them and enhance their satisfaction, including:</p> <ul style="list-style-type: none"> • Customer lists • Sales by loyalty program

Merchandising Workbench

The RDW Merchandising Workbench is a support tool for senior executives, business administrators, and managers or supervisors who use reports to make corporate decisions. Other target users include merchants, retailers and analysts from Marketing, Sales and Finance.

The Merchandising Workbench provides a high-level, organization-wide perspective for analyzing the effectiveness of merchandising strategies, especially for grocery businesses and large fashion retailers. The utilization of Key Performance Indicators (KPI's) provides detailed analysis of various merchandising techniques in order to maximize profit, increase sales opportunities, and enhance product performance. The metrics in this workbench empower retailers and merchants with information to improve business processes, ensure effective utilization of retail space, conserve resources, and develop sales potential.

The Merchandising workbench is largely driven by core retail merchandising data from Retek's Merchandising System (RMS). Data is also incorporated from Retek's Behavior Profiling Tool and Retek's Planning Solution.

Reports

Merchandising reports are identified as Level 1. Level 1 reports contain retailer data only. Predefined reports are grouped into the following functional areas:

- Sales
- Inventory
- Merchandise
- Pricing/Cost
- Promotions/Profit
- Supplier

Reporting Area	Types of Reports
Sales and profit	Monitors actual performance versus plan and last year, including: <ul style="list-style-type: none"> • By type, to date, actual vs. LY, plan, fct • Pack reporting
Inventory management	Ensures that the right inventory stock is in the right place at the right time, including: <ul style="list-style-type: none"> • Inventory adjustments by reason
Product performance	<ul style="list-style-type: none"> • Improved exception reporting
Promotion analysis	<ul style="list-style-type: none"> • Promotion sales and uplift
Markdowns	<ul style="list-style-type: none"> • By type • Corporate versus in store
Price and cost	Examines current and historical item costs, as well as item retail prices, including <ul style="list-style-type: none"> • Net cost, net net cost, dead net cost • Competitor pricing
Supplier analysis	Improves vendor delivery efficiency, using standard scorecards that measure timeliness, accuracy and quality, including: <ul style="list-style-type: none"> • Supplier performance • Supplier compliance
Stock availability	<ul style="list-style-type: none"> • Contracts and availability • Unavailable inventory • Out of stocks
Stock ledger	Maximizes gross margin and gross margin return on investment (GMROI) through detailed analysis of financial results <ul style="list-style-type: none"> • Sales, stock, gross margin at subclass/location/week level

Store Operations

For Store Managers to make effective decisions, it is critical to have access to appropriate data. The Retek Virtual Back Office provides a reporting capability that addresses this access to appropriate data. The RDW Store Operations Workbench is one component of this reporting capability.

The data warehouse stores a high volume of historical data. This data can be used to identify trends and performance over different periods of time. Day to day operational reporting (i.e. Flash Sales Report, Day Close Report) is not provided by the RDW. Instead, this type of reporting is handled in ReSA.

Store Operations reporting in the RDW is available in two forms: predefined and ad hoc reporting. A number of predefined reports support industry decision making. These reports are grouped into functional reporting areas.

Reports

The Store Operations workbench has the following reporting areas and types of reports:

Reporting Area	Types of Reports
Store performance	Measures store sales, profit and inventory over time and compares to plan and last year, including: <ul style="list-style-type: none"> • Sales and profit TY/LY vs. plan • Location contribution • Local currency
Sales productivity	Provides immediate feedback to top and bottom performing employees, using exception-based sales reports to improve customer service, including: <ul style="list-style-type: none"> • Sales, profit, returns, number of transactions by cashier, salesperson • Cashier ranking • Transaction analysis by hour, minute
Loss prevention	Highlights high-risk transactions, including returns and voids, and monitors drawer close balances to reduce fraud and theft, including: <ul style="list-style-type: none"> • Sales audit analysis • Over/short amounts • Tracking high risk transactions—voids, post voids, no sales, returns, employee sales • Scanning rates—SKUs and credit cards • Coupon usage, tenders, and discounts • Voucher reporting
Stock availability	Optimizes supply chain efficiencies and reduces out-of-stocks through greater visibility to incoming merchandise, including: <ul style="list-style-type: none"> • Contracts and availability • Unavailable inventory • Out of stocks
Stock adjustment	Provides insight to stock adjustments, including the reasons for adjustment to reduce inventory control problems.
Supplier analysis	Offers standard scorecards that measure timeliness, accuracy and quality to improve vendor delivery efficiency, including: <ul style="list-style-type: none"> • Supplier performance • Supplier compliance

Chapter 11 Retek Active Retail Intelligence

Overview

Retailers spend a significant amount of time analyzing data and reports. This requires specialized skills and knowledge, and is very time consuming. The best people within your organization are not free to contribute to their full potential when they are spending lots of time analyzing reports.

