

# Oracle Retail Merchandising Cloud Services 24.0.101.0/Xstore Suite 23.0 Implementation Guide



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# Preface

This implementation guide describes the implementation steps that you should take when integrating the Xstore Suite with the Merchandising applications.

## Audience

This Implementation Guide is intended for the integrators and implementation staff, as well as the retailer's IT personnel.

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- Oracle Retail Merchandising System documentation set
- Oracle Retail Price Management documentation set
- *Oracle Retail Xstore Suite Implementation and Security Guide*

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(Data Model documents can be obtained through My Oracle Support.)

## Conventions

The following text conventions are used in this document:

| Convention             | Meaning                                                                                                                                |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>boldface</b>        | Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.         |
| <i>italic</i>          | Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.                          |
| <code>monospace</code> | Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter. |

# 1

## Overview

This document describes integration between the Xstore suite of solutions and the Merchandising Cloud Services of solutions. For Merchandising, this document covers functionality supported in both the on premise and cloud service versions of the following products:

| On Premise Solution                      | Cloud Service Solution                                       |
|------------------------------------------|--------------------------------------------------------------|
| Oracle Retail Merchandising System (RMS) | Oracle Retail Merchandising Foundation Cloud Service (RMFCS) |
| Oracle Retail Sales Audit (ReSA)         | Oracle Retail Merchandising Foundation Cloud Service (RMFCS) |
| Oracle Retail Pricing (RP)               | Oracle Retail Pricing Cloud Service (RPCS)                   |

For the Xstore Suite, this document covers functionality supported in the following products:

| On Premise Solution                   | Cloud Service Solution                           |
|---------------------------------------|--------------------------------------------------|
| Oracle Retail Xstore Office           | Oracle Retail Xstore Office Cloud Service (XOCS) |
| Oracle Retail Xstore Point of Service | NA                                               |

The integration of the Merchandising Cloud Services and the Xstore Suite consists of two major data flows:

- Inbound: Merchandising and pricing information is consumed by Xstore Office where data is loaded into the Xcenter database and files are automatically distributed for data loading into Xstore databases.
- Point of Service transactions from Oracle Retail Xstore Point of Service flow to Xstore Office for transformation and distribution to the Merchandising Foundation Cloud Service Sales Audit module.

In combination, these data flows represent the round trip of data between the stores and headquarters. New items, other foundation data, and prices from headquarters are communicated to Xstore. Sales and returns from Xstore are communicated to Merchandising, where these transactions impact inventory. Merchandising further integrates summarized sales and inventory information from Xstore to other Oracle Retail applications, such as Planning and Analytics.

## Inbound: Integration Options with Xstore Office

The inbound Xstore Suite integration from Merchandising is achieved using platform specific integration interfaces. [Table 1-1](#) lists important details about the integration options available to the two Xstore Office deployment topologies: Cloud vs On-Premise. The inbound Xstore Office integration interfaces are:

- RMFCS/RPCS web services – Xstore Office requests merchandising and pricing data directly from Merchandising and Pricing Cloud Services

- OCDS web services - Xstore Office requests merchandising and pricing data from OCDS, which is a data hub.
- RMFCS/RPCS flat file export – Merchandising and pricing data exported from RMFCS and RPCS can be imported into Xstore Office using momzip archive files.

**Table 1-1 Inbound Xstore Suite Merchandising Integration Matrix**

| Xstore Office | Merchandising and Pricing System Data |                   |                        |
|---------------|---------------------------------------|-------------------|------------------------|
|               | Direct Web Services                   | OCDS <sup>1</sup> | Flat File <sup>2</sup> |
| Cloud         | Yes                                   | Yes               | Yes                    |
| On-Premise    | Yes <sup>3</sup>                      | Yes               | Yes                    |

<sup>1</sup> OCDS is only available with MFCS V19

<sup>2</sup> RPCS flat file export does not support export of promotions

<sup>3</sup> OAuth credentials to be obtained from Oracle Retail Home

## Outbound: Integration Options with Xstore Office

The outbound Xstore Suite integration to the Merchandising Foundation Cloud Service Sales Audit module is achieved with two options.

- Using RTLog flat files generated by RTLog generator. Depending on Xstore suite and Sales Audit deployment topologies, different file delivery options are supported including SFTP, FTS, REST download, or publishing to file system folder.
- Using direct Sales Audit REST service integration. RTLog generator is not involved.

Table below lists important details about the integration options available to the two Xstore Office deployment topologies: Cloud vs On-Premise.

**Table 1-2 Outbound Xstore Suite Merchandising Integration Matrix**

| Xstore Office | Merchandising Foundation Cloud Service Sales Audit |                  |                  |                      |                               |
|---------------|----------------------------------------------------|------------------|------------------|----------------------|-------------------------------|
|               | Sales Audit (REST)                                 | SFTP             | FTS              | File Download (REST) | Publish to File System Folder |
| Cloud         | Yes <sup>1</sup>                                   | Yes <sup>2</sup> | Yes <sup>3</sup> | Yes                  | No                            |
| On-Premise    | Yes <sup>4</sup>                                   | No               | Yes <sup>5</sup> | No                   | Yes                           |

<sup>1</sup> XOCS integration with Sales Audit REST API only available in RMFCS V21+

<sup>2</sup> XOCS integration with SFTP is only available in RMFCS V19

<sup>3</sup> XOCS integration with FTS only available in RMFCS V21+

<sup>4</sup> Xstore Office On-Premise integration with Sales Audit REST API only available in RMFCS V21+.

OAuth credentials to be obtained from Oracle Retail Home.

<sup>5</sup> Xstore Office On-Premise integration with FTS only available in RMFCS V21+.

OAuth credentials to be obtained from Oracle Retail Home.

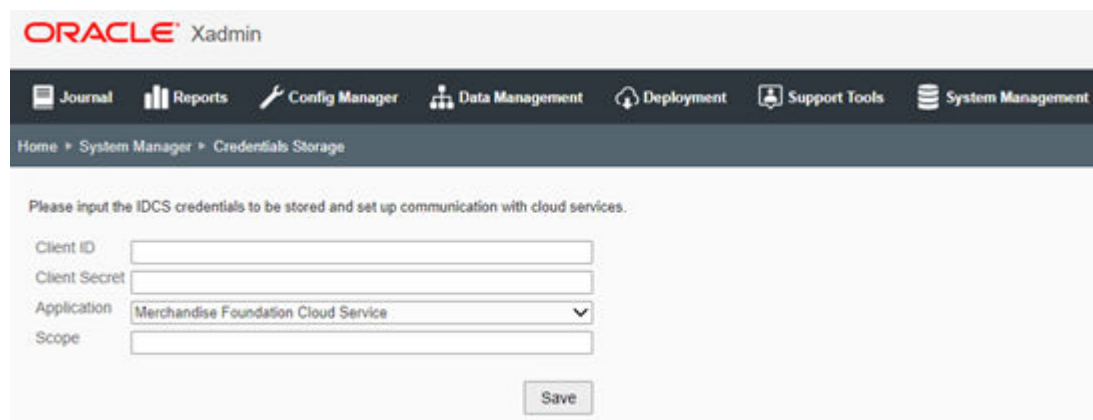
The details of the integration are covered in the remaining sections of this guide:

- [Data Flow from Merchandising to Xstore](#): This chapter describes the flow of data from the Merchandising applications to the Xstore Suite.
- [Transaction Flow from Xstore to Sales Audit](#): This chapter describes the flow of transactions from Xstore Point of Service to Sales Audit.
- [Webservice Integration Configuration](#): This chapter provides information on the configuration changes that can be made for the integration.
- [Integration Considerations](#): This chapter covers functional and technical points about the integration that need to be taken into consideration when implementing the integration.
- [RTLog Generator On-Premise](#): This chapter covers how to install, deploy, and configure the RTLog Generator application.
- [RTLog Generator Cloud](#): This chapter covers the RTLog Generator Cloud.
- [Appendix: Xstore to Sales Audit Mapping Details](#): This appendix provides tables that describe the mappings.
- [Appendix: Flat File Mapping](#): This appendix describe the flat file mapping.

## Xstore Office [On-Prem Only]: OAuth Credentials

The direct service MFCS integration, Sales Audit REST integration, and RTLog FTS integration require the use of OAuth client credentials in order for Xstore Office to communicate with MFCS/Sales Audit. Credentials should be obtained through the use of Oracle Retail Home. Once obtained, the Client ID, Client Secret, and Scope, should be submitted into Xstore Office using Xadmin's Credentials Manager.

**Figure 1-1 Credentials Storage**



ORACLE Xadmin

Journal Reports Config Manager Data Management Deployment Support Tools System Management

Home > System Manager > Credentials Storage

Please input the IDCS credentials to be stored and set up communication with cloud services.

Client ID

Client Secret

Application

Scope

Save

# 2

## Data Flow from Merchandising to Xstore

This chapter covers the data flow from Merchandising and Pricing to Xstore, where data can be consumed by Xstore Office for loading into the Xcenter database, and files distributed to Xstore for loading into the Xstore database.

The Xstore Suite can consume Merchandising and Pricing data in the following categories:

- Merchandise hierarchy
- Organizational hierarchy
- Store (including addresses)
- Dimension type (derived from item differentiator, or diff usage)
- Dimension value (derived from item diff usage)
- Items and Item Location
- Item UPC
- Value Added Tax (VAT) rules and item associations
- Related items
- Initial prices
- Price changes
- Promotions
- Clearance prices

## Conceptual Data Flow

This section describes the conceptual data flow for each of the inbound integration interfaces supported by the Xstore Suite.



### Note:

Please refer to [Table 1-1](#) for data flow option availability with respect to hosting and versions.

## Using RMFCS/RPCS Direct Services

The Merchandising Foundation Cloud Service and Pricing Cloud Service expose a set of REST web services that allow Xstore Office to communicate directly with MFCS and RPCS.

Xstore Office leverages these interfaces to poll, at a regularly scheduled intervals, for updates (for example, additions, deletions, and modifications) of Merchandising and Pricing data used by the Xstore Suite. Xstore Office communicates requests for changes in data by directly calling the Merchandising and Pricing REST web services.

When changes to Merchandising and Pricing data are detected, Xstore Office generates .mnt files containing the commands to update Xstore Suite databases. When .mnt files are generated, they are automatically deposited into the Xstore Office auto-drop folder for data-loading and distribution.

- If any detected updates necessitate updating the Xcenter database then the appropriate .mnt file will be automatically dataloaded.
- If any detected updates necessitate updating the Xstore database then the appropriate .mnt files will be deployed to the store where they can be dataloaded either immediately or at store close.

## Using OCDS

Oracle Omnichannel Cloud Data Service (OCDS) is a data hub, enabling the merchandising applications to share information with the Oracle Retail Omnichannel applications.

OCDS is composed of three major components:

- BDI Batch Job Admin - Enables the flow of data into OCDS using the Oracle Bulk Data Integration (BDI) technology. Job Admin has a User Interface (UI) to support the management of BDI batch jobs.
- RIB Injector - Enables the flow of data into OCDS from the Oracle Retail Integration Bus (RIB).
- ORDS Web Services - Enables the data contained in OCDS to be accessed by Omnichannel applications, such as the Xstore Suite, through the use of RESTful web services.

[Figure 2-1](#) illustrates the major system components that make up OCDS, and the interactions of the applications major actors.

Figure 2-1 OCDS Component Diagram

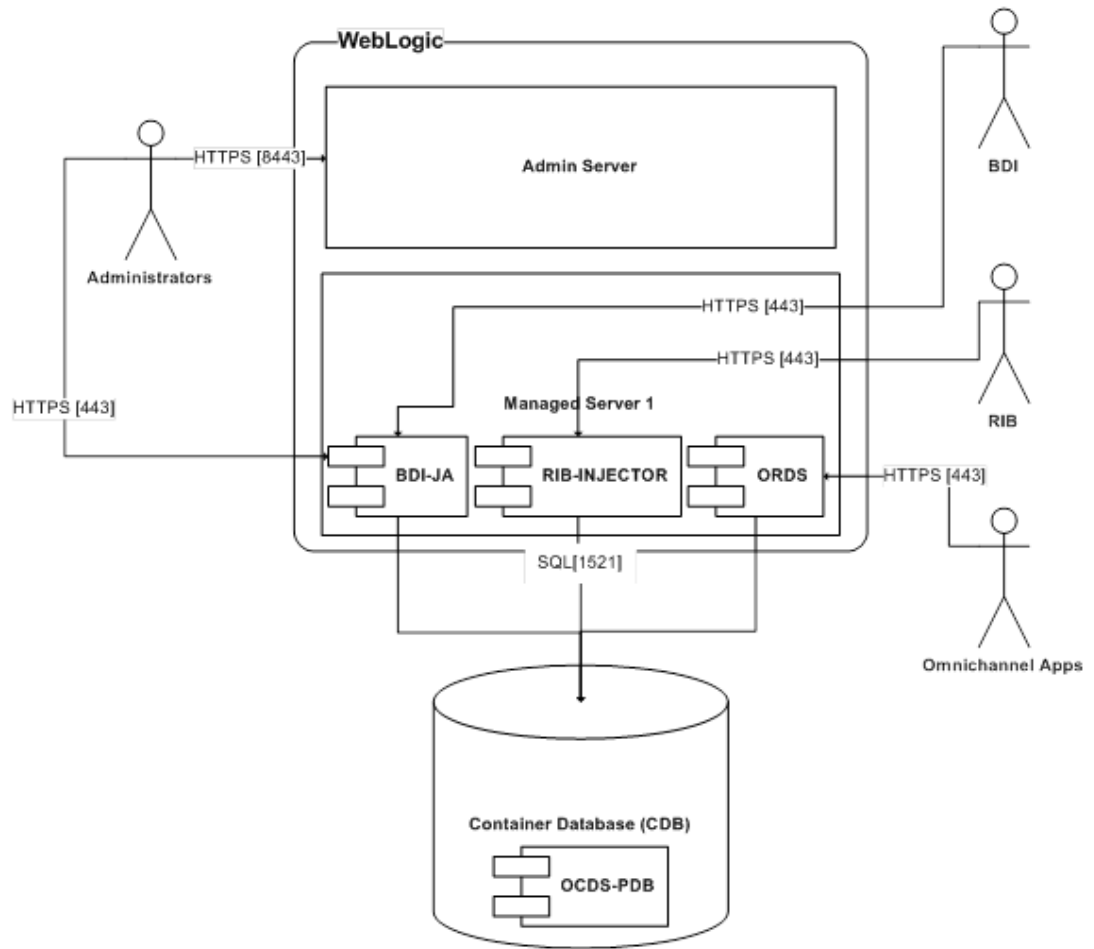
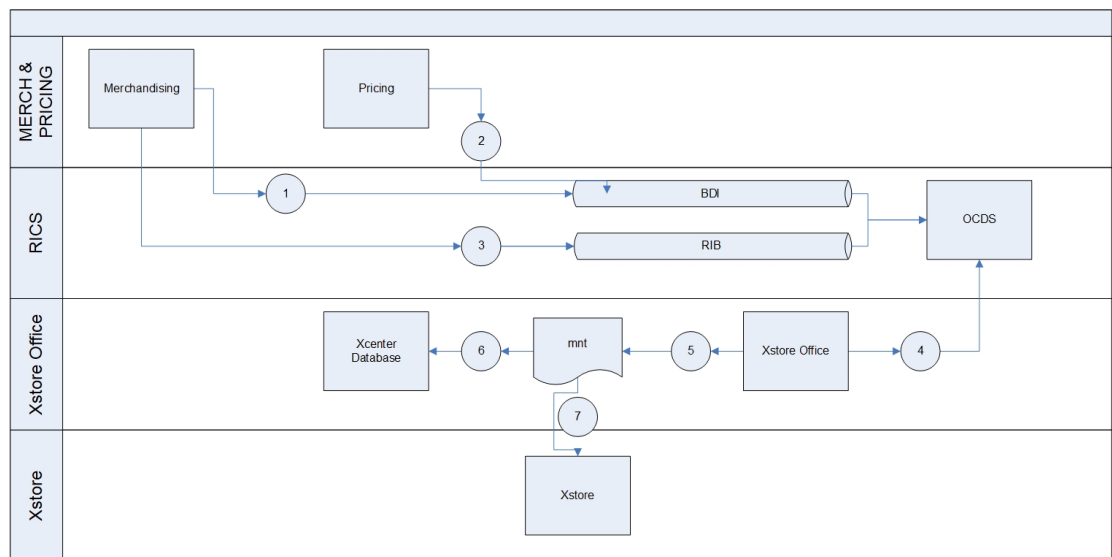


Figure 2-2 Conceptual Data Flow from Merchandising and Pricing to Xstore POS



The following steps describe the flow in [Figure 2-2](#).

1. OCDS receives an initial load of Merchandising foundation data using BDI as the data transport. For foundation data, this is generally a one-time push of data over BDI into OCDS. Incremental foundation data flows into OCDS from the RIB.

 **Note:**

It is important to understand that the receipt of Merchandising Foundation data using BDI will trigger Xstore Office to request a full refresh of all data from OCDS because Xstore Suite will detect that the system of record, OCDS, has been refreshed. Ideally, OCDS receives its initial load before the integration is established in Xadmin. If Xadmin has an active OCDS integration and OCDS needs to be refreshed, then the OCDS integration should be either paused or deleted until all BDI jobs have been completed successfully to refresh OCDS. Once all BDI jobs have completed to refresh OCDS, then the integration can be recreated or unpaused, allowing Xstore Office to request initial load to replace foundation data in Xcenter and Xstore databases.

2. OCDS starts to receive, on-going, regularly scheduled pricing and promotion data using BDI as the data transport.
3. OCDS starts to receive, on-going, near-real-time updates of Merchandising data using the RIB as the data transport.
4. Xstore Office starts polling OCDS, at a regularly scheduled interval, to check for updates (for example, additions, deletions, and modifications) of Merchandising and Pricing data used by the Xstore Suite. Xstore Office communicates requests for changes to OCDS data by calling the OCDS REST web services.
5. When changes to OCDS data are detected, Xstore Office generates .mnt files containing the commands to update Xstore Suite databases. When .mnt files are generated, they are automatically deposited into the Xstore Office auto-drop folder for data-loading and distribution.
6. If any detected OCDS updates necessitate updating the Xcenter database then the appropriate .mnt file will be automatically dataloaded.
7. If any detected OCDS updates necessitate updating the Xstore database then the appropriate .mnt files will be deployed to the store where they can be dataloaded either immediately or at store close.

 **Note:**

OCDS leverages Basic Auth to authenticate web service requests made by Xstore Office. Retailers should develop procedures to proactively change the OCDS password on both sides of the integration before the OCDS Basic Auth password expires.

## Using Flat Files

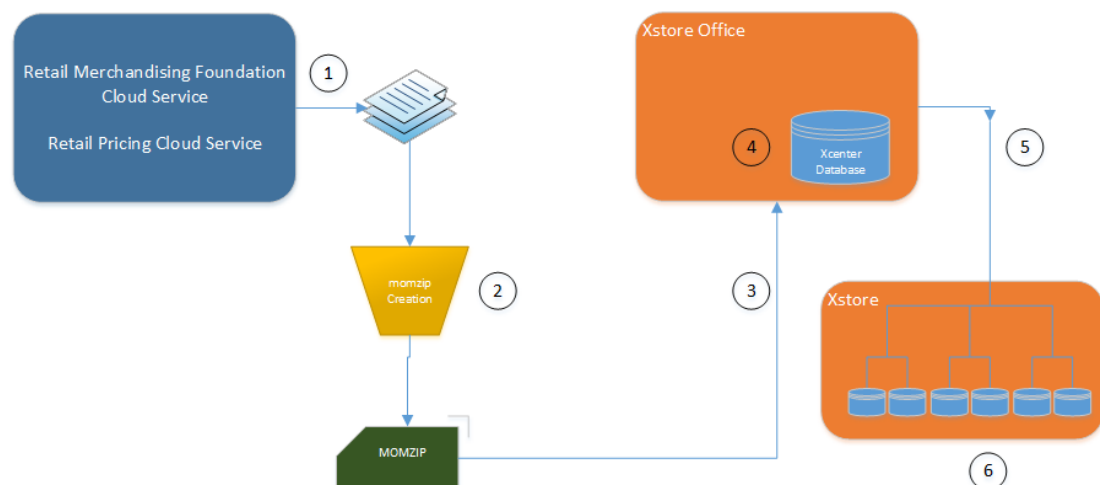


### Note:

The flat file integration will be deprecated. For more information about this feature, see the *Oracle Retail Merchandising Cloud Services Deprecation Advisory* (Doc ID 2760721.1) on My Oracle Support. For new integrations, use the direct services.

The Merchandising Foundation Cloud Service and Pricing Cloud Service support the export of data into files that can be packaged for consumption by the Xstore Suite. [Figure 2-3](#) illustrates the data flow from the Merchandising applications to Xstore Office and Xstore.

**Figure 2-3 Conceptual Data Flow from Merchandising to Xstore Suite**



The following steps describe the flow in [Figure 2-3](#):

1. RMFCS/RPCS writes data to .dat files using a series of .ksh extract scripts. These scripts support both kill/fill (full) and delta processing. Many of these scripts also support creating files that apply either to all stores or store-specific files.

Use the kill/fill export option in the merchandising and pricing system's extract scripts to generate full-load files along with running the staging batch for every store and extracting the data using the standard batch processes to convert items, price, and other key data elements from the Merchandising solutions into Xstore.

The following merchandising batch jobs are used for the integration:

- nexport\_merchhier.ksh
- nexport\_orghier.ksh
- nexport\_stores.ksh
- nexport\_diffs.ksh
- nexport\_diffgrp.ksh

- nexport\_itemmaster.ksh
- nexport\_itemloc.ksh
- nexport\_itemvat.ksh
- nexport\_relitem.ksh
- nexport\_vat.ksh
- nexport\_stg\_purge.ksh

For more information, see the *Oracle Retail Merchandising System Operations Guide, Volume 1 - Batch Overviews and Designs*.

The following pricing batch jobs are used for the integration:

- RegularPriceChangePublishBatch
- ClearancePricePublishBatch

For more information, see the *Oracle Retail Price Management Operations Guide*.

2. The retailer's system integrator is responsible for packaging the extract .dat files in a zip-format archive file named using the file extension '.momzip'. The integration uses logic based on filenames so it is important to maintain the use of the file's name as generated.

 **Note:**

The momzip file must be scanned for viruses before delivery to Xstore Office for processing

3. Momzip files are delivered to Xadmin's auto-deploy file folder either by use of webservice API or direct file system access, as available per hosting type.
4. Xadmin periodically checks the auto-deploy directory for new Momzip files. The system automatically processes the dat-file contents of the momzip. For details on the set of Merchandising files targeted to corporate or stores, see "Merchandising File Consumption by Location".
5. If any RMFCS/RPCS extract files necessitate updating the Xcenter database then the appropriate .dat files will be automatically dataloaded.

If any RMFCS/RPCS extract files necessitate updating the Xstore database then the appropriate .dat files will be deployed to the store where they can be dataloaded either immediately or at store close.

## Xstore Office Deployments

Each of the types of integration discussed in this guide involve the delivery of merchandising and pricing data, in file format, to Xstore Office's auto-deploy folder. Xadmin polls the auto-deploy folder at a configured interval and automatically processes new files. The polling-interval is configurable, and is 15 minutes by default. For information on how to configure these settings, see the Oracle Retail Xstore Office User Guide.

Deployments of .mnt or .dat files, to be loaded at the store, are automatically created for either immediate or scheduled distribution. Each deployment status of the files is displayed in the Xstore Office Deployments screen ([Figure 2-1](#)).

Once a store is closed or when the retail period changes in a 24x7 configuration, Xenvironment of the lead register pulls down files scheduled for end-of-day and runs the Xstore DataLoader to import all the files deployed into the store primary database. Files scheduled for immediate dataloading are pulled down and dataloaded automatically.

**Figure 2-4 Xstore Office Deployments**

| ID    | Name                        | Type        | Plan        | Launch Date  | Waves Complete | Status    |
|-------|-----------------------------|-------------|-------------|--------------|----------------|-----------|
| 10239 | 2_dimensionValue_1542664871 | Auto Deploy | Single Wave | Nov 19, 2018 | 0 out of 1     | Scheduled |
| 10238 | 2_dimensionType_1542664869  | Auto Deploy | Single Wave | Nov 19, 2018 | 0 out of 1     | Scheduled |
| 10237 | 5_price_1542664518196_STCF  | Auto Deploy | Single Wave | Nov 19, 2018 | 0 out of 1     | Scheduled |
| 10236 | 5_price_1542664518798_STCF  | Auto Deploy | Single Wave | Nov 19, 2018 | 1 out of 1     | Complete  |
| 10235 | 5_price_1542664518288_STCF  | Auto Deploy | Single Wave | Nov 19, 2018 | 0 out of 1     | Scheduled |
| 10234 | 5_price_1542664518696_STCF  | Auto Deploy | Single Wave | Nov 19, 2018 | 0 out of 1     | Scheduled |
| 10233 | 4_itemLoc_1542664517424_ST  | Auto Deploy | Single Wave | Nov 19, 2018 | 0 out of 1     | Scheduled |
| 10232 | 4_itemLoc_1542664516629_ST  | Auto Deploy | Single Wave | Nov 19, 2018 | 0 out of 1     | Scheduled |
| 10231 | 4_itemLoc_1542664515492_ST  | Auto Deploy | Single Wave | Nov 19, 2018 | 0 out of 1     | Scheduled |
| 10230 | 4_itemLoc_1542664513014_ST  | Auto Deploy | Single Wave | Nov 19, 2018 | 0 out of 1     | Scheduled |
| 10229 | 3_item_1542664517312_STOR   | Auto Deploy | Single Wave | Nov 19, 2018 | 0 out of 1     | Scheduled |
| 10228 | 3_item_1542664516522_STOR   | Auto Deploy | Single Wave | Nov 19, 2018 | 0 out of 1     | Scheduled |
| 10227 | 3_item_1542664516268_STOR   | Auto Deploy | Single Wave | Nov 19, 2018 | 0 out of 1     | Scheduled |
| 10226 | 3_item_1542664512980_STOR   | Auto Deploy | Single Wave | Nov 19, 2018 | 0 out of 1     | Scheduled |
| 10225 | 5_price_1542663870813_STCF  | Auto Deploy | Single Wave | Nov 19, 2018 | 0 out of 1     | Scheduled |
| 10224 | 5_price_1542663870679_STCF  | Auto Deploy | Single Wave | Nov 19, 2018 | 1 out of 1     | Complete  |

## Using RMFCS/RPCS Direct Services or OCDS

The .mnt files created by Xstore Office leverage an xml header to target when and where files are dataloaded.

For example, this header would appear in a store-specific file that is immediately downloaded and dataloaded.

```
<Header line_count="104" target_org_node="STORE:121" destination="XSTORE_ONLY"
apply_immediately="true" download_time="IMMEDIATE" />
```

**Table 2-1 MNT Files**

| Filename Prefix  | Store Specific | Destination  | Downlaod Time |
|------------------|----------------|--------------|---------------|
| 1_orgHier        | No             | ALL          | STORE_CLOSE   |
| 2_dimensionType  | No             | ALL          | STORE_CLOSE   |
| 2_dimensionValue | No             | ALL          | STORE_CLOSE   |
| 2_merchHier      | No             | ALL          | STORE_CLOSE   |
| 2_retailLoc      | No             | ALL          | STORE_CLOSE   |
| 2_vat            | No             | ALL          | STORE_CLOSE   |
| 3_item           | Yes            | XSTORE_ONLY  | STORE_CLOSE   |
| 3_itemCorp       | No             | XCENTER_ONLY |               |
| 3_itemUPC        | Yes            | XSTORE_ONLY  | STORE_CLOSE   |
| 4_itemLoc        | Yes            | ALL          | STORE_CLOSE   |

**Table 2-1 (Cont.) MNT Files**

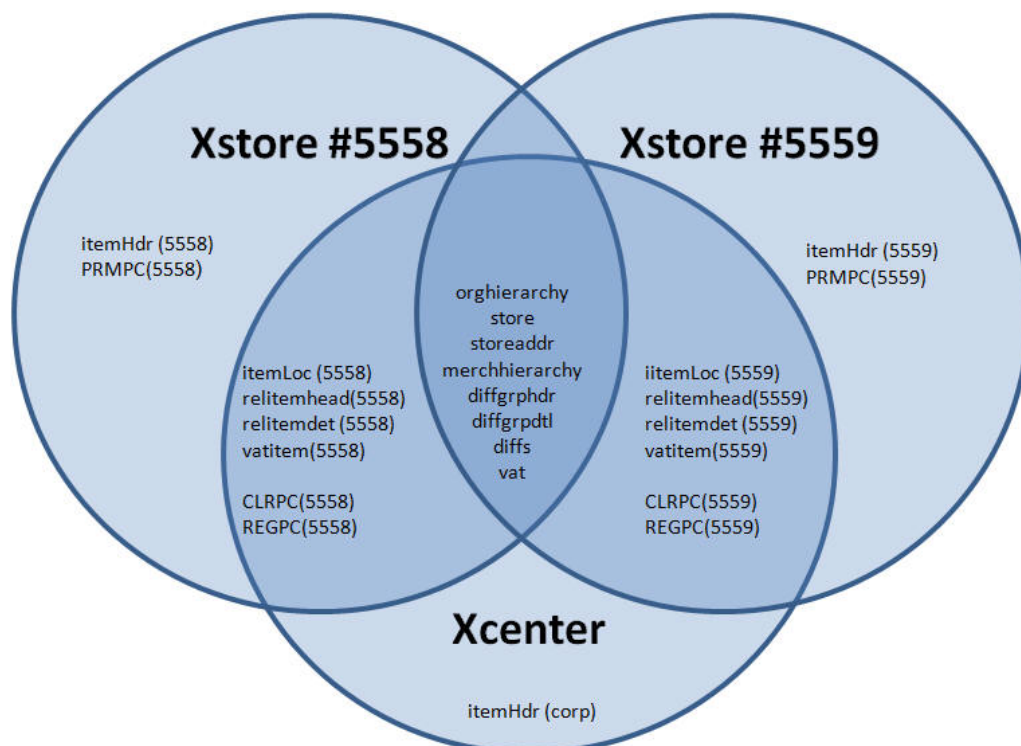
| Filename Prefix | Store Specific | Destination  | Download Time |
|-----------------|----------------|--------------|---------------|
| 4_itemLocCorp   | Yes            | XCENTER_ONLY |               |
| 4_relatedItem   | Yes            | ALL          | STORE_CLOSE   |
| 5_clrpc         | Yes            | ALL          | IMMEDIATE     |
| 5_price         | Yes            | ALL          | IMMEDIATE     |
| 5_promo         | Yes            | XSTORE_ONLY  | STORE_CLOSE   |
| 5_regp          | Yes            | ALL          | IMMEDIATE     |

## Using Flat Files

The files produced by the extract programs containing data loaded into the Xcenter and Xstore databases comprise four data sets. A data file's targeted location is specified in its file name:

- Data loaded into Xcenter
- Data loaded into Xcenter and all stores
- Data loaded into one store
- Data Loaded into all stores

The figure below illustrates where files are dataloaded by type, using a two store chain example.

**Figure 2-5 File Distribution/Dataloading by Type**

## Xstore Dataloader

DataLoader is the Xstore component responsible for translating delimited files into instructions to modify the contents of an Xstore Suite database. It can consume .mnt files generated by an Xstore Office integrated with OCDS and MFCS, or the .dat files extracted from Oracle Retail Merchandising and Pricing Cloud Systems.

The DataLoader interacts with Xstore Office, Xcenter, Xenvironment, and Xstore Point of Service to provide a complete automated solution for the propagation of foundation data changes to the centralized and store-level databases used in an enterprise Xstore deployment. Xstore data not supplied by an Oracle Merchandising/Pricing system can also be loaded by the DataLoader using its native .mnt format.

The DataLoader is designed to adapt flat files of data into relational data that Xstore can use. These flat files are referred to generically as data files within the DataLoader. Each field in a data file is delimited by a vertical bar (|) character. The DataLoader is configured to detect file types so it can process a data file's lines in distinct units of work appropriate for the type of file.

If a failure occurs during DataLoader processing of a data file, all SQL statements associated with the unit of work are rolled back and the error is logged. Processing continues with the next unit of work in the data file.

For more detailed information, see the following documents:

- Retail Reference Architecture
- *Oracle Retail Xstore Point of Service Host Interface Guide*

Both documents are available on My Oracle Support.

## Using RMFCS/RPCS direct services or OCDS

In these integration styles, Xstore Office communicates with a webservice endpoint to obtain merchandising and pricing data that is written into files using the dataloader's native .mnt file format.

Integrations with either provider can be established by using Xadmin's Integration Manager UI for an Organization. See the *Oracle Retail Xstore Office User Guide* or the *Oracle Retail Xstore Office Cloud Service User Guide* for details about configuring these integrations using Xadmin's Integration Manager.

## Using Flat Files

DataLoader is configured with a list of detectors to identify known file types that can be processed. Unknown file types are skipped and not processed. A Merchandising file detector is configured to identify all types of Merchandising data files and their meta data.

The detection is based solely on file names. Regular expressions are configured to perform pattern matching in file name to identify Merchandising file types and its meta-data including target store ID, fill type, timestamp, and line count:

- Merchandising file type detection

A file name is matched against regular expressions configured to detect its Merchandising type. If no match is found, the file is not a Merchandising file type. The

keys in the bean configuration are the Merchandising file types that Xstore/Xcenter care about.

