# Retek® Merchandising System™ 10.1.7

# Release Notes

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# Customer Support

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| **E-mail** | support@retek.com |
| **Internet (ROCS)** | rocs.retek.com<br>Retek's secure client Web site to update and view issues |
| **Phone** | +1 612 587 5800 |

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| | |
|---|---|
| Australia | +1 800 555 923 (AU-Telstra) or +1 800 000 562 (AU-Optus) |
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**When contacting Customer Support, please provide:**

- Product version and program/module name.
- Functional and technical description of the problem (include business impact).
- Detailed step by step instructions to recreate.
- Exact error message received.
- Screen shots of each step you take.

# Release Notes

## Overview

Please review the enclosed DEFECT documents promptly to establish the impact on your business operations. Retek Customer Support investigates submitted issues with the assumption that all release patches have been applied. While it is ultimately at the client's discretion as to when to apply patches, delays or lags in their application can complicate the support process. To assist in the patch review, Retek Customer Support provides a system-level assessment by assigning a Priority. In addition, a cross-reference spreadsheet is provided to assist with this research (see 'DEFECT Documentation' below).

As listed below, this patch contains both general product fixes and functional enhancements and is considered the RMS 10.1.7 release. Refer to the 'RMS Fixes' and 'RMS Enhancements' sections of this document for more details.

**Fixes** – Oracle 9i Forms Upgrade; Sales Audit; Item Maintenance; Organizational Hierarchy; Invoice Matching; Cost Management; Purchase Orders; Transfers; Receiving.

**Enhancements** – Integration with Retek Master Data Management (MDM).

Before installing RMS 10.1.7, confirm that RMS 10.1 and all following patches (RMS 10.1.1, RMS 10.1.2, RMS 10.1.3, RMS 10.1.4, RMS 10.1.5, RMS 10.1.6) have been applied.

The 10.1.7 patch release contains batch, package, forms program modifications. Refer to the 10.1.7 patch documentation (located in the doc folder on this CD) for detailed information on each fix.

As with all patches, the following points should be considered before applying RMS 10.1.7:

- Copy the original files to an archive directory before you overwrite them in case they are later needed for reference.
- Note that the cutoff date for RMS 10.1.7 was February 20, 2004. Fixes that you've received after this date and applied to your environment may require special consideration when applying this patch.
- Note whether customizations have been made to the module. If so, the customizations will need to be reapplied to the new version of the module (or the fix may need to be applied to the custom version of the code).

## DEFECT Documentation

A DEFECT fix is a modification to the base Retek code (e.g. a bug fix, performance enhancement, or functional enhancement). Each DEFECT fix included in this patch has a corresponding DEFECT document in the \doc\defect_doc folder titled <DEFECT#> <module>.doc (e.g. "123456 nxprcno.doc"). DEFECT documents should be fully reviewed before this patch is implemented.

To assist with the patch application process, there is also a DEFECT module cross-reference spreadsheet in the same folder (DEFECT MODULE XREF 1017.xls) which lists and allows sorting by DEFECT, Program Name, Revision #, Functional Area, Priority, and Defect Description. The spreadsheet includes a full list of all the previous patch DEFECT modules, plus tabs showing DEFECTs related to the current patch, and current DEFECTs broken out by module types.

# RMS Fixes

As mentioned earlier, RMS 10.1.7 includes general product fixes. Refer to the 'RMS 10.1.7 Patch' tab in the DEFECT module cross-reference spreadsheet (DEFECT MODULE XREF 1016.xls) for DEFECT, module, functional area, priority, and description. This is a complete list of fixes included in the patch. Please read the provided documents for details (see 'Defect Documentation'). Description of several noteworthy fixes follows.

## 9i Oracle Forms Upgrade

Oracle Forms 9i is supported with RMS 10.1.7. An upgrade is not mandatory with RMS 10.1.7; Forms 6i will continue to be supported until Oracle's de-support in December 2004. Retek advises waiting until the release of Oracle's 10G application server (9i) Forms/Reports (mid-April 2004).

New clients, without prior builds on RMS 10.1.x, on Forms 9i can apply all preceding patches on Forms 9i with the expectation that there will be errors with the forms (see defects listed below) until RMS 10.1.7 is applied.

Existing clients with builds up to the RMS 10.1.6 patch, that choose to upgrade to Forms 9i, can apply the 10.1.7 patch and then upgrade forms. Fixes specific to the upgrade are listed below.

- **Defect 360343** - The URL is appended with 'forms90' next to the server and listener port for reports run on 9i and a 'Page cannot be displayed' error occurs.
- **Defect 360307** - The itemfind form has some text fields bottoms cut off when upgrading to Forms 9i.
- **Defect 360086** - The rtkstrt form doesn't populate the right hand side menu when running RMS with Oracle 9i forms builder.
- **Defect 360274** - User receives ORA-06502: PL/SQL: numeric or value error when entering from the Item search window and when reentering the form from another window.
- **Defect 360242** - Compilation error when compiling itemsupp.fmb on the Oracle 9i forms builder: default value of parameter "I_CALLING_FORM" in body must match that of spec.
- **Defect 365250** - Miscellaneous issues with 9i forms upgrade:
  - Receive the following error when attempting to create item via Quick Item Entry: ORA-06502: PL/SQL: numeric or value error.
  - Receive following errors when attempting to create retail price change: FRM: 40202-Field must be entered; FRM: 40222-Disabled item 'B_PRICE_SUSP_HEAD.SKULIST' failed validation.

## Advance Fix Notifications

Over the last quarter Advance Fix Notifications were sent for the following defects. Both of these fixes should be applied immediately after the 10.1.6 patch:

**Defect 358870** - When creating a new purchase order, an error is displayed stating, "Order Number is invalid.

**Defect 359074** - Control script c357602.sql was excluded from Defect 357602.

### Sales Audit

**Defect 357736** – ReSA did not handle rounding due to the denominations in different markets. This rounding issue can best be explained by an example:

> The customer buys a set of items totaling 2064 KRW. The smallest payable amount is 10 KRW. The customer therefore pays 2060 KRW. ReSA does not accept that the Total Tendered does not match the Total Sales. Modifications for this Defect are to support the above requirement.

Refer to the Sales Audit appendix for an overview of two new forms: Currency Rounding Rules Header Maintenance [sarrulhd] and Currency Rounding Rules Detail Maintenance [sarruldt].

## Trade Management

**Defect 363973** – Updated RTM Control Scripts for 2003/2004 data installation: hts_headings.sql; oga.sql; tariff_treatment.sql.

### Stock Ledger

**Defect 361690** – Salweek's c_two_half_store cursor only doing order by store but while doing a comparison it is expecting the half_no to be in ascending order. Under certain conditions the program is fails with the following error message:

> salweek_11~20040207172254~get_location_info~half_data_budget~1403~-1403: non-ORACLE exception ~Invalid dept [2001], store [0000000976], half [20041]

**Defect 361818** – Salmth calculates the opening and closing stock cost and retail incorrectly. When no transaction has been taken place for a store, then the program ends with opn_stk_retail/cost and cls_stk_retail/cost as zero instead of its previous value in the MONTH_DATA table.

## Transfers

**Defect 360196** – When a transfer is manually closed online, the stock on hand is not handled ideally for items shipped but not received. The inventory is place back at the shipping location. This defect is an enhancement to handle those quantities differently.

**Defect 360197** – Stock orders with the status of Expired are setting transfers and allocations to Close incorrectly.

### Item Maintenance

Defect 353808 – The 10.1.5 patch added a new item form for quick item entry. The new item form, itemadd, has a combination of features from the forms itemmaster, itemsupp, and itemsuppctry. It does not have all of the features of these forms, but has enough to create and approve an item without accessing any other forms. This is designed for a basic item that will only come from one supplier and origin country, and will only have one set of dimensions. See Quick Item Entry appendix for additional details. All supporting documentation for this fix was included with 10.1.5.

### Miscellaneous

Defect 353841 - The 10.1.6 patch excluded package invattrb.pls v1.3 from Defect 353841. Patch 10.1.7 Defects 357717 and 358740 include the invattrb.pls code (v1.4 and v1.5). All supporting documentation for this fix was included with 10.1.6.