Retek Active Retail Intelligence (ARI) addresses this issue and enhances system functionality through three features:

- Exception management, which automates line-by-line exception highlighting by creating a list of all exceptions in one report. This lets your business use its data in a timely, proactive manner.
- Workflow management, which provides process automation so that you can expedite your basic business processes and take appropriate action to improve the efficiency and effectiveness of business resources.
- Process modification, which combines the exception and workflow management features to help you implement a process flow or change involving another Oracle-based product.

ARI is a strategic investment that helps retailers manage their business with rules tailored to their specific retail processes.

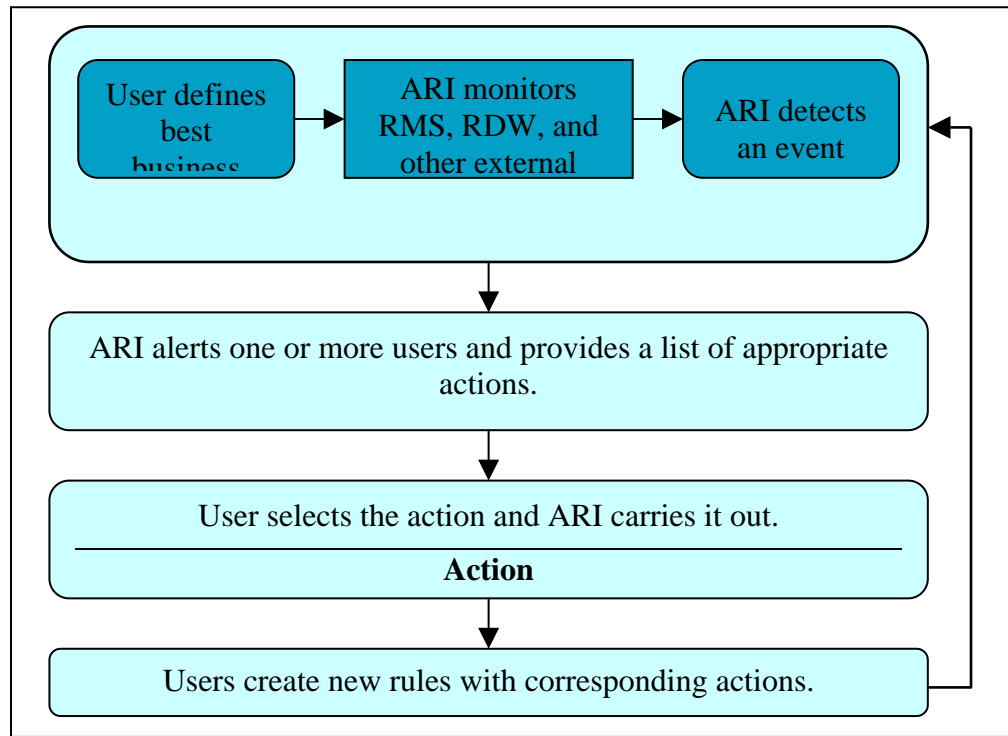
ARI acts as a highlighter pen and only gives users data that is useful to them and consistent with the global priorities of the business enterprise. In addition, ARI goes one step further and suggests appropriate actions to be taken on that information. These actions can be user-driven, or they can be automated, based on your best business practices. ARI then provides a foundation for continuous business improvement.

Retek helps you look at your current business processes and how best to implement ARI into the processes to ensure a smooth business modification. ARI can enhance your business process by automating procedures such as event review and notification. You can then use ARI 9.0 to update changes to your legacy Retek systems.

ARI works with any Oracle-based application such as the Retek Merchandising System (RMS) and the Retek Data Warehouse (RDW) to form an integrated, continuous loop solution. ARI takes the information provided by these Oracle applications and presents recommendations to users who, in turn, can convert that knowledge into a corrective action.

With ARI overseeing the flow-through of information, you can make the most of every opportunity and react more rapidly to a highly competitive marketplace and ever-increasing customer expectations.