- Target store detection

Target store ID is used by DataLoader as well as Xstore Office to determine the deployment target of a Merchandising file.

A file name is matched against regular expressions configured to detect its target store ID. Not all Merchandising file types have a target store ID configured:

- If a store ID is not detected, the file is deployed to all stores and imported into Xcenter.
- If a store ID is detected and is corp, the file is imported into Xcenter only.
- If a store ID is detected and is not corp, it is deployed to the store. With the exception of Item Header batch, it is also imported into Xcenter.

- Timestamp detection

Timestamp is used by DataLoader to sort the files. For more details, see "File Sorting". A file name is matched against regular expressions configured to detect its timestamp.

- Line count detection

Line count is used by DataLoader to validate a file. If the number of lines in the file does not match the line count, a warning is logged.

## File Sorting

There are some data dependencies when importing .dat files into Xstore, such as related item detail that needs to be imported after the related item header. When DataLoader is called to import multiple Merchandising files in the same deployment, it applies sorting to the files before importing them.

A detector is configured to have a sorting strategy, which is used to sort all the files the detector detects. A Merchandising file sorting strategy bean is configured for the Merchandising file detector to perform sorting for all Merchandising files based on their file types. Files of the same Merchandising file type are sorted based on their timestamps. Out of the box the following sorting order is specified:

- Org Hierarchy
- Store
- Store Address
- Merchandise Hierarchy
- VAT
- Diff Group Head
- Diff Group Detail
- Diff
- Item Head
- Item Loc
- VAT Item
- Related Item Head

- Related Item Detail
- Regular Price Change
- Clearance Price Change
- Promotion Price Change

## File Loading Dependency

Although the sorting strategy configuration lists all Merchandising file types, not all file types have file loading dependencies. The actual dependencies are shown in [Table 2-2](#).

**Table 2-2 File Loading Dependency**

| File Type           | Depends on                                                      |
|---------------------|-----------------------------------------------------------------|
| VAT Item            | Item Loc                                                        |
| Store Address       | Store                                                           |
| Related Item Detail | Related Item Head, Item Loc                                     |
| Item Loc            | Item Head                                                       |
| Item Head           | Diff, Diff Group Detail, Diff Group Head, Merchandise Hierarchy |
| Diff Group Detail   | Diff Group Head                                                 |
| Diff                | Diff Group Detail, Diff Group Head                              |

## File Iteration and Transformation

DataLoader processes each file in the sorted order. It invokes a file iterator to process each file. A file iterator implements Java Iterator interface. During each iteration, it transforms flat file records into a list of IPersistable (DAO or SQLQuery) objects, and returns them.

A Merchandising file iterator is configured for each Merchandising file type. It processes lines between unit dividers as a data unit that should be transformed together:

- A single line iterator that expects each line in the file, other than FHEAD or FTAIL, is a data unit that gets transformed during each iteration. One and only one line in a unit is expected. An exception is raised if that is not the case.
- A multi-line iterator expects multiple lines to form a data unit that gets transformed together during each iteration. A unit may contain one or more lines. Out of the box, only promotion price change is configured to have a multi-line iterator.
- Unit dividers are lines that end a unit. They are configured as unit definitions for each Merchandising file type.

A Merchandising transformer is called to convert a unit of data from a flat file to a list of IPersistable (DAO or SQLQuery) objects. A transformer is configured for each Merchandising file type.

All Merchandising transformers implement the IMOMDataTransformer interface, which defines two APIs:

- The transform API is invoked by the iterator in each iteration. It does all the transformation to turn a unit of flat file data to a list of IPersistable objects to create, update, or delete foundation data records in database.

- The `purgeData` API is invoked once for a file by the iterator. It is only called if the file is for a full reload. It returns a list of `IPersistable` objects to remove all existing records sourced from Merchandising.

## Persisting into the Database

`DataLoader` saves `IPersistable` objects to database in batches. A batch contains a list of `AtomicPersistables` objects. The maximum number of `AtomicPersistables` objects in a batch is configurable. An `AtomicPersistables` is a container of a group of `IPersistable` objects that must all be persisted or rolled back together as a unit. All `IPersistable` objects returned in one iteration are grouped into one `AtomicPersistable` object.

`DataLoader` first attempts to persist and commit all `IPersistable` objects from all `AtomicPersistables` objects in a batch together. If it fails, it tries to persist and commit `IPersistable` objects from one `AtomicPersistables` at a time. The number of succeeded and failed records are written to `summary.ini` files.

## Phased Rollout of Stores

Retailers who are migrating an existing Xstore Suite implementation from a different source for merchandising foundation and pricing data may desire to exclude stores defined in their organization hierarchy during a phased rollout of the integration.

## Using RMFCS/RPCS direct services or OCDS

Xstore Office Integration Manager supports the use of Store Collections when configuring either integration method. By associating a Store Collection with an integration method a retailer can identify which stores require data from the integration system. This feature can facilitate a phased-store rollout of data to a subset of existing stores in Merchandising. An integration using a Store Collection will limit the creation and deployment of `mnt` files to only those stores defined by the Store Collection.

Adding another store to an existing integration will enable incremental changes to start flowing to the store. A manual refresh from Merchandising and Pricing through either integration method should be requested for the added store to seed it with a full set of foundation and pricing data.

## Using Flat Files

A `momzip.properties` file can be included in the root folder of the `momzip` file to prevent a `.dat` files from being dataloaded in Xcenter and to limit the creation of store deployments to only a subset of stores. By associating a Store Collection with the `momzip`'s contents a retailer can identify which stores are eligible for targeting when creating deployments. This feature can facilitate a phased-store rollout of data to a subset of existing stores.

For example, the properties below are used to dataload Xcenter, but only result in deployment to stores that are members of the store collection `XOstores`.

```
dataload.xcenterEligibleFiles=true
```

```
deploy.storeCollection=XOstores
```

**Table 2-3 Flat File Properties**

| Property                       | Description                                                                                                                                                                             | Values                                                     |         |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|---------|
|                                |                                                                                                                                                                                         | Possible                                                   | Default |
| dataload.xcenterEligible Files | Indicates if Xcenter is to dataloaded                                                                                                                                                   | true/false                                                 | true    |
| deploy.storeCollection         | If a value is present for this property, then deployments will only be created for stores specified by the store collection. If no value is present then no deployments will be created | The ID of an existing Xadmin store collection, or no value | null    |

**Note:**

When the momzip.properties file does not contain a supported property key, or the key exists but has no value, then the key's default value is used.

## Manual Refresh of an Xstore Database

The typical integration's operational flow consists of a one-time initial load to seed Xstore Suite databases with data from the Oracle merchandising and pricing systems, followed by incremental updates to update Xstore Suite databases with changes made in the upstream systems. However, exceptions to this flow are expected and the integrations provide mechanisms to refresh databases on an as-need bases.

## Using RMFCS/RPCS direct services or OCDS

Both integration methods are designed to be fully automated; under normal conditions no manual steps are required to have Merchandising and Pricing data flow into a store database. However, Xadmin's Data Publisher can be used to regenerate and redeploy .mnt files with Merchandising and Pricing data to a store if exceptional circumstances necessitate the refreshing of an Xstore database.

Use of the Data Publisher to replenish one or more types of Merchandising and Pricing data at a store will result in the purging of all existing sourced data, followed by the loading of a full set of the most recent data.

When the integration is enabled in Xstore Office, the DataManager screen's "Data Publisher" option will include a "Data Source" drop down list, which includes the list options: "Omni Channel Data Service" and "Merchandise Foundation Cloud Service".



### Note:

When you select the "Merchandise Foundation Cloud Service" option, Pricing is included.

To publish data to one or more stores:

1. Choose the desired Organization Node for the target stores, select the integration, and click **Next**.

**Figure 2-6 Xstore Office - Data Publisher Option**

ORACLE Xadmin

Organization User

Journal Reports Config Manager Data Management Deployment Support Tools System

Home » Data Manager

Select one of the following options.

- > **Data Management**  
Change or create data for your organization.
- > **Pending Modifications**  
View, deploy, or delete pending data changes for your organization.
- > **Data Publisher**  
Publish data to an organizational node.

Target Organization Node: STORE:101

Data Source: Omni Channel Data Service

Next

2. Choose the type of data you wish to publish, then click **Next**.

**Figure 2-7 Xstore Office - Data to Publish**

ORACLE Xadmin

Organization User

Journal Reports Config Manager Data Management Deployment Support Tools System

Home » Data Manager » Publish STORE:101 Data

Select the types of data you wish to publish.

**Retail Location**

- ☐ Organization Hierarchy
- ☐ Retail Location

**Taxes**

- ☐ VAT

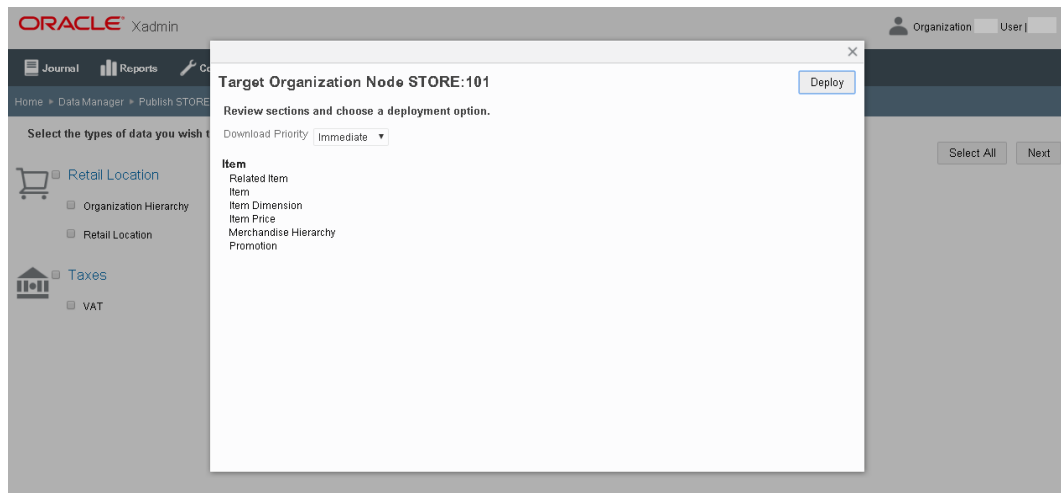
**Item**

- ☒ Related Item
- ☒ Item
- ☒ Item Dimension
- ☒ Item Price
- ☒ Merchandise Hierarchy
- ☒ Promotion

Select All Next

3. Select a Download Priority, Immediate or Store Close, and click **Deploy**.

**Figure 2-8 Xstore Office - Target Organization Node Pop Up**



## Using Flat Files

Kill/fill (full) files should be generated using the using .ksh extract scripts, packaged in a momzip archive file and targeted to only the stores where data is to be refreshed. Inclusion of a configured momzip.properties file can be used to limit dataloading to desired databases.

# 3

## Transaction Flow from Xstore to Sales Audit

Xstore is the source of Point of Sale (POS) transactions, including but not limited to the following:

- Sales
- Returns
- Voids
- Cash management transactions
- Many store activity transactions

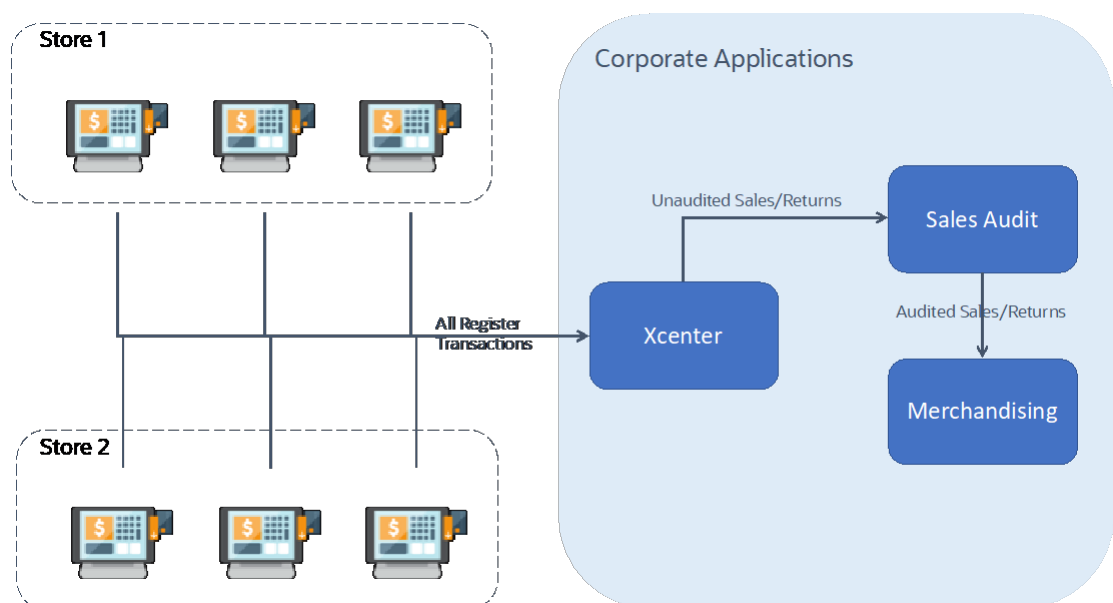
All transactions produced in Xstore are sent to Sales Audit. Sales Audit processing is primarily concerned with transactions that alter inventory or contain payment. Sales Audit loads other types of Xstore transactions (such as entering training mode, gift registry creation, and so on) into an OTHER transaction type for full visibility and to avoid gaps in the transactions sequence, but will not out of the box perform any audit functions on these OTHER types of transactions.

Sales Audit validates Xstore transactions that impact inventory (such as sales, returns, and customer orders) and exports the information to Merchandising to record the full financial and inventory impact.

## Conceptual Data Flow

Figure 3-1 illustrates the transaction flow from Xstore to Sales Audit.

**Figure 3-1 Xstore to Sales Audit Transaction Flow**



The following steps describe the flow shown in [Figure 3-1](#):

1. All Xstore registers replicate, or persist, all transactions to Xcenter. Note that this includes both customer related transactions (sale, return, void, and so on) and cash management/store operation transactions (paid in, no sale, change to training mode, and so on). Xcenter uses these transactions for activities such as cross location returns.

2. Xcenter broadcasts all transactions to Sales Audit in one of two ways.

In the form of RTLog files generated multiple times per day. This is the legacy approach. For more information, see [Technical Implementation - RTLog Files Integration](#).

Direct REST call to Sales Audit endpoint to post each incoming transaction. This is the new approach introduced since v21. For more information, see [Technical Implementation - Sales Audit REST Integration](#).

The broadcast system in Xcenter provides a means to transmit POSLog data to other systems. The data is transmitted just as Xcenter receives it from the registers through the replication system, which is approximately in real-time. The temporal ordering of the POSLog data is also preserved, just as it is with the replication system.

For more detailed information, see the following documents:

- Retail Reference Architecture available on My Oracle Support
  - *Oracle Retail Xstore Point of Service Technical Guide* available on My Oracle Support
  - *Oracle Retail Xstore Suite Implementation and Security Guide*
3. After successful totaling and auditing, Sales Audit sends all sale/return transactions to Merchandising, where the transactions impact perpetual inventory. For detailed information about uploadsales\_all.ksh, see *Oracle Retail Merchandising Operations Guide, Volume 1 - Batch Overviews and Designs*.

 **Note:**

Integrating sales and returns data directly to Merchandising, bypassing Sales Audit, is not a supported integration.

## Technical Implementation - Sales Audit REST Integration

The technical implementation of the data from Xcenter/Xstore to Sales Audit consists of four main components:

- [Sales Audit REST Xstore Broadcaster](#)
- [Sales Audit REST Endpoints](#)
- [Scheduled Job to Query Sales Audit Rejected Transactions](#)
- [Xadmin UI to View and Republish Sales Audit Rejected Transactions](#)

## Sales Audit REST Xstore Broadcaster

Through Xadmin UI, create a broadcaster of type "Oracle Retail Sales Audit, REST Service" and specify Sales Audit REST endpoint as its endpoint url.

### Note:

The endpoint url is in the form `https://<host>:<port>/<tenancyId>`. Do not specify endpoint url with full service path like following: `https://<host>:<port>/<tenancyId>/ResaRestServices/services/private/ReSA/salesService`

A Sales Audit REST broadcaster translates a transaction poslog xml to a JSON request, and posts it as payload to `ResaReSTServices/services/private/ReSA/salesService` service. While out-of-box implementation of the translation is provided, the broadcaster gives a retailer the flexibility to customize the JSON request.

The broadcaster configuration wizard has a tab called Customize (see screen capture below). A user can provide custom mapping in yaml format to customize the JSON payload. A Preview feature is also provided to diff a transaction's JSON request with or without the custom mapping. Once the custom mapping passes the preview, a user can save it with the broadcaster configuration. After an initial delay of about 30 minutes, Xcenter will detect the mapping change and apply it to all transactions broadcasted out to Sales Audit.

### Note:

For more information on how to write custom mappings in yaml, see the *Oracle Retail Xstore Sales Audit REST Extension Guidelines* (Doc ID 1994467.1) on My Oracle Support.

**Figure 3-2 Edit Broadcaster Screen - Customize Tab**

Home ► System Manager ► Broadcaster Management ► Edit Broadcaster

**Edit Broadcaster**

**Define**  
Organization 1000 - Chain 1\*  
Service ID RESA\_SERVICE  
Enabled Yes

**Connect**  
Endpoint URL https://rex.retail.us-phoenix-

**Configure**  
Batch Size 100

**Customize**  
Customization? Yes

**Review**

Connect Configure **Customize** Review

Please insert the custom mapping file below and provide the details required to preview the changes.

```
---
name: ReSA-Custom-Config
valuemaps:
  NoSaleReason:
    NSManual: MANU #Override Default Reason Code

  ReturnReason:
    RET7: RET7 #New Return Reason

TenderIdAsRef1ForCount:
```

Business Date 2021-11-19 Register #  
Store # Transaction

Preview

| Original | Customized |
|----------|------------|
|          |            |

## Sales Audit REST Endpoints

Two Sales Audit REST services are used by Xcenter. `ResaReSTServices/services/private/Resa/salesService`: A POST service called by Xcenter broadcaster to post a transaction to Sales Audit. Its payload is the JSON representation of the transaction. A success response is returned if it passes initial validation and is accepted by Sales Audit.

`ResaReSTServices/services/private/Resa/getRejectedTransactions`: Once a transaction is accepted into Sales Audit, it is placed in staging tables. A batch process will generate the RTLOG file and the file will get consumed by `saimptlog/saimptlogi` batch. While generating RTLOG, if any validation fails, then that respective transaction will be moved to reject tables. Reject tables would act as the base for this Reject Query Service.

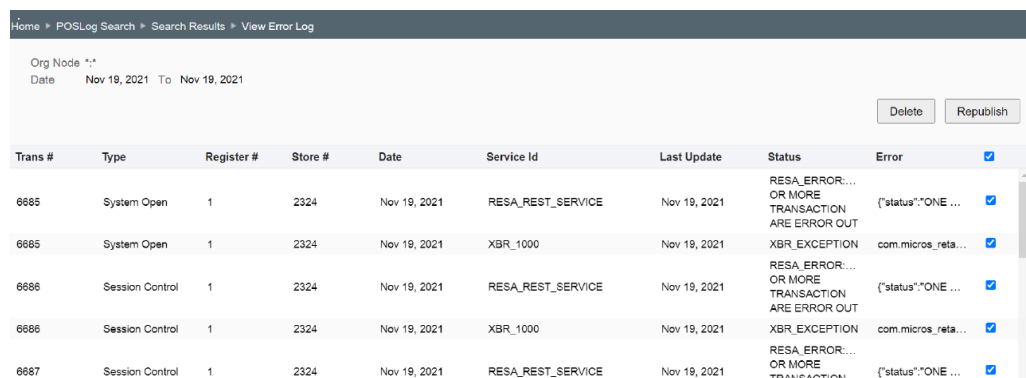
## Scheduled Job to Query Sales Audit Rejected Transactions

The Query Sales Audit Rejected Job is scheduled to run hourly in Xcenter if a broadcaster of type "Oracle Retail Sales Audit, REST Service" is enabled for at least one organization. The job iterates through each distinct Sales Audit REST endpoint configured across all organizations to query for rejected transactions through its `ResaReSTServices/services/private/Resa/getRejectedTransactions` service, and updates the rejected transactions' `WORK_STATUS` column to "REJECTED" in Xcenter's poslog work item queue table `TRN_POSLOG_WORK_ITEM`.

## Xadmin UI to View and Republish Sales Audit Rejected Transactions

To view rejected transactions, a new View Error Log button is introduced in Xadmin `SystemTools > Publish PosLog Data`. Once clicked, it displays all rejected or otherwise errored out transactions within the range of a user specified criteria for each broadcaster (See below for a screen capture of the UI). It provides error details, and allows a user to republish all or a subset of them once the underlying problem is fixed.

**Figure 3-3 POSLog Search - Sales Audit Rejected Transactions**



| Trans # | Type            | Register # | Store # | Date         | Service Id        | Last Update  | Status                                                    | Error              |                                     |
|---------|-----------------|------------|---------|--------------|-------------------|--------------|-----------------------------------------------------------|--------------------|-------------------------------------|
| 6685    | System Open     | 1          | 2324    | Nov 19, 2021 | RESA_REST_SERVICE | Nov 19, 2021 | RESA_ERROR:...<br>OR MORE<br>TRANSACTION<br>ARE ERROR OUT | ('status':"ONE ... | <input checked="" type="checkbox"/> |
| 6685    | System Open     | 1          | 2324    | Nov 19, 2021 | XBR_1000          | Nov 19, 2021 | XBR_EXCEPTION                                             | com.micros_reta... | <input checked="" type="checkbox"/> |
| 6686    | Session Control | 1          | 2324    | Nov 19, 2021 | RESA_REST_SERVICE | Nov 19, 2021 | RESA_ERROR:...<br>OR MORE<br>TRANSACTION<br>ARE ERROR OUT | ('status':"ONE ... | <input checked="" type="checkbox"/> |
| 6686    | Session Control | 1          | 2324    | Nov 19, 2021 | XBR_1000          | Nov 19, 2021 | XBR_EXCEPTION                                             | com.micros_reta... | <input checked="" type="checkbox"/> |
| 6687    | Session Control | 1          | 2324    | Nov 19, 2021 | RESA_REST_SERVICE | Nov 19, 2021 | RESA_ERROR:...<br>OR MORE<br>TRANSACTION                  | ('status':"ONE ... | <input checked="" type="checkbox"/> |

## Technical Implementation - RTLog Files Integration

The technical implementation of the data from Xcenter/Xstore to Sales Audit consists of three main components:

- [RTLog File Xstore Broadcaster](#)
- [Xstore RTLog Generator](#)
- [Sales Audit saimptlog/i](#)

### RTLog File Xstore Broadcaster

Through Xadmin UI, create a broadcaster of type "Oracle Retail Sales Audit, RTLog File" and specify RTLog generator url as its endpoint url.

### Xstore RTLog Generator

RTLog generator is a component that collects and aggregates broadcaster transactions and transforms them to the RTLog file format.

The on premise RTLog generator is packaged with Xstore, but is generally deployed in the same file system as Sales Audit.

For more information, see [RTLog Generator On-Premise](#).

### Sales Audit saimptlog/i

Sales Audit is the gateway for POS transactions to integrate to Oracle Retail Merchandising systems. There are two Sales Audit sub-processes that can upload POS files:

- `saimptlogi.c` is used when loading sales incrementally throughout the day from stores, instead of just once per day. It validates files and directly inserts the transactions into the Sales Audit tables. This includes (as necessary) creating errors for the auditors to research and correct.
- `saimptlog.c` is used for the once a day import of data from stores. It validates POS files and creates Sql\*Loader Files. This includes (as necessary) creating errors for the auditors to research and correct. A subsequent Sql\*Load process loads the transactions and errors into the Sales Audit tables.

`saimptlog` and `saimptlogi` are built with the same shared code and vary only in their approach to physically loading data into the database. The programs are collectively referred to as `saimptlog/i`.

There are a number of regular prerequisites in the Sales Audit batch schedule which must be completed before POS transactions can be loaded. For more information about supporting batch jobs, see *Oracle Retail Merchandising Operations Guide, Volume 1 - Batch Overviews and Designs*.

For more detailed information about `saimptlog/i` and the RTLog file format, see the following documents:

- *Oracle Retail Merchandising Operations Guide, Volume 1 - Batch Overviews and Designs*

# 4

## Webservice Integration Configuration

This chapter describes configuration options for the service integration, where Xstore Office calls Merchandising and Pricing services directly or through OCDS. This chapter does not apply to the flat file-based integration.

### Xstore Office: Direct Service Integration Communication

Configuration of the direct service integration involves self-service activities on both sides of the configuration. For Merchandising and POM configurations required for direct service integration from Merchandising and Pricing, see the sections Merchandising Configuration and POM Configuration below.



#### Note:

When these services are initialized, some services need a few hours for initial data processing before they can be used. It is recommended to enable these services a day in advance before Xstore Office starts subscribing

For Merchandising and POM configurations required for direct service integration from Merchandising and Pricing, see the sections [Merchandising Configuration](#) and [POM Configuration](#) below.

### Merchandising Configuration

To enable direct service integration, Oracle Retail Xstore Suite needs to be selected to have service based integration in the Integration section of System Options screen in Merchandising. For more information on System Options, refer to the *Oracle Retail Merchandising Foundation Cloud Service Implementation Guide*.

### POM Configuration

These services are operationalized by background processes that can be enabled and configured for running frequency in the Batch Administration screen of POM. For more information on these batch jobs, refer to the *Oracle Retail Merchandising Foundation Cloud Service Operations Guide*.

### Xstore Office Configuration

The direct service integration is set up through the Xadmin Integration Management feature and are stored in the Xstore Office database.

**Table 4-1 RMFCS Connection Configuration**

| Fields                    | Description                                                                                                                                                                                  |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Endpoint URL              | A URL describing protocol, host name, port and namespace of the Merchandising and Pricing Web Services.<br>Example: https://XXX.XXXXXX.XX-XXXX-X.ocs.oraclecloud.com/rgbu-XXX-XXXX-XXXX-mfcs |
| Merchandising Chain ID(s) | A comma separated list of the chain ids in Merchandising containing stores in the Xstore Organization.                                                                                       |

## Xstore Office: OCDS Integration Communication

Xstore Office requests changes to Merchandising and Pricing data in OCDS by calling the REST web services.

The properties for the OCDS integration are set up through the Xadmin Integration Management feature and are stored in the Xstore Office Cloud Service database.

**Table 4-2 OCDS Connection Configuration**

| Fields              | Description                                                                                                                         |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Endpoint URL        | A URL describing protocol, host name, and port of the OCDS Web Services.<br>Example: https://XXX-XXXX-ribcs-rics.oracleindustry.com |
| Service Path Prefix | The root service path for OCDS.<br>Example: /ords/ocds/omnichannel                                                                  |
| OCDS Chain ID(s)    | A comma separated list of the chain ids in the Merchandising system containing stores in the Xstore Organization.                   |
| Username            | The username used to authenticate web service communication with OCDS.                                                              |
| Password            | The password used to authenticate web service communication with OCDS.                                                              |

## Xstore Office: Additional OCDS/MFCS Configuration Options

Xadmin Integration Management feature includes the flowing configuration options which appear in the configuration wizard for both OCDS and MFCS configurations.

**Table 4-3 Additional OCDS/MFCS Configuration Options**

| Setting                                                                       | Description                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Timeout Connect                                                               | Number of seconds to wait for connection.                                                                                                                                                                                                                              |
| Timeout Read                                                                  | Number of seconds to wait for completion of response data.                                                                                                                                                                                                             |
| Enabled Data Types                                                            | The types of data to be requested by Xstore Office. Once data starts flowing this selection should not be changed. Typically all data types are enabled unless not using VAT or (very uncommon) price/promotion.                                                       |
| Retain Job History                                                            | The number of days to retain Job History data in the Xadmin database.                                                                                                                                                                                                  |
| Scheduled Job Interval Minutes                                                | This is the frequency with which Xadmin requests data from OCDS/MFCS. The value should be greater than or equal to 30 minutes.                                                                                                                                         |
| On Demand Job Interval Minutes                                                | This is the maximum amount of time that will elapse between when an on-demand job is created and is executed. The value should be greater than or equal to 5 minutes.                                                                                                  |
| Orphan Data Protection Offset Seconds                                         | This is the minimum amount of time data must age before it can be visible to Xstore Office. The offset helps to prevent related-data from becoming orphaned due to system latency. The value should be greater than or equal to 30 seconds.                            |
| Records Per Request Limit                                                     | This specifies the number of records to request in webservice calls. If no limit is defined then MFCS/OCDS will determine the maximum number of records.                                                                                                               |
| Retail Location: Till Accountability                                          | This specifies if Retail Locations/Stores created from data are to use Till Accountability or not.                                                                                                                                                                     |
| Retail Location: Default Locale                                               | This specifies the Locale to use in Retail Locations created from data when a LANG_ISO_CODE is not defined for a location. This setting defines the value assigned to a Retail Location in the Xstore database if the store was not assigned a Locale in Merchandising |
| Item: Tax Group ID for non-taxable Items                                      | This specifies the Tax Group ID assigned to non-taxable items created from MFCS/OCDS data.                                                                                                                                                                             |
| Item: Include future date to determine VAT code with the greatest active date | This specifies if future date should be included to determine VAT code with the greatest active date.                                                                                                                                                                  |
| VAT Rounding Code                                                             | Specifies how the system will round when calculating the tax amount.                                                                                                                                                                                                   |
| VAT Rounding Digits                                                           | Specifies how many decimal places to round to when calculating the tax amount. The minimum rounding digit is 0 and the maximum rounding digit is 10.                                                                                                                   |
| VAT Rounding at Transaction Level                                             | Specifies the ability to round at transaction level when calculating the tax amount.<br><br>When the calculated tax will be rounded at the transaction level.<br><br>When unchecked, the calculated tax is rounded at the line item level.                             |

## Merchandising Chain to Xstore Organization Mapping

The Xstore Suite provides the opportunity to organize data by Organization, where centralized and store-level data can be isolated according to a retail organization structure. The Merchandising Cloud Services supports the use of one or more Chains, where a chain can be used to group various store formats.

The Integration in the On Premise and Cloud Xstore Office requires that at least one Merchandising Chain be mapped to an Xstore Organization. This configuration must not be changed once the mapping is established.

## Integration Database Tables

There are three database tables in the Xadmin database that are exclusively used for integration with Merchandising and Pricing for both integration methods described in this document. See the *Oracle® Retail Xstore Point-of-Service Software Database Dictionary* for complete details on these tables.

**Table 4-4 Integration Database Tables**

| Table Name                   | Description                                                                                                                                                                                                                                                                                                                  |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>OCDS_JOB_HISTORY</b>      | When enabled in Xadmin, an integration job is executed by scheduled-interval or on-demand, to detect foundation data changes in integration service and extract them out into .mnt files. An entry in this table records the status, start/end time and other information of a job executed.                                 |
| <b>OCDS_ON_DEMAND</b>        | An entry in this table represents an on-demand job request. On-demand jobs can be system generated (as in the case of new store detection), or user generated (from the Xadmin UI).                                                                                                                                          |
| <b>OCDS_SUBTASK_DETAIL S</b> | An integration job executes a list of subtasks. Each subtask represents a foundation data area to detect and extract out changes. The table defines metadata for all subtasks. For a scheduled job, each and every active subtask is executed. For an on-demand job, a subset of subtasks specified for the job is executed. |

The only table that requires seed data is the OCDS\_SUBTASK\_DETAILS; the other two tables will populate during operations of the integrations.

## Enabling and Disabling Data Types

Retailers can determine the types of data requested from the integration service by Xstore Office. For example, if VAT information is not needed, then the integration can be configured to prevent requests for VAT data.

In Xstore Office Service's Integration Manager, use the Configure tab when completing the wizard UI to establish the integration.

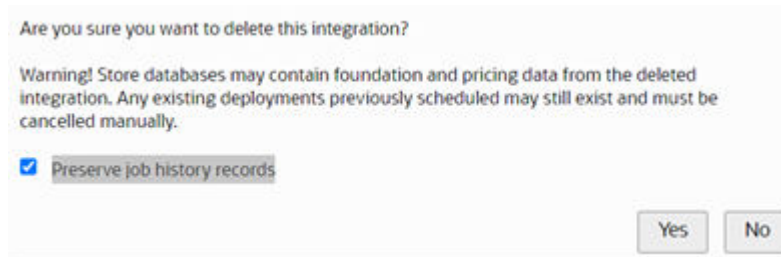
## Migration to MFCS

By default on the initial run of the MFCS integration's scheduled job, Xstore Office will request all data from the source system that has changed since the Unix epoch (January 1st, 1970 at 00:00:00 UTC). Use of the Unix epoch effectively means: "request all data changes since the beginning of time". Alternatively, a more recent point in time can be configured when creating a new MFCS integration in Xadmin's Integration Manager.

## Migration: OCDS to MFCS

Two steps can be taken to avoid a requesting a full-refresh of MFCS data, and the replacement of all OCDS data, when a newly created MFCS integration's first scheduled job is run.

