

Retek® 10 Integration Bus



Integration Guide Message Interface Overviews



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Chapter 1 – Introduction

This document summarizes Retek 10 messaging integration by functional area. These functional areas are “Message Families,” and are defined as the common data, data structures, and messages shared by two or more applications on the RIB.

In addition to message publication and subscription processing by applications, the RIB can perform additional intermediate transformation and routing operations on some messages before making them available to the subscribing application. These “intermediate adapters” are called “TAFRs”—transformation, addressing, filtering, and routing. A single TAFR may only transform a given message, only filter the message, only route it, or combine any of the three operations. See the Retek Integration Bus Technical Architecture Guide for detailed descriptions of RIB TAFRs. In this guide, wherever a TAFR operation takes place in a functional area, it is briefly described.

For each functional area, or message family, there are descriptions of:

- The publishing application’s components and message documents
- TAFR operations, if applicable
- The subscribing application’s components and message documents

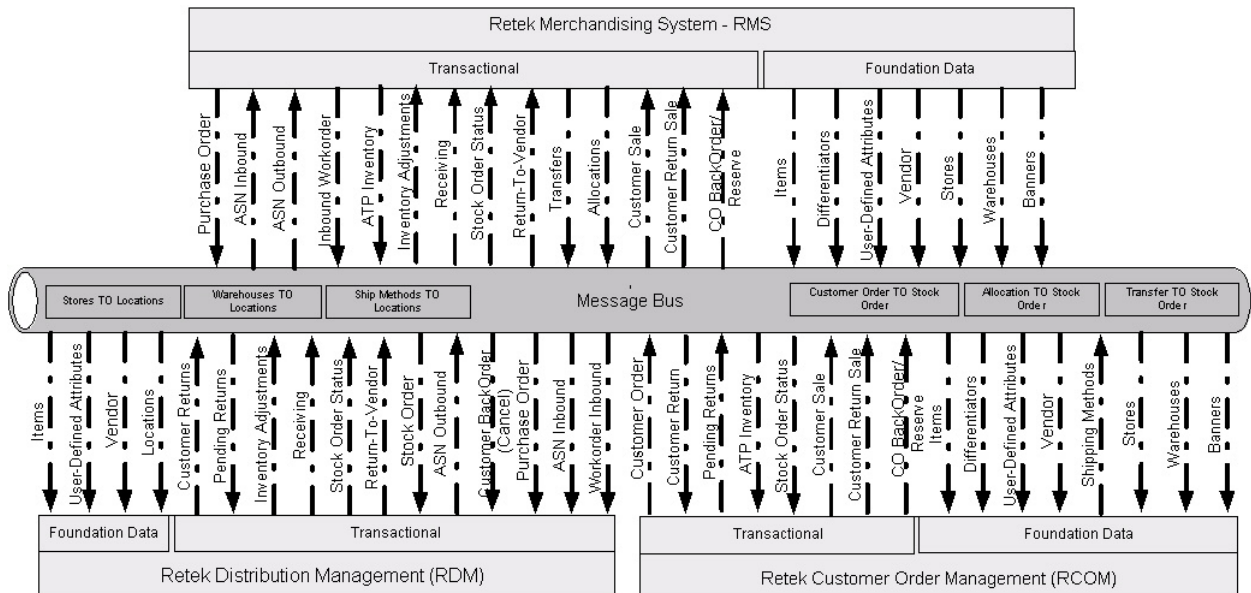
Message family functional areas

The following table lists the message family functional areas and the Retek application that publishes and subscribes to the messages.

Foundation Data		
Functional Area	Publishing Application	Subscribing Application
Banner (channels)	RMS	RCOM
Differentiator Identifiers	RMS	RCOM. RDM
Differentiator Groups	RMS	RCOM. RDM
Items	RMS	RCOM. RDM
Vendor	RMS	RCOM. RDM
Stores and warehouses	RMS	RCOM
Locations	RIB	RDM
UDAs	RMS	RDM

Transaction Data		
Functional Area	Publishing Application	Subscribing Application
Appointments	RDM	RMS
ASN Outbound	RDM	RMS, RCOM
ATP	RMS	RCOM
Customer Order Back Order Reserve	RCOM	RMS
Customer Orders	RCOM	RDM
Customer Return	RDM	RCOM
Customer Return Sale	RCOM	RMS
Customer Sale	RCOM	RMS
External ASN (ASN Inbound)	RDM, Supplier	RMS
Inventory Adjustments	RDM	RMS
Inventory Balances	RDM	RMS
Pending Return	RCOM	RDM
PO Receipts	RDM	RMS
Purchase Order (for physical locations only)	RMS	RDM
RTV	RDM	RMS
Shipping Method	RCOM	RDM
Stock Order (allocations and transfers)	RMS	RDM
Stock Order Status	RDM	RMS, RCOM
Work Order (Inbound)	RMS	RDM

The following diagram outlines all messaging interfaces that are available in Retek 10.0. Only the transformations performed in the bus are shown in this diagram.



Chapter 2 – Messaging concepts

Retek 10 Integration Bus concepts that are common to all Retek applications on the RIB, and application specific concepts are described in the following sections.

Common messaging concepts

Adapters (e*Ways)

An application interfaces the RIB via components that are generically called “adapters.” The SeeBeyond component that corresponds to an adapter is called an “e*Way.” In Retek 10.0 Integration Bus (RIB) documentation, the two words are used interchangeably.

Publish and subscribe

The application from where a RIB message originates is the “publisher.” In the case of base RIB 10.0, the message publisher may be one of three integrated applications: RMS, RDM or RCOM. The application(s) that consumes the message is the “subscriber.”

Message queue table

Whenever a message event occurs, the application writes it to the message queue table. The RIB adapter reads from the queue table to publish the next message. If the table is empty, the adapter publishes no message.

Publishing message family manager (MFM)

A message family manager (MFM) is defined in Oracle as a database package containing functions used to write to and read from the message queue table. The package typically contains two functions: ADDTOQ() and GETNXT(), which add a message to the queue and read a message from the queue respectively. ADDTOQ() is used by the publishing trigger. GETNXT() is used by the publishing adapter. The message family manager handles all message sequencing and ensures that the message is published only when it is considered a valid and complete record.

Subscribing APIs

Subscribing APIs insert data from an incoming message to the appropriate database tables. The subscribing adapter calls these APIs. Normally, there is a separate API defined for each message type subscribed to.

TAFRs

TAFR is the acronym for: Transform, Address, Filter, and Route, all of which are operations that occur on the RIB. A TAFR is an e*Way that performs one of these operations. A TAFR is completely internal to the RIB and does not sit on another application. The following are examples of TAFR operations:

Transform—A message may be transformed from one message type into another, for example, ‘WH’ (warehouse) from RMS to ‘Location’ for RDM.

Filter—A message may be filtered. For example, whenever RDM creates a stock order status (SOStatus) message, RCOM only needs the message if the message originated because of a customer order. If the SOStatus message originated because of a simple transfer between warehouses, the TAFR must filter it out so that RCOM does not ‘see’ it.

Route—A TAFR may route a message. For example, whenever a stock order message is published for RDM, the TAFR routes it to the particular RDM instance from where the stock is ordered.

RIB message envelope

Whenever a publishing adapter publishes a message from an application, it puts it into a message “envelope” known as the RIBMessageEnvelope. The envelope is a standard message format for all RIB messages, where the original published message becomes a field in the envelope. The envelope itself contains information that the RIB uses, such as hospital IDs and routing information. Some of the more important envelope fields follow:

type—The message type, for example, “OrderPhyCre.”

id—This is an XML array field for the “RIB ID.” The error hospital uses the ID to determine the messages that cannot be delivered when a given message is in the hospital due to a failure. For more information about the error hospital, see the Retek 10 Integration Bus Technical Architecture Guide and the Retek 10 Integration Bus Operations Guide.

routingInfo—This is also an XML array field for specific information used to route the message.

MessageData—The message itself, in XML format

Application message concepts

RMS – Publishing events

When a publishable event is written to the RMS database, a database trigger fires. This trigger calls the ADDTOQ() function of the MFM to gather the appropriate message data and write it to the appropriate message queue table. For example, when an RMS supplier (vendor) is created, modified or deleted, the trigger fires and writes to the message queue table. The data remains on the message queue table until it is read by the publishing adapter through a call to the GETNXT() function.

See the RMS 10.0 Operations Guide for more information on specific publishing triggers.

RCOM - Publishing events

When a publishing event occurs in RCOM, the application writes the message data to the appropriate message queue table, using the ADDTOQ() function of the MFM. Note that unlike RMS, no database triggers are employed.

RDM - Publishing events

When a publishable event occurs in RDM, the message data are written to an RDM upload table. Depending upon the event, the data are written by either a stored program or a database trigger. The ADDTOQ() function of the MFM reads the data from the upload table and write them to the message queue table. In RDM's case, the ADDTOQ() function is actually called by the GETNXT() function. The message family queue table holds data only as long as it takes for the call to the GETNXT() function to execute from the publishing adapter and for the function to perform its task.

Chapter 3 – Message interface overviews

Foundation and transaction functional area messages and message processes are detailed in the remainder of this guide.

Foundation messages

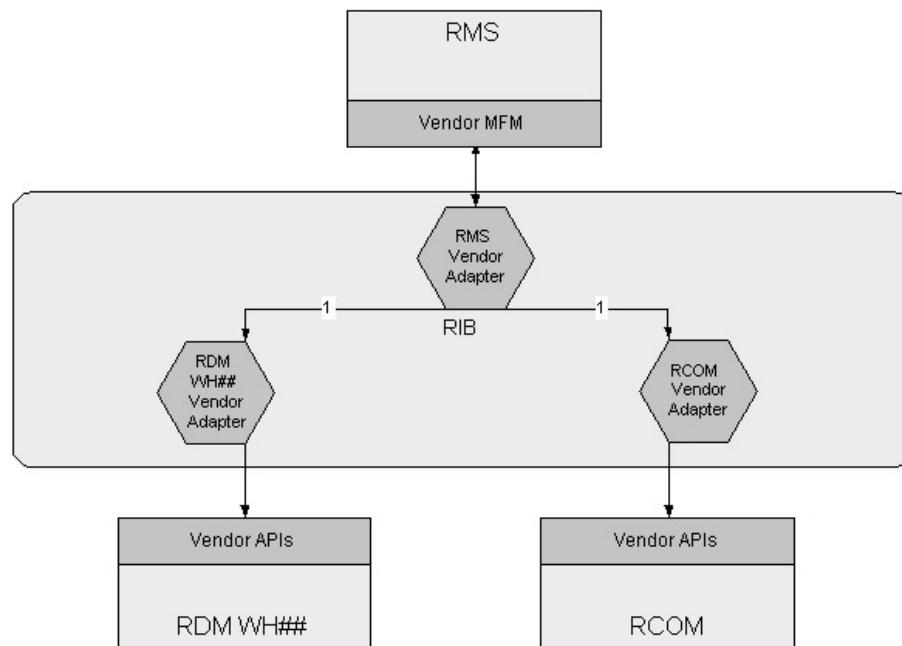
Messages that carry foundation data include the following functional areas:

- Vendor
- Differentiator identifiers
- Differentiator groups
- User-defined attributes
- Banners (channels)
- Locations (stores and warehouses)
- Items

This section contains descriptions of the messages passed on the RIB, the publishing application and its processes and message types, any TAFR operations that apply, and the subscribing application and its message processes.

Vendor

RMS 10.0 publishes vendor (supplier) and vendor address messages to the RIB for RCOM and RDM. Vendor address types for returns, orders, and invoices are published. The following diagram illustrates the vendor message process.



The message passed on the RIB through this process is: etVendorFromRMS

RMS Publisher – Vendor

Rib Components:

E*Way name: ewVendorFromRMS

RIB ID: supplier id

Routing Information: none

Application Components:

Triggering Mechanism: Table Triggers

Message family manager: RMSMFM_SUPPLIER

Message family manager Queue: SUPPLIER_MFQUEUE

Comments: None

The following table lists the vendor message types published from the message family manager RMSMFM_VENDOR:

EtVendorFromRMS		
Message Types	Mapping Document	Document Type Definition (DTD)
VendorCre	RMS_MAP_VendorDesc.xls	VendorDesc.dtd
VendorHdrMod	RMS_MAP_VendorHdtDesc.xls	VendorHdrDesc.dtd
VendorDel	RMS_MAP_VendorRef.xls	VendorRef.dtd
VendorAddrCre	RMS_MAP_VendorAddrDesc.xls	VendorAddrDesc.dtd
VendorAddrMod	RMS_MAP_VendorAddrDesc.xls	VendorAddrDesc.dtd
VendorAddrDel	RMS_MAP_VendorAddrRef.xls	VendorAddrRef.dtd

RDM Subscriber – Vendor

Rib Components:

E*Way name: ewVendorToRDMWH##

RIB ID: supplier id

Comments:

Because vendors are foundation data, the RIB does not route these messages by warehouse ID. All RDM instances receive the vendor message.

The following table lists the vendor message types that RDM subscribes to:

EtVendorFromRMS			
Message Types	Mapping Document	Document Type Definition (DTD)	Subscribing APIs
VendorCre	RDM_MAP_VendorDesc.xls	VendorDesc.dtd	RDMSUB_VendorCre
VendorHdrMod	RDM_MAP_VendorHdtDesc.xls	VendorHdrDesc.dtd	RDMSUB_VendorHdrMod
VendorDel	RDM_MAP_VendorRef.xls	VendorRef.dtd	RDMSUB_VendorDel
VendorAddrCre	RDM_MAP_VendorAddrDesc.xls	VendorAddrDesc.dtd	RDMSUB_VendorAddrCre
VendorAddrMod	RDM_MAP_VendorAddrDesc.xls	VendorAddrDesc.dtd	RDMSUB_VendorAddrMod
VendorAddrDel	RDM_MAP_VendorAddrRef.xls	VendorAddrRef.dtd	RDMSUB_VendorAddrDel

RCOM Subscriber – Vendor

Rib Components:

E*Way name: ewVendorToRCOM

RIB ID: supplier id

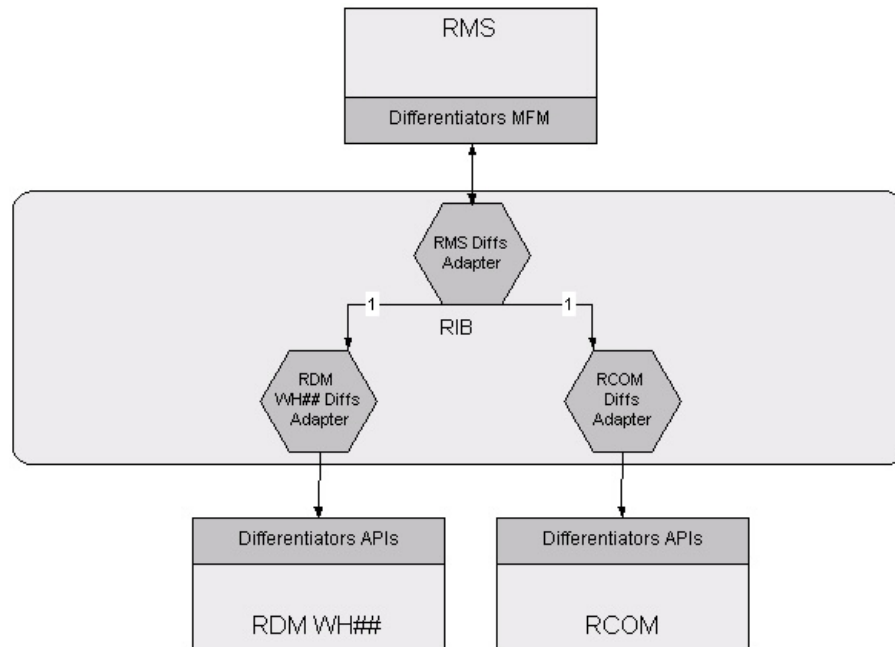
Comments: None

The following table lists the vendor message types that RCOM subscribes to:

EtVendorFromRMS			
Message Types	Mapping Document	Document Type Definition (DTD)	Subscribing APIs
VendorCre	RCOM_MAP_VendorDesc.xls	VendorDesc.dtd	RCOMSUB_VendorCre
VendorHdrMod	RCOM_MAP_VendorHdtDesc.xls	VendorHdrDesc.dtd	RCOMSUB_VendorHdrMod
VendorDel	RCOM_MAP_VendorRef.xls	VendorRef.dtd	RCOMSUB_VendorDel
VendorAddrCre	RCOM_MAP_VendorAddrDesc.xls	VendorAddrDesc.dtd	RCOMSUB_VendorAddrCre
VendorAddrMod	RCOM_MAP_VendorAddrDesc.xls	VendorAddrDesc.dtd	RCOMSUB_VendorAddrMod
VendorAddrDel	RCOM_MAP_VendorAddrRef.xls	VendorAddrRef.dtd	RCOMSUB_VendorAddrDel

Differentiator identifiers

Differentiators (“Diffs” as they are commonly called) allow users to further distinguish items. RMS publishes these differentiators as messages to the RIB. RCOM and RDM both subscribe to Diff messages. The following diagram illustrates the Diff identifier message process.