# RMS Enhancements

### Integration with Master Data Management (MDM)

Retek's Master Data Management (MDM) provides seamless integration from MDM 10.0 to RMS 10.1.7. All item data created in MDM is published to RMS.

Through MDM Retek now offers an enhanced and more robust user experience for auto item induction and item management in MDM while maintaining the strong integration of items within Retek's solution suite through RMS. For customers implementing MDM, it is assumed that item induction and management will be performed in MDM because of the additional flexibility, usability, and features. The items created and updated in MDM are sent to RMS real-time for use anywhere in RMS and other integrated applications as items are currently.

Interfaces were created for the following functional areas: Suppliers, Locations, Items, Seasons and Phases, and Seed Data. Given assumption that MDM is the single point of entry for item management, RMS has been changed to remove access to the item dialog for most information that is entered in MDM. Access has moved from the RMS item dialog to another folder for two functional areas:

- Replenishment setup (now accessible for the RMS Inventory folder);
- Unavailable Inventory (now accessible for the RMS Inventory folder).

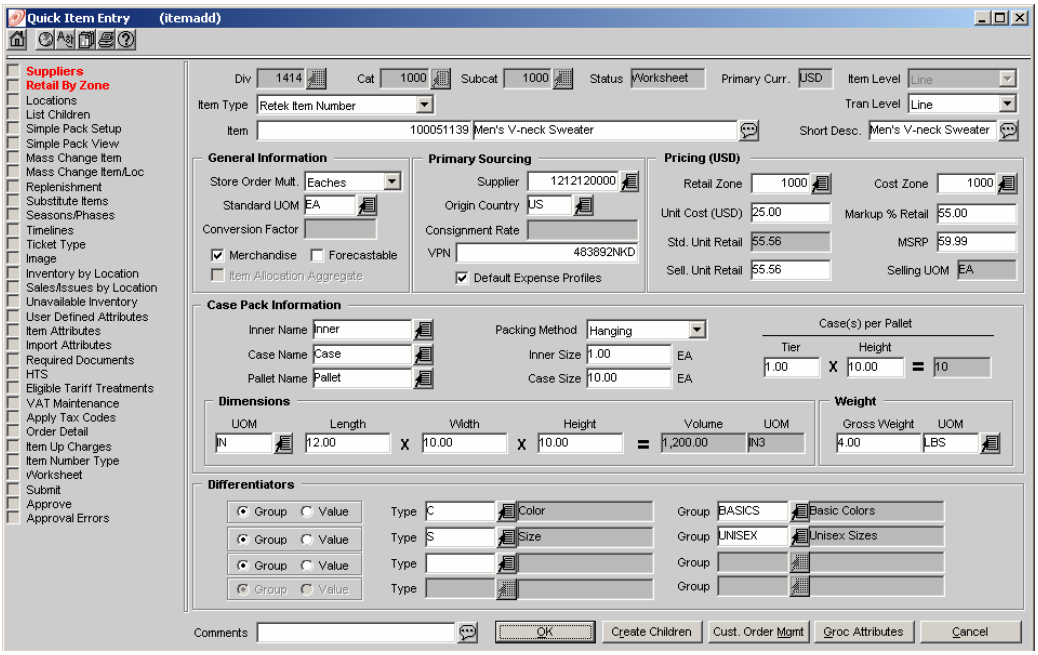
The 'RMS/MDM New Integration Point Summary' in the Integration with Master Data Management appendix provides the specific functional areas that will remain in RMS and where the new access point is from either in MDM or RMS. The appendix provides also an overview of the MDM interfaces with RMS by functional area.

# Quick Item Entry

## Quick Item Entry (itemadd)

A new form was created to simplify the item creation process. This new Quick Item Entry form allows users to create a new, single level item, with one supplier and one origin country, in Approved status, using just one screen. Fashion Items with parents and children will require up to four screens at a minimum. The layout and functionality of the form is very similar to the Item Master form with a few additional fields from the Item Supplier and Item Supplier Country forms.

When creating a staple type of item with no reference items the user will only need to enter in one screen to create an approved item.



# Difference between Quick Item Entry and Item Master

The user is allowed to create an item without being forced to go to the Item Supplier, Item Supplier Country, and Retail By Zone forms. The required fields from the Item Supplier and Item Supplier Origin Country forms have been added to the Quick Item Entry screen. With regards to the Retail by Zone form, the Quick Item Entry form assumes the values defaulted are acceptable. The processing is the same as if you went to the Retail by Zone form from Item Master and without making any changes pressed the OK button.

The creation of children items is performed exactly the same as it is via the standard Item dialog. The RCOM Attributes button and window were renamed to 'Cust. Order Mgmt.'. The 'Groc Attributes' button will only be displayed if the new System Option – Grocery Items Indicator is set to 'Yes'. The only other difference between Quick Item Entry and Item Master is that an Item can go directly from Worksheet to Approved Status in Quick Item Entry.

## Primary Sourcing Information

- Primary Supplier (Item Supplier)
- Primary Origin Country (Item Supplier Country)
- Consignment Rate (Item Supplier)
- VPN (Item Supplier)
- Default Expenses Indicator (Item Supplier Country prompts user with a message on whether or not to default expenses)
- Unit Cost (Item Supplier Country)