1. Select "Preserve job history records" when deleting the OCDS integration.



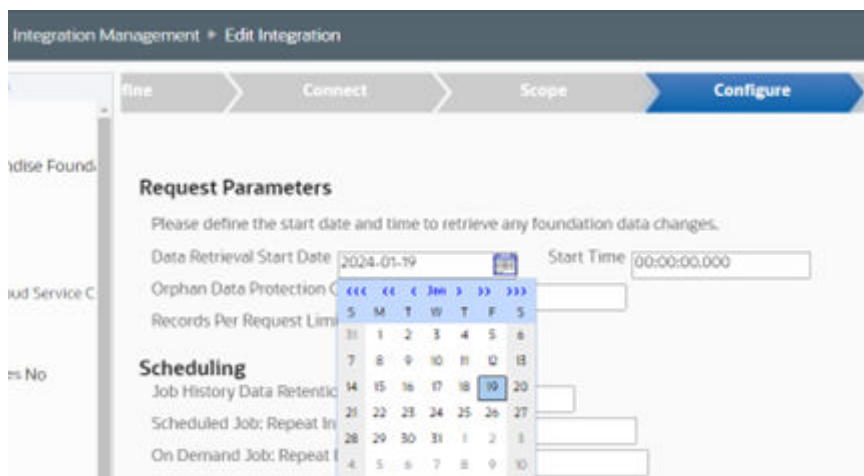
Are you sure you want to delete this integration?

Warning! Store databases may contain foundation and pricing data from the deleted integration. Any existing deployments previously scheduled may still exist and must be cancelled manually.

☒ Preserve job history records

Yes No

2. Set the Data Retrieval Start Date and Start Time on the Configure tab when defining the MFCS integration to the point in time that ensures that Xstore Office will request MFCS data that primarily is not already duplicated by data pulled from OCDS. To assist in determined the optimal point in time, the UI fields is populated with the last time the OCDS integration successfully ran a schedule job (if step #1 was used).



Integration Management » Edit Integration

fine Connect Scope **Configure**

Request Parameters

Please define the start date and time to retrieve any foundation data changes.

Data Retrieval Start Date: 2024-01-19 Start Time: 00:00:00.000

Orphan Data Protection: 5 M T W T F S

Records Per Request Limit: 11 1 2 3 4 5 6

Scheduling

Job History Data Retention: 14 15 16 17 18 19 20

Scheduled Job: Repeat Interval: 21 22 23 24 25 26 27

On Demand Job: Repeat Interval: 28 29 30 31 1 2 3

4 5 6 7 8 9 10

## Migration: Non OCDS Merchandising System to MFCS

Retailers with an existing enterprise populated from an old merchandising/pricing system may prefer the integration with the new system begin from a much more recent point in time. Set the Data Retrieval Start Date and Start Time on the Configure tab when defining the MFCS integration to the point in time that ensures that Xstore Office will request MFCS data that primarily isn't already duplicated by data pulled from the old system.

## Purging on Full Refresh

The MFCS/OCDS integration can generate (purge) and deploy mnt files containing instructions to delete merchandising and pricing data in two use-cases:

1. When a scheduled job has no job history.
2. When an on-demand job is requested from Xadmin's Data Publisher feature.



Select the desired **Purge Integration Data** checkboxes in Integration Manager's Configure tab when defining the integration to enable the generation of purge files.

## Download: Immediate vs Store Close

The OCDS\_SUBTASK\_DETAILS table includes the column DOWNLOAD\_TIME, which specifies when .mnt files should be downloaded for data loading at the store. The column contains null for those Subtasks that only populate the Xcenter database. The out-of-the-box seed data is configured so that only Pricing data will flow to the store immediately.

## "NOT ON FILE" Items

The integration has been designed to not import items that represent an Xstore "NOT ON FILE" item. The integration compares Item Ids of item records in the Xstore Office database having the type code "NOT\_ON\_FILE" with item records in REST responses from the integration system so that it can skip records having the same item ID as an Xstore "NOT ON FILE" item.

# 5

## Integration Considerations

This chapter provides the considerations that should be accounted for when implementing these solutions to minimize errors in data movement between solutions, as well as to call out some functional differences in the solutions that may limit the use of functionality in one or the other solutions.

### Foundation Data

There are a number of basic data elements that are common between the Merchandising and store systems but which are not part of the integration. This is because they are generally a one-time set up at initial implementation with only infrequent updates afterward. However, because this data is foundational to how the solutions work, it is critical that they are set up properly. These data elements fall into a couple different categories:

- [Seed Data](#)
- [Transaction Details](#)
- [Currency Exchange Rates](#)



#### Note:

The volume of data used in the integration can provide operational challenges if the time required to import and deploy data to stores takes longer than desired. This is generally only a concern when number of items and number of stores are very large, and is mostly a concern when processing initial loads.

### Seed Data

Seed data refers to data that is loaded into both solutions on implementation by Oracle Retail provided install scripts. These are coordinated between solutions as part of the base installation, but if any updates are made in one solution to add or remove items, the corresponding change should be made in the other solution. Data elements that fall into this category are:

- Currency codes
- Country codes
- Units of measure

### Transaction Details

The mapping of transaction details from Xstore POSlog to Sales Audit RTLog depends on the mappings of valid values. These mappings are detailed in [Appendix: Xstore to Sales Audit Mapping Details](#). It is critical that the mappings are complete. If additional valid values are

configured for Xstore in the RTLogMappingConfig.xml, they must also be configured for Sales Audit for the appropriate code types.

Similar to seed data, some initial data is provided for the data entities in this category, but this is an area that is more commonly configured for retailers based on their specific business processes. On initial implementation, the configurations in both Xstore and Sales Audit should be made to be in synch, with any changes made post-implementation continuing to be made in both solutions. The entities in this category include:

- Transaction Types
- Tender Types
- Tender Total IDs
- Item Types
- Reason Codes
- Item Statuses
- Sales Types

See the [Appendix: Xstore to Sales Audit Mapping Details](#) for details on configuring and mapping these entities.

## Multi-Line Text

Use of multi-line descriptions in Merchandising for data flowing to the Xstore Suite must be avoided because it can result in data loading failures by Xstore's DataLoader. All text fields used in the integration are expected to be single-line.

## Currency Exchange Rates

Exchanges rates for currencies are not one of the things integrated between Merchandising and Xstore, as Merchandising is not considered the system of record for this information at a retailer - generally that comes from the financial solution. However, if you require currency exchange rates in Xstore, then it is expected that the same source of data used for exchange rates in Merchandising will also be used to load those rates into Xstore, in order to ensure both solutions are operating with the same information and to prevent a financial impact from occurring due to differences in the rates used. Tender exchange transactions that occur in Xstore, where a customer is given USD in exchange for CAD, will be mapped to the transaction type OTHER in Sales Audit.

## Stores

By default, Xstore is configured to allow four digit store IDs, but it can be configured to hold up to 5 digit store numbers in the SequenceConfig.xml. Although Merchandising can hold up to a 10 digit store ID, when integrating with Xstore, it is strongly recommended that only four or five digit location IDs are used. Custom modifications would be required to Xstore to support larger store IDs.

Additionally, latitude and longitude information that is used by Xstore to determine nearby stores for its inventory lookup function are not available as part of the integration from Merchandising. If you wish to use this functionality in Xstore, the

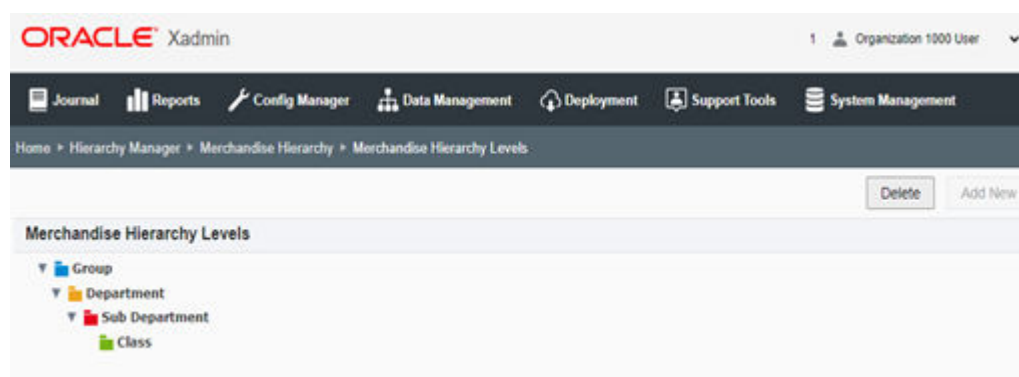
record type, RETAIL\_LOCATION\_COORDINATES, is available to DataLoader to populate the latitude and longitude of stores using the .mnt format.

All stores in Merchandising that you expect to get a sales file from Xstore should be set up to have Integrated Sales flag set to checked (Yes) as part of the store setup. Additionally, the store level attribute Unique Transaction Number should be set to Register for all Xstore integrated stores. These are both used by Sales Audit to know which stores to expect to receive files and how to audit the data in the files.

## Merchandise Hierarchy Levels

Xstore supports up to four levels of merchandise hierarchy. This means that up to four of the lowest level Merchandise Hierarchy Levels used by the Merchandising System can be mapped to the Xstore Suite Merchandise Hierarchy Levels. The default Merchandise Hierarchy Levels used by Xstore (Department, Sub Department, Class, Subclass ) do not match the bottom four levels of the merchandise hierarchy from Merchandising, which are Group, Department, Class, and Subclass. Retailers should use the Merchandise Hierarchy Level feature under Xadmin's Hierarchy Manager to configure the desired mapping. The most common mapping is either four levels (Group, Department, Class, and Subclass) or three levels (Department, Class, and Subclass). It is critical that this mapping is established before the integration is activated and any data is imported into the Xstore Suite from the Merchandising system. It is also critical that the Merchandise Hierarchy Levels are not changed once item data has been imported.

**Figure 5-1 Merchandise Hierarchy Levels**



## Merchandise Hierarchy Identifiers

Xstore requires the use of unique identifiers across all levels of the merchandise hierarchy. Merchandising does not have this requirement, so to create uniqueness the integration transforms keys imported from merchandising by appending a character representing the level as a suffix. An example would be Department 10 in Merchandising becomes Department 10D in Xstore.

Additionally in Merchandising, the ID displayed for Class and Subclass are not by themselves unique, these IDs are only unique in the context of their parents' ID. In Xstore, and some other Point Of Service systems, merchandise hierarchy IDs must be unique within the same level. Merchandising enables integration with Point Of Service systems having this requirement by also maintaining a unique key for Class and Subclass -- the unique key is held in the Merchandising tables for class and subclass. This unique value is not visible to

users of Merchandising. The Xstore Suite imports only the unique key for use in Class and Subclass identifiers.

## Items

This section lists considerations regarding items.

### Merchandise Items

Physical merchandise items should be mastered in Merchandising and use the integration described in this document to flow the data to Xstore. Xstore Office should not be used to create physical items in order to prevent errors when loading sales data into Sales Audit where the item being sold or returned cannot be identified and accounted for in Merchandising.

### Non-Merchandise Items

If using non-merchandise items, such as warranties, fees, and services, in Xstore, special attributes are required that are not available in Merchandising. Therefore to configure these items, the following approach is required:

1. Create the non-merchandise item in the Xstore Office UI, specifying the required attributes to control its behavior in Xstore.
2. Create an item in Merchandising with the same ID as that created in Xcenter. The item created in Merchandising should be set up as a non-merchandise item to prevent it from being re-exported to Xstore.

The creation of the item in Merchandising will prevent any errors from occurring in the auditing process. Any maintenance on the non-merchandise items should occur in Xstore Office going forward.



#### Note:

For more information on how non-merchandise items work between Sales Audit and Merchandising, see the *Oracle Retail Sales Audit Implementation Guide*.

To allow end users to create non-merchandise items, but be prevented from creating or editing merchandise items in Xstore, the `CFG_MERCH_ITEMS` privilege should not be granted to any users. The merch items option will still be on the screen, but it will not be accessible.

### Kit/Pack Items

Kits, or pack items in Merchandising, are items that contain multiple components but are sold as a single unit. As part of the standard item integration, Xstore does not import the component level information from Merchandising, so these items will appear as standard items in Xstore and the component details will not be available.

## Differentiators

Differentiators are used in Merchandising to define how a transaction level item (for example, SKU) differs from its parent (for example, style). For example, a differentiator might be a color, size, or flavor for an item. In Xstore, differentiators are called dimensions. Merchandising supports up to 4 differentiators/dimensions for items, while Xstore can support only three. It is strongly recommended that the 4th differentiator is not used when implementing Merchandising with Xstore, as it will be ignored in the integration.

Additionally, in Merchandising an item can be assigned differentiators without having a parent (style) associated with it. This could be used for hardline or grocery items to indicate the color or size of an item for reporting purposes, for example. However, in Xstore dimensions are primarily used to allow a user to determine the sellable SKU by entering a style ID and selecting the valid dimensions (usually color and size). Therefore, if an item does not have a parent, the dimensions sent from Merchandising will be ignored and will not be visible in Xstore.

## Product Restrictions

Product restrictions can be set up in Merchandising to indicate limitations on certain products. For example, a restriction may be set up to limit alcohol from being sold to customers under a certain age. Product restrictions are not currently supported in the integration to Xstore. Custom integration would be required to communicate this information from Merchandising to Xstore.

## Related Items

Merchandising has a concept of related items that can be used to define items that are substitutes for one another, or that could be used to cross-sell or up-sell to a customer when purchasing the main item. Substitute items from Merchandising are mapped to the Xstore substitute items to indicate items that may be substituted or offered in place of another item.

The cross-sell and up-sell types of related items are mapped to Xstore's Attached Items and configured as prompt-to-attach. Only transaction level related items are used by Xstore. Those created at the parent item level (for example, style) in Merchandising are ignored.

## Other Item Attribute Notes

The set of data entity attributes managed by the Xstore Suite and MFCS overlap but are not identical. Some data and fields supported by Xstore can not be obtained from Merchandising, and some data and attributes are imported but require transformation to bridge differences in the two systems. The following is not an exhausted list but does call out some key differences:

- Item Restocking - unlike Xstore, Merchandising does not have a flag that indicates whether an item is subject to an item restocking fee, nor the ability to define what an item's fee would be. Therefore, Xstore would not have the ability to prompt for a restocking fee during returns.
- Xstore can support prorated refunds for items, but to do so requires specific attributes sent for an item, which are not currently available in Merchandising. Therefore, this function would not be available in Xstore.

- Merchandising has the ability for retailers to extend the available item attribution by creating user defined attributes and custom flex attributes. Although included in the available data from Merchandising, these are currently not used by Xstore.
- Translated item descriptions are available from Merchandising as part of the integration but are not currently used by Xstore. Xstore uses the item level description (which is communicated in the primary Merchandising language) for Xoffice and the item/location level descriptions for the store in Xstore. If you have the requirement to send item descriptions in different languages to your stores, it is recommended that the item/location level description in Merchandising be updated to show the localized item description.
- Merch Deposit item attributes are not supported in the integration.

## Tax

This section describes considerations regarding taxes.

### Value Added Tax (VAT)

Merchandising integration includes VAT rates and the regions in which the stores have been classified for companies with operations in geographies where this type of tax is applicable. For retailers that have operations in both VAT and non-VAT regions - such as stores in the US and Canada - non-VAT regions are configured as exempt in Merchandising and communicated as such to Xstore. For more information on configuration for VAT in Xstore, see the *Oracle Retail Xstore Technical Guide*.

When Merchandising sends VAT rate updates for an item, it also includes the active date for the rate to be applicable. Retailers sometimes enter new VAT rates in advance for future planning. However, Xstore currently does not support an active date for VAT code and will ignore the active date sent, which means any new codes will go into effect immediately. Therefore, it is recommended that retailers enter the VAT code changes in Merchandising only when needed.



#### Note:

Buying from a VAT store and returning to a non-VAT store (and vice versa) is not supported in Xstore.

### US Sales Tax

Merchandising does not provide US Sales tax information to Xstore; it is assumed that product tax groups are imported into Xstore from a third-party system using Xstore Point of Service DataLoader and .mnt files.

After loading Merchandising data, the following additional steps are required to configure sales tax using the .mnt file format:

1. Set up sales tax rules. To set up a simple rate based tax rule, use existing record types TAX\_LOCATION, TAX\_AUTHORITY, TAX\_GROUP, TAX\_GROUP\_RULE, and TAX\_RATE\_RULE to populate tax tables tax\_tax\_loc, tax\_tax\_authority, tax\_tax\_group, tax\_tax\_group\_rule, and tax\_tax\_rate\_rule. For more details on tax

rule configuration, see the TAXING section in the *Oracle Retail Xstore Point of Service Host Interface Guide* available on My Oracle Support.

2. Set up retail store and tax location mapping in table `tax_rtl_loc_tax_mapping` using existing record type `TAX_RETAIL_LOCATION_MAPPING`. For more details on this record type, see the TAXING section in the *Oracle Retail Xstore Point of Service Host Interface Guide* available on My Oracle Support.
3. `ITEM_TAX_GROUP` is used to update the item record in the `itm_item_options` table with sales tax group ID. This .mnt file has to be imported after the Merchandising data import. There is no built-in mechanism in DataLoader or Xstore Office to ensure this ordering. It has to be enforced by retailer manually.

 **Note:**

There is also a configuration of tax data that must be done in Sales Audit when using the US Sales Tax configuration. See [Appendix: Xstore to Sales Audit Mapping Details](#) for more details.

## Inventory

Inventory functionality in Xstore should be disabled when implemented with Merchandising. No inventory information is integrated between Xstore and Merchandising other than sales related data and it is assumed store inventory is managed in another application, such as Oracle Retail Store Inventory Management (SIM) or Store Inventory and Operations Cloud Service (SIOCS), which is also integrated with Merchandising. Therefore, when these systems are all part of a retailer's implementation, the .sim entry in the configuration path should be used in Xstore to turn off Xstore inventory functionality. Inventory integration outside of sales and returns between Merchandising and Xstore is not supported.

## Serialized Inventory

Merchandising supports the concept that an item can be a serialized item in one store, but not in another; however in Xstore, the designation for whether or not an item is serialized is held at the item level, so there is not any differentiation by store.

 **Note:**

Merchandising does not support serialized inventory at this time. It only flags items as being serialized or not.

**OCDS/MFCS:** Unlike Xstore, Merchandising does not have a non-store-specific serialized item flag, so the integration infers this information. Merchandising does have a `uinType` item-level field that is store-specific. XOCS uses this field to recognize an item as “a serialized item” when receiving item header data for a store. The Xstore Suite's serialized item flag attribute is stored in its `itm_item` table. This table is not a store-specific item attribute table, though the data maintained in the table could represent the assortment of a single store, or the assortment of all stores.

- A store's database's `itm_item` is populated by the results of requests from MFCS/OCDS for item data for a specific store. The response includes only items in that store's item-

assortment AND an item's store-specific uinType (if one exists). This allows Xstore to properly set the serialized item flag at the store in the itm\_item table

- — When Xcenter's database's itm\_item table is populated by the results of requests from MFCS/OCDS, item records represent the assortment in all stores and are stored at the \*:~ level. Since the context of this data is not specific to any one store the concept of a store-specific uinType doesn't apply, and the serialized item flag will be false.

**Flat File:** The serialized flag can vary by location for an item in Merchandising, the last location to be dataloaded by the integration code sets the item level serialized flag in the Xcenter database. Since a store database is populated with the item assortment for only for a single store, the serialized flag will be appropriate set.

## Customer Orders

When customer orders are initially captured in Xstore, the Xstore RTLog generator sets the Fulfillment order number in the RTLog to UNKNOWN, as the fulfillment order number is not known at the time the order is created, because information has not yet been sent to the order management system.

## In-Store Orders

Orders taken in the store on behalf of a customer that do not go through an Order Management System (OMS) for fulfillment will include only a customer order number, but not a fulfillment order number when it the transactions related to it are integrated to Sales Audit.

## Recognition of a Sale

For customer orders, Xstore can be configured to recognize a sale at either the time the order is place or at the time of pickup. Integration with Merchandising requires that this configuration be time of pickup, which corresponds to when inventory is decremented from the store, in order to prevent out of synch issues between actual store inventory and what is shown in Merchandising.

In order to configure this in Xstore, the following settings should be set to false (which is the default) under both <Layaway> and <SpecialOrder> in SystemConfig.xml (whose settings are also controllable in Xadmin):

```
<Layaway>
<BookAsSaleOnSetup dtype="Boolean">false</BookAsSaleOnSetup>
<SpecialOrder>
<BookAsSaleOnSetup dtype="Boolean">false</BookAsSaleOnSetup>
```

## Pricing

In both Merchandising and Pricing the data type for retail prices is NUMBER(20,4), but in Xstore, the standard is to use a data type of NUMBER(17,6). This applies to the following item prices:

- Selling Unit Retail (from Merchandising and Pricing)
- Manufacturer's Recommended Retail (from Merchandising)

If a Pricing retail value is over 17 digits, dataloading into Xstore will fail. Non-failing records from the same file will continue to be loaded.

## Multi-Unit Pricing

Pricing and Xstore have different approaches to multi-unit pricing. Xstore converts multi-unit prices to single price, but cannot accurately do this without rounding information which varies from store to store. As such, Pricing's regular price update information for multiple units is not supported in this integration.

## Initial Price

An "Initial Price" from the Merchandising system is persisted in Xstore Suite databases with an effective date of January 1, 1970 at midnight UTC.

## Promotions

There are certain features of promotions that are supported in Pricing that are not supported in Xstore. These features should be configured off in Pricing to prevent users from creating promotions that cannot be executed. These are the features that should be configured off:

### **Allow Reward List Exclusions on Transaction Offers**

This Pricing system option should be unchecked, as Xstore cannot support receiving reward list exclusions for transaction offers.

### **Allow Supplier Site and Brand for Offer Item Selection**

This Pricing system option should be unchecked, as Xstore does not have information about the brand or supplier for an item; therefore, adding or excluding items by this type of criteria on a promotion cannot be supported in the integration.

### **Pricing Application - Promotion Offer Distribution Rules (OFDR)**

Pricing allows users to define how the discount should be distributed to items on a customer's purchase by selecting a distribution rule as part of the promotional offer creation. However, Xstore always applies the discount to the "get" items on an offer. Therefore, this code should be configured to only allow the Get Items option to be selected by users. See also the *Oracle Retail Pricing Implementation Guide* for more details.

## Sales Audit

This section describes configurations that should be made in Sales Audit, as well as some limitations that exist.

First, in addition to configuring the store setup as described above, there are some Sales Audit system options that must be configured in a particular way when integrating with Xstore:

- Transaction Appended with Workstation ID – this should be set to unchecked (No); when checking for duplicate transactions from Xstore, Sales audit will look at the register field in the transaction, along with the transaction number.
- Credit Card Masking Character – this should be set to \* when integrating with Xstore, as that is how Xstore masks credit card numbers.

- Balancing Level - when integrated with Xstore, Sales Audit should be configured with a balancing level of Register and Xstore will always send the workstation ID as the register.

## Store Data Configuration

Sales Audit requires configuration to be set up for each store where you expect to import data. For all Xstore stores, you'll need to include two lines for each store configuration – one for Sales Import and one for Item Level Tax. Sales Import is the normal store sales import configuration, and the Item Level Tax configuration is used in validation of the import file to look for tax at the item level instead of the transaction level. This is how tax data will always be sent from Xstore, regardless of tax type.

## Register-level Balancing

Xstore workstation and Sales Audit register are equivalent concepts; however Sales Audit does not have an entity equivalent to the Xstore till, which means that Xstore cannot be configured for till-level balancing when integrated with Sales Audit.

## Sales Person

In Xstore, the sales person field length can be up to 60 characters in length, but Sales Audit only allows up to 10 characters. Retailers should, as a business process, not use Xstore sales person IDs with more than 10 characters.

Additionally, Xstore allows multiple sales associates at the line item level, however Sales Audit only supports one. Therefore only the transaction level sales associate is exported to Sales Audit.

## Tender Types

Xstore supports a tender type of Home Office Check, which is not supported by Sales Audit. Retailers using this integration should not use the Xstore Home Office Check tender type. See [Appendix: Xstore to Sales Audit Mapping Details](#), for more information on tender type mapping between solutions.

## Coupons

Bounce back coupon number length in Xstore can be 60 characters long, but Sales Audit only allows 40 characters. If retailers want to use the integration, they should as a business process, not use IDs with more than 40 characters.

For more Sales Audit related considerations and configurations, see [Appendix: Xstore to Sales Audit Mapping Details](#) in this document.

## File Format

The RTLOG file that is sent from Xstore to Sales Audit uses a version that does not include the following components in the file format:

- Transaction Header level:
  - Reference number 28-31

- Transaction Item level:
  - Fulfillment Location Type
  - Fulfillment Location

For more information on how these fields are used in Sales Audit, see the *Oracle Retail Merchandising Operations Guide – Volume 1*.

## Employee IDs

A new employee can be created using the Employee Maintenance function in Xstore. By default, the employee ID is generated automatically based on the employee.seq, for example, 0219001000009. The first four digits are the store ID, the next three digits are the register ID, and the last six digits are the sequence ID. If this new employee is selected as a sales associate, an exception will be thrown in the RTLogGenerator, since the length of a sales person ID, defined in the RTLogFormatConfig file is ten, whereas the length of the auto generated employee ID is 13. In Sales Audit, an associate ID cannot be over ten characters long.

# 6

## RTLog Generator On-Premise

This chapter describes how to install, deploy, and configure the on-premise RTLog Generator application. The On Premise RTLog Generator application can be used with both the cloud or on premise Merchandising/Pricing applications.

RTLog Generator is a Java and XML based web application that exposes a Spring-JAXWS implemented SOAP web service. It is distributed as a web archive along with a configuration .zip file ready to be deployed on an Oracle WebLogic Server 14c.

This chapter uses Microsoft Windows path format as the example for paths.

### Configuration

The RTLog Generator application is shipped with a configuration .zip file (rtlog-gen-config.zip) which should be used to externally configure and extend the RTLog Generator's functionality.



#### Note:

Bounce the WebLogic server after making any configuration level changes.

Starting from release 20.0, the RTLog generator is shipped with one rtlog-generator-config.zip, which is used to integrate with Sales Audit and ReSA On-premise.

To set up the external configuration features:

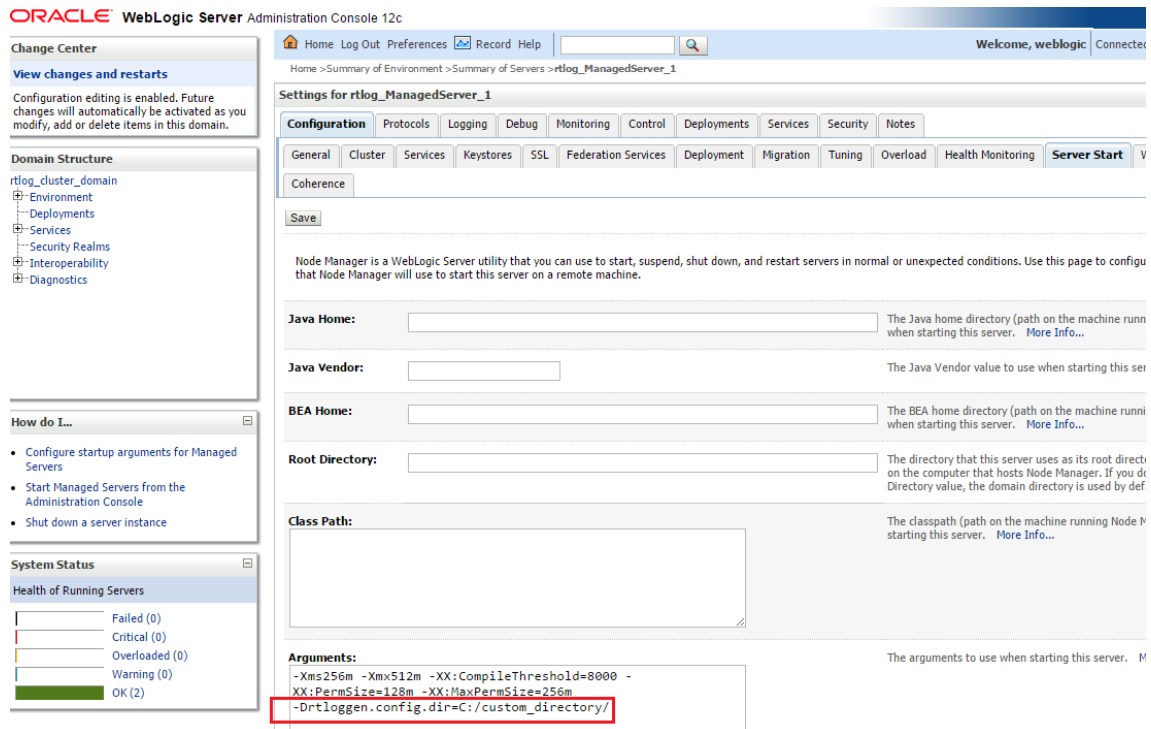
1. Extract the configuration file's content into the `C:\<rtlog-generator-config>` directory if installing on Microsoft Windows or `/usr/local/<rtlog-generator-config>` on Linux OS. These directories are the default locations where the RTLog Generator application will look for the configuration files. These default locations can be overridden/changed by using one of the following ways:

- Pass a JVM argument to the server startup script and bounce the server:

```
-Drtloggen.config.dir=C:/<custom_directory>/
```

If the WebLogic domain is created with a Node manager, the same argument can be passed from the Administration Console in the Arguments field. See [Figure 6-1](#).

Figure 6-1 Administration Console Configuration Page



- Specify the context-param field in the RTLog Generator WAR file. This requires opening up the WAR file and making the required changes. Update the web.xml file as shown in the following example:

```
<context-param>
  <param-name>rtlog.generator.config.home</param-name>
  <param-value>C:/custom_directory</param-value>
</context-param>
```

Figure 6-2 Example of context-param Field Update

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <web-app xmlns="http://java.sun.com/xml/ns/javaee" xmlns:web="http://java.sun.com/xml/ns/javaee/web-
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://java.sun.com/xml/ns
  http://java.sun.com/xml/ns/javaee/web-app_3_0.xsd" version="3.0">
3   <!--<display-name>RTLOG-GENERATOR</display-name>
4   <!--<context-param>
5     <!--<param-name>contextConfigLocation</param-name>
6     <!--<param-value>/WEB-INF/classes/applicationContext.xml</param-value>
7   </context-param>
8   <!-- Customizable external location for RTLog config files-->
9   <!--<context-param>
10    <!--<param-name>rtlog.generator.config.home</param-name>
11    <!--<param-value>C:/custom_directory</param-value>
12  </context-param>
13  <!-- Customizable RTLog generator app name. If not unspecified, it remains "rtlog-generator". This
14  <!--<context-param>
15    <!--<param-name>rtlog.generator.application.name</param-name>
16    <!--<param-value />
17  </context-param>
18  <!-- Customizable external log4j xml file. Specify just the file name without any extension. By de
19  <!--<context-param>
20    <!--<param-name>rtlog.generator.config.log4j</param-name>
21    <!--<param-value />
22  </context-param>
```

The JVM argument takes the precedence over the default location, that is, C:<rtlog-gen-config>. If either of the two does not exist, the context parameter

is used. If nothing is specified, the RTLog Generator application will fail on startup with error messages in the server logs.

2. Once the configuration file is extracted to the configured directory, verify the following files:

- `rtlogconfig.properties`:

This file contains the following properties (key value pairs):

- `processingDir`: This directory path specifies the location that RTLog Generator will use to build its RTLog files as it receives data from Xstore Office. This directory needs to be created manually.
- `resaFileDropDir`: This directory path specifies the destination for the RTLog files this system is producing. It should be configured to the location where Sales Audit is looking to receive the RTLog files. This directory needs to be created manually.
- `clusterNodeNumber`: This property should only be enabled when running in a clustered environment. For more information, see "[WebLogic Cluster Setup](#)".
- `deliveryTarget`: This property specifies the RTLog delivery target. The two possible values are `resa-cs` or `resa-onprem`. If `resa-cs` is specified, the RTLog files generated are in format compatible with Sales Audit; otherwise the files generated are in format compatible with ReSA On-premise.
- `spring.profiles.active`: This property is by default commented out. Uncomment it in the following two scenarios.
  - Enable FTS delivery of RTLog files.
    - \* Set it to `"fts,archive"` without quotes to send RTLog files to ReSA CFS object storage through FTS (File Transfer Service).
    - \* Set it to `"fts,zip,archive"` without quotes to send RTLog zip files to ReSA CFS object storage through FTS (File Transfer Service).
  - Set it to `"zip"` without quotes to zip up RTLog files placed in the directory specified by property `"resaFileDropDir"`.

Following is an example of the properties. No `spring.profiles.active` property is specified in this case.

```
processingDir = C:/RTLOG_Weblogic/Output/Store/RTLOGS
resaFileDropDir = C:/RTLOG_Weblogic/Output/ReSA
clusterNodeNumber = 1
deliveryTarget = resa-cs
-OR-
deliveryTarget = resa-onprem
```

Following is another example to enable zipping of RTLog files.