The message passed on the RIB through this process is: `etDiffsFromRMS`

RMS Publisher – Differentiators

Rib Components:

E*Way name: `ewDiffsFromRMS`

RIB ID: `diff_id`

Routing Info: `none`

Application Components:

Triggering Mechanism: `Table Triggers`

Message family manager: `RMSMFM_DIFFID`

Message family manager Queue: `DIFFID_MFQUEUE`

Comments: `None`

The following table lists the differentiator identifier message types published from the message family manager RMSMFM_DIFFID:

etDiffsFromRMS		
Message Types	Mapping Document	Document Type Definition (DTD)
DiffCre	RMS_MAP_DiffDesc.xls	DiffDesc.dtd
DiffMod	RMS_MAP_DiffDesc.xls	DiffDesc.dtd
DiffDel	RMS_MAP_DiffRef.xls	DiffRef.dtd

RDM Subscriber – Differentiators

Rib Components:

E*Way names: ewDiffsToRDMWH##

RIB ID: diff_id

Comments:

Because differentiators are foundation data, the RIB does not route these messages by warehouse ID. All RDM instances receive the same message.

The following table lists the differentiator message types that RDM subscribes to:

etDiffsFromRMS			
Message Types	Mapping Document	Document Type Definition (DTD)	Subscribing APIs
DiffCre	RMS_MAP_DiffDesc.xls	DiffDesc.dtd	RDMSUB_DiffCre
DiffMod	RMS_MAP_DiffDesc.xls	DiffDesc.dtd	RDMSUB_DiffMod
DiffDel	RMS_MAP_DiffRef.xls	DiffRef.dtd	RDMSUB_DiffDel

RCOM Subscriber – Differentiators

Rib Components:

E*Way name: ewDiffsToRCOM

RIB ID: diff_id

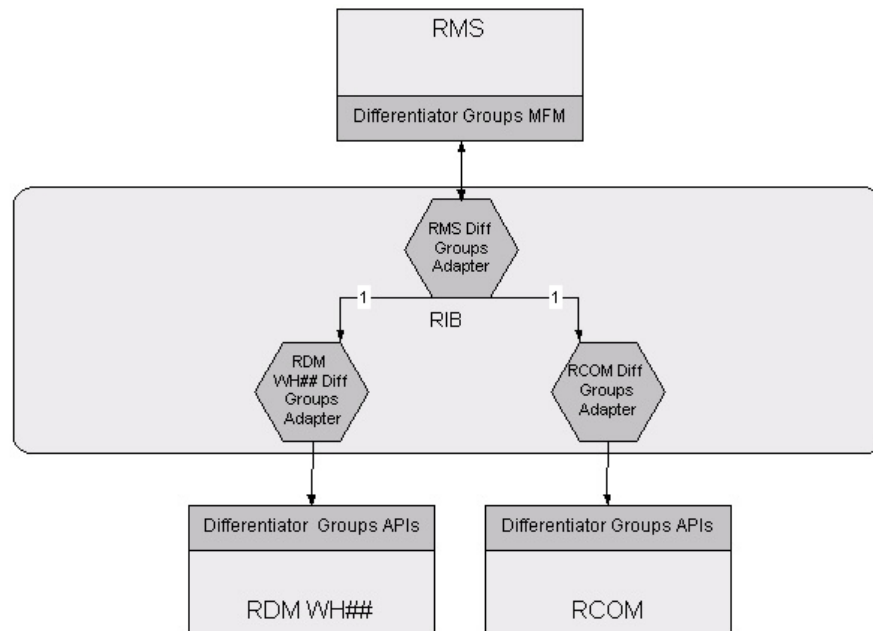
Comments: None

The following table lists the differentiator message types that RCOM subscribes to:

etDiffsFromRMS			
Message Types	Mapping Document	Document Type Definition (DTD)	Subscribing APIs
DiffCre	RMS_MAP_DiffDesc.xls	DiffDesc.dtd	RCOMSUB_DiffCre
DiffMod	RMS_MAP_DiffDesc.xls	DiffDesc.dtd	RCOMSUB_DiffMod
DiffDel	RMS_MAP_DiffRef.xls	DiffRef.dtd	RCOMSUB_DiffDel

Differentiator groups

Differentiator groups allow clients to group differentiator identifiers (Diff IDs) into logical groupings, for example, pant sizes, shirt colors, or flavors. RMS publishes differentiator group messages to the RIB. RCOM and RDM subscribe to these messages. There are header and detail messages. A diff group header is the diff group itself, and the details are individual diff IDs. See “Differentiator identifiers” in the preceding section for more information. The following diagram illustrates the diff group message process.



The message passed on the RIB through this process is: etDiffGrpFromRMS

RMS Publisher – Differentiator Groups

Rib Components:

E*Way name: ewDiffGrpFromRMS

RIB ID: diff_grp_id

Routing Info: none

Application Components:

Triggering Mechanism: Table Triggers

Message family manager: RMSMFM_DIFFGRP

Message family manager Queue: DIFFGRP_MFQUEUE

Comments: None

The following table lists the differentiator group message types published from the message family manager RMSMFM_DIFFGRP:

etDiffGrpFromRMS		
Message Types	Mapping Document	Document Type Definition (DTD)
DiffGrpHdrCre	RMS_MAP_DiffGrpHdrDesc.xls	DiffGrpHdrDesc.dtd
DiffGrpHdrMod	RMS_MAP_DiffGrpHdrDesc.xls	DiffGrpHdrDesc.dtd
DiffGrpDel	RMS_MAP_DiffGrpRef.xls	DiffGrpRef.dtd
DiffGrpDtlCre	RMS_MAP_DiffGrpDtlDesc.xls	DiffGrpDtlDesc.dtd
DiffGrpDtlMod	RMS_MAP_DiffGrpDtlDesc.xls	DiffGrpDtlDesc.dtd
DiffGrpDtlDel	RMS_MAP_DiffGrpDtlRef.xls	DiffGrpDtlRef.dtd

RDM Subscriber – Differentiator Groups

Rib Components:

E*Way name: ewDiffGrpToRDMWH##

RIB ID: O_DIFF_GRP_ID

Comments:

1 Because differentiator groups are foundation data, the RIB does not route these messages by warehouse ID. All RDM instances receive the same message.

2 Note that RDM does not use the DiffGrpDtlMod message, nor does it have a subscribing API for it. The ewDiffGrpToRDMWH## e*Way ignores any DiffGrpDtlMod message it encounters.

The following table lists the differentiator group message types that RDM subscribes to:

etDiffGrpFromRMS			
Message Types	Mapping Document	Document Type Definition (DTD)	Subscribing APIs
DiffGrpHdrCre	RMS_MAP_DiffGrpHdrDesc.xls	DiffGrpHdrDesc.dtd	RDMSUB_DiffGrpCre
DiffGrpHdrMod	RMS_MAP_DiffGrpHdrDesc.xls	DiffGrpHdrDesc.dtd	RDMSUB_DiffGrpMod
DiffGrpDel	RMS_MAP_DiffGrpRef.xls	DiffGrpRef.dtd	RDMSUB_DiffGrpDel
DiffGrpDtlCre	RMS_MAP_DiffGrpDtlDesc.xls	DiffGrpDtlDesc.dtd	RDMSUB_DiffGrpDetCre
DiffGrpDtlDel	RMS_MAP_DiffGrpDtlRef.xls	DiffGrpDtlRef.dtd	RDMSUB_DiffGrpDetDel

RCOM Subscriber – Differentiator Groups

Rib Components:

E*Way name: ewDiffGrpToRCOM

RIB ID: diff_grp_id

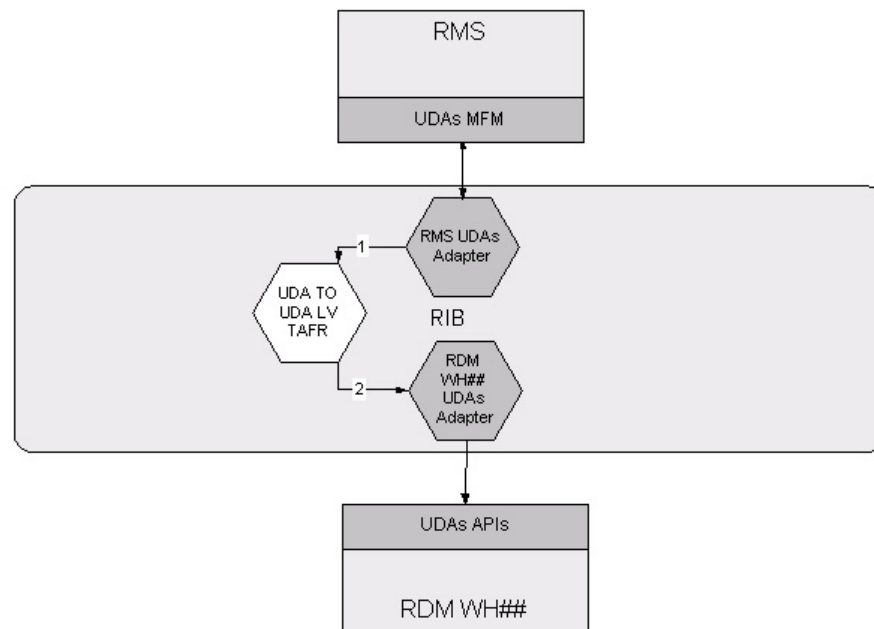
Comments: None

The following table lists the differentiator group message types that RCOM subscribes to:

etDiffGrpFromRMS			
Message Types	Mapping Document	Document Type Definition (DTD)	Subscribing APIs
DiffGrpHdrCre	RMS_MAP_DiffGrpHdrDesc.xls	DiffGrpHdrDesc.dtd	RCOMSUB_DiffGrpHdrCre
DiffGrpHdrMod	RMS_MAP_DiffGrpHdrDesc.xls	DiffGrpHdrDesc.dtd	RCOMSUB_DiffGrpHdrMod
DiffGrpDel	RMS_MAP_DiffGrpRef.xls	DiffGrpRef.dtd	RCOMSUB_DiffGrpDel
DiffGrpDtlCre	RMS_MAP_DiffGrpDtlDesc.xls	DiffGrpDtlDesc.dtd	RCOMSUB_DiffGrpDtlCre
DiffGrpDtlMod	RMS_MAP_DiffGrpDtlDesc.xls	DiffGrpDtlDesc.dtd	RCOMSUB_DiffGrpDtlMod
DiffGrpDtlDel	RMS_MAP_DiffGrpDtlRef.xls	DiffGrpDtlRef.dtd	RCOMSUB_DiffGrpDtlDel

User-defined attributes

RMS 10.0 publishes messages about user-defined attributes (UDAs) to the RIB. UDAs provide a method for defining attributes and associating the attributes with specific items. UDA's are useful for information and reporting purposes. UDA's can be defined in one of three formats: Date, Freeform text or List of Values (LOV). However, for Retek 10.0 Integration, the RIB filters all formats except LOV by the UDA to UDA LV TAFR.



Numbers 1 and 2 in the diagram correspond to the following actual messages that are passed on the RIB:

- 1 etUDAsFromRMS
- 2 etUDAsLVFromRIB

Both messages are detailed in the following paragraphs.

RMS Publisher – UDAs

Rib Components:

e*Way name: ewUDAsFromRMS
 RIB ID: uda_id
 Routing Info: display_type (date, text or list of values)

Application Components:

Triggering Mechanism: Table Triggers
 Message family manager: RMSMFM_UDA
 Message family manager Queue: UDA_MFQUEUE

Comments: None

The following table lists the UDA message types published from the message family manager RMSMFM_UDA:

etUDAsFromRMS		
Message Types	Mapping Document	Document Type Definition (DTD)
UDAHdrCre	RMS_MAP_UDAHdrDesc.xls	UDAHdrDesc.dtd
UDAHdrMod	RMS_MAP_UDAHdrDesc.xls	UDAHdrDesc.dtd
UDAHdrDel	RMS_MAP_UDAHdrRef.xls	UDAHdrRef.dtd
UDAValCre	RMS_MAP_UDAValDesc.xls	UDAValDesc.dtd
UDAValMod	RMS_MAP_UDAValDesc.xls	UDAValDesc.dtd
UDAValDel	RMS_MAP_UDAValRef.xls	UDAValRef.dtd

TAFR – LOV only

Rib Components:

e*Way name: ewUDAsToUDAsLVFromRIB
 RIB ID: uda_id
 Routing Info: display_type
 Transformation: none
 Filtering: if display_type is not “LV”, then don’t publish a etUDAsLVFromRIB message.

Comments: None

RDM Subscriber – UDAs

Rib Components:

e*Way name: ewUDAsToRDMWH##
 RIB ID: uda_id

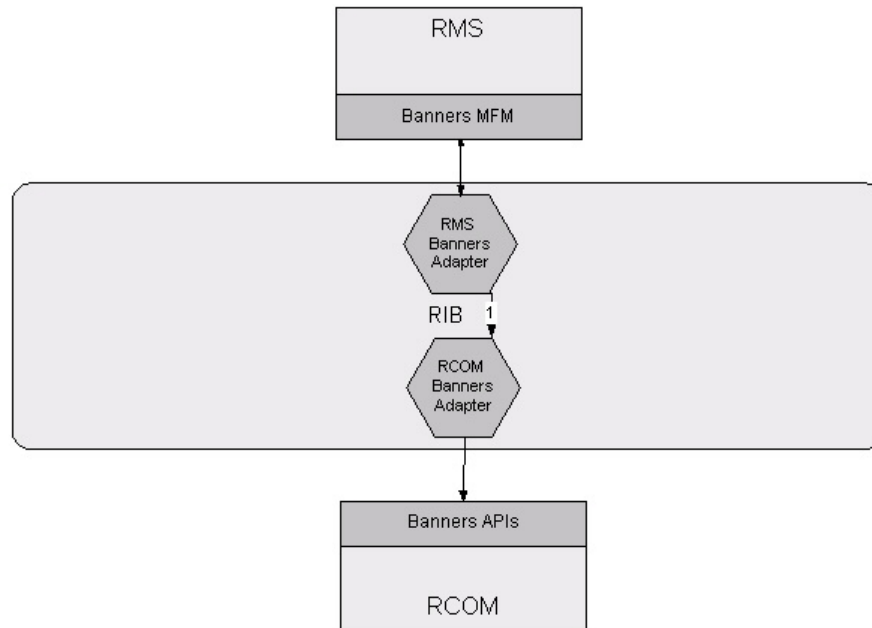
Comments: Because UDAs are foundation data, the RIB does not route these messages by warehouse ID. All RDM instances receive the same message.

The following table lists the UDA message types that RDM subscribes to:

EtUDAsLVFromRIB			
Message Types	Mapping Document	Document Type Definition (DTD)	Subscribing APIs
UDAHdrCre	RDM_MAP_UDAHdrDesc.xls	UDAHdrDesc.dtd	RDMSUB_UDAHdrCre
UDAHdrMod	RDM_MAP_UDAHdrDesc.xls	UDAHdrDesc.dtd	RDMSUB_UDAHdrMod
UDAHdrDel	RDM_MAP_UDAHdrRef.xls	UDAHdrRef.dtd	RDMSUB_UDAHdrDel
UDAValCre	RDM_MAP_UDAValDesc.xls	UDAValDesc.dtd	RDMSUB_UDAValCre
UDAValMod	RDM_MAP_UDAValDesc.xls	UDAValDesc.dtd	RDMSUB_UDAValMod
UDAValDel	RDM_MAP_UDAValRef.xls	UDAValRef.dtd	RDMSUB_UDAValDel

Banners

RMS publishes messages about banners and channels to the RIB. A banner provides a means of grouping channels, thereby allowing the customer to link all brick and mortar stores, catalogs, and Web stores. The BANNER table holds a banner identifier and name. The CHANNELS table shows all channels and any associated banner identifiers. In order to take advantage of banners and channels, the customer must run RMS in a multi-channel environment. The following diagram illustrates the banner message process.