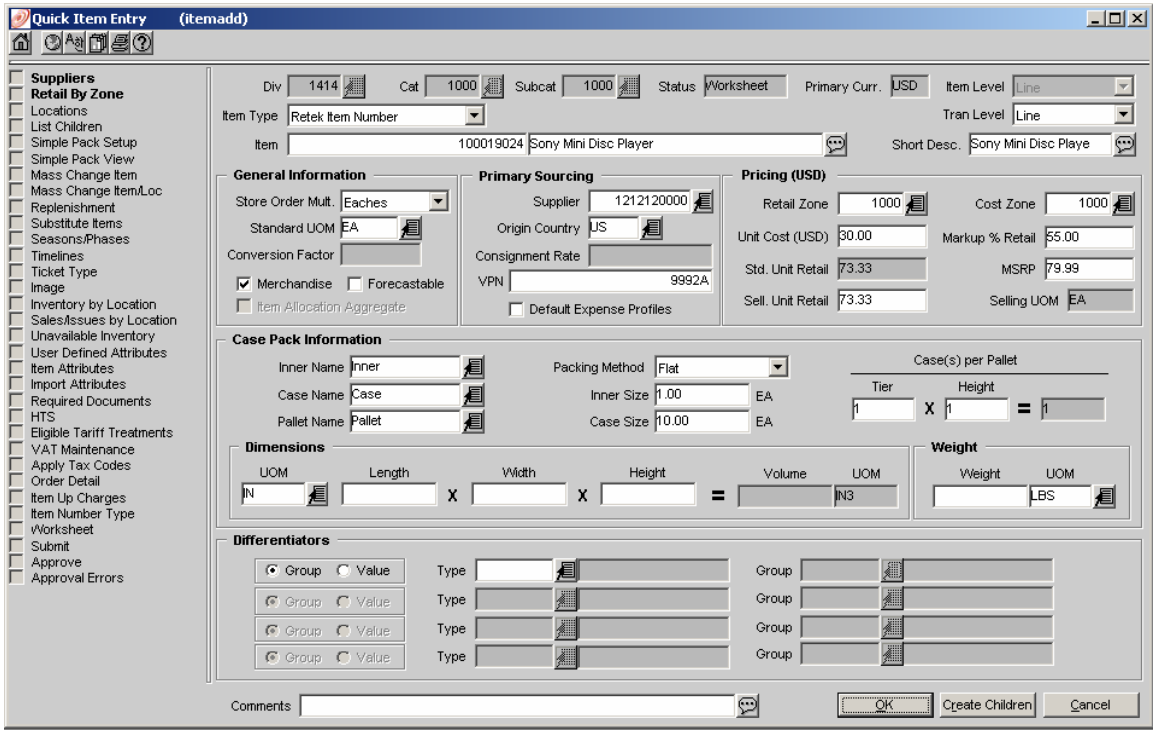
### Case Pack Information

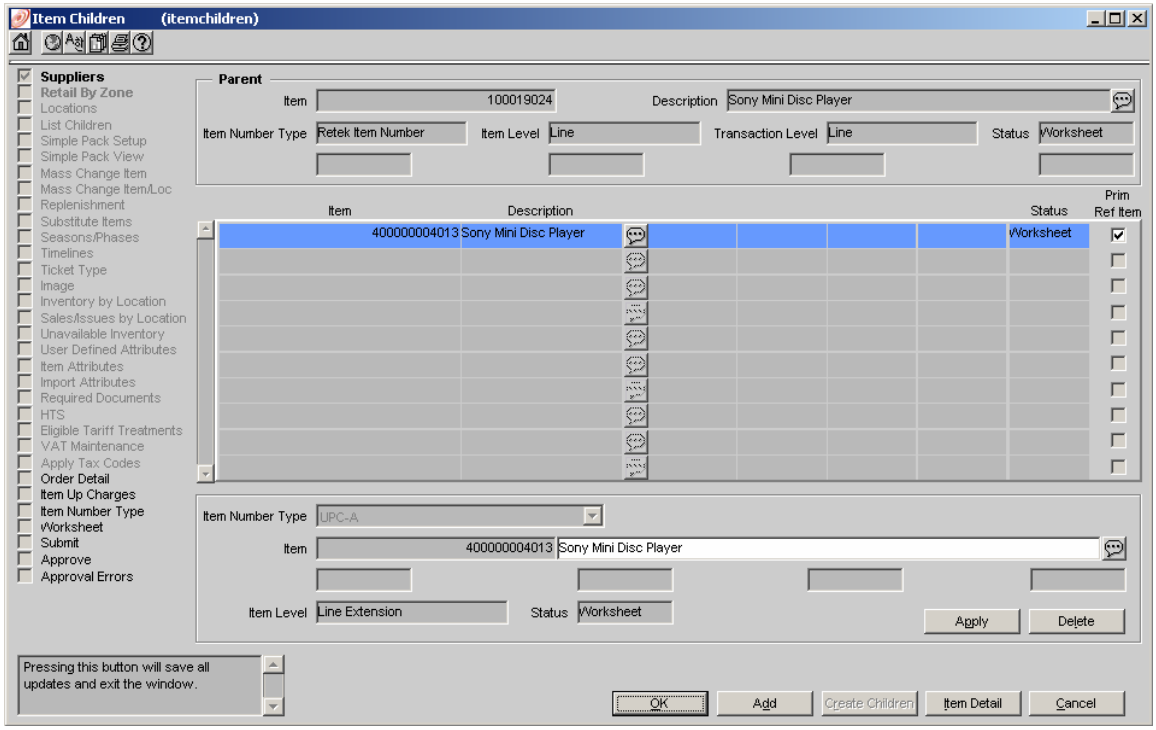
- Inner Name (Item Supplier Country)
- Case Name (Item Supplier Country)
- Pallet Name (Item Supplier Country)
- Packing Method (Item Supplier Country)
- Inner Size (Item Supplier Country)
- Case Size (Item Supplier Country)
- Tier (TI-HI) (Item Supplier Country)
- Height (TI-HI)

### Dimension Information

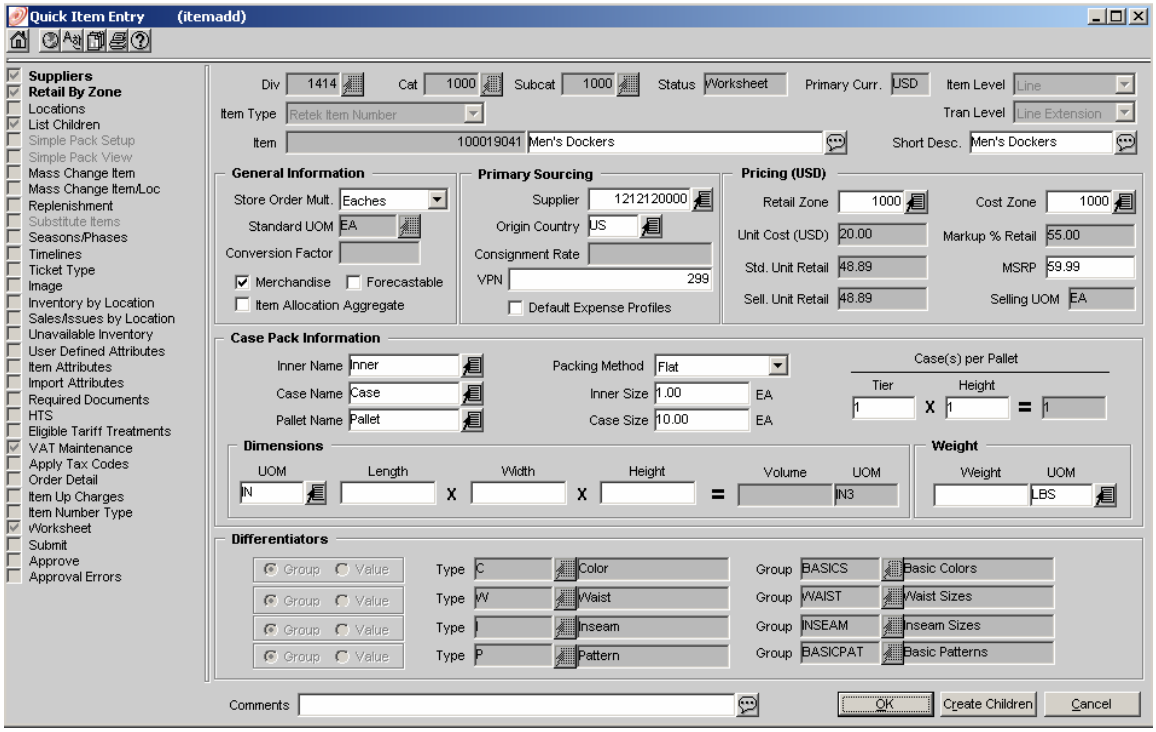
- Length (Item Supplier Country)
- Width (Item Supplier Country)
- Height (Item Supplier Country)
- Dimension UOM (Item Supplier Country)
- Weight (Item Supplier Country)
- Weight UOM (Item Supplier Country)

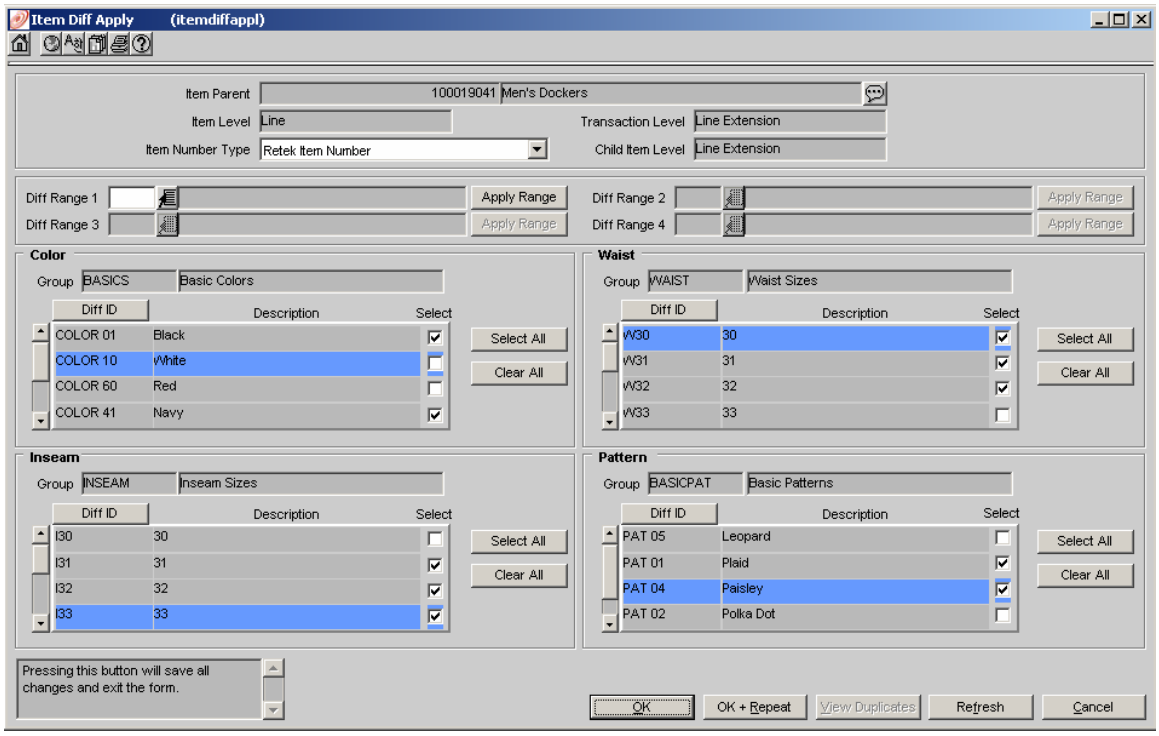
If the user is creating an item that has reference items there are 2 entry screens needed.