```
processingDir = C:/RTLOG_Weblogic/Output/Store/RTLOGS
resaFileDropDir = C:/RTLOG_Weblogic/Output/ReSA
clusterNodeNumber = 1
deliveryTarget = resa-cs
-OR-
deliveryTarget = resa-onprem
spring.profiles.active = zip
```

Additional properties and configuration have to be specified if FTS delivery of RTLog files is enabled. Skip this section if it is not enabled.

- `cloud.fts.endpointUrl`: This property specifies the ReSA FTS endpoint URL to deliver the RTLog files to.

 **Note:**

RTLog Generator supports two forms of RMS FTS endpoints.

- RMS Platform FTS wrapper API:** This API is the new FTS endpoint supported in RMS. The customer is advised to use this endpoint for FTS integration. Its URL takes the following format: `https://xxxx/xxxx/RmsPlatformServices/services/private/FTSWrapper`
- RMS FTS API (deprecated):** This API is deprecated but still supported in RMS. The customer is advised to switch to use the new platform FTS wrapper API. The deprecated API may no longer be available in RMS in the future. Its URL takes the following format: `https://xxxx/xxxx/RmsReSTServices/services/private/fts`

To invoke ReSA FTS endpoint URL secured in OAuth, IDCS client ID, secret, and scope are required. They are captured in Xcenter DB. The following properties must be specified for RTLog generator to request them through Xcenter on premise REST APIs.

- `xcenter.protocol`: http or https
- `xcenter.host`: Xcenter on premise host name
- `xcenter.port`: Xcenter on premise port
- `xcenter.db.user`: encrypted basic auth username for Xcenter on premise REST apis
- `xcenter.db.pwd`: encrypted basic auth password for Xcenter on premise REST apis
- `dtv.location.organizationId`: Xcenter organization id to request for IDCS client id/secret/scope
- `dtv.CustomerId`: customer ID used in decryption of username and password
- `dtv.CustomerId.salt`: salt used in decryption of username and password

Following is an example `rtlogconfig.properties` with FTS delivery enabled.

```
processingDir = C:/RTLOG_Weblogic/Output/Store/RTLOGS
resaFileDropDir = C:/RTLOG_Weblogic/Output/ReSA
clusterNodeNumber = 1
deliveryTarget = resa-cs
spring.profiles.active = fts,zip,archive
-OR-
spring.profiles.active = fts,archive
cloud.fts.endpointUrl=https://xxxx/xxxx/RmsPlatformServices/services/private/FTSWrapper
xcenter.protocol=https
xcenter.host=<xcenter onprem host>
```

```

xcenter.port=<xcenter onprem port>
xcenter.db.user=<encrypted xcenter onprem basic auth username>
xcenter.db.pwd=<encrypted xcenter onprem basic auth passowrd>
dtv.location.organizationId=1000
dtv.CustomerId=xxx
dtv.CustomerId.salt=xxxx

```

Cipher Keys: for rtlog-generator to decrypt xcenter.db.user and xcenter.db.pwd, cipher keys must be copied from xcenter-config/res/keys to rtlog-generator-config/res/keys. This includes all key files of the following naming patterns.

- config.cip
- config.\*.cip (for example config.2022-02-07.cip)

Truststore: certificate to communicate to Xcenter must be placed in .truststore file under rtlog-generator/res/ssl

- Multiple log4jx.xml files: These files configure the logging levels for the RTLog Generator application.
  - rtlog-generator-log4j2.xml
  - rtlog-generator-log4j2-loggers.xml
  - rtlog-generator-log4j2-appenders.xml
- spring-scheduler.xml:

It is the most commonly modified file in the RTLog Generator application. It is used to configure the scheduled interval for publishing the RTLog files. In the case of trickle polling, the default interval should be 15 minutes, however, keeping a larger interval (at least greater than or equal to 15 minutes) is recommended as configuring with a smaller interval might affect the performance.

**Figure 6-3** spring-scheduler.xml Example

```

<?xml version="1.0" encoding="UTF-8"?>

<beans xmlns="http://www.springframework.org/schema/beans" xmlns:p="http://www.springframework.org/schema/p"
       xmlns:task="http://www.springframework.org/schema/task" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xsi:schemaLocation="http://www.springframework.org/schema/beans
       http://www.springframework.org/schema/beans/spring-beans-3.0.xsd
       http://www.springframework.org/schema/task
       http://www.springframework.org/schema/task/spring-task-3.0.xsd">

  <task:scheduled-tasks scheduler="rtlogScheduler">

    <!-- To publish files once every 10 minutes = 600000 milliseconds 15 minutes = 900000 milliseconds
         1 hour = 3600000 milliseconds in fixed-delay below.
         It is not supported if fixed-delay is less than three second (3000 milliseconds). -->
    <task:scheduled ref="rtLogFilesPublisher" method="publishFilesToReSA" fixed-delay="900000" />

    <!-- You can also use "cron syntax". This simplistic example publishes files once every 5 minutes -->
    <!-- <task:scheduled ref="rtLogFilesPublisher" method="publishFilesToReSA" cron="0 */5 * * * ?"/> -->
  </task:scheduled-tasks> <task:scheduler id="rtlogScheduler" />

  <task:annotation-driven />
</beans>

```

### 3. Customization out of box configuration

To customize RTLogMappingConfig.xml and RTLogFormatConfig.xml, you can obtain your out-of-box version in the rtlog-generator.war file under WEB-INF\lib\config.jar\resources\resa-cs for Sales Audit integrations (deliveryTarget = resa\_cs) or WEB-INF\lib\config.jar\resources\resa-onprem for ReSA On-premise integrations (deliveryTarget = resa\_onprem).

Customized copies of RTLogMappingConfig.xml and RTLogFormatConfig.xml are placed in the configuration directory defaulting to C:\<rtlog-generator-config> on Microsoft Windows or /usr/local/<rtlog-generator-config> on Linux OS.

- RTLogFormatConfig.xml:

This file specifies the format of the RTLog record as specified by Sales Audit. You can modify this file.

- RTLogMappingConfig.xml:

The RTLog Generator application relies heavily on the XML-based mapping which provides extensibility and a way to maintain/upgrade features for the application. This file can be used to override all the field values for either mapping strategy:

- FieldMapperThenValueMapping:

The RecordValue attribute values as shown in the following example can be changed:

```
<MAP sourceField="tenderId" targetRecord="TransactionHeaderTotal"
targetField="ReferenceNumber1"
mappingStrategyOrder="FieldMapperThenValueMapping"
fieldMapper="trnHeaderTotalMapper">
  <VALUE_MAPPINGS handleNotFound="success"> <VALUE_MAPPING
sourceValue="GIFT_CERTIFICATE" RecordValue="GIFTCERT" />
  <VALUE_MAPPING sourceValue="HOUSE_ACCOUNT" RecordValue="HACCNT" />
  <VALUE_MAPPING sourceValue="ISSUE_STORE_CREDIT"
RecordValue="ISTCRDT" />
  <VALUE_MAPPING sourceValue="ISSUE_MERCHANDISE_CREDIT_CARD"
RecordValue="IMCCARD" />
  <VALUE_MAPPING sourceValue="ISSUE_XPAY_GIFT_CARD"
RecordValue="IXPAYGC" />
  <!--For e.g above given value can be changed as shown here.-->
  <VALUE_MAPPING sourceValue="ISSUE_XPAY_GIFT_CARD"
RecordValue="SAMPLE_IXPAYGC" />
  <VALUE_MAPPING sourceValue="MALL_CERTIFICATE"
RecordValue="MALLCERT" />
  <VALUE_MAPPING sourceValue="MERCHANDISE_CREDIT_CARD"
RecordValue="MCCARD" />
  <VALUE_MAPPING sourceValue="PAYPAL" RecordValue="PAYPAL" />
  <VALUE_MAPPING sourceValue="COUPON" RecordValue="QPON" />
  <VALUE_MAPPING sourceValue="ROOM_CHARGE" RecordValue="ROOMCHAG" />
  <VALUE_MAPPING sourceValue="RELOAD_XPAY_GIFT_CARD"
RecordValue="RXPAYGC" />
  <VALUE_MAPPING sourceValue="RELOAD_MERCHANDISE_CREDIT_CARD"
RecordValue="RMCCARD" />
  <VALUE_MAPPING sourceValue="STORE_CREDIT" RecordValue="STCRDT" />
  <VALUE_MAPPING sourceValue="XPAY_GIFT_CARD" RecordValue="XPAYGC" />
</VALUE_MAPPINGS>
</MAP>
```

- No mappingStrategyOrder and fieldMapper attributes are defined.

The RecordValue attribute values shown in the following example can be changed or a new value can be added:

```
<MAP sourceField="reason" targetRecord="TransactionHeader"
targetField="ReasonCode">
  <VALUE_MAPPINGS handleNotFound="nextMapping">
  <VALUE_MAPPING sourceValue="PI1" RecordValue="PI1"/>
  <VALUE_MAPPING sourceValue="PI2" RecordValue="PI2"/>
```

```

<VALUE_MAPPING sourceValue="PI3" RecordValue="PI3"/>
<VALUE_MAPPING sourceValue="PO1" RecordValue="PO1"/>
<VALUE_MAPPING sourceValue="PO2" RecordValue="PO2"/>
<VALUE_MAPPING sourceValue="PO3" RecordValue="PO3"/>
<VALUE_MAPPING sourceValue="PO4" RecordValue="PO4"/>
<VALUE_MAPPING sourceValue="PO5" RecordValue="PO5"/>
<VALUE_MAPPING sourceValue="SAMPLE" RecordValue="SAMPLE_VALUE"/>
</VALUE_MAPPINGS>
</MAP>

```

**Note:**

For more information on how to customize the RTLog Generator, see the *Retail Xstore - RTLog Generator Extension Guidelines (Doc ID 2174095.1)* on <https://support.oracle.com>.

## Deployment

If you are deploying in a cluster, first set up a WebLogic cluster. For more information, see ["WebLogic Cluster Setup"](#).

This section covers the deployment in both a clustered and non-clustered environment.

To deploy the RTLog Generator application:

1. Log in to the WebLogic 12 Server Administration Console (<http://<hostName>:<port>/console>).
2. Click the Deployment link from the left navigation menu.
3. Click **Install**.

**Figure 6-4 Administration Console Control Page**

**Domain Structure**

- log\_domain
  - Environment
  - Deployments**
  - Services
  - Security Realms
  - Interoperability
  - Diagnostics

**How do I...**

- Install an enterprise application
- Configure an enterprise application
- Update (redeploy) an enterprise application
- Start and stop a deployed enterprise

**Control** | **Monitoring**

This page displays a list of Java EE applications and stand-alone (redeployed), or deleted from the domain by first selecting the i

To install a new application or module for deployment to target

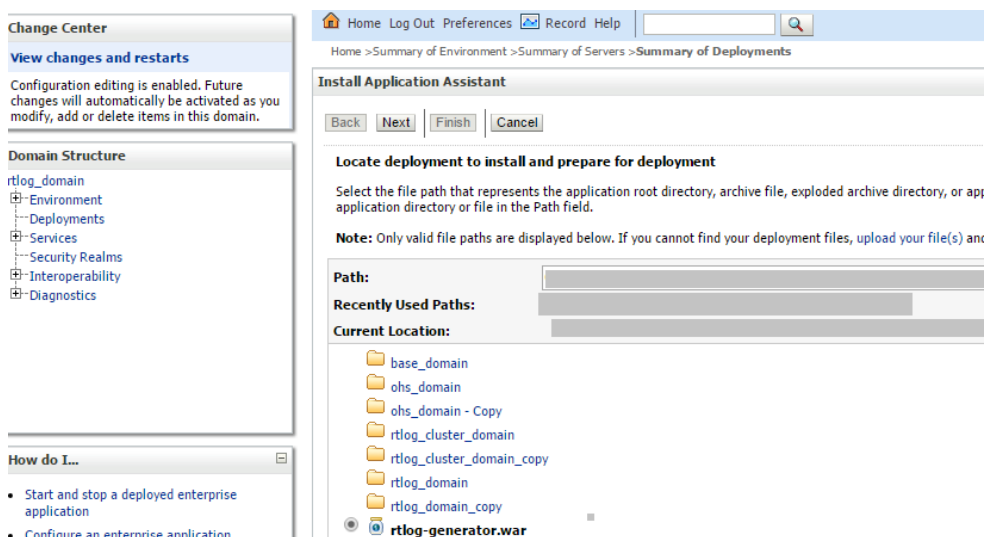
[Customize this table](#)

**Deployments**

|                          | Name                                        | Install                                | Update                                | Delete                                | Start                                | Stop                                |
|--------------------------|---------------------------------------------|----------------------------------------|---------------------------------------|---------------------------------------|--------------------------------------|-------------------------------------|
| <input type="checkbox"/> | state-management-provider-memory-rar-12.1.3 | <input type="button" value="Install"/> | <input type="button" value="Update"/> | <input type="button" value="Delete"/> | <input type="button" value="Start"/> | <input type="button" value="Stop"/> |

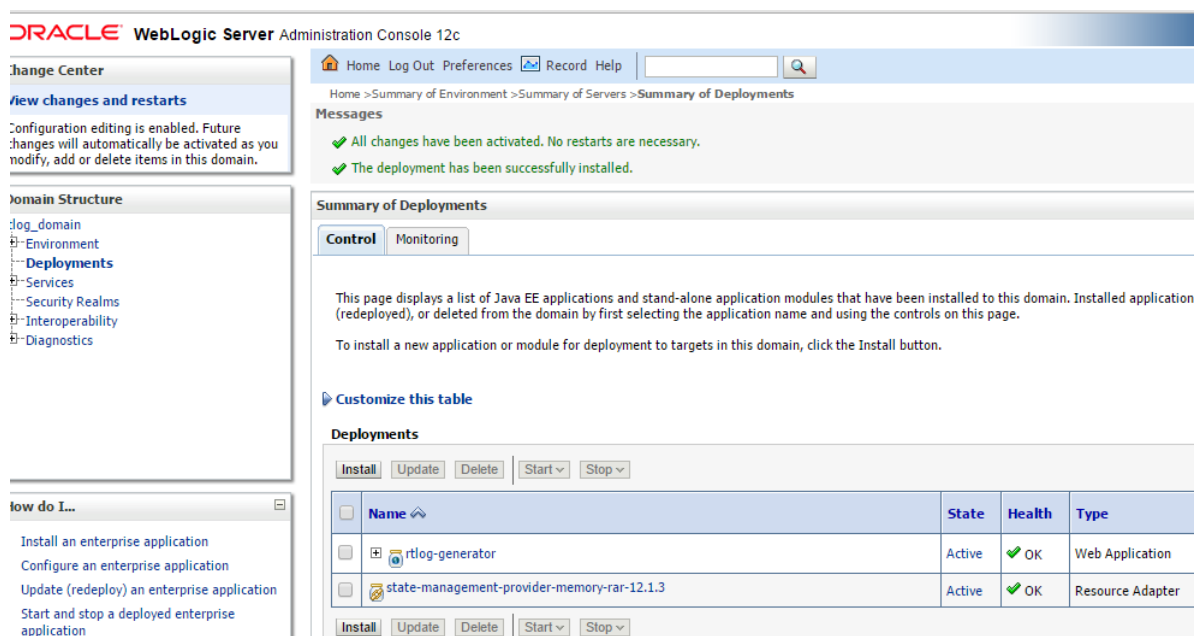
- Navigate to the rtlog-generator.war file directory. Select the rtlog-generator.war option.

**Figure 6-5 Administration Console Install Application Assistant Page**



- Click **Next** and then **Finish**. Once deployed, RTLog Generator should be listed as one of the deployed applications as shown in [Figure 6-6](#).

**Figure 6-6 Administration Console Summary of Deployments**



Once the deployment is complete, following are the next steps:

- To deploy on a cluster, see "[Deployment of the RTLog Generator Application on a Cluster](#)".

- To enable security for the RTLog Generator application, see "[Security Configuration](#)". When deploying in a non-clustered environment, continue at this section.

## WebLogic Cluster Setup



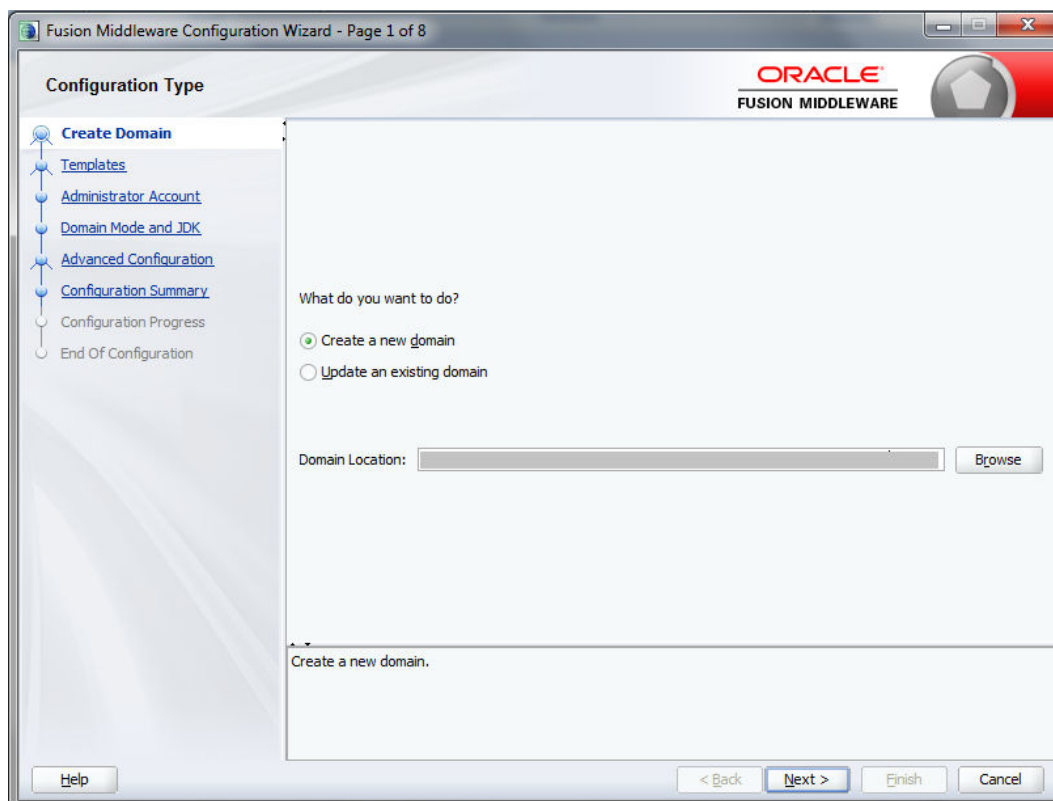
### Note:

WebLogic Server 14c must be installed on all the clustered machines and the exact same installed directory location must be used on all the machines.

To set up the cluster to use RTLog Generator:

1. Start the WebLogic configuration wizard on one machine where the Administration server needs to reside.
2. On the Configuration Wizard Configuration Type page, select **Create a new domain**. Enter or browse to the location for the domain. Click **Next**.

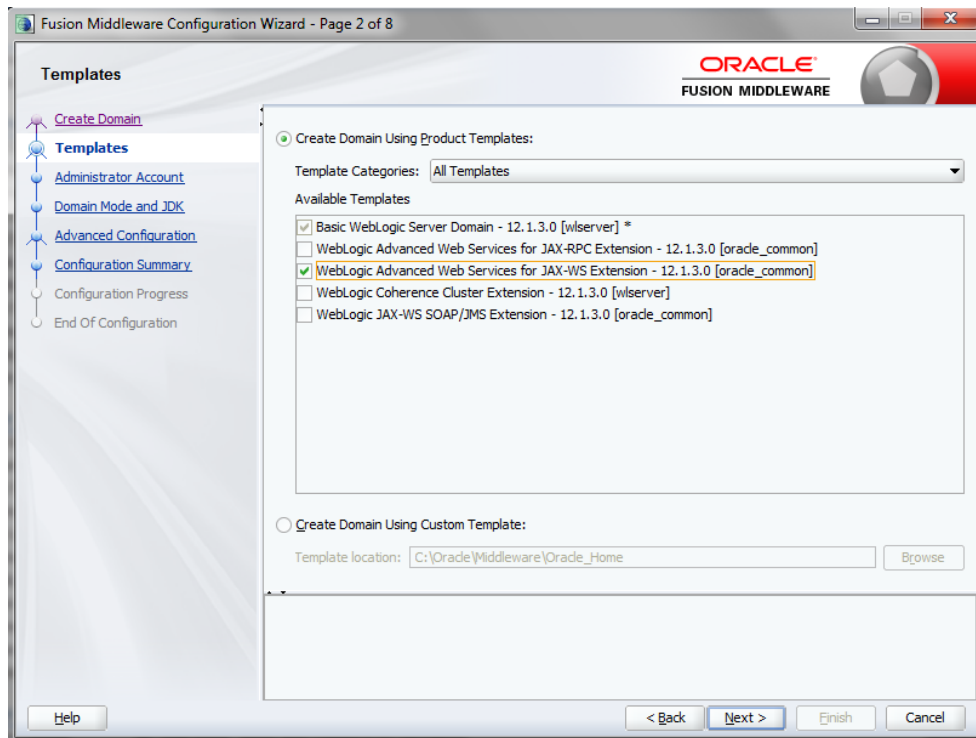
**Figure 6-7 Configuration Wizard Configuration Type Page**



3. On the Templates page, select the supported products and click **Next**. It is recommended to select the following:

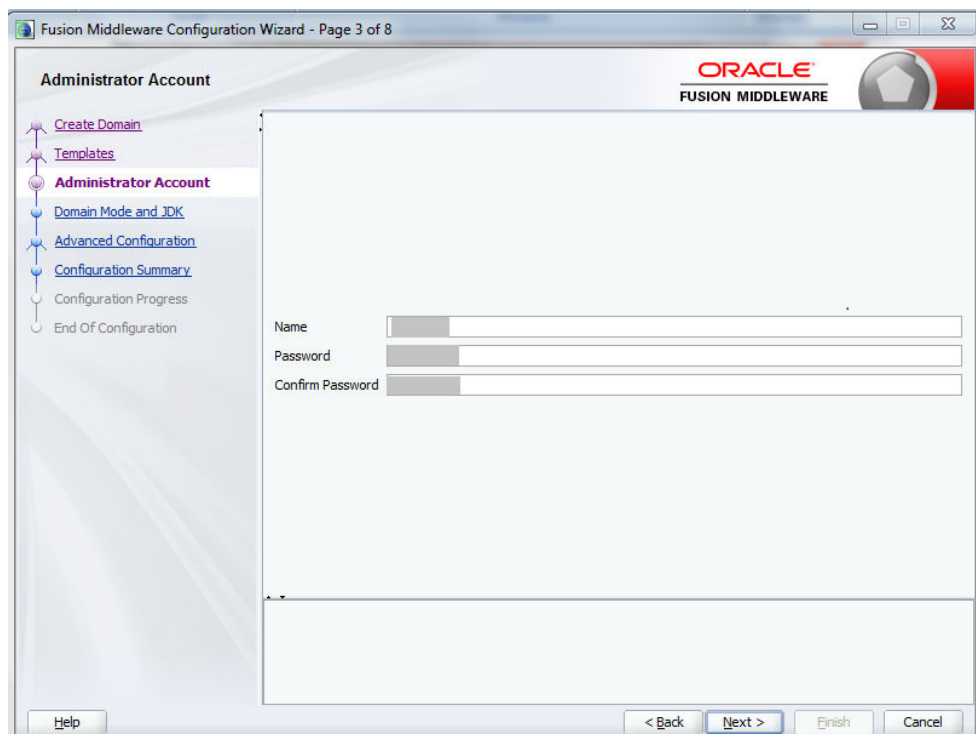
WebLogic Advanced Web Services for JAX-WS Extension

**Figure 6-8 Configuration Wizard Templates Page**



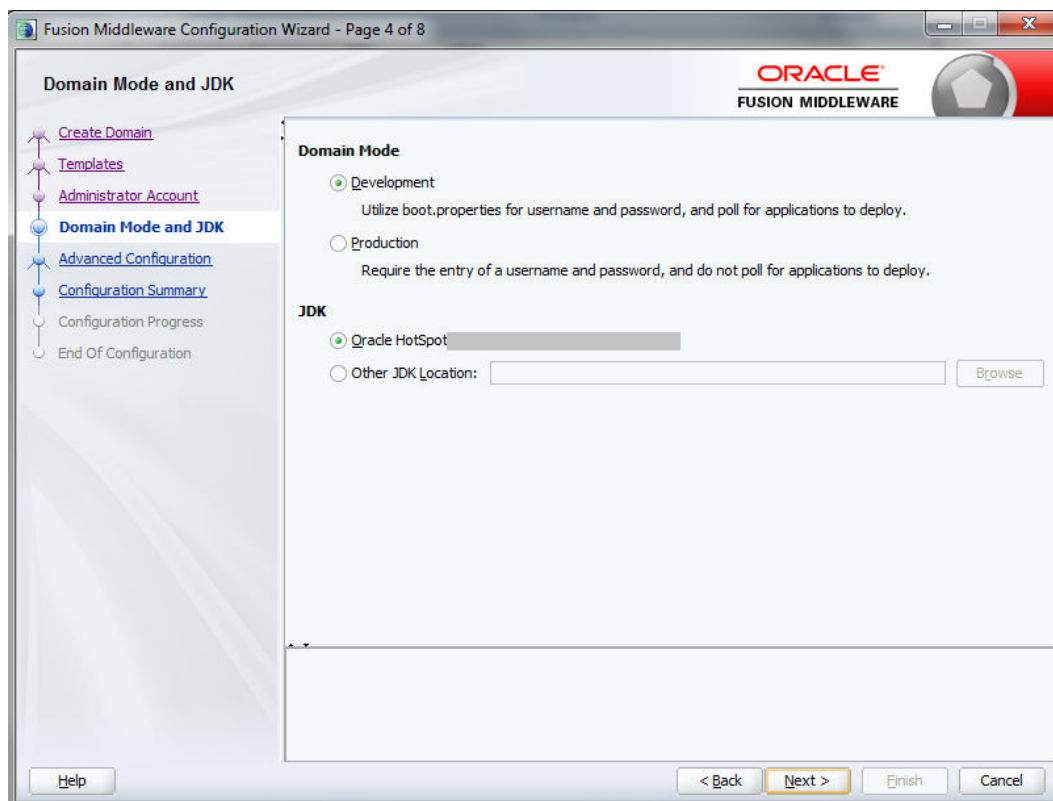
4. On the Administrator Account page, enter the Administrator user name and password. Enter the password a second time to confirm. Click **Next**.

**Figure 6-9 Configuration Wizard Administrator Account Page**

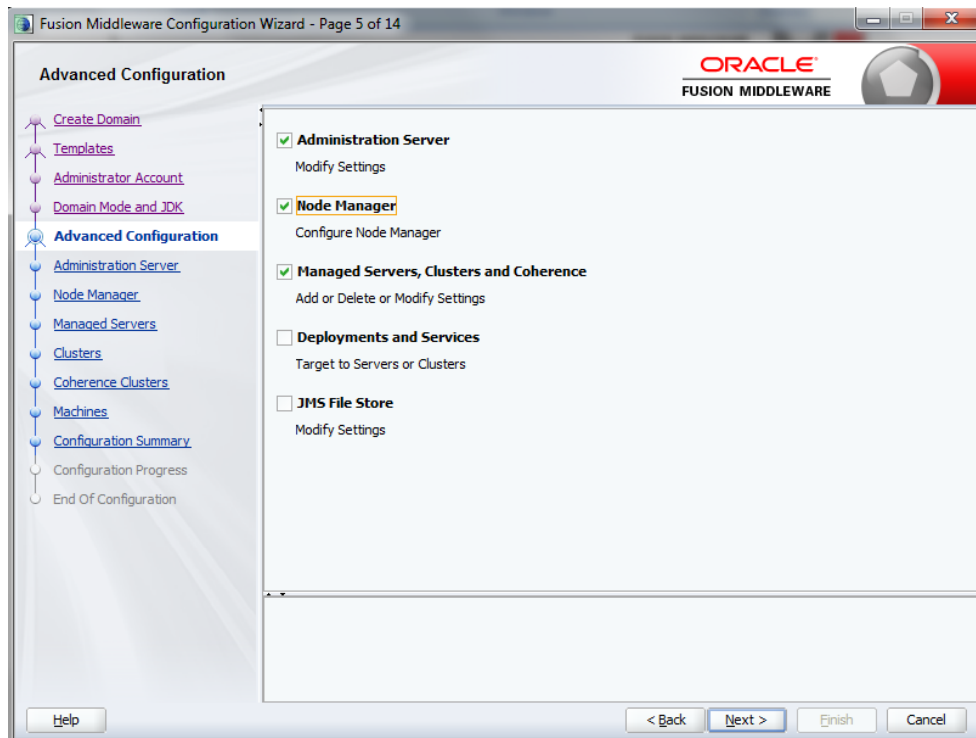


5. On the Domain Mode and JDK page, select either Development or Production mode. For production mode, you need to manually create the boot.properties file. Click **Next**.

**Figure 6-10 Configuration Wizard Domain Mode and JDK**



6. On the Advanced Configuration page, select the Administration Server, Node Manager, and Managed Servers, Clusters and Coherence options. Click **Next**.

**Figure 6-11 Configuration Wizard Advanced Configuration Page**

7. On the Administration Server page, enter the values to configure the administration server. The administrator server controls all the managed servers that are part of the cluster.

Enter the server name, select Enable SSL, and enter the listen ports. For the listen address, enter the Machine\_1 IP address. Machine\_1 will be part of the cluster and will have the administrator server running on it. Click **Next**.

Figure 6-12 Configuration Wizard Administration Server Page

The screenshot shows the 'Administration Server' page of the Fusion Middleware Configuration Wizard. The left sidebar contains a tree view with the following items: 'Create Domain', 'Templates', 'Administrator Account', 'Domain Mode and JDK', 'Advanced Configuration', 'Administration Server' (selected), 'Node Manager', 'Managed Servers', 'Clusters', 'Coherence Clusters', 'Machines', 'Configuration Summary', 'Configuration Progress', and 'End Of Configuration'. The main area displays the following fields and options:

- Server Name:
- Listen Address:
- Listen Port:
- Enable SSL: ☒
- SSL Listen Port:

Below the fields, a message states: 'The name must not be null or empty and may not contain any : , = \* ? % \_ cloned.' At the bottom, there are four buttons: 'Help', '< Back', 'Next >', 'Finish', and 'Cancel'.

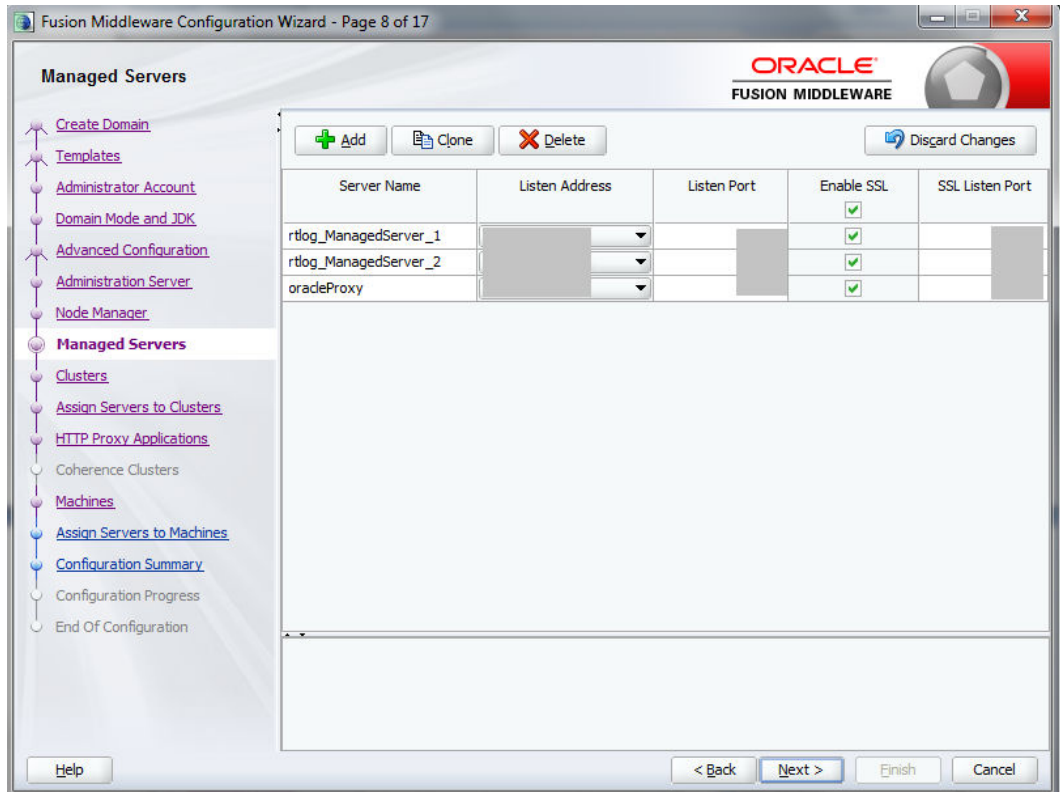
8. On the Node Manager page, do not change the default node manager settings. For the credentials, enter weblogic as the user name and enter the password. Click **Next**.

**Figure 6-13 Configuration Wizard Node Manager Page**

The screenshot shows the 'Node Manager' configuration page in the Fusion Middleware Configuration Wizard. The sidebar on the left lists the following steps: Create Domain, Templates, Administrator Account, Domain Mode and JDK, Advanced Configuration, Administration Server, **Node Manager** (current step), Managed Servers, Clusters, Coherence Clusters, Machines, Configuration Summary, Configuration Progress, and End Of Configuration. The main content area is titled 'Node Manager' and features the Oracle Fusion Middleware logo. It contains two sections: 'Node Manager Type' with radio buttons for 'Per Domain Default Location' (selected), 'Per Domain Custom Location', and 'Manual Node Manager Setup'; and 'Node Manager Credentials' with text boxes for 'Username', 'Password', and 'Confirm Password'. A 'Browse' button is next to the 'Node Manager Home' field. A note at the bottom states: 'Must be the same as the password. Password must contain at least 8 alphanumeric characters with at least one number or special character.' The footer includes a 'Help' button and navigation buttons: '< Back', 'Next >', 'Finish', and 'Cancel'.

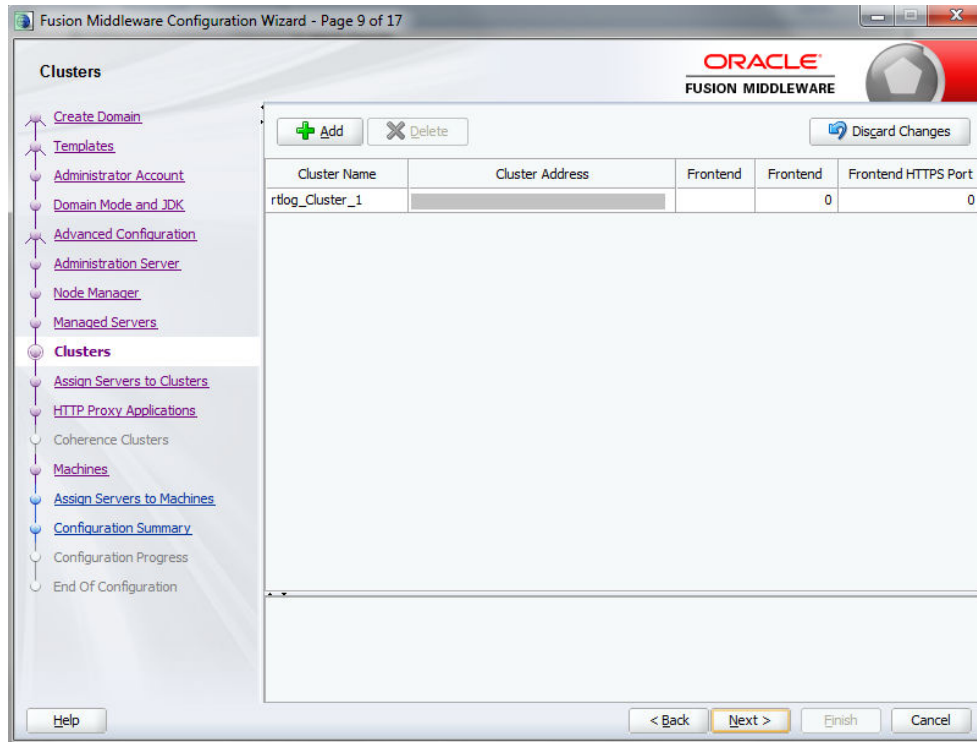
9. On the Managed Servers page, add and configure each managed server:
  - a. For the listen address, enter the IP address of the managed server. Do not select All local Addresses.
  - b. rtlog\_ManagedServer\_1 will be running on Machine\_1 in this configuration. Enter the Machine\_1 IP address for the server.
  - c. rtlog\_ManagedServer\_2 will be running on Machine\_2 in this configuration. Enter the Machine\_2 IP address for this server.
  - d. oracleProxy is running on Machine\_1, but is not a part of the cluster. It is an Oracle proxy HTTP cluster servlet used for failover and load balancing purposes. Enter the Machine\_1 IP address for this server.
  - e. Enable SSL for all the managed servers.
  - f. Click **Next**.

**Figure 6-14 Configuration Wizard Managed Servers Page**



- On the Clusters page, add and configure the cluster. Enter the cluster name followed by the cluster address, that is, IP address1:port1, IP address2:port2, so on. Click **Next**.

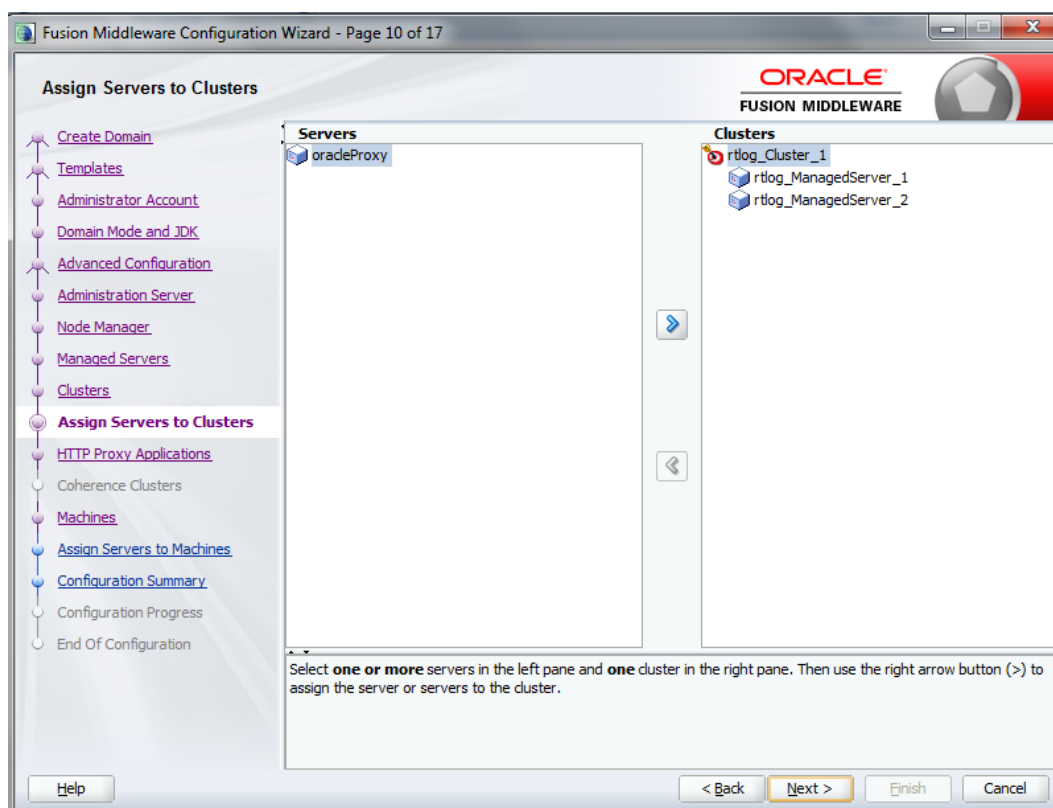
**Figure 6-15 Configuration Wizard Clusters Page**



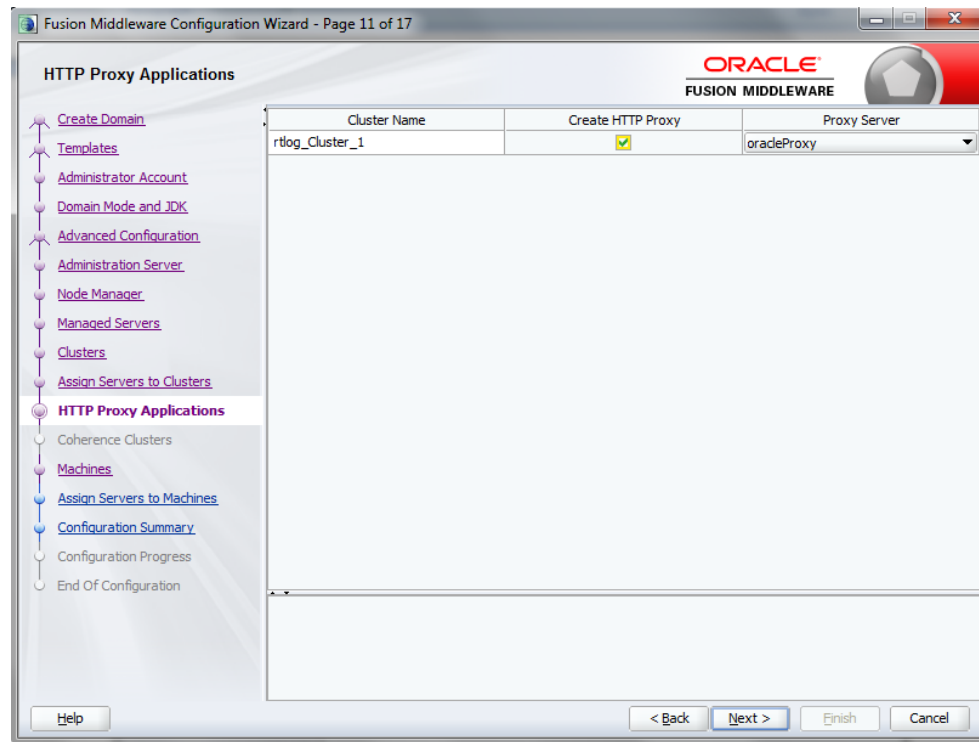
11. On the Assign Servers to Cluster page, assign the managed servers to the cluster. and click **Next**.

 **Note:**

Do not include the Oracle Proxy as part of the cluster.

**Figure 6-16 Configuration Wizard Assign Servers to Clusters Page**

12. On the HTTP Proxy Applications page, select Create HTTP Proxy and then select the server from the drop-down list. By default, it should have already been selected. Click **Next**.

**Figure 6-17 Configuration Wizard HTTP Proxy Applications Page**

13. On the Machines page, add and configure each machine. To add Machine\_1 and Machine\_2, click **Add** and enter the respective IP addresses. This configuration is for setting up the Node managers on both the machines. Since these node managers are physically separated, you can select the same host. Click **Next**.

**Figure 6-18 Configuration Wizard Machines Page**

The screenshot shows the 'Machines' page of the Fusion Middleware Configuration Wizard. The left sidebar contains a navigation tree with the following items: [Create Domain](#), [Templates](#), [Administrator Account](#), [Domain Mode and JDK](#), [Advanced Configuration](#), [Administration Server](#), [Node Manager](#), [Managed Servers](#), [Clusters](#), [Assign Servers to Clusters](#), [HTTP Proxy Applications](#), [Coherence Clusters](#), **Machines**, [Assign Servers to Machines](#), [Configuration Summary](#), [Configuration Progress](#), and [End Of Configuration](#). The 'Machines' section is currently selected.

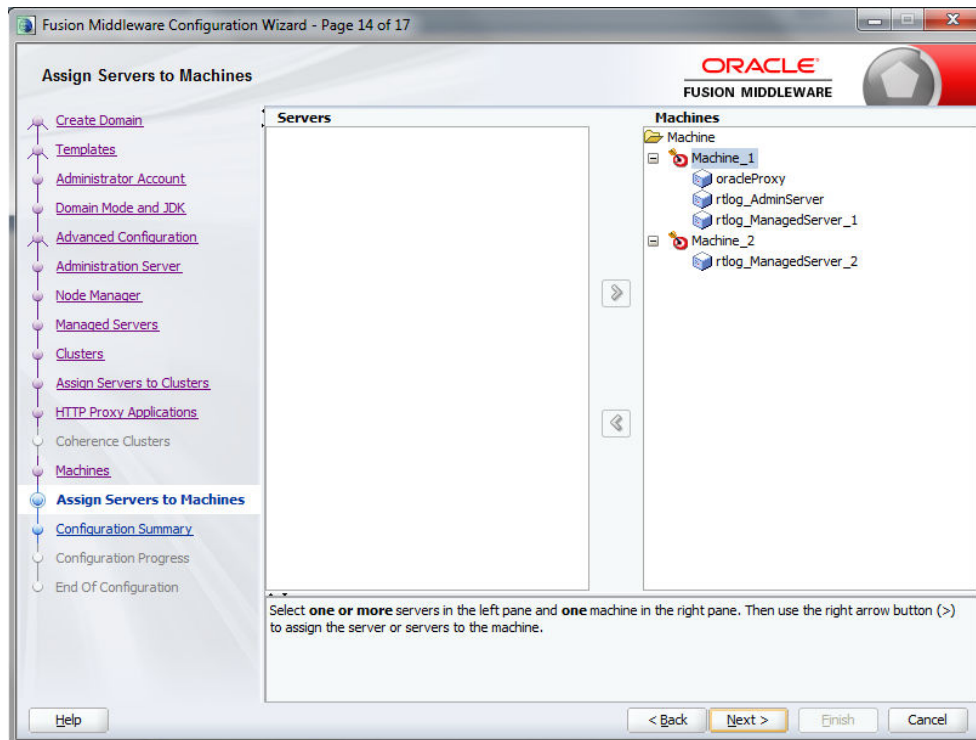
The main content area is titled 'Machines' and features the Oracle Fusion Middleware logo. It includes a 'Machine' tab set with 'Unix Machine' selected. Below the tab are '+ Add' and '- Delete' buttons, and a 'Discard Changes' button. A table lists the machines:

| Name      | Node Manager Listen Address | Node Manager Listen Port |
|-----------|-----------------------------|--------------------------|
| Machine_1 |                             |                          |
| Machine_2 |                             |                          |

At the bottom of the wizard are buttons for '< Back', 'Next >', 'Finish', and 'Cancel'. A 'Help' button is located in the bottom left corner.

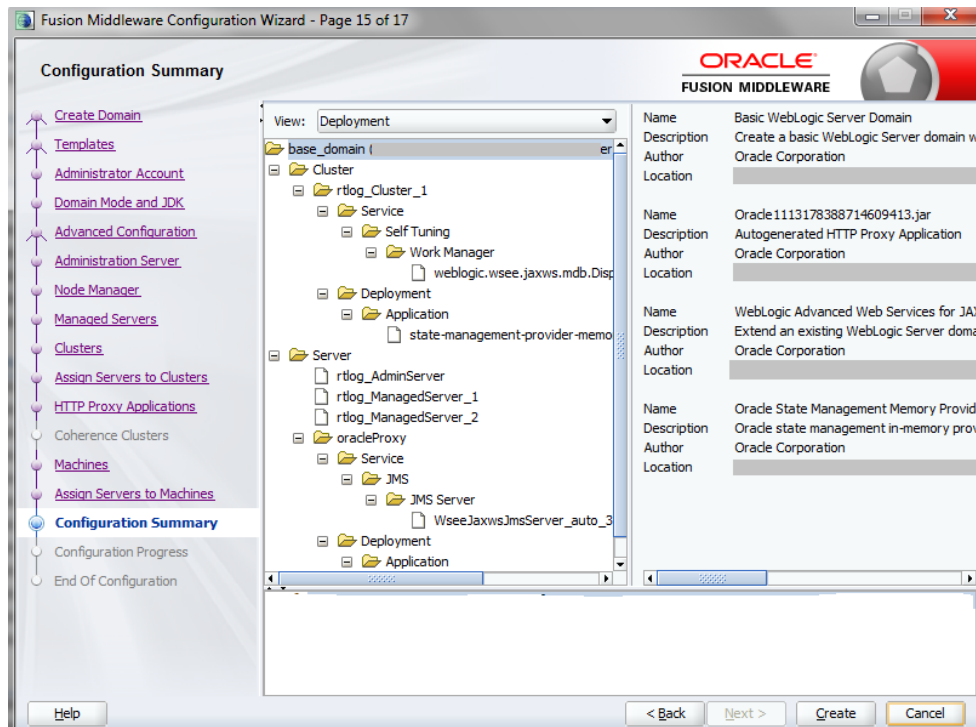
14. On the Assign Servers to Machines page, assign the servers to the machines. In this example, Oracle proxy (load balancer), Administration server, and one managed server are configured on Machine\_1. Another managed server is configured on Machine\_2. Click **Next**.

**Figure 6-19 Configuration Wizard Assign Servers to Machines Page**



15. On the Configuration Summary page, verify the selected configuration. Click **Create**. The domain is created.

**Figure 6-20 Configuration Wizard Configuration Summary Page**



To complete the configuration of the cluster:

1. Start and stop the node manager. You can find the start up script inside the newly created domain, that is, the `<rtlog_clust_domain>\bin` directory.
2. In the `nodemanager.properties` file, set `SecureListener=false`. This file is found in the `<rtlog_clust_domain>\nodemanager` directory.
3. Edit the `<rtlog_clust_domain>\config\config.xml` file. Use plain communication for the node managers by updating the communication type for the node managers as shown in the following example:

```
<machine>
  <name>Machine_1</name>
  <node-manager>
    <name>Machine_1</name>
    <nm-type>Plain</nm-type>
    <listen-address>xxx.x.xxx.xx</listen-address>
  </node-manager>
</machine>
<machine>
  <name>Machine_2</name>
  <node-manager>
    <name>Machine_2</name>
    <nm-type>Plain</nm-type>
    <listen-address>xxx.x.xxx.xxx</listen-address>
  </node-manager>
</machine>
```

4. If the `<rtlog_clust_domain>` is created with the production mode option:
  - a. Run `<rtlog_clust_domain>\startWeblogic.cmd` for the first time. This creates the servers folders under the domain. Enter the administration user name and password.
  - b. Create a folder named `security` under the `<rtlog_clust_domain>\servers\Admin` server.
  - c. Create the `boot.properties` file with the following entries under the `security` folder:

```
password=%admin_server_password%
username=%admin_server_username%
```

`%admin_server_password%` and `%admin_server_username%` are the administrator password and user name.

- d. After making these changes, if there are any running processes, shut down all the processes.
5. Pack the created domain:
  - a. Stop both the Node manager and Admin Server if not already stopped. Use the packing utility to pack the domain on the machine. This utility is found in the following location:

```
<WL_HOME>\wlserver\common\bin\pack.cmd
```

Run the following command:

```
pack.cmd -domain=<WL_HOME>\user_projects\domains\rtlog_cluster_domain -
template=<WL_HOME>\user_projects\domains\rtlog_cluster_domain\rtlog_cluster_d
omain.jar -template_name="RTLog C domain"
```

This command creates a jar named `rtlog_cluster_domain.jar` by packing the complete domain into it. Copy the `rtlog_cluster_domain.jar` to `Machine_2` and unpack it.

- b. Create a `<user_templates>` directory on the remote machine and copy the `rtlog_cluster_domain.jar` file to this location. Run the following command:

```
unpack.cmd -  
template=<WL_HOME>\user_projects\domains\<user_templates>\rtlog_cluster_domain.jar -  
domain=<WL_HOME>\user_projects\domains\rtlog_cluster_domain
```

- c. Start the Administration server and node manager on Machine\_1.
6. To enroll the remote (Machine\_2) node manager:
  - a. Run the WebLogic scripting utility. This utility can be found at the following location: <WL\_HOME>\wlserver\common\bin\as\_wlst.cmd
  - b. Start the node manager on this machine, in this example, Machine\_2. The node manager must be started before connecting to the Machine\_1 Admin server.
  - c. Run the following command:

```
connect ('adminServer_username', 'adminServer_password','t3://  
Machine_1_IPAddress:Admin_server_unsecured_port')
```
  - d. Once the connect command shows the connection completed successfully, run the following command:

```
nmEnroll ('<WL_HOME>/user_projects/domains/  
<rtlog_cluster_domain>','<WL_HOME>/user_projects/domains/  
<rtlog_cluster_domain>/nodemanager')
```
  - e. When the command completes successfully, run exit ().

 **Note:**

Repeat Step 6 for all the remote machines that will be in the cluster on which managed servers will be running. This step used Machine\_2 as the example.

7. Log in to the Administration Server console and make sure all the node managers are reachable. This can be found under Machines. Repeat this step for all the clustered machines to ensure all of them are reachable.

**Figure 6-21 Administration Console Settings Page**

The screenshot displays the Oracle WebLogic Server Administration Console 12c interface. On the left, the 'Change Center' panel shows 'View changes and restarts' with a message: 'Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.' Below this is the 'Domain Structure' tree, which includes 'rtlog\_cluster\_domain' and its sub-items: 'Environment', 'Deployments', 'Services', 'Security Realms', 'Interoperability', and 'Diagnostics'. At the bottom left is a 'How do I...' section with a link to 'Monitor Node Manager status'.

The main content area shows the breadcrumb path: 'Home > Summary of Environment > Summary of Machines > Machine\_1'. The 'Settings for Machine\_1' section has tabs for 'Configuration', 'Monitoring' (selected), and 'Notes'. Under 'Monitoring', there are sub-tabs for 'Node Manager Status' (selected) and 'Node Manager Log'.

The 'Node Manager Status' page contains the text: 'This page allows you to view current status information for the Node Manager instance c'. Below this is a table with the following data:

|                 |           |
|-----------------|-----------|
| <b>Status:</b>  | Reachable |
| <b>Version:</b> | 12.1.3    |

8. For each managed server, select the Server Start tab. In the Arguments text box, add the following if it does not already exist:

```
-Xms512m -Xmx512m -XX:CompileThreshold=8000 -XX:PermSize=512m -XX:MaxPermSize=512m
```

**Figure 6-22 Administration Console Configuration Page**

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

**Domain Structure**

- rtlog\_cluster\_domain
  - Environment
  - Deployments
  - Services
  - Security Realms
  - Interoperability
  - Diagnostics

**How do I...**

- Configure startup arguments for Managed Servers
- Start Managed Servers from the Administration Console
- Shut down a server instance

**System Status**

Health of Running Servers

|  |                |
|--|----------------|
|  | Failed (0)     |
|  | Critical (0)   |
|  | Overloaded (0) |
|  | Warning (0)    |
|  | OK (4)         |

**Settings for rtlog\_ManagedServer\_1**

**Configuration** Protocols Logging Debug Monitoring Control Deployments Serv

General Cluster Services Keystores SSL Federation Services Deployment Migra

Save

Node Manager is a WebLogic Server utility that you can use to start, suspend, shut down, and restart machine.

**Java Home:**

**Java Vendor:**

**BEA Home:**

**Root Directory:**

**Class Path:**

**Arguments:**

```
-Xms256m -Xmx512m -XX:CompileThreshold=8000 -
XX:PermSize=128m -XX:MaxPermSize=256m
```

If you want to configure the non-default external RTLog configuration directory, include an additional JVM argument:

`-Drtloggen.config.dir=C:/<rtlog-gen-config_1>/`

 **Note:**

The server-start arguments only work when you are using a NodeManager. If you do not have a NodeManager, specify the JVM argument in the start up scripts. You can also configure the same ext directory location in the RTLog Generator WAR's context-param. For more information, see "[Configuration](#)".

9. Start all the managed servers including the Oracle proxy. [Figure 6-23](#) shows an example of the list of managed servers.

**Figure 6-23 Administration Console List of Servers**

Servers (Filtered - More Columns Exist)

New Clone Delete Showing 1 to 4 of 4

| Name                     | Type       | Cluster         | Machine   | State   | Health | Listen Port |
|--------------------------|------------|-----------------|-----------|---------|--------|-------------|
| loadBalancerProxy        | Configured |                 | Machine_1 | RUNNING | ✓ OK   |             |
| rtlog_AdminServer(admin) | Configured |                 | Machine_1 | RUNNING | ✓ OK   |             |
| rtlog_ManagedServer_1    | Configured | rtlog_Cluster_1 | Machine_1 | RUNNING | ✓ OK   |             |
| rtlog_ManagedServer_2    | Configured | rtlog_Cluster_1 | Machine_2 | RUNNING | ✓ OK   |             |

New Clone Delete Showing 1 to 4 of 4

## Deployment of the RTLog Generator Application on a Cluster

To deploy the application:

1. Oracle proxy creates a web application by creating the web.xml and weblogic.xml files which can be found in the following directory:

```
<WL_HOME>\user_projects\domains\<rtlog_cluster_domain>\apps\OracleProxy4_rtlog_Cluster_1_oracleProxy\WEB-INF
```

You can modify the configurations provided in these two files and redeploy the application from the console by pointing it to this directory, that is, WEB-INF.

2. Navigate to the Administration Console home page and click Deployments in the left navigation menu. Figure 6-24 shows an example of the page before deploying the RTLog Generator application.

**Figure 6-24 Administration Console Deployments Page**

Deployments

Install Update Delete Start Stop

| Name                                           | State  | Health | Type             |
|------------------------------------------------|--------|--------|------------------|
| OracleProxy4_rtlog_Cluster_1_loadBalancerProxy | Active | ✓ OK   | Web Application  |
| state-management-provider-memory-rar-12.1.3    | Active | ✓ OK   | Resource Adapter |

Install Update Delete Start Stop

3. Click **Install**. The Install Application Assistant page appears. Select the path to the RTLog Generator WAR directory. Select the rtlog-generator.war option. Click **Next**.

**Figure 6-25 Administration Console Install Application Assistant Page**

**Install Application Assistant**

Back Next Finish Cancel

**Locate deployment to install and prepare for deployment**

Select the file path that represents the application root directory, archive file, exploded archive directory, or application module descriptor that you want to install.

**Note:** Only valid file paths are displayed below. If you cannot find your deployment files, upload your file(s) and/or confirm that your application contains the required files.

**Path:**

**Recently Used Paths:**

- 
- 
- 

**Current Location:**

- ☐ rtlog\_cluster\_domain
- ☐ rtlog\_cluster\_domain\_copy
- ☐ rtlog\_domain
- ☐ rtlog\_domain\_copy
- ☐ rtlogC\_domain\_old\_no\_proxy
- ☒ rtlog-generator.war

Back Next Finish Cancel

4. Select only the managed servers and click **Next** to finish the deployment.

**Figure 6-26 Install Application Assistant Select Deployment Targets Page**

**Install Application Assistant**

Back Next Finish Cancel

**Select deployment targets**

Select the servers and/or clusters to which you want to deploy this application. (You can reconfigure the deployment targets at any time.)

**Available targets for rtlog-generator :**

| Servers                  |                   |
|--------------------------|-------------------|
| <input type="checkbox"/> | loadBalancerProxy |
| <input type="checkbox"/> | rtlog_AdminServer |

| Clusters                            |                            |
|-------------------------------------|----------------------------|
| <input checked="" type="checkbox"/> | rtlog_Cluster_1            |
| <input type="radio"/>               | All servers in the cluster |
| <input checked="" type="radio"/>    | Part of the cluster        |
| <input type="checkbox"/>            | rtlog_ManagedServer_1      |
| <input type="checkbox"/>            | rtlog_ManagedServer_2      |

Back Next Finish Cancel

After it is successfully deployed, the RTLog Generator application appears in the Summary of Deployments page.

**Figure 6-27 Summary of Deployments Page**

✔ All changes have been activated. No restarts are necessary.  
 ✔ The deployment has been successfully installed.

**Summary of Deployments**

Control Monitoring

This page displays a list of Java EE applications and stand-alone application modules that have been installed to this domain. Installed applications and modules can be started, stopped, up application name and using the controls on this page.

To install a new application or module for deployment to targets in this domain, click the Install button.

[Customize this table](#)

**Deployments**

Install Update Delete Start Stop

| Name                                           | State  | Health | Type             |
|------------------------------------------------|--------|--------|------------------|
| OracleProxy4_rtlog_Cluster_1_loadBalancerProxy | Active | ✔ OK   | Web Application  |
| rtlog-generator                                | Active | ✔ OK   | Web Application  |
| state-management-provider-memory-rar-12.1.3    | Active | ✔ OK   | Resource Adapter |

Install Update Delete Start Stop

5. To enable container and transport level security, see "[Security Configuration](#)".
6. To enable the WebLogic Plugin Enabled parameter from the cluster domain:
  - a. Click the `<rtlog_cluster_domain>` link in the left navigation menu. Navigate to the Web Application tab.

**Figure 6-28 Administration Console Settings Page**

**ORACLE WebLogic Server Administration Console 12c**

Home Log Out Preferences Record Help

Welcome,

Home > Summary of Environment > Summary of Servers > Summary of Deployments > Summary of Environment > Summary of Servers > loadBalancerProxy > Summary of Deployments > OracleProxy4\_rtlog\_Cluster\_1\_loadBalancerProxy > Summary of Environment > **rtlog\_cluster\_domain**

**Messages**

✔ All changes have been activated. No restarts are necessary.  
 ✔ Settings updated successfully.

**Settings for rtlog\_cluster\_domain**

Configuration Monitoring Control Security Web Service Security Notes

General JTA JPA EJBs **Web Applications** Logging Log Filters

Save

Use this page to define the domain-wide Web application configuration settings.

☐ **Relogin Enabled**  
 Beginning with the 9.0 release the FORM been modified to conform strictly to the : logged-in but does not have privileges to (FORBIDDEN) page will be returned. Turr behavior, which was to return the user to

☐ **Allow All Roles**  
 In the security-constraints elements defi deployment descriptor, the auth-constrai that should be permitted access to this n "s" is a compact syntax for indicating all previous releases, role-name = "s" was t the realm. This parameter is a backward-behavior. Default behavior is one require defined in the web application. If set, the (container-descriptor -> allow-all-roles) value. [More Info...](#)

☐ **Filter Dispatched Requests**  
 Indicates whether or not to apply filters t backward compatibility flag. Until versior

**Change Center**

**View changes and restarts**

Configuration editing is enabled. Future changes will automatically be activated as you modify, add or delete items in this domain.

**Domain Structure**

rtlog\_cluster\_domain

- Environment
  - Deployments
  - Services
  - Security Realms
  - Interoperability
  - Diagnostics

**How do I...**

- Deploy Web applications
- Stop deployed Web applications
- Delete Web applications
- Update run-time descriptors

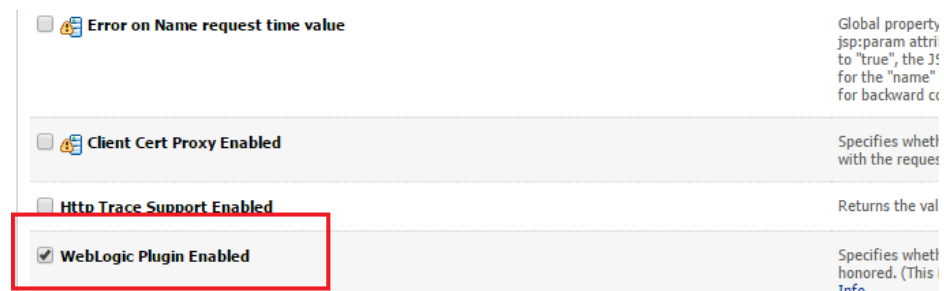
**System Status**

**Health of Running Servers**

Failed (0)

- b. Scroll down the page and select WebLogic Plugin Enabled. Click **Save**.

**Figure 6-29 WebLogic Plugin Enabled Parameter**



## Security Configuration

The RTLog Generator application is secured by leveraging two levels of security:

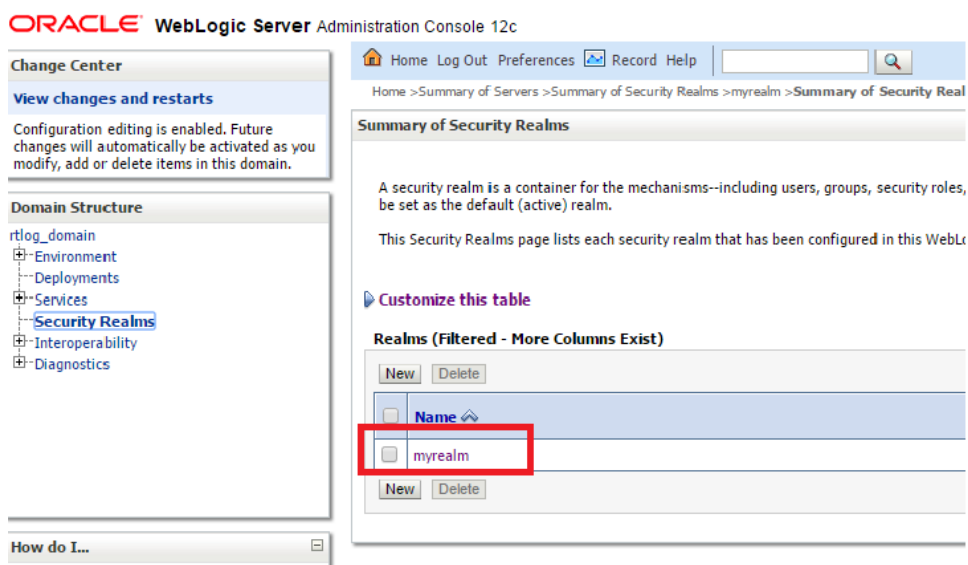
- Container level security: Basic HTTP authentication by setting up the security realm in WebLogic. To configure this security, see "[Container Level Security](#)".
- Transport level security: SOAP requests are sent over the secured protocol (HTTPS) by configuring the keystore/truststore in the WebLogic domain and importing the public certificate into Xstore Office's (client) truststore. To configure this security, see "[Transport Level Security](#)".

## Container Level Security

The following steps assume that a domain has been created with secure port (HTTPS) enabled. To configure container level security:

1. Start the WebLogic server and log in to Administration Console.
2. Click Security Realms in the left navigation menu.

**Figure 6-30 Administration Console Summary of Security Realms Page**



3. In the list of realms on the Summary of Security Realms page, select myrealm.
4. Select Users and Groups and then the Groups tab. To create a new group, click **New**. Enter a group name, for example RTLogUserGroup, and click **OK**.

**Figure 6-31 Create a New Group Page**

**ORACLE WebLogic Server Administration Console 12c**

Home > Summary of Servers > Summary of Security Realms > myrealm > Summary of Security Realms > myrealm

**Create a New Group**

OK Cancel

**Group Properties**

The following properties will be used to identify your new Group.

\* Indicates required fields

What would you like to name your new Group?

\* **Name:** RTLogUserGroup

How would you like to describe the new Group?

**Description:**

Please choose a provider for the group.

**Provider:** DefaultAuthenticator

OK Cancel

5. Select the Users tab and click **New**. Enter a user name and password and click **OK**.

**Figure 6-32 Create a New User Page**

**ORACLE WebLogic Server Administration Console 12c**

Home > Summary of Servers > Summary of Security Realms > myrealm > Summary of Security Realms > myrealm > Users and Groups > rtlogwsuser > Users and Groups

**Create a New User**

OK Cancel

**User Properties**

The following properties will be used to identify your new User.

\* Indicates required fields

What would you like to name your new User?

\* **Name:**

How would you like to describe the new User?

**Description:**

Please choose a provider for the user.

**Provider:** DefaultAuthenticator

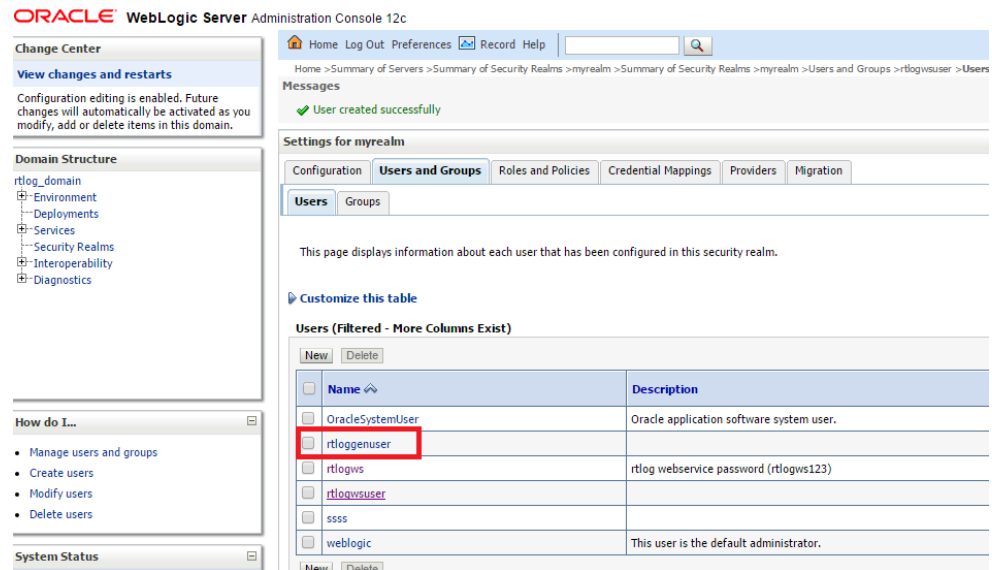
The password is associated with the login name for the new User.

\* **Password:**

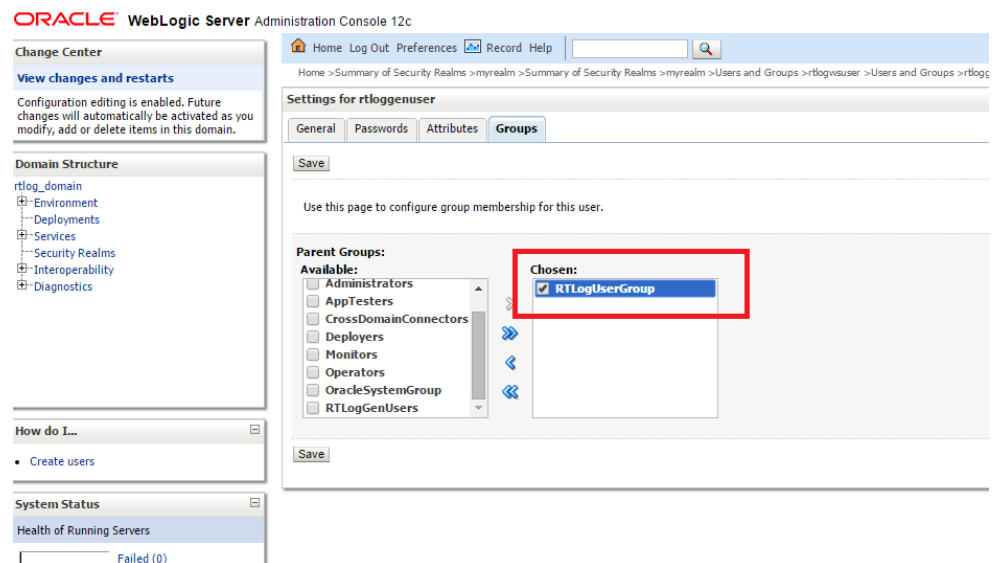
\* **Confirm Password:**

OK Cancel

6. In the list of users, click the newly created user.

**Figure 6-33 Users Page**

7. Select the Groups tab. Assign this user to the same group created in Step 4.

**Figure 6-34 User Settings Page**

8. Enter the same user name and password created in Step 5 into Xstore Office's broadcaster configuration for the RTLog Generator Web service.

You should try the MrJaxWsPortProxyFactoryBean bean and create the encrypted values for the user name and password using the String Encryption Utility. For more information, see the *Oracle Retail Xstore Point of Service Implementation Guide*.

**Figure 6-35 Example of MrJaxWsPortProxyFactoryBean Update**