The message passed on the RIB through this process is: `etBannerFromRMS`

RMS Publisher – Banners

Rib Components:

E*Way name: `ewBannerFromRMS`
 RIB ID: `banner_id`
 Routing Info: `none`

Application Components:

Triggering Mechanism: `Table Triggers`
 Message family manager: `RMSMFM_BANNER`
 Message family manager Queue: `BANNER_MFQUEUE`

Comments: `None`

The following table lists the banner message types published from the message family manager RMSMFM_BANNER:

EtBannerFromRMS		
Message Types	Mapping Document	Document Type Definition (DTD)
BannerCre	RMS_MAP_BannerDesc	BannerDesc.dtd
BannerMod	RMS_MAP_BannerDesc	BannerDesc.dtd
BannerDel	RMS_MAP_BannerRef	BannerRef.dtd
ChannelCre	RMS_MAP_ChannelDesc	ChannelDesc.dtd
ChannelMod	RMS_MAP_ChannelDesc	ChannelDesc.dtd
ChannelDel	RMS_MAP_ChannelRef	ChannelRef.dtd

RCOM Subscriber – Banners

Rib Components:

e*Way name: ewBannersToRCOM

RIB ID: banner_id

Comments: None

The following table lists the banner message types that RCOM subscribes to:

etBannerFromRMS			
Message Types	Mapping Document	Document Type Definition (DTD)	Subscribing APIs
BannerCre	RMS_MAP_BannerDesc	BannerDesc.dtd	RCOMSUB_BannerCre
BannerMod	RMS_MAP_BannerDesc	BannerDesc.dtd	RCOMSUB_BannerMod
BannerDel	RMS_MAP_BannerRef	BannerRef.dtd	RCOMSUB_BannerDel
ChannelCre	RMS_MAP_ChannelDesc	ChannelDesc.dtd	RCOMSUB_ChannelCre
ChannelMod	RMS_MAP_ChannelDesc	ChannelDesc.dtd	RCOMSUB_ChannelMod
ChanneDel	RMS_MAP_ChannelRef	ChannelRef.dtd	RCOMSUB_ChannelDel

Locations

For Retek 10 Integration Bus purposes, the word “locations” can apply to:

- Stores and warehouses in RMS
- Virtual stores and warehouses in RCOM
- Ship methods in RCOM
- Physical locations in RDM

RMS publishes stores and warehouses (both physical and virtual) to the RIB using the e*Ways:

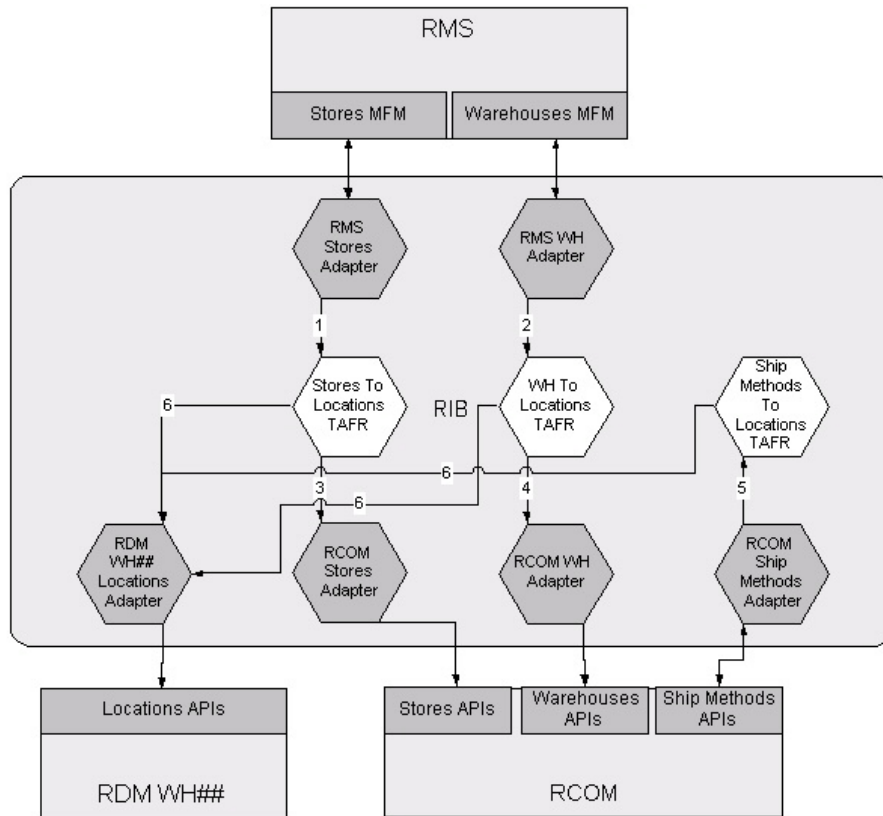
- ewStoresFromRMS
- ewWHFromRMS

RCOM publishes ship methods to the RIB using the e*Way:

- ewShipMethFromRCOM

RCOM subscribes to virtual stores and warehouses, and RDM subscribes to locations. In a multi-channel environment, before a location can be successfully consumed by the subscribing application, any channels or banners that the location references must have already been successfully consumed by the same subscribing application.

The following diagram illustrates the location message processes.



The numbers in the diagram correspond to messages and the actual message types passed on the RIB:

- 1 etStoresFromRMS
- 2 etWHFromRMS
- 3 etStoresFromRIB (Virtual Only)
- 4 etWHFromRIB (Virtual Only)
- 5 etShipMethFromRCOM
- 6 etLocationsFromRIB (Physical Only)

All messages are described in the following paragraphs.

RMS Publisher – Stores (physical and virtual)

Rib Components:

e*Way name: ewStoresFromRMS
 RIB ID: store id
 Routing Info: location_type.

Application Components:

Triggering Mechanism: Table Triggers

Message family manager: RMSMFM_STORE

Message family manager Queue: STORE_MFQUEUE

Comments: None

The following table lists the store message types published from the message family manager RMSMFM_STORE:

etStoresFromRMS		
Message Types	Mapping Document	Document Type Definition (DTD)
StoreCre	RMS_MAP_StoreDesc.xls	StoreDesc.dtd
StoreMod	RMS_MAP_StoreDesc.xls	StoreDesc.dtd
StoreDel	RMS_MAP_StoreRef.xls	StoreRef.dtd

RMS Publisher – Warehouse (physical and virtual)

Rib Components:

e*Way name: ewWHFromRMS

RIB ID: wh id

Routing Info: location type.

Application Components:

Triggering Mechanism: Table Triggers

Message family manager: RMSMFM_WH

Message family manager Queue: WH_MFQUEUE

Comments: None

The following table lists the warehouse message types published from the message family manager RMSMFM_WH:

EtWHFromRMS		
Message Types	Mapping Document	Document Type Definition (DTD)
WHCre	RMS_MAP_WHDesc.xls	WHDesc.dtd
WHMod	RMS_MAP_WHDesc.xls	WHDesc.dtd
WHDel	RMS_MAP_WHRef.xls	WHRef.dtd

RCOM Publisher – Ship Methods

Rib Components:

e*Way name: ewShipMethFromRCOM
 RIB ID: rdm_dest_id – This is the unique ship method id that is held in RCOM.
 Routing Info: none

Application Components:

Triggering Mechanism: Application
 Message family manager: RCOMMFM_SHIPMETH
 Message family manager Queue: RIB_CARRSRV_MFQUEUE

Comments: None

The following table lists the ship method message types published from the message family manager RMSMFM_SHIPMETH:

etShipMethFromRCOMMFM		
Message Types	Mapping Document	Document Type Definition (DTD)
ShipMethCre	RCOM_MAP_ShipMethDesc.xls	ShipMethDesc.dtd
ShipMethMod	RCOM_MAP_ShipMethDesc.xls	ShipMethDesc.dtd
ShipMethDel	RCOM_MAP_ShipMethRef.xls	ShipMethRef.dtd

TAFR (Stores to Locations)

Rib Components:

E*Way name: ewStoresToLocationFromRIB
 Routing Info: location_type (physical or virtual)
 Transformation: Store to Location
 Filtering: none

Comments:

- Messages are routed based on their location type (from the routing information). The physical stores are routed to etLocationsFromRIB and the virtual stores are routed to etStoresFromRIB. Because locations are foundation data, each instance of RDM receives the message, rather than routed by warehouse.
- Virtual store messages are not transformed.
- Physical store messages are transformed into location messages.

TAFR (Warehouse to Locations)

Rib Components:

e*Way name: ewWHToLocationFromRIB
 Routing Info: location type (physical or virtual).
 Transformation: warehouse to location
 Filtering: none

Comments:

- Messages are routed based on their location type (from the routing information). The physical warehouses are routed to etLocationsFromRIB and the virtual stores are routed to etWHFromRIB. Because locations are foundation data, each instance of RDM receives the message, rather than routed by warehouse.
- Virtual warehouse messages are not transformed.
- Physical warehouse messages are transformed into location messages.

TAFR (Ship methods to Locations)

Rib Components:

e*Way name: ewShipMethToLocationFromRIB
 Routing Info: none
 Transformation: ship methods to location
 Filtering: none

Comments: Ship methods are not virtual; therefore, they do not require routing, only transformation.

RDM Subscriber – Locations (Physical)

Rib Components:

e*Way name: ewLocationsToRDMWH##
 RIB ID: Store ID, warehouse ID, or rdm_desc_id (depending on the publisher)

Comments: None

The following table lists the location message types that RDM subscribes to:

etLocationsFromRIB			
Message Types	Mapping Document	Document Type Definition (DTD)	Subscribing APIs
LocationCre	RMS_MAP_LocationDesc.xls	LocationDesc.dtd	RDMSUB_LocationCre
LocationMod	RMS_MAP_LocationDesc.xls	LocationDesc.dtd	RDMSUB_LocationMod
LocationDel	RMS_MAP_LocationRef.xls	LocationRef.dtd	RDMSUB_LocationDel

RCOM Subscriber – Stores (Virtual)

Rib Components:

e*Way name: ewStoresToRCOM

RIB ID: store id

Comments: None

The following table lists the store message types that RCOM subscribes to:

etStoresFromRIB			
Message Types	Mapping Document	Document Type Definition (DTD)	Subscribing APIs
StoreCre	RMS_MAP_StoreDesc.xls	StoreDesc.dtd	RCOMSUB_StoreCre
StoreMod	RMS_MAP_StoreDesc.xls	StoreDesc.dtd	RCOMSUB_StoreMod
StoreDel	RMS_MAP_StoreRef.xls	StoreRef.dtd	RCOMSUB_StoreDel

RCOM Subscriber – Warehouses (Virtual)

Rib Components:

e*Way name: ewWHToRCOM

RIB ID: wh id

Comments: None

The following table lists the warehouse message types that RCOM subscribes to:

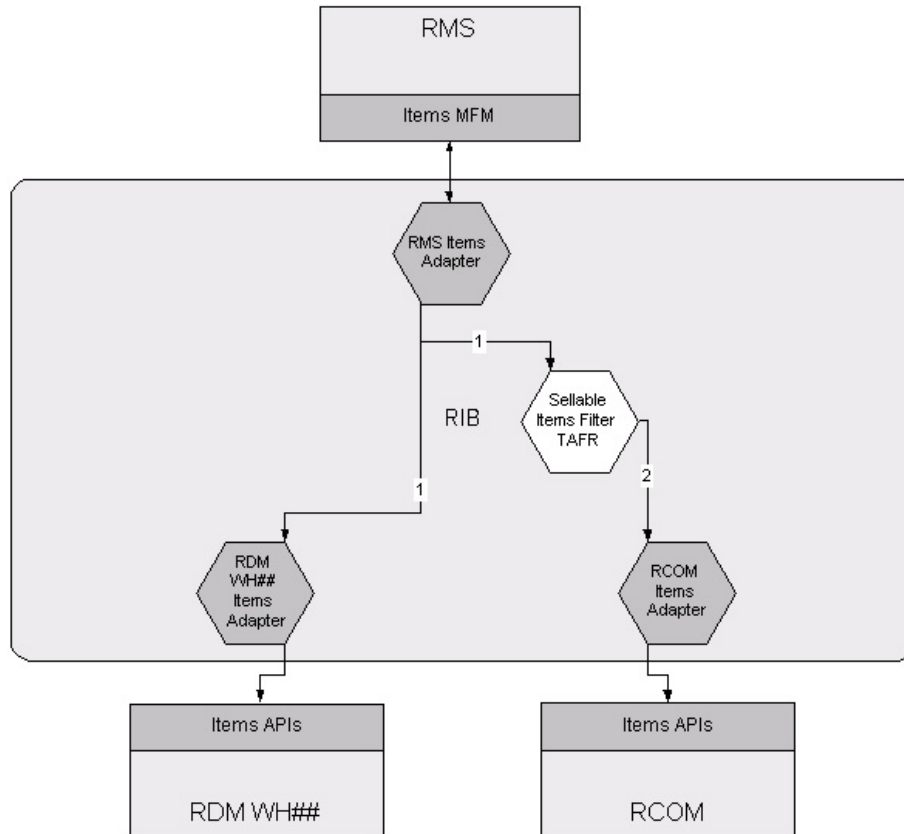
etWHFromRIB			
Message Types	Mapping Document	Document Type Definition (DTD)	Subscribing APIs
WHCre	RMS_MAP_WHDesc.xls	WHDesc.dtd	RCOMSUB_WHCre
WHMod	RMS_MAP_WHDesc.xls	WHDesc.dtd	RCOMSUB_WHMod
WHDel	RMS_MAP_WHRef.xls	WHRef.dtd	RCOMSUB_WHDel

Items

RMS publishes item data to the RIB. All sellable items are subscribed to by both RDM and RCOM. However, non-sellable items (like non-sellable packs) only go to RDM.

Before an item can be successfully consumed by a subscribing application, the vendor, location, UDAs, diffs, channels or banners that the item references must have already been successfully consumed by the same subscribing application.

The following diagram illustrates the item message processes.



Numbers 1 and 2 in the diagram correspond to the following actual messages that are passed on the RIB:

- 1 etItemsFromRMS
- 2 etItemsSPFromRIB

All messages are described in the following paragraphs.

RMS Publisher – Items

Rib Components:

E*Way name: ewItemsFromRMS
 RIB ID: item id
 Routing Info: sellable_ind.

Application Components:

Triggering Mechanism: Table Triggers
 Message family manager: RMSMFM_ITEMS
 Message family manager Queue: ITEM_MFQUEUE

Comments: None

The following table lists the item message types published from the message family manager RMSMFM_ITEMS:

etlItemsFromRMS		
Message Types	Mapping Document	Document Type Definition (DTD)
ItemCre	RMS_MAP_ItemDesc	ItemDesc.dtd
ItemDel	RMS_MAP_ItemRef	ItemRef.dtd
ItemSupCre	RMS_MAP_ItemSupDesc	ItemSupDesc.dtd
ItemSupMod	RMS_MAP_ItemSupDesc	ItemSupDesc.dtd
ItemSupDel	RMS_MAP_ItemSupRef	ItemSupRef.dtd
ItemSupCtyCre	RMS_MAP_ItemSupCtyDesc	ItemSupCtyDesc.dtd
ItemSupCtyMod	RMS_MAP_ItemSupCtyDesc	ItemSupCtyDesc.dtd
ItemSupCtyDel	RMS_MAP_ItemSupCtyRef	ItemSupCtyRef.dtd
ISCDimCre	RMS_MAP_ISCDimDesc	ISCDimDesc.dtd
ISCDimMod	RMS_MAP_ISCDimDesc	ISCDimDesc.dtd
ISCDimDel	RMS_MAP_ISCDimRef	ISCDimRef.dtd
ItemUDALOVCre	RMS_MAP_ItemUDALOVDesc	ItemUDALOVDesc.dtd
ItemUDALOVMod	RMS_MAP_ItemUDALOVDesc	ItemUDALOVDesc.dtd
ItemUDALOVDel	RMS_MAP_ItemUDALOVRef	ItemUDALOVRef.dtd
ItemUDAFFCre	RMS_MAP_ItemUDAFFDesc	ItemUDAFFDesc.dtd
ItemUDAFFMod	RMS_MAP_ItemUDAFFDesc	ItemUDAFFDesc.dtd
ItemUDAFFDel	RMS_MAP_ItemUDAFFRef	ItemUDAFFRef.dtd
ItemUDADateCre	RMS_MAP_ItemUDADateDesc	ItemUDADateDesc.dtd
ItemUDADateMod	RMS_MAP_ItemUDADateDesc	ItemUDADateDesc.dtd
ItemUDADateDel	RMS_MAP_ItemUDADateRef	ItemUDADateRef.dtd
ItemUPCCre	RMS_MAP_ItemUPCDesc	ItemUPCDesc.dtd
ItemUPCMod	RMS_MAP_ItemUPCDesc	ItemUPCDesc.dtd
ItemUPCDel	RMS_MAP_ItemUPCRef	ItemUPCRef.dtd
ItemBOMCre	RMS_MAP_ItemBOMDesc	ItemBOMDesc.dtd

etlItemsFromRMS		
Message Types	Mapping Document	Document Type Definition (DTD)
ItemBOMMod	RMS_MAP_ItemBOMDesc	ItemBOMDesc.dtd
ItemBOMDel	RMS_MAP_ItemBOMRef	ItemBOMRef.dtd
ItemImageCre	RMS_MAP_ItemImageDesc	ItemImageDesc.dtd
ItemImageMod	RMS_MAP_ItemImageDesc	ItemImageDesc.dtd
ItemImageDel	RMS_MAP_ItemImageRef	ItemImageRef.dtd

TAFR

Rib Components:

E*Way name: ewItemsToItemsSPFromRIB
 RIB ID: item id
 Routing Info: sellable_ind
 Transformation: none
 Filtering: if sellable_ind is not “Y”, then don’t publish a etlItemsSPFromRIB message.