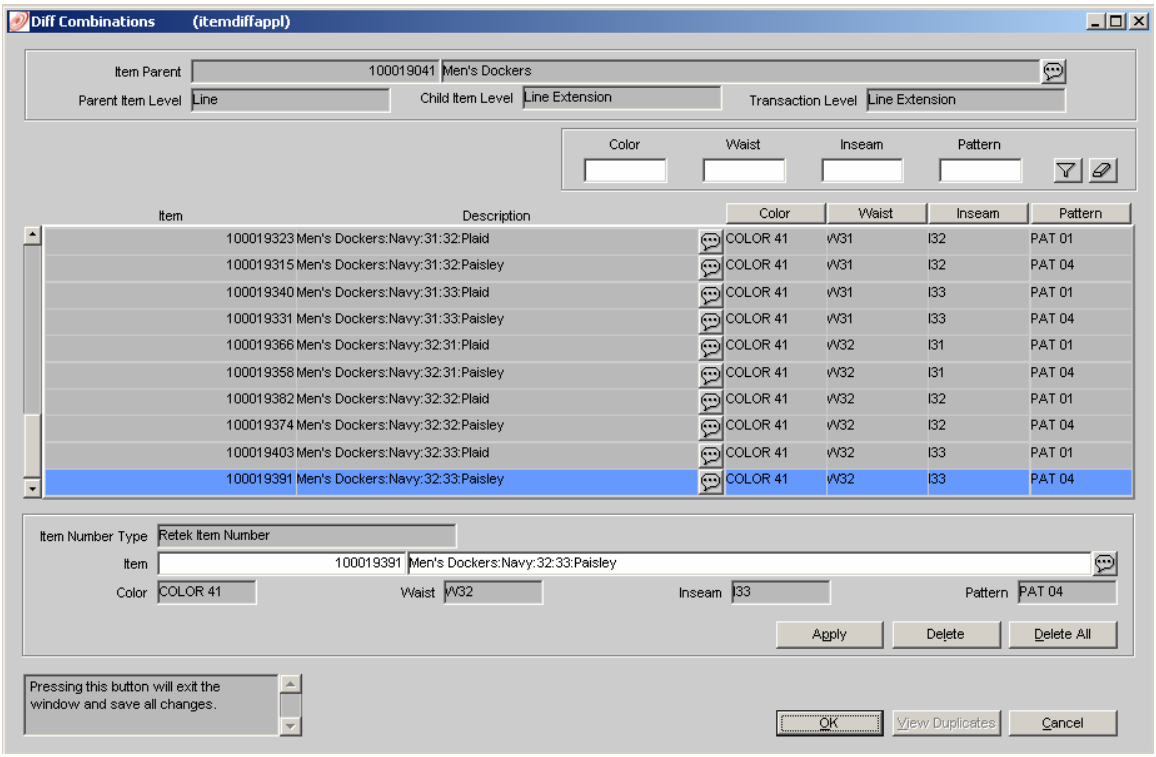


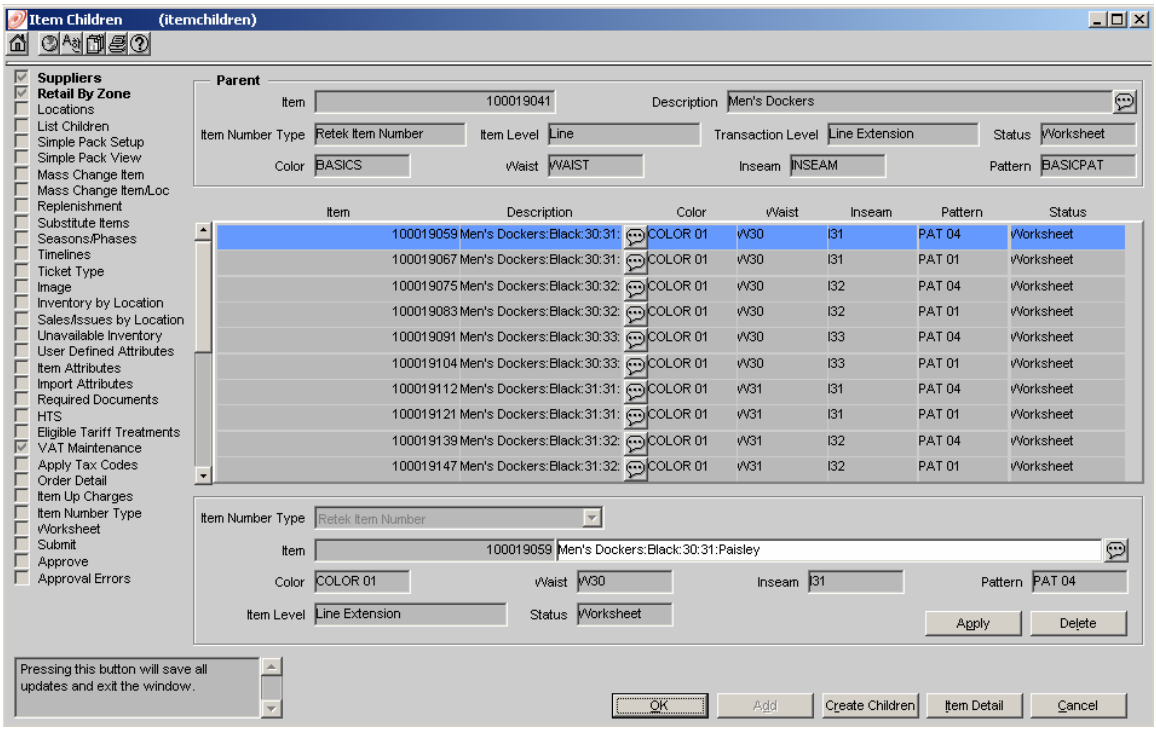



If the user is creating a fashion item that has children items there are 4 entry screens needed.