```
<bean id="ReSA_Broadcaster_jaxws_weblogic"
      class="com.micros_retail.xcenter.broadcast.MrJaxWsPortProxyFactoryBean" >

  <property name="endpointAddress" value="https://hostname:7002/rtlog-generator/service" />
  <property name="serviceInterface" value="com.micros_retail.xcenter.poslog.poslogobj.v2.PoslogObjReceiverApi" />
  <property name="wsdlDocumentUrl" value="classpath:wsdl/generic_poslog_object_v2/PoslogObjReceiverApiService.wsdl" />
  <property name="namespaceUri" value="http://v2.ws.poslog.xcenter.dtv/" />
  <property name="serviceName" value="PoslogObjReceiverApiService" />
  <property name="portName" value="PoslogObjReceiverApiPort" />
  <property name="customProperties" ref="jaxwsCustomProperties" />
  <property name="encryptedUsername" value= />
  <property name="encryptedPassword" value= />
</bean>
```

## Transport Level Security

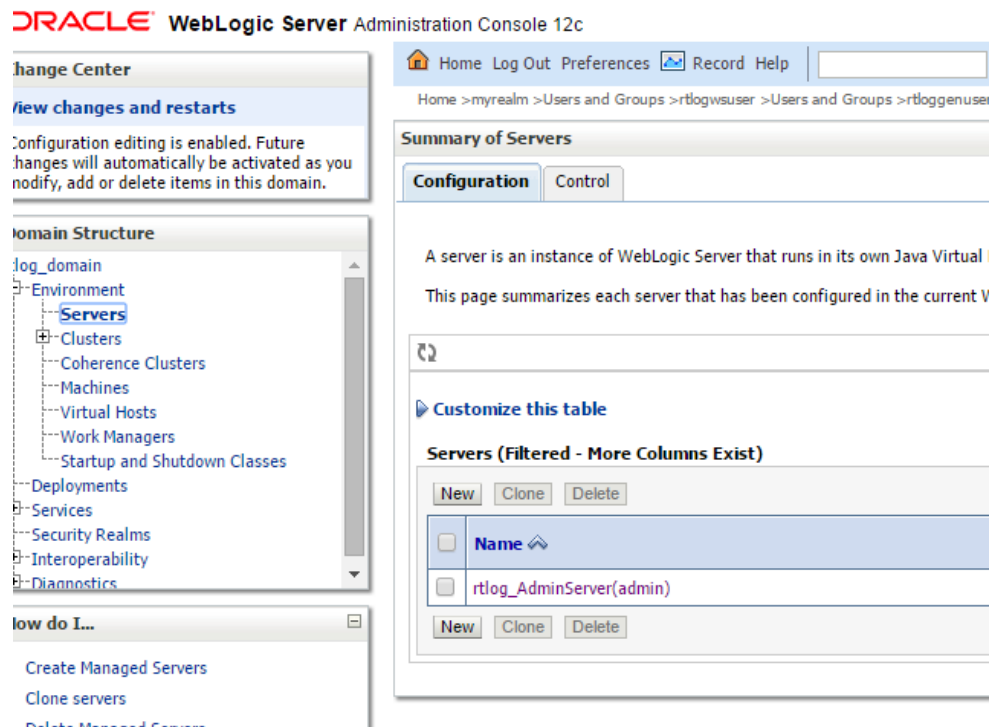
To configure transport level security:

1. Create keystore.jks using a keytool utility. For information on keytool utilities, see the *Oracle Retail Xstore Point of Service Implementation Guide*.
2. Export the public certificate into a truststore.jks file. These files are needed to configure the custom key and trust store for Step 3.

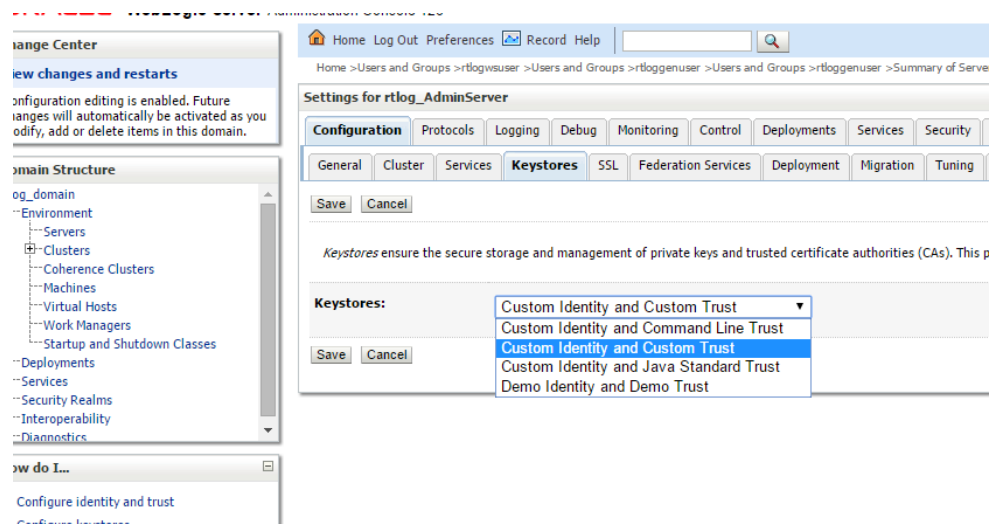
### Note:

In a clustered environment, import all the public certificates into one truststore file and configure all the instances of the server, including HttpClusterServlet proxy, to use the same truststore file.

3. Log in to the WebLogic console. Click Environment and then the Servers link from the left navigations menu.

**Figure 6-36 Administration Console Servers Page**

- Click **Change**. Select Custom Identity and Custom Trust. Click **Save**.

**Figure 6-37 Keystores Settings**

- Click the linked name for the Administration Server. The page containing the settings for the Administration Server appears. Select the Keystores tab.

Figure 6-38 Settings for the Administration Server

**Settings for rtlog\_AdminServer**

Configuration Protocols Logging Debug Monitoring Control Deployments Services Security Notes

General Cluster Services **Keystores** SSL Federation Services Deployment Migration Tuning Overload Health Monitoring Server S

Save

Keystores ensure the secure storage and management of private keys and trusted certificate authorities (CAs). This page lets you view and define various keystores.

**Keystores:** Custom Identity and Custom Trust [Change](#) [Wh](#) [Inf](#)

**Identity**

**Custom Identity Keystore:**  The Orz

**Custom Identity Keystore Type:**  The beh

**Custom Identity Keystore Passphrase:**  The wit

**Confirm Custom Identity Keystore Passphrase:**

**Trust**

**Custom Trust Keystore:**  The an

**Custom Trust Keystore Type:**  The beh

**Custom Trust Keystore Passphrase:**  The pas

**Confirm Custom Trust Keystore Passphrase:**

6. Enter the path to keystore.jks, including the file name, and enter the custom Identity Keystore passphrase you created for the keystore. Repeat this for trustore.jks, but enter the appropriate passphrase for the truststore. For an example, see [Figure 6-38](#).
7. Switch to the SSL tab. Enter the alias name and private keyphrase as created during the certificate generation. To save the changes, click **Save**.

Figure 6-39 Save Settings for Administration Server

**ORACLE WebLogic Server Administration Console 12c**

Home Log Out Preferences Record Help

Welcome, weblogic Connected to: base\_domain

**Settings for AdminServer**

Configuration Protocols Logging Debug Monitoring Control Deployments Services Security Notes

General Cluster Services Keystores **SSL** Federation Services Deployment Migration Tuning Overload Health Monitoring Server Start Web Services Coherence

Save

This page lets you view and define various Secure Sockets Layer (SSL) settings for this server instance. These settings help you to manage the security of message transmissions.

**Identity and Trust Locations:** [Keystores](#) [Change](#) [Indicates where SSL should find the server's identity \(certificate and private key\) as well as the server's trust \(trusted CAs\). More Info...](#)

**Identity**

**Private Key Location:** from Custom Identity Keystore  The keystore attribute that defines the location of the private key file. [More Info...](#)

**Private Key Alias:**  The keystore attribute that defines the string alias used to store and retrieve the server's private key. [More Info...](#)

**Private Key Passphrase:**  The keystore attribute that defines the passphrase used to retrieve the server's private key. [More Info...](#)

**Confirm Private Key Passphrase:**

**Certificate Location:** from Custom Identity Keystore  The keystore attribute that defines the location of the trusted certificate. [More Info...](#)

**Trust**

**Trusted Certificate Authorities:** from Custom Trust Keystore  The keystore attribute that defines the location of the certificate authorities. [More Info...](#)

**Advanced**

Save

 **Note:**

For a clustered environment, disable the non-SSL port for the HttpClusterServlet proxy.

## Complete the Security Configuration

Test both the container and transport level security using SOAPUI.

To set up the unlimited strength JCE files:

1. Download and install the correct version of the unlimited strength JCE files. For more information, see the *Oracle Retail Xstore Point of Service Implementation Guide*.
2. Configure Oracle WebLogic Server 14c with the Xstore suite of product's supported cipher suites. To configure it, update the `<domain>\<domain_name>\config\config.xml` file and add the following inside the ssl block:

```
<ciphersuite>TLS_RSA_WITH_AES_128_GCM_SHA256</ciphersuite>
<ciphersuite>TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384</ciphersuite>
<ciphersuite>TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384</ciphersuite>
<ciphersuite>TLS_ECDH_ECDSA_WITH_AES_256_GCM_SHA384</ciphersuite>
<ciphersuite>TLS_ECDH_RSA_WITH_AES_256_GCM_SHA384</ciphersuite>
<ciphersuite>TLS_RSA_WITH_AES_256_GCM_SHA384</ciphersuite>
```

3. Disable the schema validation in WebLogic by passing the JVM argument in the WebLogic startup script:  
-Dweblogic.configuration.schemaValidationEnabled=false
4. Xstore Office's RTLog Generator broadcaster end point should be configured to use the secured (HTTPS) URL for configuring the container level security section:

```
<property name="endpointAddress" value="https://<hostname>:7002/rtlog-
generator/service" />
```

The endpointAddress property is defined at xcenter-spring-beans.xml under Xcenter external configuration directory\xcenter-config. There are two required modifications:

- Modify broadcasterManager bean in the file by uncommenting the line below.  

```
<ref bean="ReSA_Broadcaster"/>
```
- Configure endpointAddress of the ReSA\_Broadcaster\_jaxws bean.

# RTLog Generator Cloud

This chapter describes the RTLog Generator component of Xstore Office Cloud. The RTLog Generator Cloud application can be used with both the cloud or on premise Merchandising/Pricing applications.

## RTLog Generator Cloud

This chapter describes how configure the RTLog Generator application deployed on cloud.

The RTLog Generator on cloud is a Java and XML based web application that exposes a Spring-JAXWS implemented SOAP web service and JAXRS implemented REST web services. It is usually deployed alongside the other Xstore Office Cloud applications.

## Configuration

The RTLog Generator cloud application can be configured in the following way.

Customize the RTLog Generator's mapping and format configuration via REST services.



### Note:

For more information on how to customize the RTLog Generator, see the [Configuration](#) section in [RTLog Generator On-Premise](#) and the *Retail Xstore - RTLog Generator Extension Guidelines (Doc ID 2174095.1)* on <https://support.oracle.com>.

## Integration

This section describes the RTlog Generator Cloud integration.

## Updating Mapping Configuration

RTLog Generator Cloud application provides REST services to retrieve, update and delete the `RTLogMappingConfig.xml` file. All the three services point to the URL at

`https://<hostname>/rtlog-generator/rest/config/file/v1/RTLogMappingConfig`

If RTLog generator is deployed on cloud, its mapping configuration file `RTLogMappingConfig.xml` is not accessible to a user. To customize the mapping, restful APIs are provided to upload a customized `RTLogMappingConfig.xml` to override the default out-of-box one.

**Table 7-1 REST Services related to the RTLogMappingConfig.xml**

| HTTP Protocol | Security Protocol | Response Type    | Description                                                                                                                                                                                                                                                                                                                                |
|---------------|-------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GET           | OAuth2            | application/xml  | Returns the active RTLogMappingConfig.xml file. If the customer has not uploaded a customized configuration xml file yet, provides a copy of the default mapping configuration XML file that is provided with the deployment.                                                                                                              |
| PUT           | OAuth2            | application/json | Customer submits the updated RTLogMappingConfig.xml file as the request body. Returns JSON that contains the number of bytes in the uploaded XML file.                                                                                                                                                                                     |
| DELETE        | OAuth2            | No content       | If the customer has uploaded a configuration XML file previously, it will be deleted and HTTP 200 status is returned. If there is no customized RTLogMappingConfig.xml file active yet, HTTP 204 status is returned. The default RTLogMappingConfig.xml that is part of the deployment will resume being the active mapping configuration. |

The examples below show how to retrieve and update the RTLogMappingConfig.xml.

**Example 7-1 Get active RTLogMappingConfig.xml - Get Current RTLog Mapping Configuration**

```
$ curl -H "Authorization: Bearer <token>" https://<rlog-generator-host>/rtlog-generator/rest/config/file/v1/RTLogMappingConfig" > RTLogMappingConfig.xml
```

**Example 7-2 Update RTLogMappingConfig.xml - Update the RTLog Mapping Configuration**

```
$ curl -H "Authorization: Bearer <token>" -X PUT -T "/path/to/mapping/file" https://<rlog-generator-host>/rtlog-generator/rest/config/file/v1/RTLogMappingConfig"
```

Similar to the example above, using the -X option with the value of `DELETE` will delete any customer uploaded mapping configuration XML file.

## Updating Format Configuration

RTLog Generator Cloud application provides REST services to retrieve, update and delete the `RTLogFormatConfig.xml` file. All the three services point to the URL at:

`https://<hostname>/rtlog-generator/rest/config/file/v1/RTLogFormatConfig`

If RTLog generator is deployed on cloud, its format configuration file `RTLogFormatConfig.xml` is not accessible to a user. A format configuration file defines the Sales Audit RTLog format, and in most cases is not up for customizations. However `RTLogFormatConfig.xml` file can be customized when:

- Customization has been done to Sales Audit to accept an enhanced RTLog format with additional fields
- A retailer has to integrate with an earlier version of Sales Audit which is not supported out of box, and it accepts a slightly different older RTLog format.

**Table 7-2 REST Services related to the `RTLogFormatConfig.xml`**

| HTTP Protocol | Security Protocol | Response Type    | Description                                                                                                                                                                                                                               |
|---------------|-------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GET           | OAuth2            | application/xml  | Returns the active <code>RTLogFormatConfig.xml</code> file. If the customer has not uploaded a customized configuration xml file yet, provides a copy of the default mapping configuration XML file that is provided with the deployment. |
| PUT           | OAuth2            | application/json | Customer submits the updated <code>RTLogFormatConfig.xml</code> file as the request body. Returns JSON that contains the number of bytes in the uploaded XML file.                                                                        |

**Table 7-2 (Cont.) REST Services related to the RTLogFormatConfig.xml**

| HTTP Protocol | Security Protocol | Response Type | Description                                                                                                                                                                                                                                                                                                                               |
|---------------|-------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DELETE        | OAuth2            | No content    | If the customer has uploaded a configuration XML file previously, it will be deleted and HTTP 200 status is returned. If there is no customized RTLogFormatConfig.xml file active yet, HTTP 204 status is returned. The default RTLogMappingConfig.xml that is part of the deployment will resume being the active mapping configuration. |

The examples below show how to retrieve and update the RTLogFormatConfig.xml.

**Example 7-3 Get active RTLogFormatConfig.xml - Get Current RTLog Format Configuration**

```
$ curl -H "Authorization: Bearer <token>"  
https://<rlog-generator-host>/rtlog-generator/rest/config/file/v1/  
RTLogFormatConfig" > RTLogFormatConfig.xml
```

**Example 7-4 Update RTLogFormatConfig.xml - Update the RTLog Format Configuration**

```
$ curl -H "Authorization: Bearer <token>" -X PUT -T "/path/to/format/file"  
https://<rlog-generator-host>/rtlog-generator/rest/config/file/v1/  
RTLogFormatConfig" > RTLogFormatConfig.xml
```

Similar to the example above, using the -X option with the value of DELETE will delete any customer uploaded format configuration XML file.

## Retrieving Published RTLog Files

RTLog Generator Cloud application provides three mechanisms to retrieve the published RTLog files.

- FTS (File Transfer Service) provides a way to deliver RTLog files to Sales Audit deployed as part of RMFCS v21.0 and later. By default it delivers RTLog files in compressed format (zip files). A deployment option is provided to turn off the compression. It puts RTLog files to object storage for Sales Audit to import. This service is not available for Sales Audit deployed in RMFCS v19.x.

A service request has to be filed by a retailer to setup RTLog Generator Cloud to use FTS.

FTS\_ENDPOINTURL is made available to the RTLog Generator Cloud deployment team by the Merchandising team.

 **Note:**

The RTLog Generator supports two forms of RMS FTS endpoints.

1. **RMS Platform FTS wrapper API:** This API is the new FTS endpoint supported in RMS. The customer is advised to use this endpoint for FTS integration. Its URL takes the following format: `https://xxxx/xxxx/RmsPlatformServices/services/private/FTSWrapper`
  2. **RMS FTS API (deprecated):** This API is deprecated but still supported in RMS. The customer is advised to switch to use the new platform FTS wrapper API. The deprecated API may no longer be available in RMS in the future. Its URL takes the following format: `https://xxxx/xxxx/RmsReSTServices/services/private/fts`
- SFTP service provides a way to transfer RTLog files. This method is commonly used to post RTLog files to Sales Audit deployed on RMFCS v19. By default it delivers RTLog files in compressed format (zip files). A deployment option is provided to turn off the compression.  
  
A service request has to be filed by a retailer to setup RTLog Generator Cloud to use SFTP.
    - SFTP host and path are made available to the RTLog Generator Cloud deployment team by the retailer.
    - SFTP connectivity utilizes public/private key based authentication. Once the key pair is generated, the public key has to be added to the SFTP server. If the SFTP server is hosted by Merchandising Cloud, the public key will be accessible to Merchandising Cloud deployment team to add to the SFTP server; if the SFTP server is hosted on premise, the public key will be handed over to the retailer to add to the SFTP server.
  - REST service provides a way to download RTLog files in compressed format (zip files). This is the default delivery method. The REST service endpoint URL is  
  
`https://<hostname>/rtlog-generator/rest/rtlog/files/v1/published`

**Table 7-3 REST Services to download RTLog Files**

| HTTP Protocol | Security Protocol | Response Type              | Description                                                                                                                                                                                                        |
|---------------|-------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GET           | OAuth2            | application/octet - stream | Returns the oldest RTLog zip file stream, if available. The content-disposition response header contains the name of the attached zip file.<br><br>If no zip file is available, a HTTP 204 no content is returned. |

**Example 7-5 Get Published RTLogs - OAuth2 token request**

```
$ curl -O -J -H "Authorization: Bearer <token>"  
"https://<rlog-generator-host>/rtlog-generator/rest/rtlog/files/v1/published"
```

It is recommended to have a programmable approach to acquire the OAuth2 token and utilizing the token to download the available published RTLog files compared to the command line tools shown as examples above.

## Security Configuration

RTLog Generator's web services are secured by requiring HTTPS protocol for transport layer security and require OAuth2 authentication for application level security. All of the Xoffice applications on cloud including the RTLog Generator have a valid OAuth Client (Application) registered with a specific tenant of the Oracle Identity Cloud Service.

OAuth2 authentication is a two-step process.

- Acquire a valid OAuth2 Bearer token using the IDCS Client Credentials.
- Provide the token value in the HTTP Authorization header for all of the web service requests until the token's validity is expired.

## Acquiring IDCS Token

In order to acquire a valid IDCS token, the following information is needed beforehand.

- IDCS tenant host information to build the URL for requesting a token
  - `https://<IDCS_TENANT_HOST>/oauth2/v1/token`
- `ClientID` and `ClientSecret` for the RTLog Generator Client App (that is Sales Audit).
- A command line utility or any software that can make HTTP requests with the ability to setup specific header values
  - "curl" in Linux environments
- Access to a command/utility to encode the credentials in base64 format.
  - "base64" command in Linux environments
  - "certutil" command in Windows environments

The following example shows how to request a token using the curl command line tool in a Linux environment. Ensure to replace the `clientID`, `clientSecret` and `IDCS_TENANT_HOST` with the appropriate values.

### Example 7-6 Request IDCS OAuth2 Token - OAuth2 Token Request

```
$ curl -i -H "Authorization: Basic $(echo -n clientID:clientSecret | base64)" -H
"Content-Type: application/x-www-form-urlencoded;charset=UTF-8" https://
<IDCS_TENANT_HOST>/oauth2/v1/token -d
"grant_type=client_credentials&scope=urn:opc:idm:__myscopes__"
```

You may generate Base64 encoded text of the "clientID:clientSecret" ahead of the request and use it directly in the curl command for the Basic Authorization header value. The following example shows the response that contains the token.

### Example 7-7 IDCS OAuth2 Token Response - OAuth2 Token Response

```
{"access_token": "<oauth2_token>",
"token_type": "Bearer",
"expires_in": 3600 }
```

The response above shows the token value and the expiration time in seconds. Usually, the token is a sequence of random characters of varying length up to a maximum of 16K.

## Provide IDCS Authentication

The following example shows how to provide the OAuth2 token while communicating with RTLog Generator REST services. The following example shows how to request the current active RTLogMappingConfig.xml file. Please make sure to replace the "<token>" with a valid OAuth2 token acquired in the last step and provide the correct RTLog Generator Host value.

### **Example 7-8 Provide Oauth2 Token - Provide OAuth2 Token for REST Services**