Comments: All items are published to RDM. Only items where sellable_ind = “Y” are published to RCOM

RDM Subscriber – Items

Rib Components:

E*Way name: ewItemsToRDMWH##
 RIB ID: item id

Comments: Since items are foundation data,– all RDM instances get the item message. Because items are foundation data, they are not routed by warehouse ID. Each instance of RDM receives the message.

The following table lists the item message types subscribed to by RDM:

etlItemsFromRMS			
Message Types	Mapping Document	Document Type Definition (DTD)	Subscribing APIs
ItemCre	RMS_MAP_ItemDesc	ItemDesc.dtd	RDMSUB_ItemCre
ItemHdrMod	RMS_MAP_ItemHdrDesc	ItemHdrDesc.dtd	RDMSUB_ItemHdrMod
ItemDel	RMS_MAP_ItemRef	ItemRef.dtd	RDMSUB_ItemDel
ItemSupCre	RMS_MAP_ItemSupDesc	ItemSupDesc.dtd	RDMSUB_ItemSupCre
ItemSupMod	RMS_MAP_ItemSupDesc	ItemSupDesc.dtd	RDMSUB_ItemSupMod

etlItemsFromRMS			
Message Types	Mapping Document	Document Type Definition (DTD)	Subscribing APIs
ItemSupDel	RMS_MAP_ItemSupRef	ItemSupRef.dtd	RDMSUB_ItemSupDel
ItemSupCtyCre	RMS_MAP_ItemSupCtyDesc	ItemSupCtyDesc.dtd	RDMSUB_ItemSupCtyCre
ItemSupCtyMod	RMS_MAP_ItemSupCtyDesc	ItemSupCtyDesc.dtd	RDMSUB_ItemSupCtyMod
ItemSupCtyDel	RMS_MAP_ItemSupCtyRef	ItemSupCtyRef.dtd	RDMSUB_ItemSupCtyDel
ISCDimCre	RMS_MAP_ISCDimDesc	ISCDimDesc.dtd	RDMSUB_ISCDimCre
ISCDimMod	RMS_MAP_ISCDimDesc	ISCDimDesc.dtd	RDMSUB_ISCDimMod
ISCDimDel	RMS_MAP_ISCDimRef	ISCDimRef.dtd	RDMSUB_ISCDimDel
ItemUDALOVCre	RMS_MAP_ItemUDALOVDesc	ItemUDALOVDesc.dtd	RDMSUB_ItemUDALOVCre
ItemUDALOVMod	RMS_MAP_ItemUDALOVDesc	ItemUDALOVDesc.dtd	RDMSUB_ItemUDALOVMod
ItemUDALOVDel	RMS_MAP_ItemUDALOVRef	ItemUDALOVRef.dtd	RDMSUB_ItemUDALOVDel
ItemUPCCre	RMS_MAP_ItemUPCDesc	ItemUPCDesc.dtd	RDMSUB_ItemUPCCre
ItemUPCMod	RMS_MAP_ItemUPCDesc	ItemUPCDesc.dtd	RDMSUB_ItemUPCMod
ItemUPCDel	RMS_MAP_ItemUPCRef	ItemUPCRef.dtd	RDMSUB_ItemUPCDel
ItemBOMCre	RMS_MAP_ItemBOMDesc	ItemBOMDesc.dtd	RDMSUB_ItemBOMCre
ItemBOMMod	RMS_MAP_ItemBOMDesc	ItemBOMDesc.dtd	RDMSUB_ItemBOMMod
ItemBOMDel	RMS_MAP_ItemBOMRef	ItemBOMRef.dtd	RDMSUB_ItemBOMDel

RCOM Subscriber – Items

Rib Components:

E*Way name: ewItemsToRCOM

RIB ID: item id

Comments: None

The following table lists the item message types subscribed to by RCOM:

etlItemsSPFromRIB			
Message Types	Mapping Document	Document Type Definition (DTD)	Subscribing APIs
ItemCre	RMS_MAP_ItemDesc	ItemDesc.dtd	RCOMSUB_ItemCre
ItemHdrMod	RMS_MAP_ItemHdrDesc	ItemHdrDesc.dtd	RCOMSUB_ItemHdrMod
ItemDel	RMS_MAP_ItemRef	ItemRef.dtd	RCOMSUB_ItemDel
ItemSupCre	RMS_MAP_ItemSupDesc	ItemSupDesc.dtd	RCOMSUB_ItemSupCre

etlItemsSPFromRIB			
Message Types	Mapping Document	Document Type Definition (DTD)	Subscribing APIs
ItemSupMod	RMS_MAP_ItemSupDesc	ItemSupDesc.dtd	RCOMSUB_ItemSupMod
ItemSupDel	RMS_MAP_ItemSupRef	ItemSupRef.dtd	RCOMSUB_ItemSupDel
ItemUPCCre	RMS_MAP_ItemUPCDesc	ItemUPCDesc.dtd	RCOMSUB_ItemUpcCre
ItemUPCMod	RMS_MAP_ItemUPCDesc	ItemUPCDesc.dtd	RCOMSUB_ItemUpcMod
ItemUPCDel	RMS_MAP_ItemUPCRef	ItemUPCRef.dtd	RCOMSUB_ItemUpcDel
ItemBOMCre	RMS_MAP_ItemBOMDesc	ItemBOMDesc.dtd	RCOMSUB_ItemBomCre
ItemBOMMod	RMS_MAP_ItemBOMDesc	ItemBOMDesc.dtd	RCOMSUB_ItemBomMod
ItemBOMDel	RMS_MAP_ItemBOMRef	ItemBOMRef.dtd	RCOMSUB_ItemBomDel
ItemImageCre	RMS_MAP_ItemImageDesc	ItemImageDesc.dtd	RCOMSUB_ItemImageCre
ItemImageMod	RMS_MAP_ItemImageDesc	ItemImageDesc.dtd	RCOMSUB_ItemImageMod
ItemImageDel	RMS_MAP_ItemImageRef	ItemImageRef.dtd	RCOMSUB_ItemImageDel

Transaction messages

After populating application tables with seed data and after all required foundation data messages have been subscribed to, all applications are prepared to publish and subscribe transaction data messages. Like the foundation data message functional area descriptions in the preceding section, each transaction message functional area in this section lists the messages passed on the RIB, the publishing application and its processes and message types, any TAFR operations that apply, and the subscribing application and its message processes.

The following list of transaction message functional areas are described in this section:

- Purchase order (physical, virtual locations)
- Inbound work orders
- ASN inbound
- Receiving
- Stock orders
- ASN outbound
- Stock order status
- Available to promise (ATP)
- Customer backorder and reserve
- Customer sale
- Inventory adjustments
- Pending returns
- Return to vendor
- Customer order return sale

Purchase order

Purchase order messages may pertain to physical locations only, or to virtual or physical locations. This section describes message publication and subscription for both situations.

Physical location purchase order data

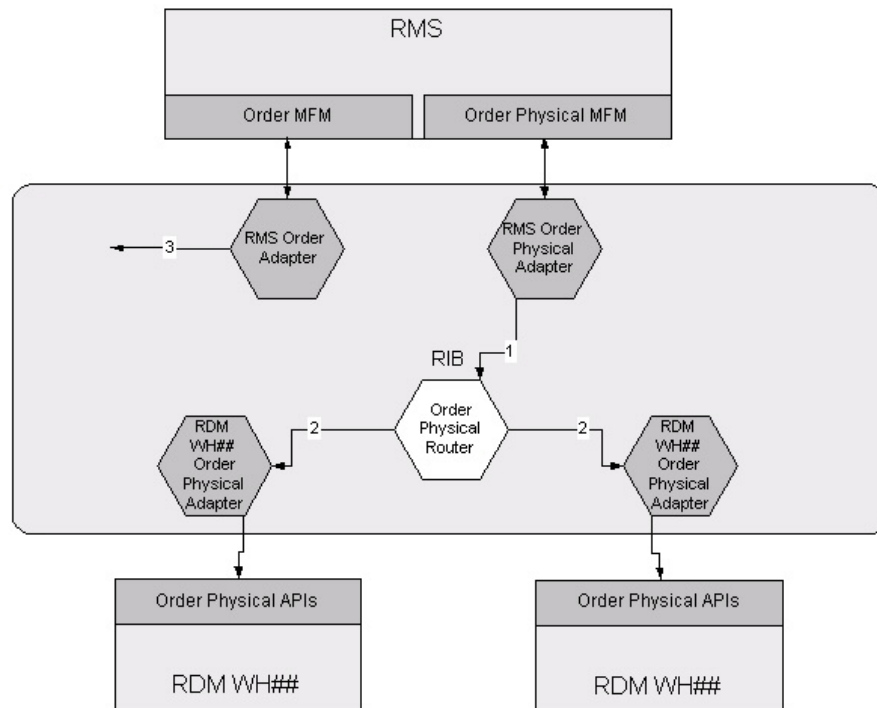
RMS publishes purchase order data for physical locations to the RIB, using the ewOrderPhysFromRMS adapter (e*Way). When the data is originally at the virtual location level, RMS rolls it up to the physical location level before writing it to the physical order message queue table. This process results from the fact that RDM, the only subscriber for purchase orders, accepts data only at the physical location level.

Virtual location purchase order data

RMS also publishes purchase order data for virtual and/or physical locations, using the ewOrderFromRMS adapter. This adapter can publish either virtual or physical location data, depending on how RMS is configured. If RMS is configured to run in a multi-channel environment, virtual locations hold stock, while physical locations (warehouses) do not. Note that virtual location publication has no subscribers in base RIB 10.0; however, the functionality exists for any external client applications that may need virtual location purchase order data.

RMS publishes purchase orders as a header with multiple detail lines. Each detail line specifies the location the detail must be routed to. Thus, the Order Physical routing TAFR may rout a single published RMS purchase order message to more than one warehouse.

The following diagram illustrates the purchase order message processes.



The numbers in the diagram correspond to the following actual messages that are passed on the RIB:

- 1 etItemsFromRMS
- 2 etItemsSPFromRIB

All messages are described in the following paragraphs.

RMS Publisher – Orders (Physical Locations)

Rib Components:

E*Way name: ewOrderPhysFromRMS
 RIB ID: order_no
 Routing Info: facility_type.

Application Components:

Triggering Mechanism: Table Triggers
 Message family manager: RMSMFM_ORDERPHYS
 Message family manager Queue: ORDERPHYS_MFQUEUE

Comments: During the purchase order creation process, multiple messages are written to the ORDERPHYS_MFQUEUE table. However, none of these can be picked up by the message family manager until the order has been approved, at which time the message family manager combines the multiple rows on the queue table into one message. Other than the purchase order creation process, each single row in the queue table corresponds to a publishable message.

The following table lists the purchase order physical message types published from the message family manager RMSMFM_ORDERPHYS:

EtOrderPhysFromRMS		
Message Types	Mapping Document	Document Type Definition (DTD)
POPhysCre	RMS_MAP_POPhyDesc.xls	POPhyDesc.dtd
POPhysDtlCre	RMS_MAP_POPhyDtlDesc.xls RMS_MAP_PODtlTsfDesc.xls	POPhyDtlDesc.dtd
POPhysHdrMod	RMS_MAP_POHdrDesc.xls	POHdrDesc.dtd
POPhysDtlMod	RMS_MAP_POPhyDtlDesc.xls	POPhyDtlDesc.dtd
POPhysDel	RMS_MAP_PORef.xls	PORef.dtd
POPhysDtlDel	RMS_MAP_POPhyDtlRef.xls	POPhyDtlRef.dtd

RMS Publisher – Orders (Physical and/or virtual Locations)

Rib Components:

E*Way name: ewOrderFromRMS

RIB ID: order_no

Routing Info: none

Application Components

Triggering Mechanism: Table Triggers

Message family manager: RMSMFM_ORDER

Message family manager Queue: ORDER_MFQUEUE

Comments: Many events in the RMS purchase order creation or modification process write a row to the ORDER_MFQUEUE table. For example, there may be many rows in the queue table, but they may represent only a few POPhysCre messages. The message family manager combines the rows on the queue table into one message to publish to the RIB.

The following table lists the purchase order virtual/physical message types published from the message family manager RMSMFM_ORDER:

EtOrderFromRMS		
Message Types	Mapping Document	Document Type Definition (DTD)
POCre	RMS_MAP_PODesc.xls	PODesc.dtd
PODtlCre	RMS_MAP_PODtlDesc.xls RMS_MAP_PODtlTsfDesc.xls	PODtlDesc.dtd
POHdrMod	RMS_MAP_POHdrDesc.xls	POHdrDesc.dtd
PODtlMod	RMS_MAP_PODtlDesc.xls	PODtlDesc.dtd
PODel	RMS_MAP_PORef.xls	PORef.dtd
PODtlDel	RMS_MAP_PODtlRef.xls	PODtlRef.dtd

TAFR

Rib Components:

E*Way name: ewOrderPhysToOrderPhysWHFromRIB
 RIB ID: order_no, add location_id
 Routing Info: facility type.
 Transformation: none
 Filtering: none

Comments: The messages are routed based on their facility type, derived from the routing information, and the physical warehouse identifier. The physical warehouse identifier is extracted from the message data. A new message type is created and published by the TAFR, which is only subscribed to by the appropriate RDM warehouse.

RDM Subscriber – Orders (Physical Locations)

Rib Components:

E*Way name: ewOrderPhysToRDMWH##
 RIB ID: order_no, location_id

Comments: None

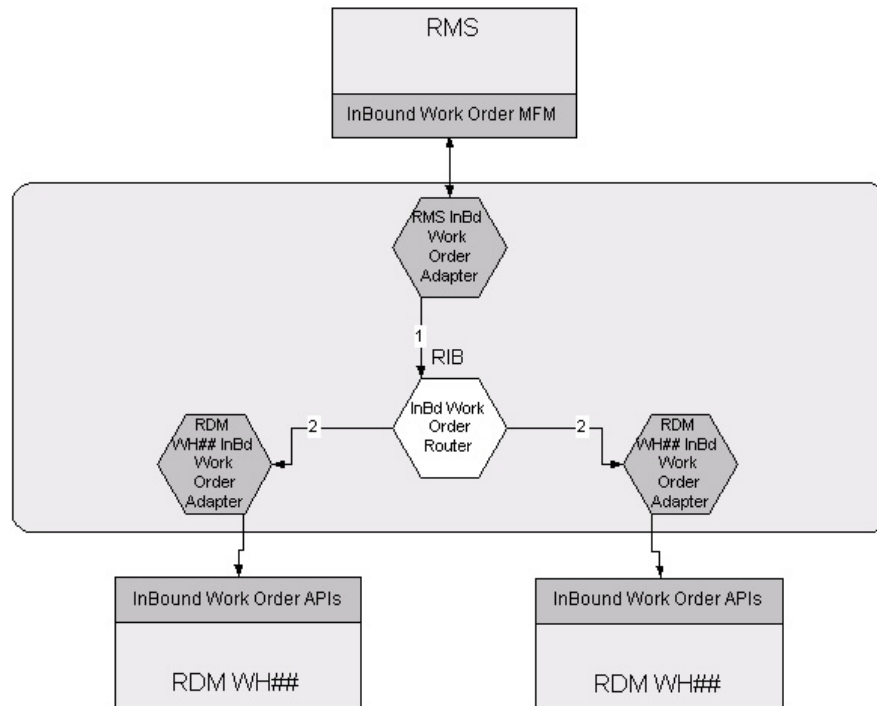
The following table lists the purchase order physical message types subscribed to by RDM:

etOrderPhysFromRIBToWH##			
Message Types	Mapping Document	Document Type Definition (DTD)	Subscribing APIs
POPhysCre	RDM_MAP_POPhyDesc.xls	POPhyDesc.dtd	RDMSUB_POPhysCre
POPhysDtlCre	RDM_MAP_POPhyDtlDesc.xls ,RDM_MAP_PODtlTsfDesc.xls	POPhyDtlDesc.dtd	RDMSUB_POPhysDtlCre
POPhysHdrMod	RDM_MAP_POHdrDesc.xls	POHdrDesc.dtd	RDMSUB_POPhysHdrMod
POPhysDtlMod	RDM_MAP_POPhyDtlDesc.xls	POPhyDtlDesc.dtd	RDMSUB_POPhysDtlMod
POPhysDel	RDM_MAP_PORef.xls	PORef.dtd	RDMSUB_POPhysDel
POPhysDtlDel	RDM_MAP_POPhyDtlRef.xls	POPhyDtlRef.dtd	RDMSUB_POPhysDtlDel

Inbound Work orders

RMS publishes work order messages. A work order provides direction to RDM about work that needs to be completed on items contained in a recent purchase order. RMS publishes new work order messages soon after it publishes the purchase order message. RMS also publishes modified work orders. RDM subscribes to work order messages in order to determine the tasks that need to be completed at the warehouse.

The following diagram illustrates the work order message processes.



The numbers in the diagram correspond to the following actual messages that are passed on the RIB:

- 1 etWOInFromRMS
- 2 etWOInToRDMWH##

All messages are described in the following paragraphs.