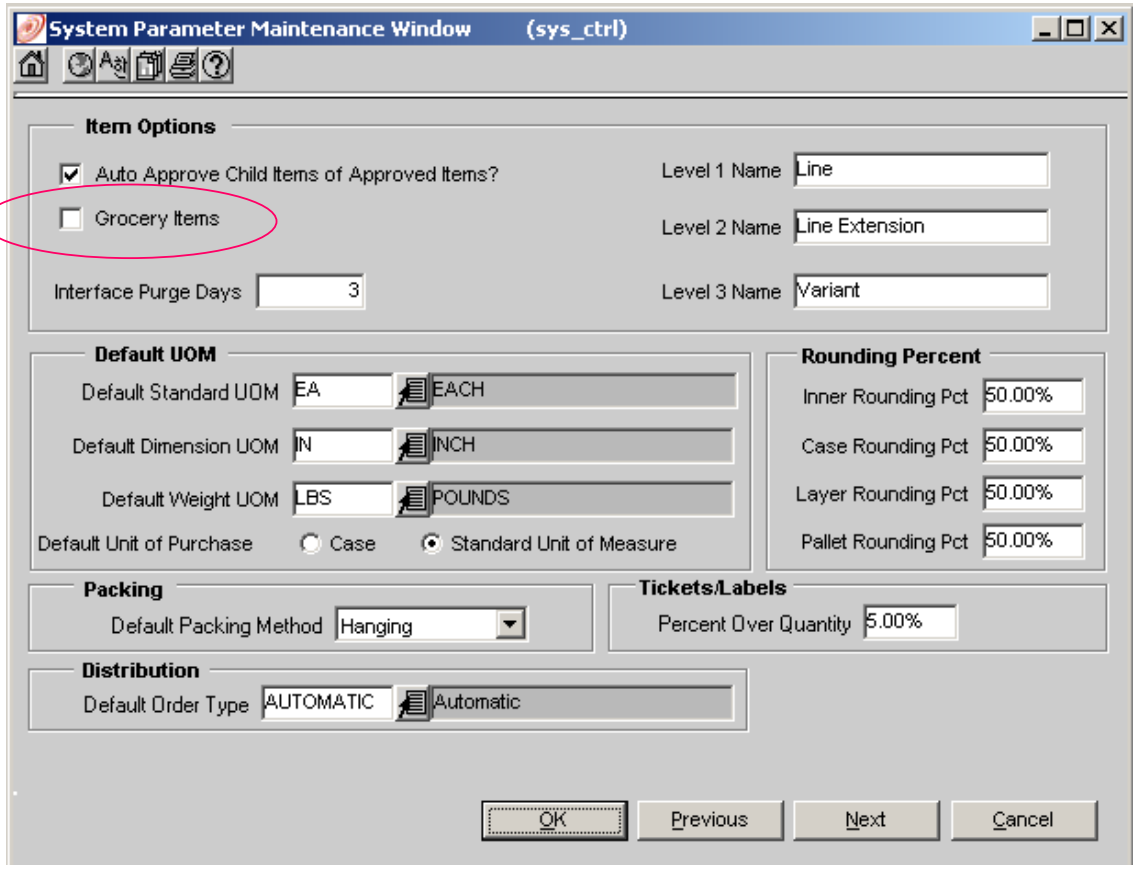




Diff Combinations (itemdiffappl)
Item Parent 100019041 Men's Dockers
Parent Item Level Line
Child Item Level Line Extension
Transaction Level Line Extension
Color
Waist
Inseam
Pattern
Item
Description
100019323 Men's Dockers:Navy:31:32:Plaid COLOR 41 W31 I32 PAT 01
100019315 Men's Dockers:Navy:31:32:Paisley COLOR 41 W31 I32 PAT 04
100019340 Men's Dockers:Navy:31:33:Plaid COLOR 41 W31 I33 PAT 01
100019331 Men's Dockers:Navy:31:33:Paisley COLOR 41 W31 I33 PAT 04
100019366 Men's Dockers:Navy:32:31:Plaid COLOR 41 W32 I31 PAT 01
100019358 Men's Dockers:Navy:32:31:Paisley COLOR 41 W32 I31 PAT 04
100019382 Men's Dockers:Navy:32:32:Plaid COLOR 41 W32 I32 PAT 01
100019374 Men's Dockers:Navy:32:32:Paisley COLOR 41 W32 I32 PAT 04
100019403 Men's Dockers:Navy:32:33:Plaid COLOR 41 W32 I33 PAT 01
100019391 Men's Dockers:Navy:32:33:Paisley COLOR 41 W32 I33 PAT 04
Item Number Type Retek Item Number
Item 100019391 Men's Dockers:Navy:32:33:Paisley
Color COLOR 41
Waist W32
Inseam I33
Pattern PAT 04
Apply
Delete
Delete All
Pressing this button will exit the window and save all changes.
OK
View Duplicates
Cancel


Item Children (itemchildren)
Suppliers
Retail By Zone
Locations
List Children
Simple Pack Setup
Simple Pack View
Mass Change Item
Mass Change Item/Loc
Replenishment
Substitute Items
Seasons/Phases
Timelines
Ticket Type
Image
Inventory by Location
Sales/Issues by Location
Unavailable Inventory
User Defined Attributes
Item Attributes
Import Attributes
Required Documents
HTS
Eligible Tariff Treatments
VAT Maintenance
Apply Tax Codes
Order Detail
Item Up Charges
Item Number Type
Worksheet
Submit
Approve
Approval Errors
Parent
Item 100019041
Description Men's Dockers
Item Number Type Retek Item Number
Item Level Line
Transaction Level Line Extension
Status Worksheet
Color BASICS
Waist WAIST
Inseam INSEAM
Pattern BASICPAT
Item
Description
Color
Waist
Inseam
Pattern
Status
100019059 Men's Dockers:Black:30:31: COLOR 01 W30 I31 PAT 04 Worksheet
100019067 Men's Dockers:Black:30:31: COLOR 01 W30 I31 PAT 01 Worksheet
100019075 Men's Dockers:Black:30:32: COLOR 01 W30 I32 PAT 04 Worksheet
100019083 Men's Dockers:Black:30:32: COLOR 01 W30 I32 PAT 01 Worksheet
100019091 Men's Dockers:Black:30:33: COLOR 01 W30 I33 PAT 04 Worksheet
100019104 Men's Dockers:Black:30:33: COLOR 01 W30 I33 PAT 01 Worksheet
100019112 Men's Dockers:Black:31:31: COLOR 01 W31 I31 PAT 04 Worksheet
100019121 Men's Dockers:Black:31:31: COLOR 01 W31 I31 PAT 01 Worksheet
100019139 Men's Dockers:Black:31:32: COLOR 01 W31 I32 PAT 04 Worksheet
100019147 Men's Dockers:Black:31:32: COLOR 01 W31 I32 PAT 01 Worksheet
Item Number Type Retek Item Number
Item 100019059 Men's Dockers:Black:30:31:Paisley
Color COLOR 01
Waist W30
Inseam I31
Pattern PAT 04
Item Level Line Extension
Status Worksheet
Apply
Delete
Pressing this button will save all updates and exit the window.
OK
Add
Create Children
Item Detail
Cancel

# System Variables (sys_ctrl)

A new indicator was added to the System Variables form. This checkbox indicates whether or not the retailer handles grocery merchandise items. This indicator will drive whether or not the user will have access to the Grocery Attributes window in the Quick Item Entry form by only displaying the Grocery Attributes button when the indicator is set to 'Y'es.



# Sales Audit Appendix

Defect 357736 introduced two new forms to RMS 10.1.7. An overview is provided below. Please see the defect documentation for additional details.

## Currency Rounding Rules Header Maintenance [sarrulhd]

This form allows you to maintain a list of rounding rules based on currency and country. Only one rule can be defined per currency/country combination. If a rule is applicable for all countries using a specific currency, set the country field to null. If a currency has more than one rule defined, (i) rule1 for currency = X and country = X (ii) rule2 for currency X and country = null; Country X will use rule1 whereas all other countries having currency X will use rule2. Both the Start Date and Status fields determine the effectivity of the rule. Start Date will only be applicable if the Status is Active. An Inactive rule will be inactive regardless if there is a Start Date.

You can access the Currency Rounding Rules Detail Maintenance window in order to edit the rounding rules range and round amount.

## Currency Rounding Rules Detail Maintenance [sarruldt]

This form lets you set up the rounding rules range and the corresponding amount it rounds down/up to. A rounding rule range is defined by the lowest(inclusive) and highest(inclusive) ending amount. Ending amount can be before or after the decimal point for the currency. Lowest and highest ending amount are always defined with 4-decimals. Currency Decimal Places Retail in the Currency Maintenance window determines the number of decimals for the round amount. A set of rounding rules cannot have an overlapping range.

Ending amount before the decimal point – given an ending amount range of 0 to 9.9999 with round amount of 0; any ending amount values within that range will be rounded down to 0.

Ending amount after the decimal point - given an ending amount range of 0 to 0.2455 with round amount of 0; 0.2456 to 0.7455 with round amount of 0.75; 0.7456 to 1.0000 with round amount of 1. An ending amount 0.50 will be rounded up to 0.75.

# Functional Specification for MDM Interfaces with RMS

## Overview

As the enterprise store for Item information, MDM must interface with RMS to provide Item access in support of the customer's business processes. Currently, MDM will interface with RMS 10.2, RMS 10.1.7, and RMS 9.0.15. Integration with RMS 9 requires that the customer run the Oracle 9i database. Customers running Oracle 8i will need to upgrade to run these interfaces. Using the RIB architecture, these interfaces will be loosely coupled with RMS, meaning that MDM will be able to publish and subscribe to messages involving other applications. For RMS 9, a batch component will be written so that retailer's are not required to purchase the RIB. For each interface, a technical procedure will be developed to map MDM defined attributes to the receiving applications fields.