The following diagram shows the ARI process flow.



ARI Process

Who Uses ARI?

There are two main groups of ARI users:

- ARI administrators, who are responsible for setting up and maintaining your ARI system.
- ARI end users, who receive and respond to alerts.

ARI Administrators

Much of the ARI user interface is directed at the people in your business who are responsible for configuring and maintaining ARI. These users define the business rules under which ARI performs exception management. Ideally, configuring ARI is a cooperative effort involving these individuals:

- A *business analyst*, who has both a functional understanding of the business and a technical understanding of the software used in the business.
- A *database administrator* who has database knowledge and Oracle programming skills.

In this cooperative effort, business analysts work with members of the business to define requirements and with database administrators to implement the requirements. A business analyst may take on the major portion of those responsibilities.

ARI End Users

The ARI end user receives alerts and takes actions to resolve the alerts. Any user of Retek products, such as the Retek Merchandising System (RMS), could be an ARI end user. The ARI end user interface consists of two main dialogs, one for alerts and one for viewing events associated with the alerts.

Benefits

ARI provides the following benefits:

Benefit	Description
Deployable across all Retek products	Can be deployed across Retek's suite of products and should be an integral part of the deployment of Retek components, modules, and integration efforts.
Integrates business processes	Provides an integrated exception reporting and workflow management tool through a single workbench designed for ease of use, flexibility, and business relevance.
Integrates with non-Retek systems	Can be configured to monitor data from other Oracle-based systems external to the Retek suite.
Saves time and resources	Reduces time spent analyzing reports substantially, freeing up your skilled resources to add value elsewhere in the business process.
Reduces need for custom reports	Cuts down on custom report development by moving to the exception-reporting model. This is a shorter implementation cycle at a lower cost.
Action notification	Appropriate actions are tied to the exception, enabling users to complete work quickly while enforcing good business practices.

Exception Management

ARI's primary role is exception management. In this role, ARI performs three basic functions in the enterprise:

- Exception detection
- Exception notification and presentation
- Exception resolution

Exception Detection

ARI searches the transaction database and the available data warehouses for user-defined exception conditions. When one of those conditions is met, ARI notifies the appropriate people and recommends corrective actions based on business rules that the retailer defines.

Note: For example, if the sales generated by a new item rise faster than expected in the sales forecast, ARI alerts the appropriate buyer to step up reservation on inventory with the supplier. Conversely, if sales are lower than expected, ARI notifies the buyer and prompts to cancel outstanding orders.

Exception Notification and Presentation

If inventory begins to pile up in an area (whether due to slow sales, poor allocations, infrastructure, or other causes), ARI notifies the appropriate individuals (store managers, merchandisers, and so forth) to transfer the goods to where they can be sold and recommends a strategy for preventing the future overstock.

ARI can also monitor the markdowns, promotions, and clearance strategies buyers propose. Categorizing the effect of price movement with the current and expected rates of sale, ARI can recommend adjustments in the price change.

Exception Resolution

Business rules drive the exception management process and govern the activities of ARI throughout the process of exception resolution. Rule sets are used to:

- Define the conditions that constitute an exception. The merchandising systems and available data warehouses are polled for occurrences of situations described by users or systems models.
- Identify the users to be notified that an exception has occurred. After an exception is detected, the information is conveyed to one or more end users for resolution.
- Determine that actions are available to resolve the exception or move the resolution process forward. The user selects from a list of appropriate actions, and then ARI carries out that action.

ARI can monitor systems for exception conditions in real time or periodically. An exception definition is generally a minimal set of conditions, such as change in value in a column of a database table.

When the monitor encounters an exception condition, ARI retrieves and evaluates additional data to verify whether an exception has occurred. If the exception is valid, ARI builds an event. The event contains all of the information that is required for notification and processing the exception conditions.

To change or set up new rules, ARI has a wizard that walks users and administrators through the process of setting up rules and corresponding actions to be monitored in the databases. These can be global rules that apply to a group of users or personal rules that are created for a specific individual.

Having a powerful tool such as ARI overseeing the flow-through of your information helps you make the most of every opportunity:

- Reacting more rapidly to a highly competitive marketplace
- Changing and diversifying lifestyles
- Increasing customer expectations

Workflow Management

ARI can be accessed through a client viewer or a Web browser. You interact with ARI through two user interfaces: the Alert Viewer and the Event Viewer.