RMS Publisher – Inbound Work Orders

Rib Components:

E*Way name: ewWOInFromRMS
 RIB id: O_WO_ID, O_WH, O_SEQ_NO, O_ITEM
 Routing Info: none

Application Components:

Triggering Mechanism: Table Triggers
 Message family manager: RMSMFM_WORKORDER
 Message family manager Queue: WORKORDER_MFQUEUE

Comments: None

The following table lists the message types that are published from RMSMFM_WORKORDER:

etWOInFromRMSMFM		
Message Types	Mapping Documents	Type (DTD)
InBdWOCre	RMS_MAP_InBdWODesc.xls	InBdWODesc.dtd
InBdWOMod	RMS_MAP_InBdWODesc.xls	InBdWOHdrDesc.dtd
InBdWODel	RMS_MAP_InBdWOREf.xls	InBdWOREf.dtd

TAFR

Rib Components:

E*Way name: ewWOInToWOInWHFromRIB
 RIB ID: O_WO_ID, O_WH, O_SEQ_NO, O_ITEM
 Routing Info: pass through sellable_ind from publisher
 Transformation: facility_id
 Filtering: None

Comments: Route messages to their proper RDM instance using the facility_id and the location (from the message data).

RDM Subscriber – Inbound Work Orders

Rib Components:

E*Way name: ewWOInToRDMWH##

RIB id: O_WO_ID, O_WH, O_SEQ_NO, O_ITEM

Comments: None

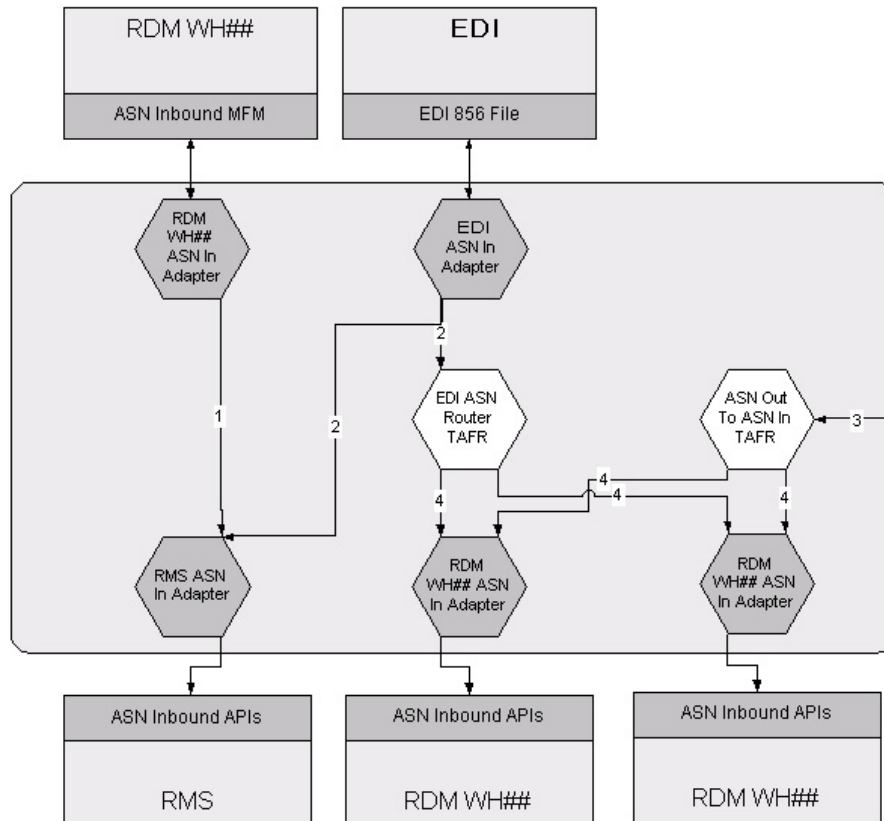
The following table lists the inbound work order message types subscribed to by RDM:

etWOInFromRIBToWH#			
Message Types	Mapping Documents	Type (DTD)	Subscribing APIs
InBdWOCre	RDM_MAP_InBdWODesc.xls	InBdWODesc.dtd	RDMSUB_InBdWOCre
InBdWOMod	RDM_MAP_InBdWODesc.xls	InBdWODesc.dtd	RDMSUB_InBdWOMod
InBdWODel	RDM_MAP_InBdWORef.xls	InBdWORef.dtd	RDMSUB_InBdWODel

ASN inbound

ASN inbound messages are advanced shipment notification (ASN) messages that tell RDM to expect a shipment of merchandise. These messages can originate either from an outside vendor (via EDI) or from another RDM instance (in the case of a transfer or allocation shipment). RMS subscribes to ASN inbound messages as well as RDM. RMS uses the ASN inbound message to create shipment records.

The following diagram illustrates the ASN inbound message processes.



The numbers in the diagram correspond to the following actual messages that are passed on the RIB:

- 1 etASNInFromRDMWH##
- 2 etASNInFromEDI
- 3 etASNOutFromRDMWH##
- 4 etASNInFromRIBToWH##

All messages are described in the following paragraphs.

RDM Publisher – ASN Inbound

Rib Components:

E*Way name: ewASNInFromRDMWH##

RIB id: none

Routing Info: facility_type

Application Components:

Triggering Mechanism: Application

Message family manager: RDMMFM_ASNIN

Message family manager Queue: INBOUND_ASN_QUEUE

Comments: None

The following table lists the ASN inbound message types that are published from RDMMFM_ASNIN:

etASNInFromRDM		
Message Types	Mapping Documents	Type (DTD)
ASNInCre	RDM_MAP_ASNInDesc.xls RDM_MAP_ASNInHdrDesc.xls RDM_MAP_ASNInPODesc.xls RDM_MAP_ASNInCtnDesc.xls RDM_MAP_ASNInItemDesc.xls	ASNInDesc.dtd
ASNInMod	RDM_MAP_ASNInDesc.xls RDM_MAP_ASNInHdrDesc.xls RDM_MAP_ASNInPODesc.xls RDM_MAP_ASNInCtnDesc.xls RDM_MAP_ASNInItemDesc.xls	ASNInDesc.dtd
ASNInDel	RDM_MAP_ASNInRef.xls	ASNInRef.dtd

EDI Publisher – ASN Inbound

Rib Components:

E*Way name: ewASNInFromEDI

RIB ID: none

Routing Info: facility_type, asn_type

Application Components:

Triggering Mechanism: File

Message family manager: N/A

Message family manager Queue: N/A

Comments: This message is triggered by the presence of the file in the EDI download directory. The name and location of this directory is configured in the e*Way configuration file under the section titled “Subscribe to External,” parameter “Remote Directory Name.” The name of the file is configured in the same section under parameter “Remote File Regexp.” The EDI file is also mapped from the EDI format to the Retek ASN format.

The following table lists ASN inbound message types that are published from EDI:

EtASNInFromEDIExt		
Message Types	Mapping Documents	Type (DTD)
ASNInCre	RDM_MAP_ASNInDesc.xls RDM_MAP_ASNInHdrDesc.xls RDM_MAP_ASNInPODesc.xls RDM_MAP_ASNInCtnDesc.xls RDM_MAP_ASNInItemDesc.xls	ASNInDesc.dtd
ASNInMod	RDM_MAP_ASNInDesc.xls RDM_MAP_ASNInHdrDesc.xls RDM_MAP_ASNInPODesc.xls RDM_MAP_ASNInCtnDesc.xls RDM_MAP_ASNInItemDesc.xls	ASNInDesc.dtd
ASNInDel	RDM_MAP_ASNInRef.xls	ASNInRef.dtd

TAFR – ASNOut to ASNIn

See the Outbound ASN section for details of this TAFR.

TAFR – EDI ASNInWH

Rib Components:

E*Way name: ewASNInEDIToASNInWHFromRIB
 RIB ID: none
 Routing Info: facility_type, asn_type
 Transformation: none
 Filtering: none

Comments: This operation routes the message to the proper RDM warehouse instance based on the facility_type (from the routingInfo) and the ToLocation (from the messageData).

RMS Subscriber – ASN inbound

Rib Components:

E*Way name: ewASNInToRMS

RIB ID: none

Comments: None

The following table lists ASN inbound message types that are subscribed to by RMS:

etASNInFromRDM, etASNInFromEDI			
Message Types	Mapping Documents	Document Type Definiton (DTD)	Subscribing APIs
ASNInCre	RMS_MAP_ASNInDesc.xls RMS_MAP_ASNInHdrDesc.xls RMS_MAP_ASNInPODesc.xls RMS_MAP_ASNInCtnDesc.xls RMS_MAP_ASNInItemDesc.xls	ASNInDesc.dtd	RMSSUB_ASNINCRE
ASNInMod	RMS_MAP_ASNInDesc.xls RMS_MAP_ASNInHdrDesc.xls RMS_MAP_ASNInPODesc.xls RMS_MAP_ASNInCtnDesc.xls RMS_MAP_ASNInItemDesc.xls	ASNInDesc.dtd	RMSSUB_ASNINMOD
ASNInDel	RMS_MAP_ASNInRef.xls	ASNInRef.dtd	RMSSUB_ASNINDEL

RDM Subscriber – ASN inbound

Rib Components:

E*Way name: ewASNInToRDMWH##

RIB ID: none

Comments: None

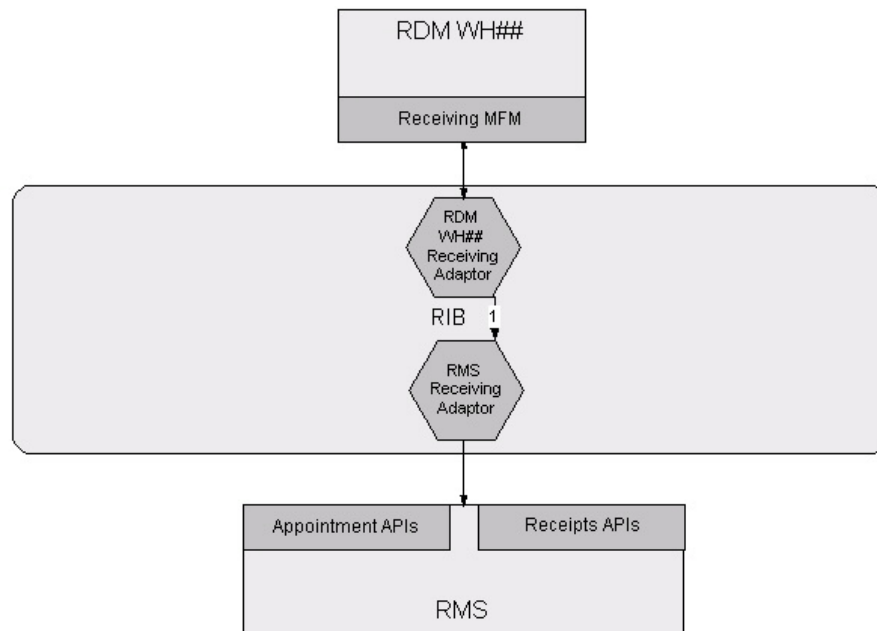
The following table lists ASN inbound message types that are subscribed to by RDM:

EtASNInFromRIBToWH##			
Message Types	Mapping Documents	Document Type Definiton (DTD)	Subscribing APIs
ASNInCre	RMS_MAP_ASNInDesc.xls RMS_MAP_ASNInHdrDesc.xls RMS_MAP_ASNInPODesc.xls RMS_MAP_ASNInCtnDesc.xls RMS_MAP_ASNInItemDesc.xls	ASNInDesc.dtd	RMSSUB_ASNINCRE
ASNInMod	RMS_MAP_ASNInDesc.xls RMS_MAP_ASNInHdrDesc.xls RMS_MAP_ASNInPODesc.xls RMS_MAP_ASNInCtnDesc.xls RMS_MAP_ASNInItemDesc.xls	ASNInDesc.dtd	RMSSUB_ASNINMOD
ASNInDel	RMS_MAP_ASNInRef.xls	ASNInRef.dtd	RMSSUB_ASNINDEL

Receiving

Receiving consists of appointment and receipt messages that RDM publishes to the RIB for RMS. An appointment is information about the arrival of merchandise at a location. A receipt message tells RMS when merchandise arrives in RDM. It also allows RMS to close the appointment for that receipt.

The following diagram illustrates the receiving message processes.



The number in the diagram corresponds to the following actual message that is passed on the RIB:

1 etReceivingFromRDM

This message is described in the following paragraphs.

RDM Publisher – Receiving

Rib Components:

E*Way name: ewReceivingFromRDMWH##

RIB ID: O_FROM_LOCATION
The unique location ID held in RDM.

O_APPT_NBR
The unique appointment number held in RDM, if there is one.

Routing Info: facility_type

Application Components:

Triggering Mechanism: Application

Message family manager: RDMMFMM_RECEIVING

Message family manager Queue: APPT_RECEIPT_QUEUE

Comments: There will be no O_APPT_NBR in the RIB ID if the receipt arrives without an appointment.

The following table lists the receiving message types that are published from RDMMFM_RECEIVING:

Message Type	Mapping Documents	Document Type Definition (DTD)
AppointCre	RDM_MAP_AppointDesc.xls	AppointDesc.dtd
AppointDtlCre	RDM_MAP_AppointDtlDesc.xls	AppointDtlDesc.dtd
AppointHdrMod	RDM_MAP_AppointHdrDesc.xls	AppointHdrDesc.dtd
AppointDtlMod	RDM_MAP_AppointDtlDesc.xls	AppointDtlDesc.dtd
AppointDel	RDM_MAP_AppointRef.xls	AppointRef.dtd
AppointDtlDel	RDM_MAP_AppointDtlRef.xls	AppointDtlRef.dtd
ReceiptCre	RDM_MAP_ReceiptDesc.xls	ReceiptDesc.dtd
ReceiptMod	RDM_MAP_ReceiptDesc.xls	ReceiptDesc.dtd

RMS Subscriber – Receiving

Rib Components:

E*Way name: ewReceiptsToRMS

RIB id: O_FROM_LOCATION, O_APPT_NO (if there is an appointment)

Comments: There is no O_APPT_NBR in the RIB ID if the receipt arrives without an appointment.

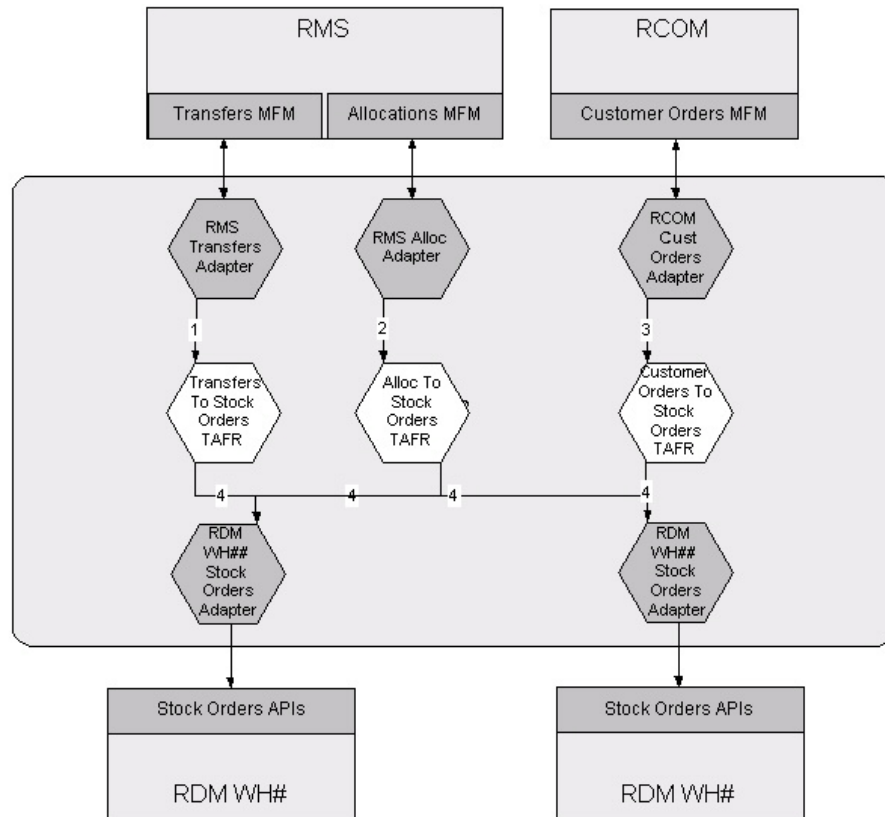
The following table lists the receiving message types subscribed to by RMS:

Message Type	Mapping Document	Document Type Definition (DTD)	Subscribing API
AppointCre	RMS_MAP_AppointDesc.xls	AppointDesc.dtd	RMSSUB_APPOINTCRE
AppointDtlCre	RMS_MAP_AppointDtlDesc.xls	AppointDtlDesc.dtd	RMSSUB_APPOINTDTLCRE
AppointHdrMod	RMS_MAP_AppointHdrDesc.xls	AppointHdrDesc.dtd	RMSSUB_APPOINTHDRMOD
AppointDtlMod	RMS_MAP_AppointDtlDesc.xls	AppointDtlDesc.dtd	RMSSUB_APPOINTDTLMOD
AppointDel	RMS_MAP_AppointRef.xls	AppointRef.dtd	RMSSUB_APPOINTDEL
AppointDtlDel	RMS_MAP_AppointDtlRef.xls	AppointDtlRef.dtd	RMSSUB_APPOINTDTLDEL
ReceiptCre	RMS_MAP_ReceiptDesc.xls	ReceiptDesc.dtd	RMSSUB_RECEIPTCRE
ReceiptMod	RMS_MAP_ReceiptDesc.xls	ReceiptDesc.dtd	RMSSUB_RECEIPTMOD

Stock orders

RMS publishes transfer and allocation messages; RCOM publishes customer order messages. Both of these are transformed by TAFRs to stock order messages, which are subscribed to by RDM.