```
$ curl -i -H "Authorization: Bearer <token>" "https://<rlog-generator-host>/rtlog-generator/rest/config/file/v1/RTLogMappingConfig"
```

# A

## Appendix: Xstore to Sales Audit Mapping Details

The mapping from the Xstore POSLog format to the Sales Audit RTLog format is defined in the Xstore configuration file RTLogMappingConfig.xml. This appendix provides details on the following ode types used by each of the applications that are used in this mapping:

- [Transaction Types](#)
- [Tender Types](#)
- [Tender Totals](#)
- [Item Types](#)
- [Sales Audit Reason Codes](#)
- [Item Status/and Sales Types](#)
- [Customer ID Types](#)
- [Sales Audit Tax Codes](#)
- [Reference Codes/Labels](#)
- [Sale Return Transaction](#)

### Transaction Types

Both Xstore and Sales Audit support a number of similar transactions types, but each solution uses different codes for these transaction types. The table below shows how the transaction types in Xstore map to the transaction types and sub-transaction types used in Sales Audit. See also the *Oracle Retail Sales Audit Implementation Guide* for more details on these codes.

**Table A-1 Transaction Type Mapping**

| Xstore Transaction Type | Sales Audit Transaction Type TRAT | Sales Audit Sub-Transaction Type TRAS | Description                                                                                                                                    |
|-------------------------|-----------------------------------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| ACCOUNT_LOOKUP          | OTHER                             | OTHER                                 | ACCOUNT_LOOKUP transactions are passed from Xstore to Sales Audit for full visibility audit, but not otherwise implemented in Sales Audit.     |
| BALANCE_INQUIRY         | OTHER                             | OTHER                                 | BALANCE_INQUIRY transactions are passed from Xstore to Sales Audit for full visibility audit, but not otherwise implemented in Sales Audit.    |
| CREDIT_APPLICATION      | OTHER                             | OTHER                                 | CREDIT_APPLICATION transactions are passed from Xstore to Sales Audit for full visibility audit, but not otherwise implemented in Sales Audit. |

**Table A-1 (Cont.) Transaction Type Mapping**

| Xstore Transaction Type                                                                                | Sales Audit Transaction Type TRAT | Sales Audit Sub-Transaction Type TRAS | Description                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ESCROW                                                                                                 | OTHER                             | OTHER                                 | ESCROW transactions are passed from Xstore to Sales Audit for full visibility audit, but not otherwise implemented in Sales Audit.                                                                                                                                                            |
| EXCHANGE_RATE                                                                                          | OTHER                             | OTHER                                 | EXCHANGE_RATE transactions are passed from Xstore to Sales Audit for full visibility audit, but not otherwise implemented in Sales Audit.                                                                                                                                                     |
| GNRIC                                                                                                  | OTHER                             | OTHER                                 | GNRIC transactions are passed from Xstore to Sales Audit for full visibility audit, but not otherwise implemented in Sales Audit.                                                                                                                                                             |
| INVENTORY_CONTROL                                                                                      | OTHER                             | OTHER                                 | INVENTORY_CONTROL transactions are mapped from Xstore to Sales Audit for full visibility audit, but not otherwise implemented in Sales Audit.<br><br>Xstore should be configured so that inventory control transactions are not generated, and therefore not sent to Sales Audit.             |
| INVENTORY_SUMMARY_COUNT                                                                                | OTHER                             | OTHER                                 | INVENTORY_SUMMARY_COUNT transactions are mapped from Xstore to Sales Audit for full visibility audit, but not otherwise implemented in Sales Audit.<br><br>Xstore should be configured so that inventory summary count transactions are not generated, and therefore not sent to Sales Audit. |
| MOVEMENT_PENDING                                                                                       | OTHER                             | OTHER                                 | MOVEMENT_PENDING transactions are mapped from Xstore to Sales Audit for full visibility audit, but not otherwise implemented in Sales Audit.<br><br>Xstore should be configured so that inventory summary count transactions are not generated, and therefore not sent to Sales Audit.        |
| NO_SALE                                                                                                | NOSALE                            | NOSALE                                | NA                                                                                                                                                                                                                                                                                            |
| POST_VOID                                                                                              | PVOID                             | VOID                                  | NA                                                                                                                                                                                                                                                                                            |
| RETAIL_SALE<br>(can be mapped to multiple Sales Audit transaction types depending on other conditions) | SALE                              | SALE                                  | Regular transaction.                                                                                                                                                                                                                                                                          |
|                                                                                                        | NOSALE                            | SUSPND                                | Suspend transaction.                                                                                                                                                                                                                                                                          |
|                                                                                                        | VOID                              | CANCEL                                | Cancel transaction.                                                                                                                                                                                                                                                                           |
|                                                                                                        | VOID                              | CANCEL                                | Cancel orphaned transaction.                                                                                                                                                                                                                                                                  |
| SESSION_CONTROL                                                                                        | OTHER                             | OTHER                                 | Issue till.                                                                                                                                                                                                                                                                                   |
|                                                                                                        | OTHER                             | OTHER                                 | Assign till/assign till tender transfer.                                                                                                                                                                                                                                                      |

Table A-1 (Cont.) Transaction Type Mapping

| Xstore Transaction Type                                                                                   | Sales Audit Transaction Type TRAT | Sales Audit Sub-Transaction Type TRAS | Description                                                                               |
|-----------------------------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------|-------------------------------------------------------------------------------------------|
|                                                                                                           | OTHER                             | OTHER                                 | Attach till.                                                                              |
|                                                                                                           | OTHER                             | OTHER                                 | Remove till.                                                                              |
|                                                                                                           | OTHER                             | OTHER                                 | Return till.                                                                              |
| SYSTEM_CLOSE                                                                                              | CLOSE                             | CSTORE                                | Close store.                                                                              |
| SYSTEM_OPEN                                                                                               | OPEN                              | OSTORE                                | Open store.                                                                               |
| TENDER_CONTROL<br>(can be mapped to multiple Sales Audit transaction types depending on other conditions) | OPEN                              | OTILL                                 | Begin till count.                                                                         |
|                                                                                                           | CLOSE with TOTAL / OTHER          | CTILL with CTILLT / OTHER             | Till closing count (register accountability/ till accountability).                        |
|                                                                                                           | CLOSE and TOTAL                   | CTILL and CTILLT                      | Till reconcile. Each counted tender type has a corresponding TOTAL and CTILLT as a THEAD. |
|                                                                                                           | PAIDIN                            | PITILL                                | Pay in.                                                                                   |
|                                                                                                           | PAIDOU                            | POTILL                                | Pay out.                                                                                  |
|                                                                                                           | OTHER                             | AUDIT                                 | Till audit.                                                                               |
|                                                                                                           | PULL                              | PUTILL                                | Mid-day deposit. Place funds in store bank.                                               |
|                                                                                                           | OTHER                             | BANK                                  | Bank deposit.                                                                             |
|                                                                                                           | LOAN                              | LOTILL                                | Till loan (cash transfer).                                                                |
|                                                                                                           | PULL                              | PUTILL                                | Pick up till (cash pickup).                                                               |
|                                                                                                           | OTHER                             | OTHER                                 | Open store bank.                                                                          |
|                                                                                                           | OTHER                             | OTHER                                 | Store bank reconcile.                                                                     |
| TENDER_EXCHANGE                                                                                           | PAIDIN                            | PITILL                                | NA                                                                                        |
| TILL_CONTROL                                                                                              | OTHER                             | OTHER                                 | NA                                                                                        |
| TIMECLOCK                                                                                                 | OTHER                             | OTHER                                 | Employee clock in.                                                                        |
|                                                                                                           | OTHER                             | OTHER                                 | Employee clock out.                                                                       |
| TRAINING_MODE_ENTRY                                                                                       | OTHER                             | NTRAIN                                | NA                                                                                        |
| TRAINING_MODE_EXIT                                                                                        | OTHER                             | XTRAIN                                | NA                                                                                        |
| WORKSTATION_CLOSE                                                                                         | CLOSE                             | CREG                                  | NA                                                                                        |
| WORKSTATION_COMPLETE_REMOTE_CLOSE                                                                         | CLOSE                             | CRGRC                                 | NA                                                                                        |
| WORKSTATION_OPEN                                                                                          | OPEN                              | OREG                                  | NA                                                                                        |
| WORKSTATION_START_REMOTE_CLOSE                                                                            | OTHER                             | CRGRC                                 | NA                                                                                        |
| GIFT_REGISTRY                                                                                             | OTHER                             | OTHER                                 | Assign gift registry (register operation)                                                 |
|                                                                                                           | OTHER                             | OTHER                                 | Reissue gift registry (register operation)                                                |
| RAIN_CHECK                                                                                                | OTHER                             | OTHER                                 | Redeem rain check.                                                                        |
| BATCH_CLOSE                                                                                               | OTHER                             | OTHER                                 | Credit and debit settlement.                                                              |

Table A-1 (Cont.) Transaction Type Mapping

| Xstore Transaction Type | Sales Audit Transaction Type TRAT | Sales Audit Sub-Transaction Type TRAS | Description                                                  |
|-------------------------|-----------------------------------|---------------------------------------|--------------------------------------------------------------|
| REOPEN                  | REOPEN                            | NA                                    | Used to reopen a previously closed store day in Sales Audit. |

## Tender Types

In order to communicate the tender type used on transactions, a specific mapping is used between Xstore and Sales Audit. The details below outline how the tenders in Xstore map to the Sales Audit tender groups and types. See also the *Oracle Retail Sales Audit Implementation Guide* for information on configuration of tender types and tender type groups.

Table A-2 Tender Type Mapping

| Xstore           |                           | Xstore POS Log Tender Group Type |                           | Sales Audit RTLog |                                     |
|------------------|---------------------------|----------------------------------|---------------------------|-------------------|-------------------------------------|
| Tender Type Code | Tender Type D             | Tender Type                      | Tender ID                 | Tender Type Group | Tender Type ID                      |
| CURRENCY         | USD_CURRENCY              | Cash                             | USD_CURRENCY              | CASH              | If primary 1000, if alternate 1010. |
|                  | AUD_CURRENCY              | Cash                             | AUD_CURRENCY              | CASH              | If primary 1000, if alternate 1010. |
|                  | CAD_CURRENCY              | Cash                             | CAD_CURRENCY              | CASH              | If primary 1000, if alternate 1010. |
|                  | EUR_CURRENCY              | Cash                             | EUR_CURRENCY              | CASH              | If primary 1000, if alternate 1010. |
|                  | GBP_CURRENCY              | Cash                             | GBP_CURRENCY              | CASH              | If primary 1000, if alternate 1010. |
| CREDIT_CARD      | VISA                      | CreditDebit                      | VISA                      | CCARD             | 3000                                |
|                  | MASTERCARD                | CreditDebit                      | MASTERCARD                | CCARD             | 3010                                |
|                  | AMERICAN_EXPRESS          | CreditDebit                      | AMERICAN_EXPRESS          | CCARD             | 3020                                |
|                  | DINERS_CLUB               | CreditDebit                      | DINERS_CLUB               | CCARD             | 3040                                |
|                  | DISCOVER                  | CreditDebit                      | DISCOVER                  | CCARD             | 3030                                |
|                  | JCB                       | CreditDebit                      | JCB                       | CCARD             | 3090                                |
|                  | DEBITCARD                 | CreditDebit                      | DEBITCARD                 | DCARD             | 8000                                |
| ACCOUNT          | HOUSE_ACCOUNT             | dtv:Account                      | HOUSE_ACCOUNT             | CCARD             | 3120                                |
|                  | A new type of credit card | CreditDebit                      | A new type of credit card | CCARD             | Map to UNKNW.                       |
| CHECK            | CHECK                     | Check                            | CHECK                     | CHECK             | If primary 2000, if foreign 2050.   |

Table A-2 (Cont.) Tender Type Mapping

| Xstore            |                                | Xstore POS Log Tender Group Type |                                | Sales Audit RTLog                                                                                                            |                                   |
|-------------------|--------------------------------|----------------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Tender Type Code  | Tender Type D                  | Tender Type                      | Tender ID                      | Tender Type Group                                                                                                            | Tender Type ID                    |
| TRAVELERS_CHECK   | USD_TRAVELERS_CHECK            | dtv:TravelersCheck               | USD_TRAVELERS_CHECK            | CHECK                                                                                                                        | If primary 2020, if foreign 2060. |
|                   | CAD_TRAVELERS_CHECK            | dtv:TravelersCheck               | CAD_TRAVELERS_CHECK            | CHECK                                                                                                                        | If primary 2020, if foreign 2060. |
| VOUCHER           | GIFT_CERTIFICATE               | Voucher                          | GIFT_CERTIFICATE               | VOUCH                                                                                                                        | If primary 4030, if foreign 4100. |
|                   | ISSUE_GIFT_CERTIFICATE         | Voucher                          | ISSUE_GIFT_CERTIFICATE         | VOUCH                                                                                                                        | If primary 4030, if foreign 4100. |
|                   | ISSUE_MERCHANDISE_CREDIT_CARD  | Voucher                          | ISSUE_MERCHANDISE_CREDIT_CARD  | VOUCH                                                                                                                        | 4050                              |
|                   | ISSUE_STORE_CREDIT             | Voucher                          | ISSUE_STORE_CREDIT             | VOUCH                                                                                                                        | 4050                              |
|                   | ISSUE_XPAY_GIFT_CARD           | Voucher                          | ISSUE_XPAY_GIFT_CARD           | VOUCH                                                                                                                        | 4040                              |
|                   | MALL_CERTIFICATE               | Voucher                          | MALL_CERTIFICATE               | VOUCH                                                                                                                        | 4060                              |
|                   | MERCHANDISE_CREDIT_CARD        | Voucher                          | MERCHANDISE_CREDIT_CARD        | VOUCH                                                                                                                        | 4050                              |
|                   | RELOAD_MERCHANDISE_CREDIT_CARD | Voucher                          | RELOAD_MERCHANDISE_CREDIT_CARD | VOUCH                                                                                                                        | 4050                              |
|                   | RELOAD_XPAY_GIFT_CARD          | Voucher                          | RELOAD_XPAY_GIFT_CARD          | VOUCH                                                                                                                        | 4040                              |
|                   | STORE_CREDIT                   | Voucher                          | STORE_CREDIT                   | VOUCH                                                                                                                        | If primary 4050, if foreign 4090. |
|                   | XPAY_GIFT_CARD                 | Voucher                          | XPAY_GIFT_CARD                 | VOUCH                                                                                                                        | 4040                              |
| COUPON            | COUPON                         | ManufacturerCoupon               | COUPON                         | QPON                                                                                                                         | 5000                              |
|                   | ROOM_CHARGE                    | CreditDebit                      | ROOM_CHARGE                    | VOUCH                                                                                                                        | 4050                              |
| CREDIT_CARD       | PAYPAL                         | TBD                              | PAYPAL                         | PAYPAL                                                                                                                       | 3075                              |
| HOME_OFFICE_CHECK | HOME_OFFICE_CHECK              | NA                               | NA                             | Not supported in this solution. Home office check tenders should not be used in Xstore if it is integrated with Sales Audit. |                                   |

## Tender Totals

Sales Audit uses tender totals to compare the total amount of a tender reported from the store (Accounted For) with the amount that it should have reported (Accountable For) based on store activity in a day. Totals are fully customer configured in Sales Audit. However, when integrating with Xstore, a few specific totals are expected to be created to total tenders. The totals that should be created and their ID are outlined in the table below, along with the Xstore tender type used for the total.

**Table A-3 Total Tender ID Mapping**

| Xstore          |                                | Sales Audit RTLog |
|-----------------|--------------------------------|-------------------|
| TenderType      | TenderID                       | Total ID          |
| CURRENCY        | USD_CURRENCY                   | CASH              |
|                 | AUD_CURRENCY                   | CASHAC            |
|                 | CAD_CURRENCY                   | CASHAC            |
|                 | EUR_CURRENCY                   | CASHAC            |
|                 | GBP_CURRENCY                   | CASHAC            |
| TRAVELERS_CHECK | USD_TRAVELERS_CHECK            | TCHECK            |
|                 | AUD_TRAVELERS_CHECK            | TCHECKAC          |
|                 | CAD_TRAVELERS_CHECK            | TCHECKAC          |
|                 | EUR_TRAVELERS_CHECK            | TCHECKAC          |
|                 | GBP_TRAVELERS_CHECK            | TCHECKAC          |
|                 | MXN_TRAVELERS_CHECK            | TCHECKAC          |
| CREDIT_CARD     | CREDIT_CARD                    | CCARD             |
| VOUCHER         | GIFT_CERTIFICATE               | GIFTCERT          |
|                 | MALL_CERTIFICATE               | MALLCERT          |
|                 | MERCHANDISE_CREDIT_CARD        | MCCARD            |
|                 | RELOAD_MERCHANDISE_CREDIT_CARD | RMCCARD           |
|                 | RELOAD_XPAY_GIFT_CARD          | RXPAYGC           |
|                 | STORE_CREDIT                   | STCRDT            |
|                 | XPAY_GIFT_CARD                 | XPAYGC            |
|                 | ISSUE_XPAY_GIFT_CARD           | IXPAYGC           |
|                 | ISSUE_STORE_CREDIT             | ISTCRDT           |
|                 | ISSUE_MERCHANDISE_CREDIT_CARD  | IMCCARD           |
| ACCOUNT         | HOUSE_ACCOUNT                  | HACCNT            |
| COUPON          | COUPON                         | COUPON            |

## Item Types

There are a number of different item types that are used in Xstore, and these all need to be mapped to item types used by Sales Audit. The table below outlines how the types in Xstore map to the Sales Audit item types.

**Table A-4 Item Type Mapping**

| Xstore Item Type    | Sales Audit Item Type | Description          |
|---------------------|-----------------------|----------------------|
| Alteration          | NMITEM                | Non-Merchandise Item |
| Deposit             | NMITEM                | Non-Merchandise Item |
| dtv:GiftCertificate | GCN                   | Voucher              |
| dtv:NonMerchandise  | NMITEM                | Non-Merchandise Item |
| dtv:Payment         | NMITEM                | Non-Merchandise Item |
| Fee                 | NMITEM                | Non-Merchandise Item |
| ItemCollection      | ITEM                  | Item                 |
| Service             | NMITEM                | Non-Merchandise Item |
| Stock               | ITEM                  | Item                 |
| Warranty            | NMITEM                | Non-Merchandise Item |

## Sales Audit Reason Codes

Xstore has a single set of reason codes, used both for reason codes, price override codes, and other modifications. Sales Audit separates these concepts into individual sets. Because reason codes can be mixed coming out of Xstore, Sales Audit has mapped some code values to multiple code types to avoid the possibility of errors.

For more information on each of these categories of reason codes, see the *Oracle Retail Sales Audit Implementation Guide*.

## Reason Codes

First is a general reason code that may be entered for specific transaction types to provide more information about the context of the transaction. This type of reason code is mapped to Xstore miscellaneous reason codes.

**Table A-5 Sales Audit Reason Codes**

| Xstore Reason Code | Sales Audit Reason Code | Description            |
|--------------------|-------------------------|------------------------|
| PV1                | PV1                     | Cashier Error          |
| PV2                | PV2                     | Supervisors Discretion |
| PV3                | PV3                     | Customer Satisfaction  |
| NS1                | NS1                     | Making Change          |

**Table A-5 (Cont.) Sales Audit Reason Codes**

| Xstore Reason Code | Sales Audit Reason Code | Description           |
|--------------------|-------------------------|-----------------------|
| NS2                | NS2                     | Employee Check Cashed |
| NS3                | NS3                     | Petty Cash In         |
| NS4                | NS4                     | Petty Cash Out        |
| NS5                | NS5                     | Spiff/Bonus Out 1     |
| CF1                | CF1                     | Holiday Adjustment    |
| CF2                | CF2                     | Register Down         |
| PAID_IN            | PI1                     | Change from Paid Out  |
| PAID_IN            | PI2                     | Found Money           |
| PAID_IN            | PI3                     | Drawer Loan 1         |
| PAID_IN            | TENDEX                  | Tender exchange       |
| PAID_OUT           | PO1                     | Stocks                |
| PAID_OUT           | PO2                     | Delivery              |
| PAID_OUT           | PO3                     | Postage               |
| PAID_OUT           | PO4                     | Contractor Services   |
| PAID_OUT           | PO5                     | Store Incentives      |

## Return Reason Codes

Sales Audit return reason codes are used to provide the context of the return in Sales Audit. These map to the Xstore reason codes as follows:

**Table A-6 Return Reason Codes**

| Xstore Reason Code | Sales Audit Reason Code | Description                 |
|--------------------|-------------------------|-----------------------------|
| RET1               | RET1                    | Did not like                |
| RET2               | RET2                    | Better price somewhere else |
| RET3               | RET3                    | Did not fit                 |
| RET4               | RET4                    | Damaged                     |
| RET5               | RET5                    | Exchange                    |
| RET6               | RET6                    | Poor quality                |
| RET41              | RET41                   | Open box                    |
| RET42              | RET42                   | Unusable                    |
| RET43              | RET43                   | Repairable                  |

## Discount Reason Codes

Used in Sales Audit to indicate the valid discount types for sales and return transaction, this table shows how these are mapped to the Xstore reason codes used for returns:

**Table A-7 Discount Reason Codes**

| Xstore Reason Code        | Sales Audit Reason Code | Description         |
|---------------------------|-------------------------|---------------------|
| DC1                       | S                       | Incorrect Label     |
| DC2                       | MS                      | Manager Discretion  |
| DC3                       | CP                      | Price Guarantee     |
| DC4                       | D                       | Damage Adjustment   |
| NEW_PRICE_RULE            | NEWPRC                  | New Price Rule      |
| DOCUMENT                  | DOC                     | Document            |
| MANUFACTURER_COUPON       | MCOUP                   | Manufacturer Coupon |
| REFUND_PRORATION          | REFUND                  | Refund Proration    |
| CALCULATED_WARRANTY_PRICE | CALWAR                  | Warranty Price      |

## Item Price Override Reason Codes

This grouping of reason codes is used to hold the valid price override reason codes that are expected by Sales Audit. These map to the reason codes used in Xstore as follows:

**Table A-8 Item Price Override Reason Codes**

| Xstore Reason Code  | Sales Audit Reason Code | Description             |
|---------------------|-------------------------|-------------------------|
| AR_PR_1             | AR_PR_1                 | Insufficient Funds      |
| AR_PR_2             | AR_PR_2                 | Wrong Amount            |
| AR_PR_3             | AR_PR_3                 | Wrong Amount            |
| AR_PR_4             | AR_PR_4                 | Wrong Invoice           |
| COMMENT             | NEWPRC                  | Other - Enter Comments  |
| PC1                 | S                       | Incorrect Label         |
| PC2                 | MS                      | Supervisors Discretion  |
| PC3                 | CP                      | Competitive Price Match |
| PC4                 | D                       | Damage Adjustment       |
| BASE_PRICE_RULE     | BSPRC                   | Base Price Rule         |
| PROMPT_PRICE_CHANGE | PROMPT                  | Price Prompt            |
| AUTHORIZED_AMOUNT   | AUTHMT                  | Authorized Amount       |

## Item Status/and Sales Types

Valid values for item status in Sales Audit are:

|     |                  |
|-----|------------------|
| V   | Voided           |
| S   | Sale             |
| R   | Return           |
| O   | Other            |
| ORI | Order Initiate   |
| ORC | Order Cancel     |
| ORD | Order Complete   |
| LIN | Layaway Initiate |
| LCA | Layaway Cancel   |
| LCO | Layaway Complete |

Valid values for sales type in Sales Audit are:

|   |                         |
|---|-------------------------|
| R | Regular                 |
| I | In-Store Customer Order |
| E | External Customer Order |

These two sets of codes are then mapped to the actions in Xstore as follows:

**Table A-9 Item Status/ and Sales Type Mapping**

| Xstore Item   | Xstore Action              | Sales Audit Item Status | Sales Audit Sales Type |
|---------------|----------------------------|-------------------------|------------------------|
| Regular Sale  | Sale                       | S                       | R                      |
|               | Return                     | R                       | R                      |
|               | Void                       | S and V (two lines)     | R                      |
| Layaway Item  | Init                       | LIN                     | I                      |
|               | Cancel                     | LCA                     | I                      |
|               | Pickup                     | LCO                     | I                      |
|               | Void                       | S and V (two lines)     | I                      |
| Locate Order  | Init                       | ORI                     | E                      |
|               | Cancel                     | ORC                     | E                      |
|               | Pickup                     | ORD                     | E                      |
|               | Void when update or pickup | ORC                     | E                      |
|               | Void when Init             | S and V (two lines)     | E                      |
| Special Order | Init                       | ORI                     | E                      |
|               | Cancel                     | ORC                     | E                      |
|               | Pickup                     | ORD                     | E                      |

**Table A-9 (Cont.) Item Status/ and Sales Type Mapping**

| Xstore Item | Xstore Action              | Sales Audit Item Status | Sales Audit Sales Type |
|-------------|----------------------------|-------------------------|------------------------|
|             | Void when update or pickup | ORC                     | E                      |
|             | Void when Init             | S and V (two lines)     | E                      |
| Work Order  | Init                       | ORI                     | I                      |
|             | Cancel                     | ORC                     | I                      |
|             | Pickup                     | ORD                     | I                      |
|             | Void when update or pickup | ORC                     | I                      |
|             | Void when Init             | S and V (two lines)     | I                      |
| Pre-Sale    | Init                       | ORI                     | I                      |
|             | Cancel                     | ORC                     | E                      |
|             | Pickup                     | ORD                     | E                      |
|             | Void when update or pickup | ORC                     | E                      |
|             | Void when Init             | S and V (two lines)     | E                      |
| On Hold     | Init                       | ORI                     | I                      |
|             | Cancel                     | ORC                     | I                      |
|             | Pickup                     | ORD                     | I                      |
|             | Void when update or pickup | ORC                     | I                      |
|             | Void when Init             | S and V (two lines)     | I                      |
| Send Sale   | Init                       | S                       | R                      |
|             | Void when Init             | S and V (two lines)     | R                      |

## Customer ID Types

Sales Audit has a set of codes that it uses for validating the various forms of identification that can be presented at the store for a transaction. However, Xstore always sends just one type - Customer ID or CUSTID. This customer ID type is part of the default Sales Audit implementation and should be configured to "Used" when implementing with Xstore.

## Sales Audit Tax Codes

When implementing using US Sales Tax for some or all stores, the tax code sent by Xstore will always be sent as TOTAX. This will be validated against the list of valid non-VAT tax codes in Sales Audit. This code is included in the initial Sales Audit configuration, but care should be taken not to remove or configure that code type off when integrating with Xstore.

## Reference Codes/Labels

Sales Audit has a flexible method of taking in reference fields from a POS at various levels of the transaction. These can be configured differently by transaction and sub-transaction type within Sales Audit. In general, these are not used in the base Xstore implementation without

customization with a couple of exceptions. The reference fields that Xstore uses are as follows:

- Reference Number 1 (Transaction Header) - for the Day Close (DCLOSE) transaction type, this field will contain the file counter for the end of day
- Reference Number 1 (Transaction Header) - for the Tender Total (TOTAL) transaction type, contains the tender ID/type
- Reference Number 3 (Transaction Header) - includes the employee ID if the sale was to an employee

For more on configuring reference fields in Sales Audit, see the *Oracle Retail Sales Audit Implementation Guide*.

## Sale Return Transaction

This section describes sale return transaction mappings.

### Transaction Header Mapping

This section describes mappings for the transaction header of sale return transactions. The transaction header format is defined at TransactionHeader RECODE\_FORMAT in the RTLogFormatConfig.xml file.

A sale return transaction can be mixed with a sale line item, return line item, special order pickup line item, special order payment, work order line item, and so on. In this case, the sale and return transaction type and sub transaction type are defined as SALE. The actual types of line items are specified at line item level.

The field Salesperson in Transaction Header is matched to -1. It means there is no Salesperson available at transaction level. Instead the field Salesperson in line item is populated, since it is possible to have different sales people for different line items in the same transaction.

OriginalTransactionNumber and Orig\_reg\_no are only populated for post void transactions. Mapper PostVoidOriginalTransactionInfoMapper indicates the mapping logic.

### Line Item (TITEM) Mapping

This section describes mappings for line items of sale return transactions. The line item format is defined at TransactionItem RECODE\_FORMAT in the RTLogFormatConfig.xml file.

The line item will not be exported for suspended, cancelled and post void transactions. It is disabled in retailTrnDetailrExportabilityMapper.

It would be one or more line item records in a sale return transaction.

There are two kinds of item types, physical/merchandise item (ITEM) or non physical/non merchandise item (NMITEM). Non physical items are service fee, payment, work order item, and so on.

The Item id of a physical item is set to Item field; the Item id for a non physical item is set to NonMerchandiseItem field of the RTLog record.

The default value of the ItemStatus field is S, which is set in the RTLogFormatConfig.xml file. If the line item is return, the value is set to R. Return reason code mapping can be found in / retailTransaction/lineItems/return source field VALUE\_MAPPINGS.

The default value of SalesType for sale return line item is I (internal sale).

ItemVoidStatusMapper sets the void flag of the record to true if the line is voided. If a sale return line item record is voided, a clone of the sale return line item record will be created, the item status for the new record is set to "V". In this case the status of the two lines are "S" and "V" or "R" and "V". Sales Audit balances off a sale/return line with its voided line to zero.

## Item Discount (IDISC) Mapping and Round off Discount Mapping

This section describes mappings for item level discounts of sale return transactions. The item level discount format is defined at ItemDiscount RECODE\_FORMAT in the RTLogFormatConfig.xml file.

The item level discount will not be exported for suspended, cancelled and post void transactions. It is disabled in retailTrnDetailExportabilityMapper.

It would be zero or more item discount records for a line item.

If it is a Deal discount, the RMSPromotionType is mapped to 9999, otherwise it is mapped to 1004.

The discount type of ItemDiscount is mapped from reasonCode and discountReasonCode of RetailPriceModifierType Poslog object.

The values of DiscountReferenceNumber, PromoComponent and RMSPromotionType are mapped from PromotionIDMapper. If the retail price modifier is voided, DiscountReferenceNumber and PromoComponent are set to zero. If the retail price modifier is not voided and it is a deal promotion, it is mapped based on the following conditions:

- If it is an RPM promotion, DiscountReferenceNumber is set to RPM promotion id and PromoComponent is set to promotion component id.
- If it is not an RPM promotion, RMSPromotionType is set to 2000, DiscountReferenceNumber and PromoComponent are set to zero.

PromotionIDMapper implements this logic.

DiscountAmountMapper calculates unit discount amount for the ItemDiscount RTLog IDISC record and also sets roundedOffAmount to the RTLog record. The value of unit discount amount is the total discount amount divided by item quantity rounding by half up with unit discount scale. The value of roundedOffAmount is the difference between total discount amount and unit discount amount multiplies item quantity. Note that the roundedOffAmount is not a field of IDISC, therefore it is not going to be exported.

A round off discount record (ItemRoundedOffDiscount) is always created after a discount record (ItemDiscount) if the roundedOffAmount is not equal to zero. In a discount record, if the roundedOffAmount exists, a round off discount record will be cloned from the discount record, otherwise a new round off discount record will be created. The value of discount amount of a round off discount record is the round off amount of the corresponding discount record. The value of the quantity in a round off discount record is always set to zero. RoundedOffDiscountAmountMapper is specially used for this mapping.

The format of ItemRoundedOffDiscount record and ItemDiscount record are exactly the same, that is IDISC. The reason for adding a round off discount record is that Poslog uses discountAmount and RTLog uses UnitDiscountAmount. If a quantity of a line item is not one,

such as 3, the UnitDiscountAmount times 3 is not equal to discountAmount in Poslog. To balance it off, an extra discount line is introduced to set the round off amount to unit discount amount. It guaranties the total discount value is equal to sum of the two IDISC records.

## Item Level Tax Mapping

This section describes mappings for item level tax of sale return transactions. The item level tax format is defined at ItemGlobalTax RECODE\_FORMAT in the RTLogFormatConfig.xml file.

Tax lines will not be exported for suspended, cancelled and post void transactions. It is disabled in retailTrnDetailExportabilityMapper.

It would be one or more tax lines for one sale return line item. It depends on how many tax authorities are applied on this item.

RTLog requires four digits decimal for TaxRate in ItemGlobalTax record format. AmountMapper object sets the scale of tax rate to four to fit the need.

RTLog requires four digits decimal for TaxAmount in ItemGlobalTax record format. AmountMapper object sets the scale of tax amount to four to fit the need.

The value of TaxAmountSign field is P when tax amount is positive, N when tax amount is negative. It is done is SignMapper.

The RTLog Generator application supports either VAT or non VAT. It does not support both of them in the application instance. VAT and non VAT configurable settings can be found at the roundedOffTaxAmountMapper spring bean in the RTLogMappingBean.xml file.

TaxCode mappings are different for VAT and non VAT systems. If the RTLog Generator application is set to VAT, the tax group id maps to the tax code. If the RTLog Generator application is set to non VAT, the tax code is always "TOTAX". ItemTaxCodeMapper implements this logic.

The value of TotalTaxAmount is blank if the tax is voided. Otherwise, the value of TotalTaxAmount is the sum of the item taxes from all item tax authorities. It is implemented at ItemTotalTaxAmountMapper.

The value of TaxableIndicator of ItemGlobalTax is a flag to indicate the item has tax or not. If the TaxAmountSign amount sign is zero, the value of TaxableIndicator is set to N, otherwise it is set to Y.

## Tender Line Mapping

This section describes mappings for transaction tender of sale return transactions. The transaction tender format is defined at TransactionTender RECODE\_FORMAT in the RTLogFormatConfig.xml file.

The tender line will not be exported for suspended, cancelled and post void transactions. It is disabled in retailTrnTenderExportabilityMapper.

The actual mappings of transaction tender type group and tender type id (sub type) are listed on sourcePath "/transaction/lineItems/tender" in the RTLogMappingConfig.xml file.

There may be zero or more tender line items within one sale return transaction.

The tender type id is different for base currency and foreign currency and is also different for base traveler's check and foreign traveler's check. Object tenderTypeIDMapper is responsible for doing the actual currency and traveler's check mapping. If the tender type is currency or traveler's check, mapping value will be found from the mapper, the corresponding VALUE\_MAPPINGS will be skipped. Otherwise, it will do the value mapping in the VALUE\_MAPPINGS.

RTLog requires four digits decimal for TenderAmount in TransactionTender record format. Mapper amountMapper sets the scale of tender amount to four to fit the need.

The value of TenderSign field will be P when tender amount is positive, N when tender amount is negative. It is done in SignMapper.

There is a special tender line which is used for transaction rounded off amount. For detail information, refer to the next section.

## Rounded Off Amount

Transaction rounded amount is used to balance off a transaction. The amount comes from the following areas.

- Rounded amount from roundedTotal@RetailTransactionType Poslog object.
- Total tax amount from the sum of amount@TaxType of each tax LineItem of RetailTransactionType Poslog object.
- Total sale return line item tax amount from the sum of amount@TaxType of SaleType of LineItem of RetailTransactionType Poslog object.

Transaction rounded off amount = value of 1 + (value of 2 - value of 3).

RTLog exports line item taxes rather than exports transaction level taxes. The reason is that the payment amount in an order transaction includes a certain percentage of item price and tax amount. When doing a pickup, the transaction level tax is not zero, and the payment already includes the part of the tax. The total tax will be more than the value is supposed to be. The transaction will not balance off.

A special RECORD\_FORMAT TransactionTenderRoundedOff is created for this purchase. The syntax of the format is exactly the same as the one for TransactionTender. The TenderTypeGroup is always set to CASH and TenderTypeID is always 1020. TenderAmount of TransactionTenderRoundedOff is the transaction rounded of amount, TenderSign is the transaction rounded of amount sign. RoundedOffAmountMapper accumulates the rounded amounts based on the algorithm above and sets the value and sign to TenderAmount and TenderSign fields.

This special tender line will not be exported for suspended, cancelled and post void transactions. It is disabled in retailTrnDetailExportabilityMapper. It will not be exported when the total rounded amount is zero.

# B

## Appendix: Flat File Mapping

This appendix describes the mapping from the RMS and RPM flat file format to the Xstore database format. Details are provided for the following mappings:

- [RMS Diff Group Detail](#)
- [RMS Diff Group Header](#)
- [RMS Diffs](#)
- [RMS Item Header](#)
- [RMS Item Location](#)
- [RMS Merchandise Hierarchy](#)
- [RMS Organizational Hierarchy](#)
- [RMS Related Item Detail](#)
- [RMS Related Item Header](#)
- [RMS Store](#)
- [RMS Store Address](#)
- [RMS VAT](#)
- [RMS VAT Item](#)
- [RPM Clearance Price](#)
- [RPM Regular Price](#)
- [RPM Promotions](#)

### RMS Diff Group Detail

[Table B-1](#) describes the RMS Diff Group Detail mapping.

**Table B-1 RMS Diff Group Detail Mapping**

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                        | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|-------------|----------------------|------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 0           | Family               | Value is always DIFFGRPDTL. Data will always be present in this field. | Character            | 20                  | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-1 (Cont.) RMS Diff Group Detail Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table       | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment  |
|-------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------------|------------------|------------------------|----------------------------|--------------------|
| 1           | Type                 | Value is always FULL when the program is run in full mode.<br><br>If the program is run in delta mode, the type will vary based on the type of change (CRE, MOD, DEL). Valid values are:<br>DIFFGRPDTLCRE - Creation of diff group group header information.<br>DIFFGRPDTLMOD - Modification of diff group header information.<br>DIFFGRPDTLDEL - Deletion of diff group header information.<br><br>Data will always be present in this field. | Character            | 15                  | NA                    | NA               | NA                     | NA                         | Determines action. |
| 2           | DiffGroupld          | This field holds the ID of the diff group.<br><br>Data will always be present in this field.                                                                                                                                                                                                                                                                                                                                                   | Character            | 10                  | rms_diff_group_detail | DIFF_GROUP_ID    | VARCHAR2(10 CHAR)      | NA                         | NA                 |
| 3           | Diffld               | This field holds a unique number ID for the diff.<br><br>Data will always be present in this field.                                                                                                                                                                                                                                                                                                                                            | Character            | 10                  | rms_diff_group_detail | DIFF_ID          | VARCHAR2(10 CHAR)      | NA                         | NA                 |
| 4           | Display Seq          | Optional sequence to describe the order in which diffs within the diff group should be displayed in user interfaces.<br><br>Data is optional in this field.                                                                                                                                                                                                                                                                                    | Character            | 4                   | rms_diff_group_detail | DISPLAY_SEQ      | NUMBER(4)              | NA                         | NA                 |