Alert Viewer

The Alert Viewer alerts you to events that require your attention. It is your first look at events to which you are assigned individually or as part of a group. The Alert Viewer acts as a gateway to access events and take actions to resolve the exceptional data conditions driving those events.

ARI 9.0.0.0 provides an e-mail alert notification option. In addition to the traditional alert distribution, alerts are formatted in either long or short text formats. An API is provided for exporting these alerts to both formats as they occur. You can then send the alerts to an e-mail gateway or, with minimal custom effort, a fax or pager gateway.

From the Alert Viewer, you link to more details about the event and actions you can perform to resolve the event, as displayed in the Event Viewer.

The Alert Viewer shows end users the priority and a count of the number of instances of each event type assigned to them. New alerts can be deferred out of New status, but opening the Alert Viewer does not automatically take an alert out of New status. An alert is new until it is deferred or the event it represents is closed.

Alerts displayed in the Alert Viewer are selected using a filter. Filters consist of an event type, state, and other criteria, such as date and priority of the event.

Using the Alert Viewer, you can:

- Retrieve events by applying default or user-defined filters to event data.
- Add and maintain user-defined filters.

Note: For example, you can filter the view of events to see events from a certain date, of a certain state, or a combination of filtering criteria.

The list of events assigned to you is displayed on the upper right part of the Alert Viewer. The information displayed about each event includes:

- The event's priority
- The name of the event
- The event state
- The event count, or number of instances of the event

You can view all new alerts and act on them immediately or defer alerts and resolve them later. From the Alert Viewer, you link to more details about the event and actions you can perform to resolve the event, as displayed in the Event Viewer.

Event Filter

Events displayed in the Alert Viewer are selected using a filter. For example, you can filter to view events for a date, a priority, or a combination of filtering criteria. You can use or edit an existing filter or create a new filter.

There are system-provided filters and user-defined filters. Alert recipients can create, modify, and delete user-defined filters.

Users and Groups

User groups are designed to allow easy event routing. A user group can be linked with event conditions. When the event conditions are met, the routing process uses that group to build a list of users eligible to receive the event. You can define user and group identifications to determine who receives which alerts.

An ARI user definition consists of data relating to the individual, preferences for working in ARI, advanced options for notification, status, and specific rules for routing events to that user. You can also specify who receives the alerts when the user is inactive.

A group combines users based on some common characteristics. Typically, groups represent aspects of the company's business model that are mapped back to individual users. For example, you can define groups to reflect employee work areas, such as store or department, or to reflect job roles, such as buyer roles or invoice matching teams.

ARI administrators define and edit users and groups.

Event Viewer

When you choose to perform an action on an event that ARI displays in the Alert Viewer, the system brings you to the Event Viewer. The Event Viewer displays details about events, including an opportunity to drill into the system to further examine the cause of the event, and the actions you can take to resolve events. Messages about the event are also displayed. These messages include:

- Why the event was created
- A list of every user who has forwarded the event
- Messages included with the forwarded event
- Errors encountered during the event's lifecycle

Details of Event

The event details tell you more about the event and let you go to the event's source. If the event detail is an image or a long-text file, the detail's value in the right column is a hypertext link. You can click the hypertext link to view the image or text file.

Actions

In ARI 9.0.0.0 you can decide what actions you want implemented on the system.

Note: For example, you can choose to be notified of an event, or you can set up the system to resolve that event after notification.

A list of actions that are associated with the selected event type is displayed. An action can be called via the Event Viewer to resolve the exception that triggered the event. ARI administrators can set up these actions when they are defining events.

Actions can vary greatly, depending on the event. The action may take you to portions of the merchandising system to perform actions such as approving purchase orders or creating new purchase orders, or cause a message about the action to be displayed.

Revalidation of Events

To ensure that the events you are working with are current and relevant to you, ARI provides several event revalidation options. Revalidation is necessary because ARI monitors live systems in which users are constantly modifying data.

Depending on the event, the modifications may cause the event to become irrelevant.

Note: For example, a low inventory condition that requires reordering may be taken care of by an inventory adjustment in which demonstration stock is converted to floor stock available for sale. Consequently, the event can be resolved quickly without reordering any stock.

If an event is susceptible to such changes, generally revalidation is scheduled as part of the definition and done automatically. However, it is still important to have current information, so users have the option of revalidating at any time, regardless of whether an event needs frequent or infrequent revalidation.