## Functional Areas

Interfaces are required for the following functional areas: Suppliers, Locations, Items, Seasons and Phases, and Seed Data. These are individually detailed below.

## Suppliers Publication from RMS

RMS owns all Supplier data, with the exception of certain UCCnet specific information (GLN) only needed in MDM for Item creation, MDM requires all Supplier data from RMS. MDM will own the Item-Supplier intersections. For MDM details, see FS71 Supplier and Locations Structures.

Ship Points will be setup in MDM. These are only setup per Item in RMS. MDM will have a Ship Point creation process. Interface will need to revisited based on Item-Supplier-ShipPt intersection analysis to satisfy publication back to RMS.

### Publication out of RMS 10

Supplier: The current Supplier publisher for RMS 10 will be reused. MDM requires the following information:

- Supplier number
- Supplier name
- Supplier status
  - indicates whether the supplier is active or not
- currency code
  - indicates the primary currency for the supplier
- Default item lead time
  - default setting for the lead-time attribute at item-supplier-ship pt (country) level.

- Duns number
  - Duns and Bradstreet supplier identifying number. This will assist GLN mapping from UCCnet.
- Cost Change percent variance.
- Cost Change amount variance

### Subscription into MDM

Supplier: All attributes passed from RMS will be added as attributes to the Supplier in MDM.

# Locations Publication from RMS

For MDM Phase 1, RMS will own most Location data and MDM will maintain a mirror of this data, including Locations, Location Groups, and the Location Hierarchy. MDM will own the Item-Loc intersection. For MDM details, see FS71 Supplier and Locations Structures.

### Publication out of RMS 10

Locations: The following information is required by MDM. Information for both Warehouses and Stores will be mapped into a single structure in MDM, with both Warehouse ID and Store ID mapping to the location identifier.

- Location name
- Location identifier
- Channel
- Stock holding indicator
- Selling location indicator
- Virtual/Physical location flag – default to physical when does not exist.

In general, Locations have the following grouping structures or capability:

- Hierarchy – A multi-level categorization of stores.
- Groups – A set of stores for various uses. This was previously Location Lists in RMS 10
- Subgroups – A limited hierarchical system of Groups.

## Location Hierarchy

MDM will support hierarchies of locations with all the features of hierarchies of Items. The general hierarchy requirements of MDM will satisfy Organization Hierarchy as it exists in RMS, with enhancements including multiple hierarchies, inheritance and defaulting attribute values, optional parents and level skipping.

Location hierarchy maintenance is out of scope for Phase 1. During the initial release, MDM will contain a mirror of RMS via the locations interface.

### Publication out of RMS 10

Organization Hierarchy: The following information is required for District, Area, Region, and Chain.

- Node identifiers
- Node names
- Node parent

## Location Groups

MDM should support groups of locations with all the features of groups of items, including static, dynamic, and scheduled types; and criteria including attribute values, hierarchy membership, nested group membership, and logical combinations of these. Groups of items have been built with this in mind, and this should be relatively straightforward to achieve. The group construct in MDM easily satisfies the existing capabilities of Location Lists in RMS today.

Location group maintenance is out of scope for MDM Phase 1. User requirements for Location Groups will be satisfied via mirroring the structure of RMS.

### Publication out of RMS 10

Location Groups: The following information is required to create the Location Groups structure in MDM.

- Location List identifier
- Location identifier
- Location type identifier

## Location Sub-Groups

Location Sub-Groups are known as Zones in RMS. A Subgroups is a set of groups of locations which guarantee that every location belongs to one and only one group per subgroup. Subgroups are used today in RMS to assign defaults for pricing behavior, and to define sets of stores which can transfer goods to one another. When the user picks “Price Subgroup 1” for an item, the system knows that each location belongs to a single group a to n within subgroup 1, and that a given item-location should use the rule assigned to its group within price subgroup 1.

Table: An Example of Subgroups

| | Group 1 | | | Group 2 | | | Group 3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Sub Group | A | B | C | A | B | C | A | B | C |
| Stores | 1-5 | 6-10 | 11-15 | 1-3 | 4-12 | 13-15 | 1,8-11, 15 | 2-7 | 12-14 |

Notes on Table:

- User choices are usually limited to Groups 1, 2, and 3.
- System understands sub-grouping under each group.
- Each subgroup guarantees a group assignment for each of the 15 stores.

Location Subgroup maintenance is out of scope for MDM Phase 1. User requirements for Subgroups will be satisfied via mirroring RMS data within one of the structures above..

### Publication out of RMS 10

Cost Zones: All fields from the RMS Cost Subgroup, Cost Subgroup Group, and Cost Subgroup Group Loc tables are required for Cost Subgroups in MDM.

Price Zones: Price zone population in MDM is out of scope due to the ability to link to the Retail by Zone form in RMS

# Item Publications from MDM

MDM is the data store of record for all Item information. Because of this, MDM will own and publish the majority of Item attributes and intersections. The goal for MDM is to publish a comprehensive set of Item data, which can then be manipulated as needed by the receiving interfaces. However, since external systems, including RMS, will currently make updates to Items that need to be propogated to MDM, all of the Item interfaces will be two-way interfaces.

Item creation in MDM can be performed in multiple steps and a publication can occur following combinations of certain steps. The following steps make up the Item create workflow in MDM:

- Hierarchy Selection and Generation of Item keys (Item)
- Item Dimension attributes (Item Supplier Country)
- Item Product Level attributes (Item)
- Item Supplier attributes (Item Supplier)
- Item Supplier Ship Point attributes (Item Supp Country)
- Item Location attributes (Item Locs and Item Loc Traits)
- Item Receiving Locations (Item Supplier Country Loc)

Publication to RMS will occur at these points:

- Item Level information complete. This allows for the population of the highest level RMS Item tables, allowing a reduced set of Item maintenance in RMS. Publication will occur for in worksheet status for a new Item.
- Supplier Ship Point information complete, includes Supplier and Dimensions. This is dependant on the Item Level information.
- Item Locations information populated. This is dependant on the Item Level information.
- Item Receiving Locations information populated. This is dependant on the Item Supplier Ship Point and Item Locations information.

The following RMS states must be mapped during integration. In RMS there are currently two levels at which Item's have status, Item and Item Location. These may just be mapped values to a calculated status during integration. Here are the Item Master Status's:

- 'W' = Worksheet: item setup in progress, cannot be used in system
- 'S' = Submitted: item setup complete and awaiting approval, cannot be used in system. MDM will not publish in Submitted status.
- 'A' = Approved: item is approved and can now be used throughout the system

## Item

MDM owns Item setup and maintenance. For customers with an existing RMS implementation, Items already in the system will be moved to MDM during conversion. No online interface will be necessary. MDM will then map other needed attributes, such as the GTIN. The base Item interface publishes information from MDM to RMS, however due to Item create abilities during Purchase Order creation and complementary interface will return data to MDM.

### Subscription for RMS 10

Item: Data for this interface will be pulled from the Item Master table. Fields TBD.