The following diagram illustrates the stock order message processes.



The numbers in the diagram correspond to the following actual messages that are passed on the RIB:

- 1 etTransfersFromRMS
- 2 etAllocFromRMS
- 3 etCustOrderFromRCOM
- 4 etStockOrdersFromRIBToWH##

These messages are described in the following paragraphs.

RMS Publisher – Transfers

Rib Components:

- E*Way name: ewTransfersFromRMS
- RIB ID: O_TSF_NO – This is the unique transfer id that is held in RMS.
- Routing Info: loc_to_type, loc_from_type, physical_from_loc

Application Components:

Triggering Mechanism: Table Triggers
 Message family manager: RMSMFM_TRANSFERS
 Message family manager Queue: TSF_MFQUEUE

Comments: None

The following table lists the stock order message types that are published from RDMMFM_TRANSFERS:

EtTransfersFromRMS		
Message Types	Mapping Documents	Type (DTD)
TransferCre	RMS_MAP_TransferDesc.xls	TransferDesc.dtd
TransferDtlCre	RMS_MAP_TransferDtlDesc.xls	TransferDtlDesc.dtd
	RMS_MAP_TsfDtlTcktDesc.xls	
TransferHdrMod	RMS_MAP_TransferHdrDesc.xls	TransferHdrDesc.dtd
TransferDtlMod	RMS_MAP_TransferDtlDesc.xls	TransferDtlDesc.dtd
TransferDel	RMS_MAP_TransferRef.xls	TransferRef.dtd
TransferDtlDel	RMS_MAP_TransferDtlRef.xls	TransferDtlRef.dtd

RMS Publisher – Allocations

Rib Components:

E*Way name: ewAllocFromRMS
 RIB ID: O_ALLOC_NO – This is the unique allocation id that is held in RMS.
 Routing Info: loc_to_type, loc_from_type, physical_from_loc

Application Components:

Triggering Mechanism: Table Triggers
 Message family manager: RMSMFM_ALLOC
 Message family manager Queue: ALLOC_MFQUEUE

Comments: None

The following table lists the message types that are published from RMSMFM_ALLOC:

EtAllocFromRMS		
Message Types	Mapping Documents	Type (DTD)
AllocCre	RMS_MAP_AllocDesc.xls	AllocDesc.dtd
AllocDtlCre	RMS_MAP_AllocDtlDesc.xls	AllocDtlDesc.dtd
	RMS_MAP_AllocDtlTcktDesc.Xls	
AllocHdrMod	RMS_MAP_AllocHdrDesc.xls	AllocHdrDesc.dtd
AllocDtlMod	RMS_MAP_AllocDtlDesc.xls	AllocDtlDesc.dtd
AllocDel	RMS_MAP_AllocRef.xls	AllocRef.dtd
AllocDtlDel	RMS_MAP_AllocDtlRef.xls	AllocDtlRef.dtd

RCOM Publisher – Customer Orders

Rib Components:

E*Way name: ewCustOrderFromRCOM

RIB ID: O_SHIP_REQUEST_ID – This is the unique customer order shipping request id that is held in RCOM.

Routing Info: Physical_Warehouse_id

Application Components:

Triggering Mechanism: Application

Message family manager: RCOMMFM_CUSTORDER

Message family manager Queue: RIB_CUSTORDER_MFQUEUE

Comments: None

The following table lists the message type that is published from RCOMMFM_CUSTORDER:

etCustOrderFromRCOMMFM		
Message Types	Mapping Documents	Type (DTD)
COCre	RCOM_MAP_CODesc.xls	CODesc.dtd
	RCOM_MAP_CODesc	
	RCOM_MAP_CODtlDesc	
	RCOM_MAP_COHdrDesc	

TAFR – Transfers to Stock Orders

Rib Components:

E*Way name: ewTransfersToStockOrderFromRIB
 RIB ID: O_TSF_NO
 Routing Info: loc_to_type, loc_from_type, physical_from_loc, add facility_type
 Transformation: Transform from Transfer to Stock Order
 Filtering: none

Comments: Route to correct RDM instance based on facility type and location.

TAFR – Allocations to Stock Orders

Rib Components:

E*Way name: ewAllocToStockOrderFromRIB
 RIB ID: O_ALLOC_NO
 Routing Info: loc_to_type, loc_from_type, physical_from_loc, add facility_type
 Transformation: Transform from to Allocation to Stock Order
 Filtering: none

Comments:

Route to correct RDM instance based on facility type and location

TAFR – Customer Orders to Stock Orders

Rib Components:

E*Way name: ewCustOrderToStockOrderFromRIB
 RIB id: O_SHIP_REQUEST_ID
 Routing Info: Physical_Warehouse_id, add facility_type
 Transformation: Transform from Customer Order to Stock Order
 Filtering: none

Comments: Route to correct RDM instance based on facility type and location.

RDM Subscriber – Stock Orders

Rib Components:

E*Way name: ewStockOrderToRDMWH##
 RIB ID: O_TSF_NO, O_ALLOC_NO, O_SHIP_REQUEST_ID
 (Depending upon where the message originated.)

Comments: None

The following table lists the stock order message types subscribed to by RDM:

etStockOrderFromRIBToWH#			
Message Types	Mapping Documents	Type (DTD)	Subscribing APIs
SOCre	Map_TransferDesc.xls Map_AllocDesc.xls	SODesc.dtd	RDMSUB_SOCre
SODtlCre	Map_TransferDtlDesc.xls MapTsfDtlTcktDesc.xls Map_AllocDtlDesc.xls Map_AllocDtlTcktDesc.xls	SODtlDesc.dtd	RDMSUB_SODtlCre
SOHdrMod	Map_TransferHdrDesc.xls Map_AllocHdrDesc.xls	SOHdrDesc.dtd	RDMSUB_SOHdrMod
SODtlMod	Map_TransferDtlDesc.xls Map_AllocDtlDesc.xls	SODtlDesc.dtd	RDMSUB_SODtlMod
SOHdrDel	Map_TransferRef.xls Map_AllocRef.xls	SOHdrRef.dtd	RDMSUB_SOHdrDel
SODtlDel	Map_TransferDtlRef.xls Map_AllocDtlRef.xls	SODtlRef.dtd	RDMSUB_SODtlDel

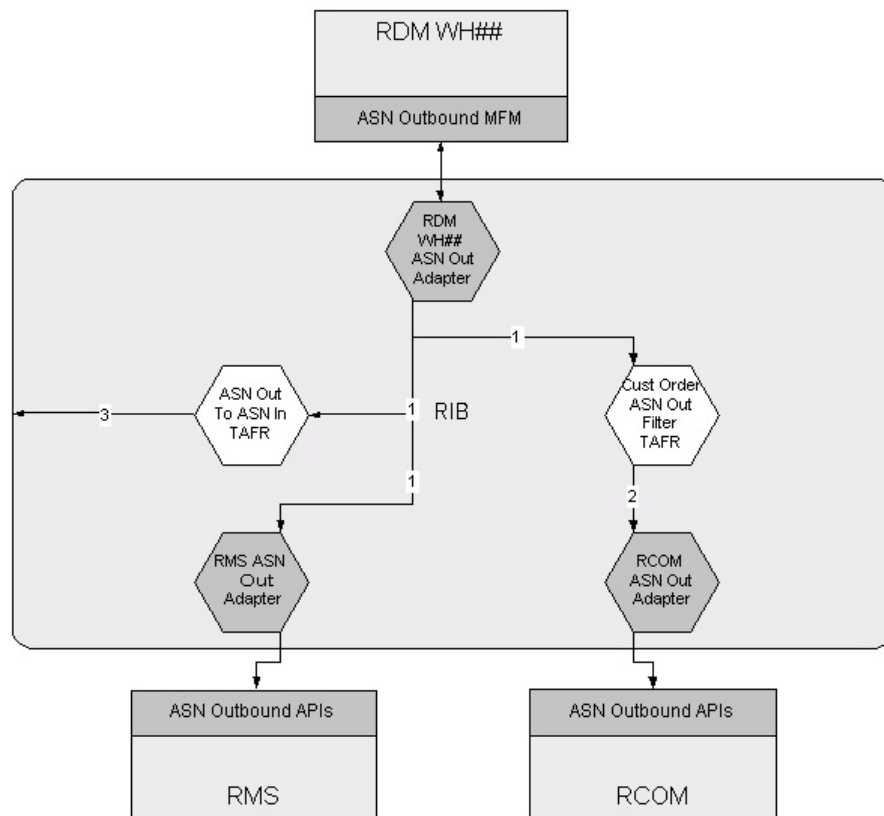
ASN Outbound

RDM publishes advance shipment notification (ASN) messages that RMS uses to create or modify a shipment record. Any ASN that originates from RDM is called an “outbound” ASN. This is also known as a bill of lading (BOL). An ASN that is coming into RDM is an “inbound” ASN.

Inbound ASNs can originate from external systems, or from another instance of RDM. For example, if an outbound shipment occurs because of a transfer to another warehouse, the outbound ASN is transformed into an inbound ASN and published to the receiving warehouse.

Any outbound ASNs that originate because of a customer order are sent to RCOM, as well as to RMS. Shipments occurring because of a transfer or allocation are sent only to RMS.

The following diagram illustrates the ASN outbound message processes.



The numbers in the diagram correspond to the following actual messages that are passed on the RIB:

- 1 etASNOutFromRDMWH##
- 2 etASNOutToASNOutCOFromRIB
- 3 etASNInFromRIBToWH##

These messages are described in the following paragraphs.

RDM Publisher – ASN Outbound

Rib Components:

E*Way name: ewASNOutFromRDMWH##
 RIB ID: none
 Routing Info: loc_type, facility_type, consumer_direct

Application Components:

Triggering Mechanism: Application
 Message family manager: RDMMFM_ASNOUT
 Message family manager Queue: OUTBOUND_ASN_QUEUE

Comments: None

The following table lists the ASN outbound message types that are published from RDMMFM_ASNOUT:

etASNOutFromRDM		
Message Types	Mapping Documents	Type (DTD)
ASNOutCre	RDM_MAP_ASNOutDesc.xls	ASNOutDesc.dtd
	RDM_MAP_ASNOutHdrDesc.xls	
	RDM_MAP_ASNOutDistroDesc.xls	
	RDM_MAP_ASNOutCtnDesc.xls	
	RDM_MAP_ASNOutItemDesc.xls	

TAFR – ASNOut to ASNIn

Rib Components:

E*Way name: ewASNOutToASNInWHFromRIB
 RIB ID: none
 Routing Info: loc_type, facility_type, add ASN_type. ASN_type either is passed on through (when the message originates with an external EDI feed), or is set to the default, which is “C” (carton).
 Transformation: This will transform an Outbound ASN to and Inbound ASN
 Filtering: None

Comments: This TAFR operation transforms ASNs that are directed to another warehouse, such as transfers or allocations between two warehouses. It also routes the message to the proper warehouse based on the facility_type (from routingInfo) and the ToLocation (from the messageData).

Note: This TAFR appears in both the ASN Outbound diagram and the ASN Inbound diagram (see the “ASN Inbound” section).

TAFR – ASNOut to ASNOutCO

Rib Components:

E*Way name: ewASNOutToASNOutCOFromRIB

RIB ID: None

Routing Info: consumer_direct ,loc_type, facility_type

Transformation: Drop all members of ASNOutDistroDesc array (in messageData) where consumer_direct is not “Y”

Filtering: If there is not at least one element of messageData.ASNOutDistrDesc array where consumer_direct is not “Y”, do not publish a etASNOutCOFromRIB message.

Comments: This filter ensures that RCOM receives only those ASNOut messages that pertain to customer orders.

RMS Subscriber – ASN Outbound

Rib Components:

E*Way name: ewASNOutToRMS

RIB ID: None

Comments: RMS directly to RDM for this message, no TAFR required.

The following table lists ASN Outbound message types subscribed to by RMS:

EtASNOutFromRDM			
Message Types	Mapping Documents	Document Type Definiton (DTD)	Subscribing API
ASNOutCre	RDM_MAP_ASNOutDesc.xls	ASNOutDesc.dtd	RMSSUB_ASNOUTCRE
	RDM_MAP_ASNOutHdrDesc.xls		
	RDM_MAP_ASNOutDistroDesc.xls		
	RDM_MAP_ASNOutCtnDesc.xls		
	RDM_MAP_ASNOutItemDesc.xls		

RCOM Subscriber – ASN outbound

Rib Components:

E*Way name: ewASNOutToRCOM

RIB ID: None

Comments: None

The following table lists ASN Outbound message types subscribed to by RCOM:

EtASNOutFromRDM			
Message Types	Mapping Documents	Document Type Definiton (DTD)	Subscribing API
ASNOutCre	RDM_MAP_ASNOutDesc.xls	ASNOutDesc.dtd	RCOMSUB_ASNOUTCRE
	RDM_MAP_ASNOutHdrDesc.xls		
	RDM_MAP_ASNOutDistroDesc.xls		
	RDM_MAP_ASNOutCtnDesc.xls		
	RDM_MAP_ASNOutItemDesc.xls		

Stock order status

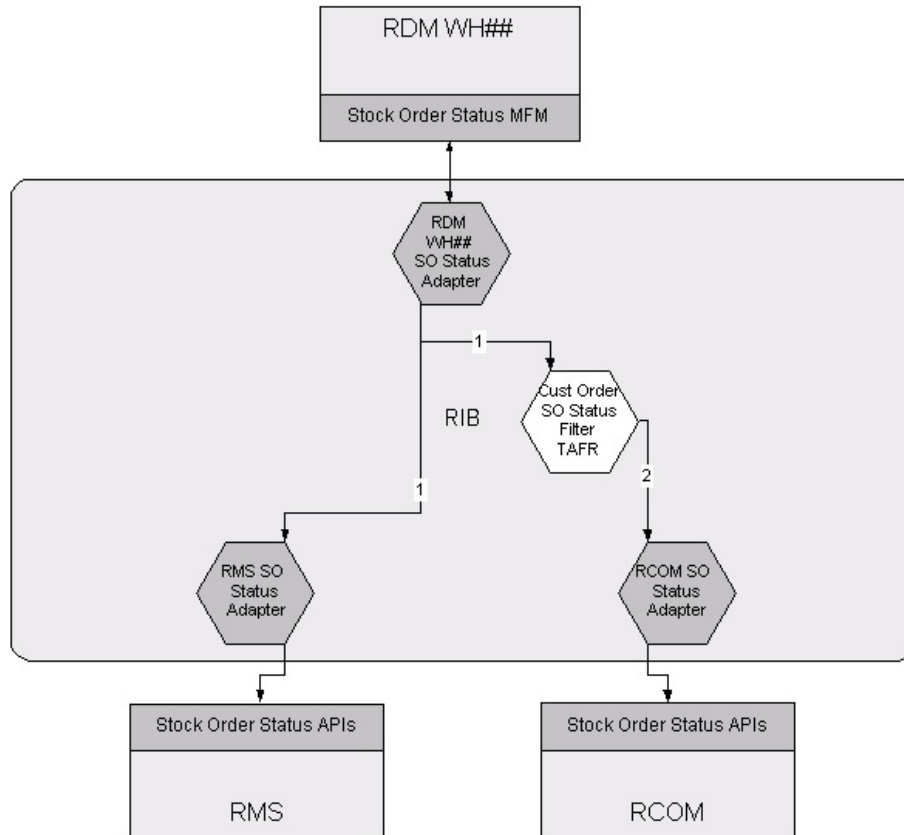
RDM publishes stock order status (SO status) messages to the RIB for a large number of RDM stock operation activities. A stock order status message always refers to one line item, or detail, of a ship order. The following table lists each stock order status code in base RDM along with the definition for each.:

Stock Order Status	Definition
SI (successful insert)	This indicates that RDM has successfully received a ship order for the indicated item.
SD (successful delete)	RDM has received a cancel order for the indicated item.
DS (detail selected)	RDM has selected (allocated for an order) the indicated item.
DU (detail unselected)	This can result if the back order flag of the order = 'Y' and there is inadequate stock quantity to fulfill the order for the indicated item. The unselected quantity pertains to the unavailable stock.
NI (no inventory)	When the back order flag is 'N' and there isn't enough stock to fulfill the order, this message will be generated.
PP (pending pick)	The stock has been identified and allocated and is pending picking.
PU (unpick)	If rollback_allocation flag = 'Y' and the order has to be returned to stock for any reason, or the pick_after_date has passed and it is already partly picked.
EX (expired)	Whenever an order is received where the pick_after_date has passed.
SR (store reassign)	If merchandise has been allocated for one store, but is later reassigned to another store, two SR messages are sent: One containing negative stock values (referring to the first store) One with positive stock values (referring to the second store).
RS (return to stock)	When rollback_allocation flag = "N", RDM publishes this message if it is unable to fulfill the order for the indicated item.