Process Modification

The 9.0.0.0 version of ARI can help shorten the amount of time your system and process modifications take as you change or upgrade your system with Retek products. Because the modifications are less invasive of the system being modified than they might be if they were made without ARI, you can more easily apply patches and upgrades to the modified system.

Chapter 12 Retek RetailCRM

Overview

Today's consumers shop around in stores, online, and through catalogs, kiosks, and a handful of other channels. Sometimes they need the convenience of a virtual purchase, while at other times they want to see the merchandise in person before opening their wallets. Perhaps they enjoy the speed of buying over the Web through their cell phone or personal computer, but also enjoy making leisurely selections from a catalog.

As consumers continue to buy through multiple formats, retailers must be equipped to make use of direct-to-consumer channels or risk losing out to the competition. Retek RetailCRM provides all of the software necessary for retailers to sell directly to their customers. Even more importantly, Retek RetailCRM is integrated into Retek 9.0.0.0 suite to provide an end-to-end, customer-oriented solution. Retek RetailCRM helps with:

- Product selection and purchase
- Customer information tracking
- Personalized retention
- Shipping and distribution operations

Retek RetailCRM works easily with other Retek solutions such as Retek Merchandising System (RMS) and Retek Distribution Management (RDM). As such, Retek provides a complete integrated solution from a single vendor, eliminating the challenges of integration of third-party solutions.

This cross-channel integration, together with complete customer order processing functionality, means that Retek RetailCRM enables you to serve and respond to each customer on an individual basis. This one-to-one service is possible in real time and through the customer's preferred channel, making Retek RetailCRM a critical component of your customer relationship management programs.

Benefits

Retek RetailCRM offers the following benefits:

Benefit	Description
Multi-channel retailing	<ul style="list-style-type: none"> • Retek RetailCRM brings multi-channel functionality to retailers through a cross-channel integration of all customer interactions. • Retek RetailCRM provides the last link in a true “one view of the customer” across all channels. By processing transactions through a central location from every direct sales channel, Retek RetailCRM brings one view of the customer to your organization in a real-time order database. • Leveraging data from one channel through another, Retek RetailCRM lets retailers promote cross-channels, up-sell/cross-sell, track customer value throughout the enterprise, and provide the highest level of service to the customer.
Pureplay Internet retailers	<ul style="list-style-type: none"> • Retek RetailCRM gives e-retailers the most robust system available to run your Web store. Purchasing, call handling, financial approval, customer service, and fulfillment are all provided through this system. • When your business expands with customer service/call centers, or through brick and mortar storefronts, Retek RetailCRM grows with you. The system’s scalability and robust functionality serve e-retailers throughout your development, giving the power you need as your business expands.
Retail customer relationship management	<ul style="list-style-type: none"> • By centralizing this comprehensive view of the customer, Retek RetailCRM provides real-time information on the customer relationship that all departments can access. Customer service, assortment planning, marketing, and merchandising all operate from the same customer system. • Through the flexibility of the system, you can control the point of interaction consistently across all customer touchpoints, providing the highest level of service whenever the customer interacts with your organization.
Customer direct fulfillment systems	<ul style="list-style-type: none"> • With individually based transactions coming from customer direct channels like the Internet, call centers, and kiosks, distribution centers can now manage warehouse and fulfillment operations based on that individual customer demand. • Retek RetailCRM brings the detailed purchase and shipping data, with the personalized information retailers need to optimize larger shipments to retailers’ distribution systems. Receiving, scheduling, reporting, cross-dock/reservation, and shipping operations are integrated and grouped according to the distribution required.

Interfaces

Retek RetailCRM has the following interfaces:

- Open interfaces
- Batch interfaces
- Real time interfaces
- Oracle application interfaces

Global Commissioning

Global Commissioning provides real-time marketing information on sales, points, and commissionable volumes for multi-level sales representative and distributor compensation. It tracks and reports award eligibility for distributors who have achievements in accordance with the parameters set up in the distributor awards programs.

The Global Commissioning module is capable of single and simultaneous genealogy in multiple countries using country-specific languages and currencies accordingly. Multiple compensation plans within the direct selling or multi-level marketing enterprise can be managed without limit to the downline organization.