Set during Item Hierarchy Assignment and Product Level Attributes

- Item_Master:Dept
- Item_Master:Class
- Item_Master:Subclass
- Item_Master:Tran_Level
- Item_Master:Item
- Item_Master:Item_Number_Type
- Item_Master:Item_desc
- Item_Master:Short_Desc
- Item Master:Diff_1, Diff_2, Diff_3, Diff_4
- Item_Master:Orderable
- Item_Master:Sellable
- Item_Master:Pack_Ind

- Item_Master:Gift_Wrap_Ind
- Item_Master:Ship_Alone
- Item_Master:Simple_Pack
- Item_Master:Const_Dimension_Ind (default to No)
- Item_Master:Forecast_Ind (default to No)

Assigned while entering Dimensions:

- Item_Master:Standard UOM
- Item_Master:UOM Conversion Factor
- Item_Master:Package Size

Entering Components

- Pack_Item:Pack_No
- Pack_Item:Seq_No
- Pack_Item:Pack_Qty
- Pack_Item_Breakout:Item
- Pack_Item_Breakout:Comp_Pack_Qty

Entered as Product Level attributes

- Backorderable
  - Boolean
  - Maps to RMS
- Item_Master:Catch weight ind
- Item_Master:Comments
- Item_UDA:Convey Method
- Item_UDA:Employee Discount %
- Flavor - gets dropped or maps to a diff - (Item_Master:Diff)
- Item_Master:Handling sensitivity
  - initial values on code detail table as type ‘HSEN’
- Item_Master:Handling temp
  - values on code detail table as type ‘HTMP’
- Item_Image:Item
- Item_Image:Name
- Item_Image:Desc
- Item_Master:Mfg_rec_retail
- Item_Master:cost price zone

- Item_Master:Store order multiple
- Item_Master:Waste pct
- Item_Master:Waste type
- Item_Seasons:Season
- Item_Seasons:Phase

## Item Locations

MDM will own the Item-Location intersection and publish this data to RMS. Item Location will be created during the Create Item workflows. Locations will be published separately from other Item data, but are dependant on having Item information in the RMS Item tables. Item Locations will be published at the Store location level and not using higher levels in the hierarchy.

Currently at the Item Location level here are the definitions of the current status's which must be passed to RMS.

- 'A' = Active, item is valid and can be ordered and sold
- 'I' = Inactive, item is valid but cannot be ordered or sold
- 'C' = Discontinued, item is valid and sellable but no longer orderable
- 'D' = Delete, item is invalid and cannot be ordered or sold

## Subscription into RMS 10

ItemLoc:  The following information will be entered in MDM for an item location and must be received by RMS 10.

- Item_Loc:Item Id
- Item_Loc:Location Id
- Item_Loc:Location Type (S or W)
- Item_Loc:taxable ind
- Item_Loc:local desc
- Item_Loc:local short desc
- Item_Loc:ti
- Item_Loc:hi
- Item_Loc:store_ord_mult
- Item_Loc:status
- Item_Loc:daily waste pct
- Item_Loc_Traits:launch date
- Item_Loc_Traits:qty key options
- Item_Loc_Traits:manual price entry
- Item_Loc_Traits:deposit code

- Item_Loc_Traits:food stamp ind
- Item_Loc_Traits:wic ind
- Item_Loc_Traits:proportional tare pct
- Item_Loc_Traits:fixed tare value
- Item_Loc_Traits:fixed tare uom
- Item_Loc_Traits:reward eligible ind
- Item_Loc_Traits:natl brand comp product
- Item_Loc_Traits:return policy
- Item_Loc_Traits:stop sale ind
- Item_Loc_Traits:elect mtk clubs
- Item_Loc_Traits:report code
- Item_Loc_Traits:req shelf life on selection
- Item_Loc_Traits:req shelf life on receipt
- Item_Loc_Traits:ib shelf life
- Item_Loc_Traits:store reoderable ind
- Item_Loc_Traits:rack size
- Item_Loc_Traits:full pallet product
- Item_Loc_Traits:in store market basket
- Item_Loc_Traits:storage location
- Item_Loc_Traits:alt storage loc
- Item_Loc_Traits:returnable ind
- Item_Loc_Traits:refundable ind
- Item_Loc_Traits:backorder ind

## Item Supplier

MDM will own the Item-Supplier intersection and publish this data to RMS.

### Subscription into RMS 10

ItemSupplier:

- Item_Supplier:Supplier
- Item_Supplier:Item
- Item_Supplier:Primary_Supp_Ind
- Item_Supplier:VPN
- Item_Supplier:Supplier label
  - Supplier's Short Description (30)
    - Maps to RMS 'Supplier label'
- Item_Supplier:Consignment rate
- Item_Supplier:Discontinue date
- Item_Supplier:Direct Ship Indicator
- Item_Supplier:Pallet name – default to "Pallet"
- Item_Supplier:Case name – default to "Case"
- Item_Supplier:Inner name – default to "Inner"

## Item Supplier Country

MDM will own the Item-Supplier intersection and publish this data to RMS. At this level we can publish the majority of the dimensions attributes as well as the intersection.

### Subscription into RMS 10

ItemSupplierCountry: The following attributes will be passed to RMS during the Supplier Ship Pt publication.

Entered during Supplier Ship Pt setup in MDM

- Item_Supp_Country;Supplier
- Item_Supp_Country:Origin Country
- Item_Supp_Country:Item
- Item_Supp_Country:Unit Cost
- Item_Supp_Country:Lead Time
- Item_Supp_Country:Pick up Lead Time
- Item_Supp_Country:Min Qty
- Item_Supp_Country:Max Qty
- Item_Supp_Country:Supp_Hier_Lvl1 (Manufacturer)

- Item_Supp_Country:Supp_Hier_Lvl2 (Distributor)
- Item_Supp_Country:Supp_Hier_Lvl3 (Wholesaler)
- Item_Supp_Country:Default_UOP
- Item_Supp_Country:Supp_Pack_Size
- Item_Supp_Country:Inner_Pack_Size
- Item_Supp_Country:Primary Supp Ind
- Item_Supp_Country:Primary Country Ind

Entered during Dimensions setup in MDM

- Item_Supp_Country_Dim:Tare Weight
- Item_Supp_Country_Dim:Tare Type
- Item_Supp_Country_Dim:LWH UOM / Item_Supp_Country:Dimension_UOM
- Item_Supp_Country_Dim:Length / Item_Supp_Country:Ship_Carton_Len
- Item_Supp_Country_Dim:Width / Item_Supp_Country:Ship_Carton_Wid
- Item_Supp_Country_Dim:Height / Item_Supp_Country:Ship_Carton_Hgt
- Item_Supp_Country_Dim:Liquid Volume
- Item_Supp_Country_Dim:Liquid Volume UOM
- Item_Supp_Country_Dim:Stat Cube
- Item_Supp_Country_Dim:weight UOM / Item_Supp_Country:Weight_UOM
- Item_Supp_Country_Dim:weight / Item_Supp_County:Ship_Carton_Wt
- Item_Supp_Country_Dim:net weight

Entered during Supplier setup in MDM and defaulted to the Ship Pt:

- Item_Supp_Country:TI
- Item_Supp_Country:HI
- Item_Supplier_Country:Unit Cost
- Item_Supp_Country_Dim:Presentation Method

## Item Supp Country Loc

MDM will own the Item-Supp-Country-Loc intersection, called Item Receiving Locations in MDM, and publish this data to RMS. However, like Item this interface will be defined in both directions to support intersection information populated in RM

### Subscription into RMS 10

ItemSupplier:  The user supplies values for the following list of attributes which may be published after the creation of  Item-Supplier-ShipPt and an Item-Location relationships.

- Item_Supp_Country_Loc:Unit_cost
- Item_Supp_Country_Loc:Primary_loc_ind
- Item_Supp_Country_Loc:Pick up Lead Time
- Item_Supp_Country_Loc:round level
- Item_Supp_Country_Loc:round case percent
- Item_Supp_Country_Loc:round layer percent
- Item_Supp_country_Loc:round pallet percent
- Item_Supp_Country_Loc:Origin_Country_ID (taken from the Ship Pt)

## Item Groups

MDM provides the ability to place Items into groups, both statically and dynamically via a selection criteria. MDM owns this grouping structure and must publish groups to RMS. In RMS all Item groups published from MDM will be statically defined, meaning MDM will not publish to the SkuList_Criteria table. Dynamic groups are generated via query criteria only executed on the MDM database. All dynamic groups will be published to external applications upon creation, maintenance, and during a periodic batch cycle to capture items created since the last publication.

RMS users will have the ability to generate dynamic groups within RMS, but these will not be published to MDM and will only include items existing in RMS.