RMS subscribes to stock order status for the purpose of keeping transfer and allocation records up to date.

RDM subscribes to stock order status for information concerning a customer order that RDM has made. A RIB TAFR e*Way filters the stock order status messages so that only the ones concerning customer orders are published to RCOM.

The following diagram illustrates the stock order status processes.



The numbers in the diagram correspond to the following actual messages that are passed on the RIB:

- 1 etSOStatusFromRDM
- 2 etSOStatusCOFromRIB

These messages are described in the following paragraphs.

RDM Publisher – Stock Order Status

Rib Components:

E*Way name: ewSOStatusFromRDMWH##,
 RIB ID: none
 Routing Info: customer_direct (indicates if this concerns a customer order), facility_type

Application Components:

Triggering Mechanism: Application

Message family manager: RDMMFM_SOSTATUS

Message family manager Queue: STOCK_ORDER_INFO_QUEUE

Comments: None

The following table lists the stock order status message type that is published from RDMMFM_SOSTATUS:

etSOSStatusFromRDM		
Message Types	Mapping Documents	Type (DTD)
SOSStatusCre	RDM_MAP_SOSStatusDesc.xls	SOSStatusDesc.dtd

TAFR - Customer Orders Only

Rib Components:

E*Way name: ewSOSStatusToSOSStatusCOFromRIB

RIB ID: None

Routing Info: consumer_direct, facility_type

Transformation: none

Filtering: If consumer_direct is not “Y”, do not publish a etSOSStatusCOFromRIB message.

Comments: This filter ensures that only RCOM only receives SOSStatus messages that pertain to customer orders.

RMS Subscriber – Stock Order Status

Rib Components:

E*Way name: ewSOSStatusToRMS

RIB ID: None

Comments: None

The following table lists the stock order status message type subscribed to by RMS:

EtSOSStatusFromRDM			
Message Types	Mapping Documents	Type (DTD)	Subscribing APIs
SOSStatusCre	RMS_MAP_SOSStatusDesc.xls	SOSStatusDesc.dtd	RMSSUB_SOSStatusCre

RCOM Subscriber – Stock Order Status

Rib Components:

E*Way name: ewSOStatusToRCOM

RIB ID: None

Comments: None

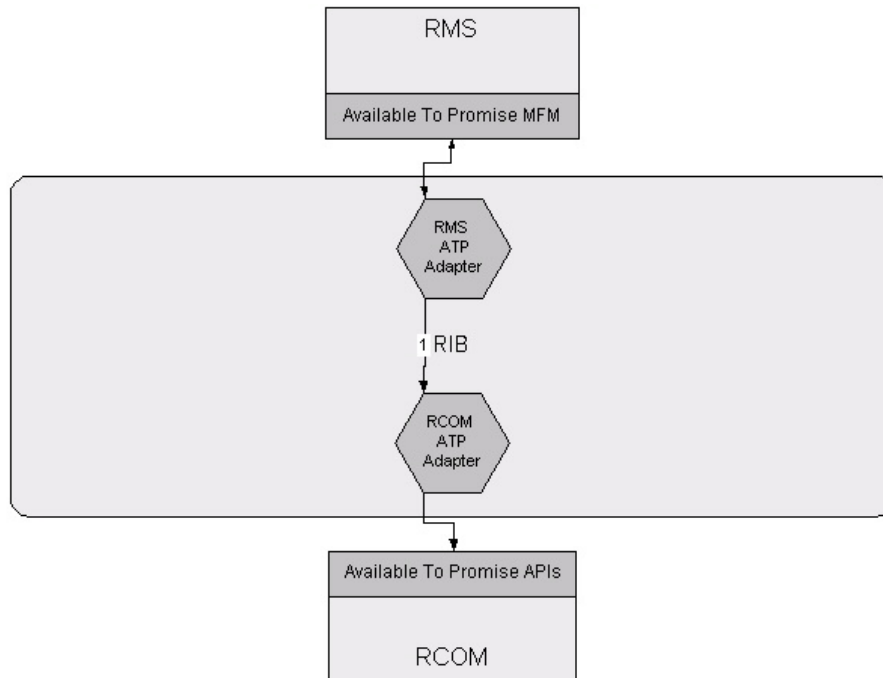
The following table lists the stock order status message type subscribed to by RCOM:

etSOStatusCOFromRIB			
Message Types	Mapping Documents	Type (DTD)	Subscribing APIs
SOStatusCre	RCOM_MAP_SOStatusDesc.xls	SOStatusDesc.dtd	RDMSUB_SOCre

ATP (available to promise)

RMS publishes available to promise (ATP) messages that give RCOM an updated view of stock on hand. Messages are specific to the quantity of one item at one location as held within RMS. Prior to publishing an ATP message, RMS checks that the item referenced in the message has previously been published as foundation data to the RIB for RCOM.

The following diagram illustrates the ATP process.



The number in the diagram corresponds to the following actual message that is passed on the RIB:

1 etATPFromRMS

The message is described in the following paragraphs.

RMS Publisher – ATP

Rib Components:

E*Way name: ewATPFromRMS

RIB ID: None

Routing Info: None

Application Components:

Triggering Mechanism: Table triggers

Message family manager: RMSMFM_ATP

Message family manager queue: ATP_MFQUEUE

Comments: None

The following table lists the message types that are published from RCOMMFM_ATP:

etATPFromRMS		
Message Types	Mapping Documents	Type (DTD)
ATPCre	RMS_MAP_ATPDesc.xls	ATPDesc.dtd
ATPMod	RMS_Map_ATPDesc.xls	ATPDesc.dtd

RCOM Subscriber – ATP

Rib Components:

E*Way name: ewATPToRCOM

RIB ID: None

Comments: None

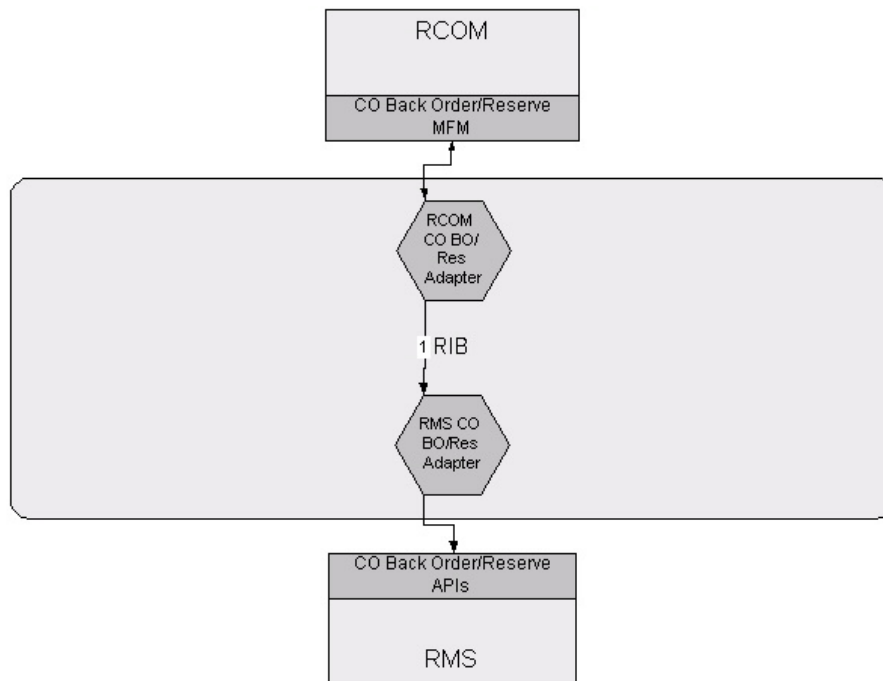
The following table lists the ATP message types subscribed to by RMS:

etATPFromRMS			
Message Types	Mapping Documents	Type (DTD)	Subscribing APIs
ATPCre	RCOM_MAP_ATPDesc.xls	ATPDesc.dtd	RCOMSUB_ATPCRE
ATPMod	RCOM_MAP_ATPDesc.xls	ATPDesc.dtd	RCOMSUB_ATPMOD

Customer Orders – Back order and reserve

Whenever RCOM makes a customer order, it publishes a message for RMS. If RCOM knows the merchandise is available to promise (see the earlier ATP section), it publishes a message that prompts RMS to reserve the merchandise for the order. If RCOM knows the merchandise is not available to promise, it publishes a message that prompts RMS to back order the merchandise.

The following diagram illustrates the back order and reserve process.



The number in the diagram corresponds to the following actual message that is passed on the RIB:

1 etCOBoResFromRCOM

The message is described in the following paragraphs.

RCOM Publisher – Customer Orders – Back order/Reserve

Rib Components:

E*Way name: ewCoBoResFromRCOM
 RIB ID: O_WAREHOUSE, O_ITEM
 Routing Info: None

Application Components:

Triggering Mechanism: Application
 Message family manager: RCOMMFM_CORESBO
 Message family manager Queue: RIB_CORESBO_MFQUEUE

Comments: None

The following table lists the message types that are published from RCOMMFM_CORESBO:

EtCOBoResFromRCOM		
Message Types	Mapping Documents	Type (DTD)
CustBOCre	RCOM_MAP_CustBODesc.xls	CustBODesc.dtd
CustBOToResCre	RCOM_MAP_CustBOToResDesc.xls	CustBOToResDesc.dtd
CustResToBOCre	RCOM_MAP_CustResToBODesc.xls	CustResToBODesc.dtd
CustBOCanCre	RCOM_MAP_CustBOCanDesc.xls	CustBOCanDesc.dtd
COResCre	RCOM_MAP_COResDesc.xls	COResDesc.dtd
COResCanCre	RCOM_MAP_COResCanDesc.xls	COResCanDesc.dtd

RMS Subscriber – Customer Orders – Back order/Reserve

Rib Components:

E*Way name: ewCOBoResToRMS

RIB ID: O_WAREHOUSE, O_ITEM

Comments: None

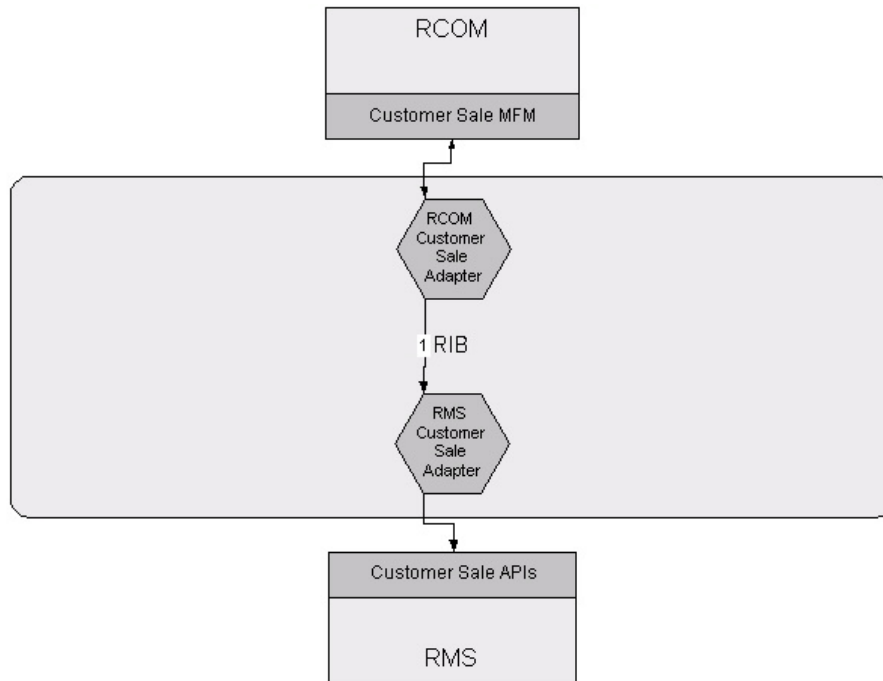
The following table lists the customer back order and reserve message types subscribed to by RMS:

EtCustBOResFromRCOM			
Message Types	Mapping Documents	Type (DTD)	Subscribing APIs
CustBOCre	RMS_MAP_CustBODesc.xls	CustBODesc.dtd	RMSSUB_CustBOCre
CustBOToResCre	RMS_MAP_CustBOToResDesc.xls	CustBOToResDesc.dtd	RMSSUB_CustBOToResCre
CustResToBOCre	RMS_MAP_CustResToBODesc.xls	CustResToBODesc.dtd	RMSSUB_CustResToBOCre
CustBOCanCre	RMS_MAP_CustBOCanDesc.xls	CustBOCanDesc.dtd	RMSSUB_CustBOCanCre
COResCre	RMS_MAP_COResDesc.xls	COResDesc.dtd	RMSSUB_COResCre
COResCanCre	RMS_MAP_COResCanDesc.xls	COResCanDesc.dtd	RMSSUB_COResCanCre

Customer Sale

Whenever RCOM receives a notification from RDM that a customer order has been shipped (an ASNOut message), it publishes a Customer Order Sale message to RMS.

The following diagram illustrates the customer sale process.



The number in the diagram corresponds to the following actual message that is passed on the RIB:

1 etCOSaleFromRCOM

The message is described in the following paragraphs.

RCOM Publisher – Customer Sales

Rib Components:

E*Way name: ewCOSaleFromRCOM

RIB ID: O_WH, O_STORE, O_ITEM

Routing Info: None

Application Components:

Triggering Mechanism: Application

Message family manager: RCOMMFM_COSALE

Message family manager queue: RIB_COSALE_MFQUEUE

Comments: None

The following table lists the message types that is published from RCOMMFM_COSALE:

etCOSaleFromRCOM		
Message Types	Mapping Document	Type (DTD)
CustSaleCre	RCOM_MAP_CustSaleDesc.xls	CustSaleDesc.dtd

RMS Subscriber – Customer Sales

Rib Components:

E*Way name: ewCOSaleToRMS

RIB ID: O_WH, O_STORE, O_ITEM

Comments: none

The following table lists the customer order sale message type that is subscribed to by RMS:

etCOSaleFromRCOM		
Message Types	Mapping Document	Type (DTD)
CustSaleCre	RCOM_MAP_CustSaleDesc.xls	CustSaleDesc.dtd

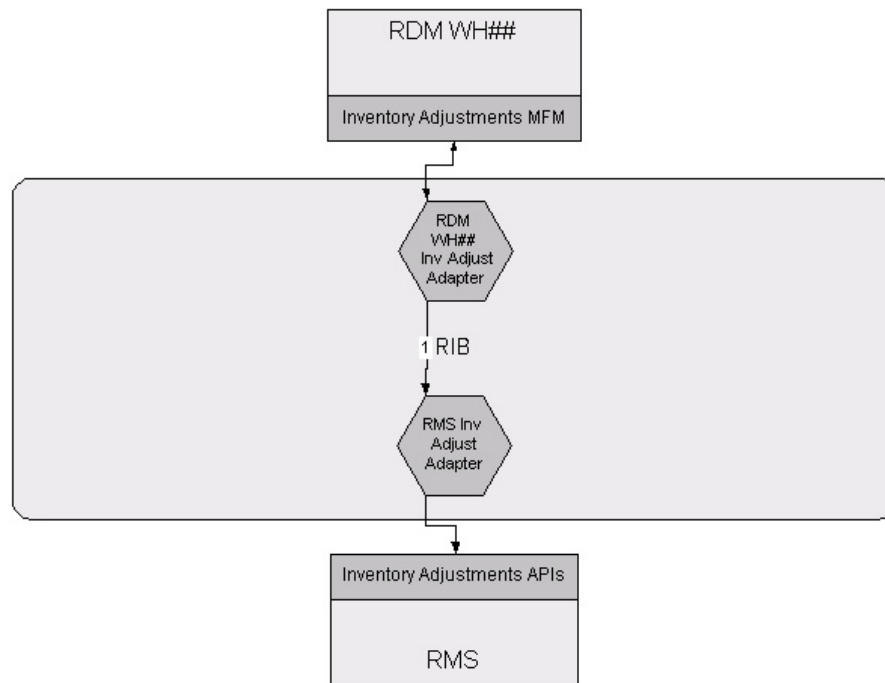
Inventory adjustments

RDM publishes inventory adjustment data in messages to the RIB. The data in the messages includes disposition codes for quantities of items for one location. RMS subscribes to these messages in order to:

- Adjust overall quantities of stock on hand for an item at a location
- Adjust the availability of item-location quantities

RDM sends messages that may contain values in the from_disposition and to_disposition XML tags. RMS only processes disposition changes that may alter an item's inventory status between available or unavailable. In addition, if either the from_disposition or the to_disposition is null, RMS treats this fact as an addition or subtraction to overall stock on hand for the item.