Features

The Global Commissioning module performs the following functions:

Function	Description
Process commissions	<ul style="list-style-type: none"> • Maintains the commission periods • Processes historical commission adjustments • Monitors distributor performances and volume summaries • Reviews distributor leg organizational points • Interfaces distributor payables information from commissions • Reviews commission details and distributor recognitions • Reviews distributor commission history information
Maintain commission history	<ul style="list-style-type: none"> • Maintains distributor historical points, volume, and instant qualifier information • Monitors breakaway and payment history information • Processes manual promotions
Monitor distributor performance	<ul style="list-style-type: none"> • Reviews distributor performances by period to include achieved level, points, volumes, and legs per commission period • Reviews total commission summaries by commission type • Reviews distributor payment adjustment summaries by adjustment reason
Review distributor volume summary	<ul style="list-style-type: none"> • Reviews a distributor's volume summary records • Reviews a distributor's order volume summary records • Reviews a distributor's volume summary records by commission type (personal, group, etc.)
Maintain payables distributor interface	<ul style="list-style-type: none"> • Transfers invoice data from consumer commerce to accounts payable • Creates and confirms the invoice payment batches • Prints checks and activity reports

Order Management

Order Management is a high-speed, high-volume and multi-channel consumer order processing system. Order Management also features order fulfillment and many other robust features designed to maximize the potential of every transaction.

Order management helps retailers:

- Structurally manage transactions/orders from any channel at a consistent levels of quality
- Enhance the buying behavior through services and promotions that maximize those transactions.

Order management includes options such as order entry, data transfer to fulfillment processing, item inventory, and item pricing.

Features

The Order Management module performs the following functions:

Function	Description
Enter orders	<ul style="list-style-type: none"> • Generates orders via multiple channels including telephone operator, telephone touch-tone voice response, e-mail, or point of sale customers. • Defines frequency, start, and end dates for recurring orders and change and/or cancel auto ship contracts. • Enters customers orders and produces sales receipts for point of sale transactions. Calculates change based on cash transactions. • Specifies order and marketing sources for statistical tracking.
Host customer information	Hosts all customer information and customer profiles. Customer model includes standardized address information, multiple ship-to and bill-to addresses, and multiple shipping information.
Host distributor information	Supports a global numbering system to handle organizations that span the globe. Distributors include name and paternal name, distributor ID, multiple names and addresses for bill-tos, and ship-tos
Process orders	<ul style="list-style-type: none"> • Processes orders and returns • Performs packing and shipping functions • Provides open, inquire about, and close manifests • Automatically or manually creates and relieves item reservations
Inventory	Performs item management and price/discount management.
Customer service	Includes customer lookup, order history lookup, activity lookup, and notes capture/retrieval.
Interfaces	Retek RetailCRM includes open interface tables to: <ul style="list-style-type: none"> • General Ledger • Direct marketing • RDW • Credit card authorization • Debit card authorization • Interactive voice response (IVR) • Postal address standardization

Chapter 13 Retek Price Management

Overview

Retek Price Management is a product that provides a method of using business notes and exception-based markdown processes to improve your bottom line. Price Management provides flexibility and is easily configured to your unique business needs.

Additionally, Retek Price Management integrates fully with both RMS and/or your existing retail systems to radically improve the markdown process.

Price Management provides for a well-defined and easy-to-use price change process that allows for aggregated permanent and clearance price change execution. The process is as follows:

1. Corporate rules select candidates from all products that may need a price change thus providing a best practice framework for each markdown cycle.
2. The product manager refines this selection using appropriate rules for each product class, style, or range. Rules can be dynamically built, tested, and executed. Rules can also be stored for reuse.
3. Price change guides are applied to markdown candidates to identify the markdown liability and to understand the unit and dollar impact.
4. Presentation of departmental markdowns allow for aggregated and detailed review and approval.
5. Reworking of markdowns after review is simple and easy to execute.
6. Final price changes are executed in legacy or Retek transaction systems.

The foundation for Retek Price Management uses a toolset to develop, maintain, and apply a set of markdown rules. Retek Price Management is a straightforward process to define rules for common requirements such as aging inventory, seasonability performance, promotions, and vendor-related issues. These rules can be set at the corporate and buyer level, and are priority-driven.

Retek Price Management's purpose is to automate and streamline the merchandise price change business processes.

The performance of a product is not just determined by your planned margin; it is measured on the actual one. Therefore, it is important to manage to overall margin, which means managing markdowns across the organization carefully.