### Publication out of MDM

Groups:

- Item Group identifier
- Item identifier

### Subscription into RMS 10

Groups: Item groups are placed into the Item List tables: SkuList_Head and Skulist_Detail

- Skulist_Detail:Skulist Id
- Skulist_Detail:Item Id
- Skulist_Detail:Item level
- Skulist_Detail:Transaction level
- Skulist_Detail:Pack ind

- Skulist_Detail:Insert Id
- Skulist_Detail:Insert date
- Skulist_Detail:Create datetime
- Skulist_Detail:Last update datetime
- Skulist_Detail:Last update id
- Skulist_Head:Skulist
- Skulist_Head:Skulist description
- Skulist_Head:Create date
- Skulist_Head:Create id
- Skulist_Head:Static_Ind
- Skulist_Head:Last Rebuild Date
- Skulist_Head:User Security Ind
- Skulist_Head:Tax Prod Group Ind (Nullable)
- Skulist_Head:Comment Desc (Nullable)

## Item User Defined Attributes and UDA Definitions

MDM does not distinguish between standard Item attributes and UDAs. MDM will publish Item data and it is the responsibility of the RMS Item subscriber to determine the proper location for Item attributes. However, MDM must publish any new UDA definitions to RMS prior to publishing data for that UDA. This data must be integrated into the RMS UDA, UDA_Values, and UDA_Item_Defaults tables. RMS can accept UDAs that are free-form text, dates, or a list of values, so all MDM UDAs will need to map to one of those types.

User must specify whether or not the new Attribute will be passed to RMS. The default behaviour will be to pass to RMS as a UDA.

### Publication out of MDM

UDA Definitions: MDM must send the following data for integration with RMS. Much of this data can be derived from the MDM attribute definitions.

- UDA identifier
- UDA description
- Data Type (Number, Alphanumeric, Date, optional))
- Display type (Free form, List of Values, Date)
- Data length
- Single value Ind
- UDA Values

### Subscription into RMS 10

UDA Definitions: RMS 10 must populate the following fields with data passed from MDM.

- UDA identifier
- UDA description
- Module (only valid value is “ITEM”)
- Display Type
- Data Type
- Data Length
- Single Value Ind
- UDA_Values:UDA_Value
- UDA_Value:UDA_Value_Desc
- UDA_Item_Defaults:UDA_ID
- UDA_Item_Defaults:Seq_No
- UDA_Item_Defaults:Dept
- UDA_Item_Defaults:Class (Nullable)
- UDA_Item_Defaults:Subclass (Nullable)
- UDA_Item_Defaults:UDA_Value (Nullable)
- UDA_Item_Defaults:Required Ind
- UDA_Item_Defaults:Hierarchy Value

# Item Diffs and Diff Maintenance

MDM will not implement the current RMS Diff structure, but will provide the same functionality through hierarchical attributes. Because of this, MDM will publish Item data and it is the responsibility of the RMS subscriber to map the specific attributes defined as Diffs in RMS appropriately. Diffs and Diff Groups will be maintained in MDM using the attributes structures and changes integrated to RMS. Currently, RMS uses Diffs to create certain Item attributes, such as SKU, which will now be passed from MDM. To support RMS, MDM will limit the number of diffs set on an Item to 4. MDM will maintain this using a business rule during Item create/maintain workflows.

# Item Publications from RMS

Because MDM is the central Item data store, any applications creating Items during process not performed in MDM must send that data to MDM.

## Item

RMS will publish Item data to MDM for Items created during Purchase Order creation. In this instance RMS creates SKU level items from an existing parent Style, defaulting most of the attributes to achieve a fully formed Item.

### Publication out of RMS 10

Item: Item Master attributes and Item intersections will be published from RMS, including Item-Supplier, Item-Supplier-Country, Item-Supplier-Country-Loc, Item-Seasons, and Item-Locations. RMS will publish all data specified in the corresponding subscription interfaces, above

## Merchandise Hierarchy

MDM will publish Merchandise Hierarchy information to RMS as part of the Item publication. However, modifications to the Merchandise Hierarchy must take place in RMS due to RMS dependancies and will not be allowed in MDM. This includes reclassification, or moving nodes within the Merchandise Hierarchy, which must be interfaced from RMS to MDM.

### Publication out of RMS 10

MerchHier: All Merchandise Hierarchy data will be published by RMS, including Division, Group, Dept, Class, and Subclass. This is an existing interface from RMS.

# Seasons and Phases Publication from RMS

Seasons information set as Item attributes will be passed to RMS as part of the Item interface. However, base Seasons data will be maintained in RMS and sent to MDM as a list. MDM will not modify this data, but will simply be using the list as valid values for the Seasons and Phases Item attributes.

### Publication out of RMS 10

Seasons: All fields from the RMS Seasons table are required in MDM.

Phases: All fields from the RMS Phases table are required in MDM.

# Seed Data Publications from RMS

RMS data is needed in MDM during initial population as valid values for Item Attributes. MDM will simply maintain the needed attribute values for these fields.

## Unit of Measure

RMS will own Unit of Measure data and this will be mirrored in MDM. UoM is stored on the RMS Codes tables. To support possible other UoM's in MDM due to inducted Items, MDM will need to provide mapping functionality to the RMS units of measure. This codes interface can be used for other Codes tables information. MDM will also need to retain Unit of Measure conversion data which will be inserted via one time script.

### Publication out of RMS 10

Codes: MDM will utilize the current RMS Code Head and Code Detail publisher. MDM requires the following data:

- Code Head: Code Type
- Code Head: Code Type Description
- Code Detail: Code Type
- Code Detail: Code
- Code Detail: Code Description
- Code Detail: Code Seq

## Currency and Exchange Rates

MDM will mirror the RMS list of currencies from the Currency table in RMS. This interface must also populate exchange rates periodically in MDM. Typically RMS is populated via a feed from an external source. It is during implementation to accept that feed into MDM and not utilize this interface for Exchange Rate data if appropriate.

### Publication out of RMS 10

Currency: Information taken from the RMS Currency and Currency_Rates tables must be populated in MDM. This includes:

- Currency code
- Currency description
- Exchange rate
- Effective date
- Exchange type

## Countries

MDM will mirror the RMS list of countries from the Country table in RMS.

### Publication out of RMS 10

Country: Information taken from the RMS Country table must be populated in MDM. This includes:

- Country ID
- Country description

# Considerations

#### Localization

All Localized MDM data must be passed on all outbound interfaces. MDM will not receive localized information on inbound interfaces due to limitations in external systems. Prior to the integration message entering an external system, the language accepted by that system will be determined and only that language will be populated.

# RMS/MDM New Integration Point Summary Chart

| Function | Form Name | Integration Needed | Integration Direction | MDM Access Point (container) | New RMS access? (RMS Patch) |
|---|---|---|---|---|---|
| Sales and Inventory lookup | Unavailable Inventory | N | None | None | Add to the Inventory folder |
| | Item Location Inventory | | | | Currently available from the Inventory folder |
| | Sales Info/Issues by Location | | | | |
| Item ELC & Importing | Item Expense Maintenance | Y | MDM to RMS | Supplier and Supplier Ship Point | |
| | Item /Supplier Origin Country List (ELC view) | | | Supplier Ship Point | |
| | Item Import Attributes | | | Assign Product **Attributes** | |
| | Required Documents | | | | |
| | Item HTS Maintenance | | | | |
| | Item Eligible Tariff Treatment | | | | |
| Retail Pricing | Item Retail Price by Zone | Y | MDM to RMS | Assign Product **Attributes** | |
| Bracket Costing | Item Supplier Country Location Bracket Cost | Y | MDM to RMS | Supplier *and* Supplier Ship Point *and* Receiving Locations to Ship Points | |
| Replenishment Set-up | Replenishment Attribute Maintenance | N | None | None | Add to the Inventory folder |
| | Substitute Item Maintenance | | | | |
| Ticketing | Item Ticket Detail | Y | MDM to RMS | Assign Product **Attributes** | |
| Item Timeline set-up | Timeline | Y | MDM to RMS | Assign Product **Attributes** | |
| Tax/VAT | Tax Rate View | Y | MDM to RMS | Assign Product **Locations** | |
| | Item Tax Codes | | | Assign Product **Attributes** | |
| | VAT Item Maintenance | | | | |
| Item Upcharges | Item Upcharges | Y | MDM to RMS | Assign Product **Attributes** | |
| Item List Use | Many of the Item List screens in RMS | Y | RMS to MDM | Item Group | |