The following diagram illustrates the inventory adjustment process:



The number in the diagram corresponds to the following actual message that is passed on the RIB:

```
1  etInvAdjustFromRDMWH##
```

The message is described in the following paragraphs.

Publisher – Inventory adjustments – RDM

RDM's publication of inventory adjustment messages involves the following process. RDM populates its upload table INVENTORY_ADJ_TO_UPLOAD with data. The inventory adjustment adapter calls the RDMMFM_INVADJ message family manager's GETNXT procedure to:

- Read all records from the upload tables that involves:

- Building strings with the data
- Parsing it to XML
- Creating the actual XML
- Populate the INVENTORY_ADJ_INFO_QUEUE staging table with the XML as a CLOB data type and inserting the appropriate message type
- Publish the message to the RIB. The following message is published to the RIB:

EtInvAdjustFromRDM		
Message Types	Mapping Documents	Type (DTD)
InvAdjustCre	RDM_MAP_InvAdjustDesc.xls	InvAdjustDesc.dtd

Subscriber – Inventory adjustments – RMS

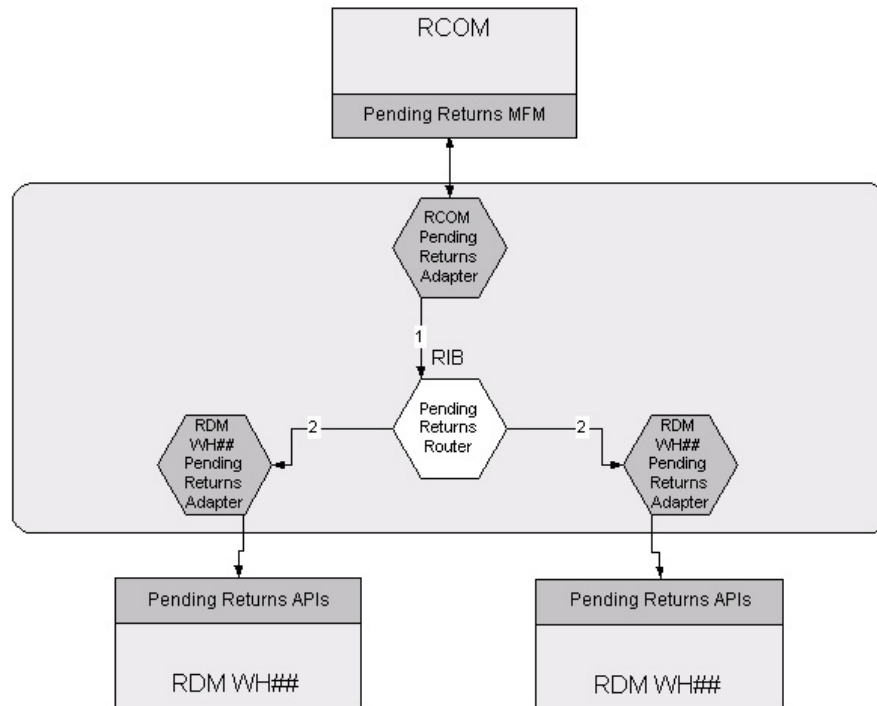
RMS subscribes to one stock order status message from the RIB:

etInvAdjustFromRDMWH##			
Message Types	Mapping Documents	Type (DTD)	Subscribing APIs
InvAdjustCre	RMS_MAP_InvAdjustDesc.xls	InvAdjustDesc.dtd	RMSSUB_InvAdjustCre

Pending returns (from a customer order)

RCOM publishes a pending return message to RDM whenever it has been notified that a customer order will be returned. After the return arrives, RDM publishes a customer return message for RCOM.

The following diagram illustrates the pending return process:



The numbers in the diagram correspond to the following actual messages that are passed on the RIB:

- 1 etPendReturnFromRCOM
- 2 etPendReturnWHFromRIBToWH##

These messages are described in the following paragraphs.

RCOM Publisher – Pending Returns

Rib Components:

E*Way name: ewPendReturnFromRCOM
 RIB ID: None
 Routing Info: Dest_id (RDM physical warehouse ID)

Application Components:

Triggering Mechanism: Application
 Message family manager: RCOMMFM_PENDRETURN
 Message family manager queue: RIB_PENDRETURN_MFQUEUE

Comments: None

The following table lists the message types that are published from RCOMMFM_PENDRETURN:

etPendReturnFromRCOM		
Message Types	Mapping Documents	Type (DTD)
PendRetCre	RCOM_MAP_PendRetDesc.xls	PendRetDesc.dtd
PendRetDtlMod	RCOM_MAP_PendRetDtlDesc.xls	PendRetDtlDesc.dtd
PendRetDtlCre	RCOM_MAP_PendRetDtlDesc.xls	PendRetDtlDesc.dtd
PendRetDtlDel	RCOM_MAP_PendRetDtlRef.xls	PendRetDtlRef.dtd
PendRetDel	RCOM_MAP_PendRetRef.xls	PendRetRef.dtd

TAFR – Route To Warehouse

Rib Components:

E*Way name: ewPendReturnToPendReturnWHFromRIB

RIB ID: None

Routing Info: Dest_id

Transformation: None

Filtering: None

Comments: Route messages to their proper RDM instance using the facility_id and the dest_id (from routing_info).

RDM Subscriber – Pending Returns

Rib Components:

E*Way name: ewPendReturnToRDMWH##

RIB ID: None

Comments: None

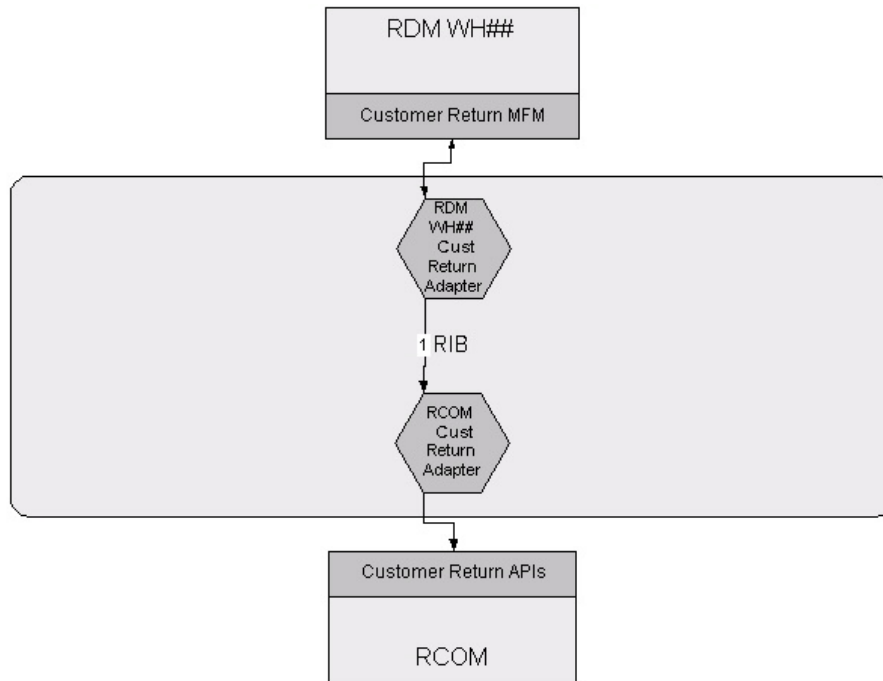
The following table lists the pending return message types subscribed to by RDM:

EtPendReturnFromRCOM			
Message Types	Mapping Documents	Type (DTD)	Subscribing APIs
PendRetCre	RDM_MAP_PendRetDesc.xls	PendRetDesc.dtd	RDMSUB_PendRetCre
PendRetDtlMod	RDM_MAP_PendRetDtlDesc.xls	PendRetDtlDesc.dtd	RDMSUB_PendRetDtlMod
PendRetDtlCre	RDM_MAP_PendRetDtlDesc.xls	PendRetDtlDesc.dtd	RDMSUB_PendRetDtlCre
PendRetDtlDel	RDM_MAP_PendRetDtlRef.xls	PendRetDtlRef.dtd	RDMSUB_PendRetDtlDel
PendRetCre	RDM_MAP_PendRetRef.xls	PendRetRef.dtd	RDMSUB_PendRetDel

Customer returns

RDM publishes a customer return message to RCOM whenever RMS receives the return.

The following diagram illustrates the customer return process:



The number in the diagram corresponds to the following actual message that is passed on the RIB:

1 etCustReturnFromRDM

This message is described in the following paragraphs.

RDM Publisher – Customer Returns

Rib Components:

E*Way name: ewCustReturnFromRDMWH##

RIB ID: O_FROM_LOCATION, O_RMA_NBR, O_PRO_NBR,
O_ITEM_ID

Routing Info: none

Application Components:

Triggering Mechanism: Application

Message family manager: RDMMFM_CUSTRETURN

Message family manager Queue: CUSTOMER_RETURNS_QUEUE

Comments: None

The following table lists the customer return message types published from RDMMFM_CUSTRETURN:

etCustReturnFromRDM		
Message Types	Mapping Documents	Type (DTD)
CoRetCre	RCOM_MAP_CoRetDesc.xls	CoRetDesc.dtd
CoRetHdrCre	RCOM_MAP_CoRetHdrDesc.xls	CoRetHdrDesc.dtd
CoRetDtlCre	RCOM_MAP_CoRetDtlDesc.xls	CoRetDtlDesc.dtd

RCOM Subscriber – Customer Returns

Rib Components:

E*Way name: ewCustReturnToRCOM

RIB ID: O_FROM_LOCATION, O_RMA_NBR, O_PRO_NBR,
O_ITEM_ID

Comments: None

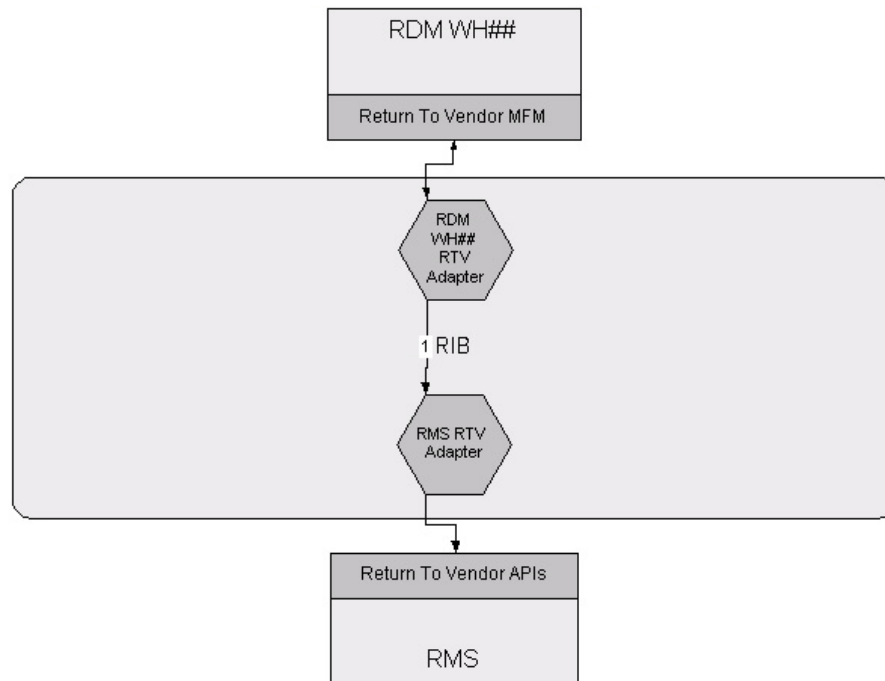
The following table lists the customer return message type subscribed to by RCOM:

etCustReturnFromRDM			
Message Types	Mapping Documents	Type (DTD)	Subscribing APIs
CoRetCre	RCOM_MAP_CoRetDesc.xls	CoRetDesc.dtd	RCOMSUB_CoRetCre

Return to vendor

Whenever merchandise is returned to the vendor, RDM publishes return-to-vendor (RTV) messages to the RIB. RMS subscribes to these messages in order to update inventory quantities and stock ledger values.

The following diagram illustrates the RTV message process:



The number in the diagram corresponds to the following actual message that is passed on the RIB:

1 etRTVFromRDM

This message is described in the following paragraphs.

RDM Publisher – Return to Vendor (RTV)

Rib Components:

E*Way name: ewRTVFromRDM

RIB ID: None

Routing Info: facility_type

Application Components:

Triggering Mechanism: Application

Message family manager: RDMMFM_RTV

Message family manager queue: RTV_QUEUE

Comments: None

The following table describes the message type that is published from RDMMFM_RTV:

EtRTVFromRDM		
Message Types	Mapping Documents	Type (DTD)
RTVCre	RDM_MAP_RTVDesc.xls	RTVDesc.dtd

RMS Subscriber – Return to Vendor (RTV)

Rib Components:

E*Way name: ewRTVToRMS

RIB ID: None

Comments: None

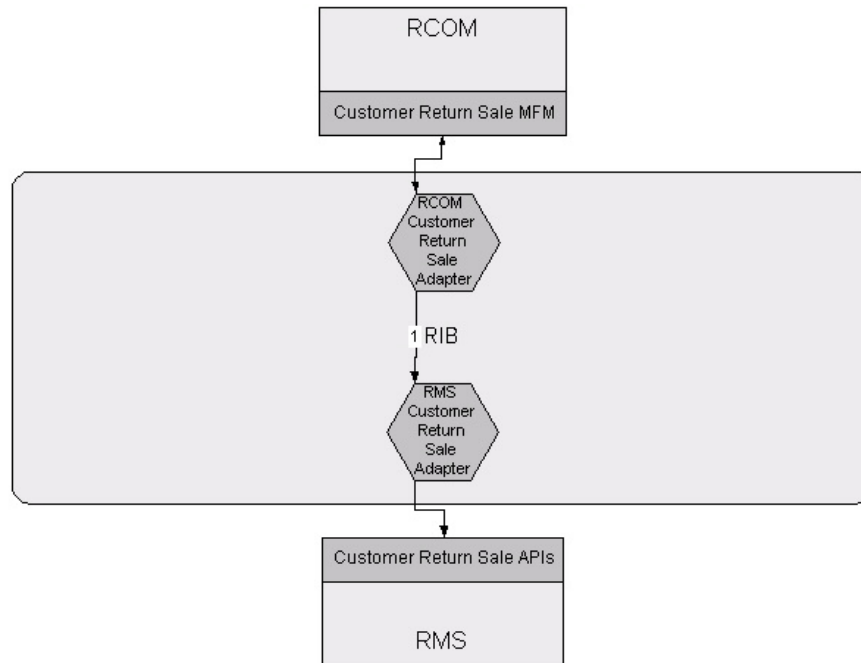
The following table lists the RTV message type subscribed to by RMS:

etRTVFromRDM			
Message Types	Mapping Documents	Type (DTD)	Subscribing APIs
RTVCre	RMS_MAP_RTVDesc.xls	RTVDesc.dtd	RMSSUB_RTVCRE

Customer order return sale

When RCOM receives a return of a customer order sale, it publishes a customer order return sale message to the RIB for RMS.

The following diagram illustrates the customer order return sale message process:



The number in the diagram corresponds to the following actual message that is passed on the RIB:

1 etCOSaleFromRCOM

This message is described in the following paragraphs.

RCOM Publisher – Customer Order Return Sale

Rib Components:

E*Way name: ewCOSaleFromRCOM
 RIB ID: O_WH, O_STORE, O_ITEM
 Routing Info: None

Application Components:

Triggering Mechanism: Application
 Message family manager: RCOMMFM_COSALE
 Message family manager queue: RIB_COSALE_MFQUEUE

Comments: None

The following table lists the message types that are published from RCOMMFM_COSALE:

etCOSaleFromRCOM		
Message Types	Mapping Documents	Type (DTD)
CustBOCre	RCOM_MAP_CustBODesc.xls	CustBODesc.dtd
CustBOToResCre	RCOM_MAP_CustBOToResDesc.xls	CustBOToResDesc.dtd
CustResToBOCre	RCOM_MAP_CustResToBODesc.xls	CustResToBODesc.dtd
CustBOCanCre	RCOM_MAP_CustBOCanDesc.xls	CustBOCanDesc.dtd
COResCre	RCOM_MAP_COResDesc.xls	COResDesc.dtd
COResCanCre	RCOM_MAP_COResCanDesc.xls	COResCanDesc.dtd

RMS Subscriber – Customer Order Return Sale

Rib Components:

E*Way name: ewCOSaleToRMS

RIB ID: O_WH, O_STORE, O_ITEM

Comments: None

The following table lists the customer order return sale message types subscribed to by RMS:

etCOSaleFromRCOM			
Message Types	Mapping Documents	Type (DTD)	Subscribing APIs
CustRetSaleCre	RMS_MAP_CustRetSaleDesc.xls	CustRetSaleDesc.dtd	RMSSUB_CustRetSaleCre

Listed below are the messages shown in the above diagram. These are the actual message types that are passed on the RIB.

1. etCOSaleFromRCOM