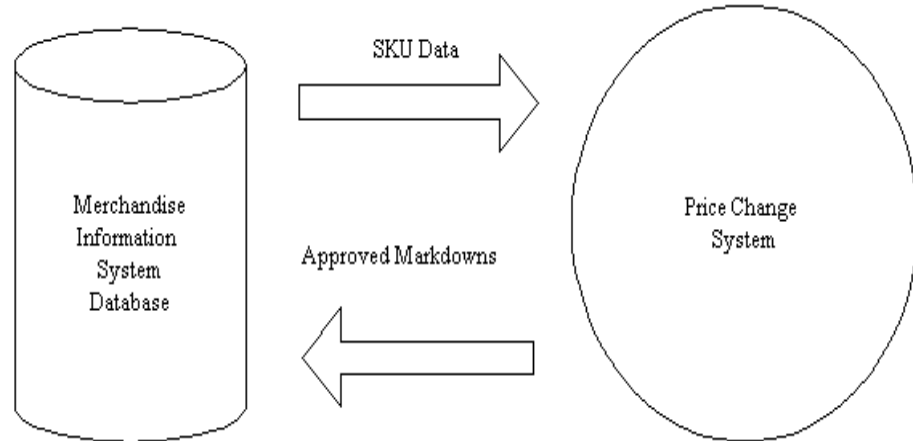
- Each markdown should be considered carefully so that the desired rate of sale can be achieved, without giving up money or customer service.
- The price elasticity of a product may mean that the sales will not be adversely affected if the price is increased. In fact, sometimes the reverse is true.

The system automates and streamlines the price change process through the use of:

- Automated candidate generation processes that suggest price changes for buyer selection based on corporate and department level rules
- Online processes to help buyers quickly review suggested price changes and confirm selections within their budget allocations
- Online control processes that provide Merchant Information Office (MIO) personnel with the ability to configure the automated rules processing
- Import and export functions that interface with Retek Merchandising System (RMS)

System Interaction

The Retek Price Management product interacts with merchandise information system, as illustrated in Figure 1.



System Interaction

At the start of the price change process, SKU data is extracted from the merchandise information system and loaded into the price change system for processing.

Once the price change process has been completed, approved price changes are sent to the merchandise information system for further processing.

Features

Retek Price Management offers significant features that conventional systems do not offer. The following table shows the differences between conventional systems and Price Management.

Conventional System	Price Management
Detailed review of all SKUs	Review exception list of candidates
Hand annotate and calculate legacy reports	Interactive, online analysis and feedback
Requires buyer to execute at corporate offices	Internet enabled for offsite execution
Lack of consensus on priorities	Priority ranked markdown rules
Variable practices	Best practices
Open loop system	Closed loop systems

Additionally, Retek Price Management has been designed as an easy-to-integrate module. This has several advantages, including:

- Uses all the standard RMS tables and price change execution engines
- Can be used with any version of RMS
- Does not require modification to the base RMS solution
- Can be implemented and deliver benefits quickly. Most retailers would look for payback within three to five markdown cycles
- Can be implemented against other, non-Retek transaction systems

Benefits

Retek Price Management lets you define, maintain, and use all rules needed to drive your business, as well as maintain a central, user-defined set of price guides that are applied to all markdown calculations. By using Retek Price Management, a retailer can effectively manage a large number of SKUs to ensure the correct price of each item at the store, catalog, or Web site.

The Retek Price Management product offers the following key benefits:

- Reduces time and effort required to take markdowns
- Adopts a rules-based approach in promoting best practices across the entire business
- Provides flexible markdown scheduling and optimized budget allocations
- Allows for taking markdowns at appropriate levels—applying the correct business rules for each category, class, or style to ensure optimal performance across the business
- Supports Internet-enabled markdown selection and execution

Chapter 14 Design

Overview

Retail is all about events, products, people, and time. Retek's Design product cuts product development times by networking everyone involved in product design around a central design database. A highly visual service, Design enables entire product ranges to be conceived, developed, and finalized electronically. Design enables your team to communicate creative ideas with 100% accuracy.

Using a digital camera and a scanner, Design makes it possible for you to visually capture and share initial ideas and concepts from the outset. As new assortments are built, historical information can be re-used to cut down on the production time on like-for-like products and to avoid repetition of costly mistakes.

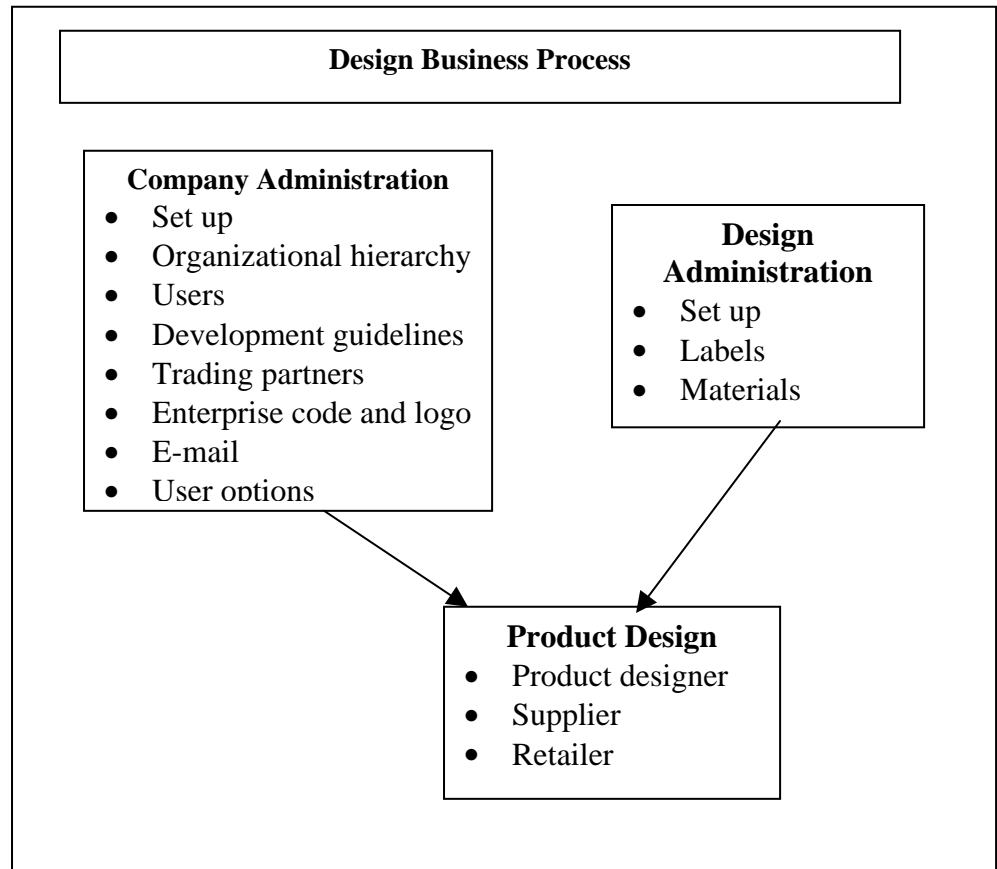
You can work jointly with trading partners and others to complete details of each new product, including multiple images of the product, costing, pricing, size and color information, and design specifications. This central development resource eliminates any uncertainty in supplier communications. Also, because no details are lost or misunderstood, collaboration via the Design product saves time and anxiety, and fosters improved relationship with your retail customers

Process

To use Design, you and your trading partners must register with retail.com and subscribe to this e-service. Once activated, you can access Design through a simple log in process.

All retail.com e-services are Web-based. All that is required is an Internet connection and your choice of Internet browser. Preferred browsers are Internet Explorer 4.0 + or Netscape 4.0+.

The following figure shows the Design business process.



Features

Design offers you multiple features, including:

- Easy-to-use interface
- High level of security and privacy
- Digital sticky notes highlight design specification
- Initial ideas and concepts shared in real time
- Virtual scrapbook maintains images
- Buyers' worksheet provides an arena for team development of product details
- Summary section provides key information
- Easy-to-use, Web-based system lets you conceive, develop, and finalize your entire range of products on-line

Benefits

Design offers general benefits to all users plus specific benefits to both retailers and trading partners.

- Increases sales through tighter collaboration with your customer
- Provides a single point of contact to communicate detailed product plans pictorially across the Internet, allowing for prompt reaction to demands
- Reduces travel costs and pre-production meetings by communicating all key design specifications and labeling requirements
- Enables suppliers to view all product costing before committing to a final selling price
- Decreases costs to create product samples
- Saves time and expense of finding a historical record of design changes made to merchandise

Retailer Benefits

- Brings the right products into your store faster
- Connects everyone involved with the trading process
- Assures your control over who participates in the process and has access to your designs
- Eliminates pre-production meetings and reduces travel costs
- Increases accuracy of data

Trading Partner Benefits

- Dramatically reduces product development time
- Shrinks inventory and carrying costs
- Decreases cost of product samples
- Increases sales through tighter collaboration with customers