| NA          | NA                   | NA                                                                                                                                                                                                                                                                                                                                                                                                                                             | NA                   | NA                  | rms_diff_group_detail | CREATE_DATE      | TIMESTAMP(6)           | now()                      | NA                 |
| NA          | NA                   | NA                                                                                                                                                                                                                                                                                                                                                                                                                                             | NA                   | NA                  | rms_diff_group_detail | UPDATE_DATE      | TIMESTAMP(6)           | now()                      | NA                 |

# RMS Diff Group Header

Table B-2 describes the RMS Diff Group Header mapping.

**Table B-2 RMS Diff Group Header Mapping**

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                     | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table       | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment  |
|-------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------------|------------------|------------------------|----------------------------|--------------------|
| 0           | Family               | Value is always DIFFGRPHDR. Data will always be present in this field.                                                                                                                                                                                                                                                                                                                                                                                              | Character            | 20                  | NA                    | NA               | NA                     | NA                         | Ignored.           |
| 1           | Type                 | Value is always FULL when the program is run in full mode.<br><br>If the program is run in delta mode, the type will vary based on the type of change (CRE, MOD, DEL). Valid values are:<br><br>DIFFGRPHDRCRE<br>- Creation of diff group group header information.<br><br>DIFFGRPHDRMOD<br>- Modification of diff group header information.<br><br>DIFFGRPHDRDEL<br>- Deletion of diff group header information.<br><br>Data will always be present in this field. | Character            | 15                  | NA                    | NA               | NA                     | NA                         | Determines action. |
| 2           | DiffGroupld          | This field holds a unique number ID for the differentiator group. As primary ID, DiffGroupld cannot be modified.<br><br>Data will always be present in this field.                                                                                                                                                                                                                                                                                                  | Character            | 10                  | rms_diff_group_header | DIFF_GROUP_ID    | VARCHAR2(10 CHAR)      | NA                         | NA                 |

Table B-2 (Cont.) RMS Diff Group Header Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table       | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                   |
|-------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------------|------------------|------------------------|----------------------------|-----------------------------------------------------|
| 3           | DiffGroupDesc        | Description of the differentiator group (for example: Men's Shirt Sizes, Women's Shoe Sizes, Girls Dress Sizes, Shower Gel Scents, Yogurt Flavors, and so on). Data will always be present in this field in the DIFFGRPHDRCRE and DIFFGRPHDRMOD records.                                       | Character            | 120                 | rms_diff_group_header | DIFF_GROUP_DESC  | VARCHAR2(120 CHAR)     | NA                         | NA                                                  |
| 4           | DiffTypeId           | This field holds a value of the types of differentiators contained in this differentiator group including, but not limited to:<br>S - size<br>C - color<br>F - flavor<br>E - scent<br>P - pattern<br>Data will always be present in this field in the DIFFGRPHDRCRE and DIFFGRPHDRMOD records. | Character            | 6                   | rms_diff_group_header | DIFF_TYPE        | VARCHAR2(6 CHAR)       | NA                         | NA                                                  |
| 5           | DiffTypeDesc         | Contains the description of the differentiator type. Data will always be present in this field in the DIFFGRPHDRCRE and DIFFGRPHDRMOD records.                                                                                                                                                 | Character            | 120                 | NA                    | NA               | NA                     | NA                         | Ignored. It is already captured in the diff id tab. |
| NA          | NA                   | NA                                                                                                                                                                                                                                                                                             | NA                   | NA                  | rms_diff_group_header | CREATE_DATE      | TIMESTAMP(6)           | NA                         | NA                                                  |

Table B-2 (Cont.) RMS Diff Group Header Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table       | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|-------------|----------------------|-----------------|----------------------|---------------------|-----------------------|------------------|------------------------|----------------------------|-------------------|
| NA          | NA                   | NA              | NA                   | NA                  | rms_diff_group_header | UPDATE_DATE      | TIMESTAMP(6)           | NA                         | NA                |

## RMS Diffs

Table B-3 describes the RMS Diffs mapping.

Table B-3 RMS Diffs Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                             | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                  |
|-------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|------------------------------------------------------------------------------------|
| 0           | Family               | Value is always DIFFS. Data will always be present in this field.                                                                                                                                                                                                                                                                                                                           | Character            | 20                  | NA              | NA               | NA                     | NA                         | Ignored.                                                                           |
| 1           | Type                 | Value is always FULL when the program is run in full mode.<br><br>If the program is run in delta mode, the type will vary based on the type of change (CRE, MOD, DEL). Valid values are:<br><br>DIFFCRE - Creation of diff information.<br><br>DIFFMOD - Modification of diff information.<br><br>DIFFDEL - Deletion of diff information.<br><br>Data will always be present in this field. | Character            | 15                  | NA              | NA               | NA                     |                            | Determines action.                                                                 |
| 2           | DiffId               | Contains the unique ID of the diff.<br><br>Data will always be present in this field.                                                                                                                                                                                                                                                                                                       | Character            | 10                  | rms_diff_ids    | DIFF_ID          | VARCHAR2(10 CHAR)      | NA                         | Also used to populate rms_diff_group_detail for the default Diff Group membership. |

Table B-3 (Cont.) RMS Diffs Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                   | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                     |
|-------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-----------------------------------------------------------------------|
| 3           | DiffDesc             | Contains the text description of the diff.<br><br>Data will always exist in this field for DIFFCRE and DIFFMOD.                                                                                                                                                                                                                                                                                                                                                   | Character            | 120                 | rms_diff_ids    | DIFF_DESC        | VARCHAR2(120 CHAR)     | NA                         | NA                                                                    |
| 4           | DiffType             | Contains the type code for the diff. All diffs belong to one and only one type.<br><br>Data will always exist in this field for DIFFCRE and DIFFMOD.                                                                                                                                                                                                                                                                                                              | Character            | 6                   | rms_diff_ids    | DIFF_TYPE        | VARCHAR2(6 CHAR)       | NA                         | Also used to populate rms_diff_group_head for the default Diff Group. |
| 5           | DiffType Desc        | Contains the description of the diff.<br><br>Data will always exist in this field for DIFFCRE and DIFFMOD.                                                                                                                                                                                                                                                                                                                                                        | Character            | 120                 | rms_diff_ids    | DIFF_TYPE_DESC   | VARCHAR2(120 CHAR)     | NA                         | Also used to populate rms_diff_group_head for the default Diff Group. |
| 6           | Industry Code        | Can optionally hold the unique code used by industry standards to identify the differentiator. For example, in the US, the National Retail Federation defines a standard Color and Size Codes that gives retailers, vendors, and manufacturers a common language for product color and size identification for EDI purposes. This supplements the information conveyed by UPC codes. For example, mens pants size combination 32x32 has an NRF code number 10492. | Character            | 10                  | NA              | NA               | NA                     | NA                         | Ignored.                                                              |

Table B-3 (Cont.) RMS Diffs Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                      | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|-------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 7           | Industry<br>Subgroup | Can optionally hold a sub-grouping code used by industry standards to further identify the differentiator. For example, in the US, the National Retail Federation uses a subgroup for colors (for example, purple is defined as 500; dark purple represents a range from 501 to 509, medium purple represents a range from 510 to 519, bright purple represents a range from 520 to 529, and so on). | Character            | 10                  | NA              | NA               | NA                     | NA                         | Ignored.          |
| NA          | NA                   | NA                                                                                                                                                                                                                                                                                                                                                                                                   | NA                   | NA                  | rms_diff_ids    | CREATE_DATE      | TIMESTAMP(6)           | now()                      | NA                |
| NA          | NA                   | NA                                                                                                                                                                                                                                                                                                                                                                                                   | NA                   | NA                  | rms_diff_ids    | UPDATE_DATE      | TIMESTAMP(6)           | now()                      | NA                |

## RMS Item Header

Table B-4 describes the RMS Item Header mapping.

Table B-4 RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                   | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|-------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 0       | Family               | Value is always ITEMS. Data will always be present in this field. | Character            | 20                  | NA              | NA               | NA                     | NA                         | Ignored.          |

**Table B-4 (Cont.) RMS Item Header Mapping**

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                  | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table                                                                   | Xstore<br>Column                     | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                              |
|---------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------------------------------------------------------------------------|--------------------------------------|------------------------|----------------------------|--------------------------------------------------------------------------------|
| 1       | Type                 | Value is always FULLHDR when the program is run in full mode.<br><br>In delta mode, valid values are:<br>ITEMHDCRE<br>ITEMHDRMOD<br>ITEMHDRDEL<br><br>Data will always be present in this field. | Character            | 15                  | NA                                                                                | NA                                   | NA                     | NA                         | Determines action.                                                             |
| 2       | Location             | For corporate level files, this field holds the string CORPORATE. In location specific files, this field holds the numeric ID of the store of WH.                                                | Character            | 10                  | itm_item,<br>itm_item_<br>dimensio<br>n_value,<br>itm_item_<br>dimensio<br>n_type | ORG_CO<br>DE,<br>ORG_VA<br>LUE       | VARCHA<br>R(30)        | ""                         | Dimension Value and Dimension Type are only used for Style items.              |
| 3       | Item                 | ID of the item. This field will always have data.                                                                                                                                                | Character            | 25                  | itm_item,<br>itm_item_<br>dimensio<br>n_value,<br>itm_item_<br>dimensio<br>n_type | ITEM_ID,<br>DIMENSI<br>ON_SYS<br>TEM | VARCHA<br>R(60)        | NA                         | DIMENSIO<br>N_SYSTE<br>M is<br>populated<br>with ItemID<br>for Style<br>items. |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name    | RMS Description                                                                                                                                                                                                       | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table                               | Xstore<br>Column               | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                                                                                                                                                                                          |
|---------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------------------------------------|--------------------------------|------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4       | ItemPar<br>ent          | ID of the parent of the item. ItemParents can be used as a mechanism to group items together. The ItemParent will also exist as an Item in another row. Data is optional in this field for many items.                | Character            | 25                  | itm_item,<br>itm_item_<br>cross_ref<br>erence | PARENT_<br>ITEM_ID,<br>ITEM_ID | VARCHA<br>R(60)        | NA                         | If the record represents a UPC item, an itm_item_cross_reference record is created. Otherwise, the parent is stored in itm_item.parent_item_id. If a UPC item, ItemParent is set in itm_item_cross_reference.item_id, and the item is stored in itm_item_cross_reference.manufacturer_upc. |
| 5       | ItemGra<br>ndparen<br>t | ID of the grandparent of the Item. ItemGrandparents can be used as a mechanism to group items together. The ItemGrandparent will also exist as an Item in another row. Data is optional in this field for many items. | Character            | 25                  | NA                                            | NA                             | NA                     | NA                         | Ignored.                                                                                                                                                                                                                                                                                   |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                    | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 6       | PackInd              | This field indicates if the item is a pack. A pack is a type of item that acts as a collection of other items. Packs have a Y value. Regular items have an N value.<br><br>This field will always have data for the ITEMHDCRE and ITEMHDMOD records.                                                                                                                                               | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 7       | SimpleP<br>ackInd    | This field indicates if the pack item is a simple pack. A simple pack is a collection that consists of multiple of the same item (for example, 10 pack of the same item). Only simple packs have a Y value. Both complex packs (which consist of a mixture of different items) and regular items have an N value.<br><br>This field will always have data for the ITEMHDCRE and ITEMHDMOD records. | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                       |
|---------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|---------------------------------------------------------|
| 8       | ItemLevel            | <p>Number indicating in which of the three levels the item resides. The item level determines if the item stands alone or if it is part of a family of related items.</p> <p>The concept is best explained with the following typical (although not exhaustive) examples.</p> <p>Staple items generally have a item level = 1.<br/>UPCs for staple items generally have an item level = 2 (and the staple item is the UPC's parent item).</p> <p>Fashion styles generally have an item level = 1.<br/>Fashion skus generally have an item level = 2.<br/>UPCs for fashion skus generally have an item level = 3.</p> <p>Valid values are 1, 2, and 3.</p> <p>This field will always have data.</p> | Number               | 1                   | NA              | NA               | NA                     | NA                         | Used to distinguish Item from Style, and UPC from Item. |

**Table B-4 (Cont.) RMS Item Header Mapping**

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                       |
|---------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|---------------------------------------------------------|
| 9       | TranLevel            | <p>Number indicating which of the three levels of transactions occur for the item's group. The transaction level is the level at which the items inventory is tracked in the system. The transaction level item will be inventoried, counted, transferred, shipped, and so on. Only one level of the hierarchy of an item family may contain transaction level items.</p> <p>The concept is best explained with the following typical (although not exhaustive) examples.</p> <p>Staple items generally have a TranLevel = 1. UPCs for staple items generally have a TranLevel = 1 (inventory transactions occur at the staple sku level; sales of the item roll up to the parent staple sku).</p> <p>Fashion styles generally have a TranLevel = 2 (the style itself is not sold/inventoried).</p> <p>Fashion skus generally have an TranLevel = 2 (the fashion sku is sold/inventoried).</p> <p>UPCs for fashion skus generally have a TranLevel = 2 (the</p> | Number               | 1                   | NA              | NA               | NA                     | NA                         | Used to distinguish Item from Style, and UPC from Item. |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name             | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column             | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                     |
|---------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------------------|------------------------|----------------------------|---------------------------------------|
|         |                                  | fashion sku is sold/<br>inventoried).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                      |                     |                 |                              |                        |                            |                                       |
|         | TranLev<br>el<br>(Continu<br>ed) | There are some<br>rare cases in<br>vendor-managed<br>inventory where the<br>TranLevel equals 3.<br><br>Valid values are 1,<br>2, and 3.<br><br>This field will always<br>have data.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                      |                     |                 |                              |                        |                            |                                       |
| 10      | Inventor<br>yInd                 | This indicator is<br>used to determine if<br>inventory is held for<br>the item/item family.<br>Inventory is not held<br>(value = N) in some<br>cases, such as:<br><br>Concession items<br>that are sold by<br>independent in<br>location<br>concessions.<br><br>Consignment items<br>that are not owned<br>by the retailer;<br>financial and<br>inventory<br>processing occurs<br>after the item is sold<br>to a consumer.<br><br>Containers sold/<br>returned for deposit.<br>Some items that are<br>transformed for<br>sale.<br><br>Valid values are Y<br>and N.<br><br>This field will always<br>have data for the<br>ITEMHDCRE and<br>ITEMHDMOD<br>records. | Character            | 1                   | itm_item        | NOT_INV<br>ENTORIE<br>D_FLAG | NUMBE<br>R(1,0)        | NA                         | When N,<br>then 1;<br>otherwise<br>0. |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                      | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table         | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                                                                                                |
|---------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|------------------|------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11      | Diff1Level           | This field describes whether the Diff1 information represents a Diff Group or Diff ID. A Diff Group is a collection of possible Diff IDs. When assigned to a parent item, the diffs in the diff group limit the possible diff IDs that can be assigned to a child of the parent item. Valid Values are GROUP and ID. Data is optional in this field for many items.  | Character            | 6                   | NA                      | NA               | NA                     | NA                         | Used to identify Style Item. When GROUP, DataLoader fetches RMS DIFF Group Details to create Dimension System information. When ID, DataLoader fetches the Default DIFF Group for the Diff1Type. |
| 12      | Diff1Type            | This field contains the type of the Diff1 information. Valid values can be configured by the retailer. Common examples include:<br>C - Color<br>WS - Waist Sizes<br>F - Flavor<br>SC - Scent<br>Note that these examples are not consistent or required. They are presented here simply to help explain the field.<br>Data is optional in this field for many items. | Character            | 6                   | itm_item_dimension_type | DIMENSION        | VARCHAR2(30 CHAR)      | NA                         | Only used when Diff1Level is provided.                                                                                                                                                           |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                     | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                                                                                                |
|---------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13      | Diff1                | This field contains the ID of the Diff1 information. If the Diff1Level is GROUP, this field contains a Diff Group ID. If the Diff1Level is ID, it contains the ID of a diff (a size, color, and so on.) This field is optional.                                                                                                                                     | Character            | 10                  | itm_item        | DIMENSION1       | VARCHAR2(60 CHAR)      | NA                         | NA                                                                                                                                                                                               |
| 14      | Diff2Level           | This field describes whether the Diff2 information represents a Diff Group or Diff ID. A Diff Group is a collection of possible Diff IDs. When assigned to a parent item, the diffs in the diff group limit the possible diff IDs that can be assigned to a child of the parent item. Valid values are GROUP and ID. Data is optional in this field for many items. | Character            | 6                   | NA              | NA               | NA                     | NA                         | Used to identify Style Item. When GROUP, DataLoader fetches RMS DIFF Group Details to create Dimension System information. When ID, DataLoader fetches the Default DIFF Group for the Diff2Type. |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                      | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table         | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                      |
|---------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|------------------|------------------------|----------------------------|----------------------------------------|
| 15      | Diff2Type            | This field contains the type of the Diff2 information. Valid values can be configured by the retailer. Common examples include:<br>C - Color<br>WS - Waist Sizes<br>F - Flavor<br>SC - Scent<br>Note that these examples are not consistent or required. They are presented here simply to help explain the field.<br>Data is optional in this field for many items. | Character            | 6                   | itm_item_dimension_type | DIMENSION        | VARCHAR2(30 CHAR)      | NA                         | Only used when Diff2Level is provided. |
| 16      | Diff2                | This field contains the ID of the Diff2 information. If the Diff1Level is GROUP, this field contains a Diff Group ID. If the Diff1Level is ID, it contains the ID of a diff (a size, color, and so on).<br>Data is optional in this field for many items.                                                                                                            | Character            | 10                  | itm_item                | DIMENSION2       | VARCHAR2(60 CHAR)      | NA                         | NA                                     |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                      | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table         | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                                                                                                        |
|---------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|------------------|------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 17      | Diff3Level           | This field describes whether the Diff3 information represents a Diff Group or Diff ID. A Diff Group is a collection of possible Diff IDs. When assigned to a parent item, the diffs in the diff group limit the possible diff IDs that can be assigned to a child of the parent item. Valid values are GROUP and ID. Data is optional in this field for many items.  | Character            | 6                   | NA                      | NA               | NA                     | NA                         | Used to identify Style Item. When GROUP, DataLoader fetches the RMS DIFF Group Details to create the Dimension System information. When ID, DataLoader fetches the Default DIFF Group for the Diff3Type. |
| 18      | Diff3Type            | This field contains the type of the Diff3 information. Valid values can be configured by the retailer. Common examples include:<br>C - Color<br>WS - Waist Sizes<br>F - Flavor<br>SC - Scent<br>Note that these examples are not consistent or required. They are presented here simply to help explain the field.<br>Data is optional in this field for many items. | Character            | 6                   | itm_item_dimension_type | DIMENSION        | VARCHAR2(30 CHAR)      | NA                         | Only used when Diff3Level is provided.                                                                                                                                                                   |

**Table B-4 (Cont.) RMS Item Header Mapping**

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                           | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 19      | Diff3                | This field contains the ID of the Diff3 information. If the Diff1Level is GROUP, this field contains a Diff Group ID. If the Diff1Level is ID, it contains the ID of a diff (a size, color, and so on).<br>Data is optional in this field for many items.                                                                                                                 | Character            | 10                  | itm_item        | DIMENSION3       | VARCHAR2(60 CHAR)      | NA                         | NA                |
| 20      | Diff4Level           | This field describes whether the Diff4 information represents a Diff Group or Diff ID. A Diff Group is a collection of possible Diff IDs. When assigned to a parent item, the diffs in the diff group limit the possible diff IDs that can be assigned to a child of the parent item.<br>Valid values are GROUP and ID.<br>Data is optional in this field for many items. | Character            | 6                   | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                   | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column                       | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                                |
|---------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|----------------------------------------|------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 21      | Diff4Type            | This field contains the type of the Diff4 information. Valid values can be configured by the retailer. Common examples include: C - Color<br>WS - Waist Sizes<br>F - Flavor<br>SC - Scent<br>Note that these examples are not consistent or required. They are presented here simply to help explain the field.<br>Data is optional in this field for many items. | Character            | 6                   | NA              | NA                                     | NA                     | NA                         | Ignored.                                                                                                                         |
| 22      | Diff4                | This field contains the ID of the Diff4 information. If the Diff1Level is GROUP, this field contains a Diff Group ID. If the Diff1Level is ID, it contains the ID of a diff (a size, color, and so on).<br>Data is optional in this field for many items.                                                                                                         | Character            | 10                  | NA              | NA                                     | NA                     | NA                         | Ignored.                                                                                                                         |
| 23      | Dept                 | Number identifying the department in the merchandise hierarchy to which the item belongs.<br>If the item has a parent, the item's department will be the same as that of its parent.<br>This field will always have data for the ITEMHDRCRE and ITEMHDRMOD records.                                                                                               | Number               | 4                   | itm_item        | MERCH_LEVEL_2<br>(or configured level) | VARCHAR2(60<br>CHAR)   | NA                         | D is always appended to the value. The value is used to look up the parent from the loc_org_hierarchy to populate merch_level_1. |

**Table B-4 (Cont.) RMS Item Header Mapping**

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                             | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column                       | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                  |
|---------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|----------------------------------------|------------------------|----------------------------|------------------------------------|
| 24      | Class                | Number identifying the class in the merchandise hierarchy to which the item belongs.<br>If the item has a parent, the item's class will be the same as that of its parent.<br>This field will always have data for the ITEMHDRCRE and ITEMHDRMOD records.                                                   | Number               | 4                   | NA              | NA                                     | NA                     | NA                         | Ignored.                           |
| 25      | Unique<br>Class      | Number uniquely identifying the class node to which the item belongs.<br>Class ID is not unique in the level of the merchandise hierarchy. The combination of Dept/Class is unique, but requires the use of a composite key.<br>This field will always have data for the ITEMHDRCRE and ITEMHDRMOD records. | Number               | 10                  | itm_item        | MERCH_LEVEL_3<br>(or configured level) | VARCHAR2(60<br>CHAR)   | NA                         | C is always appended to the value. |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                  | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column                    | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                  |
|---------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|-------------------------------------|------------------------|----------------------------|------------------------------------|
| 26      | Subclas<br>s         | Number identifying the subclass in the merchandise hierarchy to which the item belongs.<br><br>Subclass ID is not unique in the level of the merchandise hierarchy. The combination of Dept/Class/Subclass is unique.<br><br>If the item has a parent, the item's class will be the same as that of its parent.<br><br>This field will always have data for the ITEMHDCRE and ITEMHDMOD records. | Number               | 4                   | NA              | NA                                  | NA                     | NA                         | Ignored.                           |
| 27      | UniqueS<br>ubclass   | Number uniquely identifying the subclass node to which the item belongs.<br><br>Subclass ID is not unique in the level of the merchandise hierarchy. The combination of Dept/Class/Subclass is unique, but requires the use of a composite key.<br><br>This field will always have data for the ITEMHDCRE and ITEMHDMOD records                                                                  | Character            | 10                  | itm_item        | MERCH_LEVEL_4 (or configured level) | VARCHAR2(60 CHAR)      | NA                         | S is always appended to the value. |

**Table B-4 (Cont.) RMS Item Header Mapping**

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                 | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table  | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                |
|---------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|------------------|------------------|------------------------|----------------------------|----------------------------------------------------------------------------------|
| 28      | Status               | Item life cycle status of the item.<br><br>For this release, this field always contains the character A as only approved items are exported.<br><br>This field will always have data for the ITEMHDRCRE and ITEMHDRMOD records. | Character            | 1                   | NA               | NA               | NA                     | NA                         | Ignored.                                                                         |
| 29      | ItemDesc             | Long description of the item.<br><br>This field will always have data for the ITEMHDRCRE and ITEMHDRMOD records.                                                                                                                | Character            | 250                 | com_translations | TRANSLATION      | VARCHAR2(4000 CHAR)    | NA                         | If Location is CORPORATE, the com_translations record is created using ItemDesc. |
| 30      | SecondaryItemDesc    | Secondary description of the item.<br><br>Data is optional in this field.                                                                                                                                                       | Character            | 250                 | NA               | NA               | NA                     | NA                         | Ignored.                                                                         |
| 31      | ShortDescription     | Shortened item description.<br><br>This field will always have data for the ITEMHDRCRE and ITEMHDRMOD records.                                                                                                                  | Character            | 120                 | NA               | NA               | NA                     | NA                         | Ignored.                                                                         |
| 32      | BrandName            | This field contains the brand associated to an item.<br><br>Data is optional in this field.                                                                                                                                     | Character            | 30                  | NA               | NA               | NA                     | NA                         | Ignored.                                                                         |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                      |
|---------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|--------------------------------------------------------|
| 33      | Mercha<br>ndiseInd   | <p>Indicates if the item is a merchandise item (Y, N).</p> <p>Merchandise items are generally physical items (things that must be shipped/received and of which there is an inventory). Non-merchandise items are often items which do not have inventory. Common examples include extra fees for service (extended warranties, alterations) or endlessly available items (downloads, in-app purchases of bonus content, subscriptions).</p> <p>All items, both merchandise and non-merchandise, are exported from RMS.</p> <p>This field will always have data for all records.</p> | Character            | 1                   | NA              | NA               | NA                     | NA                         | If N, then NON_PHYSICAL item so the record is skipped. |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name      | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                         | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 34      | Primary<br>RefIteml<br>nd | Indicates if the sub-transaction level item is designated as the primary sub-transaction level item.<br><br>For transaction level items and above, the value in this field will be N.<br><br>For sub-transaction level items, this field may be either Y (if the current record is a primary UPC) or N (if the current record is not the primary UPC).<br><br>This field will always have data for the ITEMHDCRE and ITEMHDMOD records. | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 35      | CostZon<br>eGroupl<br>d   | Cost zone group associated with the item for ELC calculations.<br><br>Data is optional in this field.                                                                                                                                                                                                                                                                                                                                   | Number               | 4                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 36      | Standar<br>dUOM           | Unit of measure in which stock of the item is tracked at a corporate level.<br><br>Unit of measure may have to be manually synchronized between the systems as this is foundation data that is not currently bulk integrated out of Merchandising.<br><br>This field will always have data for the ITEMHDCRE and ITEMHDMOD records.                                                                                                     | Character            | 4                   | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                             | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 37      | UOMConvFactor        | Conversion factor between an Each and the standard_uom when the standard_uom is not in the quantity class (such as if standard_uom = lb and 1 lb = 10 eaches, this factor will be 10). This factor is used to convert sales and stock data when an item is retailed in eaches, but does not have eaches as its standard unit of measure.<br>Data is optional in this field. | Number               | 20                  | NA              | NA               | NA                     | NA                         | Ignored.          |
| 38      | Package Size         | Holds the size of the product printed on any packaging (for example, 24 ounces). This field can be used for reporting purposes and to determine same sized and different sized items.<br>Data is optional in this field.                                                                                                                                                    | Number               | 12                  | NA              | NA               | NA                     | NA                         | Ignored.          |
| 39      | Package UOM          | Holds the unit of measure associated with the package size. This field can be used for reporting purposes and to determine same sized and different sized items.<br>Data is optional in this field.                                                                                                                                                                         | Character            | 4                   | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name                   | RMS Description                                                                                                                                                                                                          | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 40      | StoreOr<br>dMulti                      | Merchandise shipped from the warehouses to the stores must be specified in this unit type. Valid values are: C = Cases; I = Inner; E = Eaches. This field will always have data for the ITEMHDCRE and ITEMHDMOD records. | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 41      | Forecas<br>tInd                        | Indicates if sales forecasts will be produced for this item. Valid values are: Y, N. This field will always have data for the ITEMHDCRE and ITEMHDMOD records.                                                           | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 42      | Original<br>Retail                     | The original retail price of the item per unit. This field is stored in the primary currency of the Merchandising systems. Data is optional in this field.                                                               | Number               | 20                  | NA              | NA               | NA                     | NA                         | Ignored.          |
| 43      | Original<br>RetailCu<br>rrencyC<br>ode | The currency code of the OriginalRetail. Data is optional in this field.                                                                                                                                                 | Character            | 3                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 44      | MfgRec<br>Retail                       | Data is optional in this field.                                                                                                                                                                                          | Number               | 20                  | itm_item        | LIST_PRI<br>CE   | NUMBE<br>R(17,6)       | NA                         | NA                |
| 45      | MfgRec<br>RetailCu<br>rrencyC<br>ode   | The currency code of the MfgRecRetail. Data is optional in this field.                                                                                                                                                   | Character            | 3                   | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name     | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 46      | RetailLa<br>belType      | This field indicates any special label type associated with an item (that is, pre-priced or cents off). This field is used in RMS for reporting purposes only.<br><br>Data is optional in this field.                                                                                                                                                                                                                                                                                                                                                                                  | Character            | 6                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 47      | RetailLa<br>belValue     | This field represents the value associated with the RetailLabelType.<br><br>Data is optional in this field.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Number               | 20                  | NA              | NA               | NA                     | NA                         | Ignored.          |
| 48      | ItemAgg<br>regateIn<br>d | This field holds an indicator of whether the retailer wants to aggregate inventory and sales for the item with the inventory and sales of other child items.<br><br>For staple items, this indicator is N. For fashion items, this indicator may be Y. If this indicator is Y, the retailer may also define which diff positions should be aggregated into item/diff combinations.<br><br>Aggregated sales and inventory planning data can be used for inventory decision making and other reporting.<br><br>This field will always have data for the ITEMHDCRE and ITEMHDMOD records. | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |

**Table B-4 (Cont.) RMS Item Header Mapping**

| Po<br>s | RMS<br>Field<br>Name      | RMS Description                                                                                                                                                                                                                                                                                                                                                                        | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 49      | Diff1Agg<br>regateIn<br>d | This field holds an indicator (Y/N) of whether the retailer wants to aggregate inventory and sales for the item by the first Diff defined for the item (such as Style/Color).<br><br>Aggregated sales and inventory planning data can be used for inventory decision making and other reporting.<br><br>This field will always have data for the ITEMHDCRE and ITEMHDMOD records.      | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 50      | Diff2Agg<br>regateIn<br>d | This field holds an indicator (Y/N) of whether the retailer wants to aggregate inventory and sales for the item by the first Diff defined for the item (such as Style/Waist Size).<br><br>Aggregated sales and inventory planning data can be used for inventory decision making and other reporting.<br><br>This field will always have data for the ITEMHDCRE and ITEMHDMOD records. | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name      | RMS Description                                                                                                                                                                                                                                                                                                                                                                     | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 51      | Diff3Agg<br>regateIn<br>d | This field holds an indicator (Y/N) of whether the retailer wants to aggregate inventory and sales for the item by the first Diff defined for the item (such as Style/Inseam).<br><br>Aggregated sales and inventory planning data can be used for inventory decision making and other reporting.<br><br>This field will always have data for the ITEMHDCRE and ITEMHDMOD records.  | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 52      | Diff4Agg<br>regateIn<br>d | This field holds an indicator (Y/N) of whether the retailer wants to aggregate inventory and sales for the item by the first Diff defined for the item (such as Style/Pattern).<br><br>Aggregated sales and inventory planning data can be used for inventory decision making and other reporting.<br><br>This field will always have data for the ITEMHDCRE and ITEMHDMOD records. | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 53      | ItemNu<br>mberType   | <p>This field holds a code descriptor of the type of item number. Valid values for this field include, but are not limited to:</p> <p>ITEM - Oracle Retail Item Number</p> <p>UPC-A - UCC12</p> <p>UPC-AS - UCC12 with Supplement</p> <p>UPC-E - UCC8</p> <p>UPC-ES - UCC8 with Supplement</p> <p>EAN8 - EAN/UCC-8</p> <p>EAN13 - EAN/UCC-13</p> <p>EAN13S - EAN/UCC-13 with Supplement</p> <p>ISBN10 - SBN-10</p> <p>ISBN13 -</p> <p>ISBN-13NDC -</p> <p>NDC/NHRIC -</p> <p>National Drug Code</p> <p>PLU - PLU</p> <p>VPLU - Variable Weight PLU</p> <p>SSCC - SSCC Shipper Carton</p> <p>UCC14 - EAN/UCC-14</p> <p>MANL - Manual</p> <p>This field will always have data for the ITEMHDCRE and ITEMHDRMOD records.</p> | Character            | 6                   | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 54      | FormatID             | <p>This field holds the format ID that corresponds to the item's variable UPC. This value is only used for items with variable weight PLU/variable weight UPCs (ItemNumberType = VPLU). Valid values include, but are not limited to:</p> <p>A 1-4-6-1<br/>B 1-5-5-1<br/>C 1-4-6-1<br/>D 1-5-5-1<br/>E 2-4-5-1<br/>F 2-4-5-1<br/>G 2-5-4-1<br/>H 2-5-5-1<br/>I 2-4-6-1<br/>J 2-4-6-1<br/>K 2-5-5-1</p> <p>In the case of a type A, this means the total barcode will be at least 6 digits. The prefix of the barcode will be 1 digit in the first position. The item ID is 4 digits and will be in digits 2 to 5 of the barcode. The variable weight will start in digit 6 of the barcode and be at least 1 (possibly more digits).</p> <p>Data is optional in this field, and can only exist for the ItemNumberType = VPLU.</p> | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |

**Table B-4 (Cont.) RMS Item Header Mapping**

| Po<br>s | RMS<br>Field<br>Name    | RMS Description                                                                                                                                                                                                                                                                               | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 55      | Prefix                  | This column holds the prefix for variable weight UPCs. The size of the prefix (1 or 2 digits) depends on the FormatID. The prefix is used to standardize variable weight UPCs.<br><br>Data is optional in this field, and can only exist for the ItemNumberType = VPLU.                       | Number               | 2                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 56      | RecHan<br>dlingTe<br>mp | Holds the temperature information associated with the item. Valid values include, but are not limited to:<br><br>FRIDGE - Keep Refrigerated at 35°F/1.6°C<br><br>FROZEN - Keep Frozen at 0°F/-18C<br><br>ROOM - Keep at Room Temperature<br><br>Data is optional in this field.               | Character            | 6                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 57      | RecHan<br>dlingSe<br>ns | Holds the sensitivity information associated with the item. Valid values include, but are not limited to:<br><br>AERO - Aerosol Container - flammable<br><br>COMPUS - Combustible<br><br>EXPLOD - Explosive<br><br>FRAG - Fragile<br><br>TOXIC - Toxic<br><br>Data is optional in this field. | Character            | 6                   | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 58      | Perisha<br>bleInd    | Grocery item attribute used to indicate whether an item is perishable. Valid values are Y and N.<br><br>This field will always have data for the ITEMHDCRE and ITEMHDMOD records.                                                                                                                                                                                                                                                                                                  | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 59      | WasteTy<br>pe        | Identifies the wastage type as either sales or spoilage wastage. Sales wastage occurs during processes that make an item saleable (for example, fat is trimmed off at customer request). Spoilage wastage occurs during the products shelf life (for example, evaporation causes the product to weigh less after a period of time).<br><br>Valid values are:<br>SP - Spoilage<br>SL - Sales<br><br>Wastage is not applicable to pack items.<br><br>Data is optional in this field. | Character            | 6                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 60      | WasteP<br>ct         | Average percent of wastage for the item over its shelf life. Used in inflating the retail price for wastage items.<br><br>Data is optional in this field.                                                                                                                                                                                                                                                                                                                          | Number               | 12                  | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name     | RMS Description                                                                                                                                                                                                                                                         | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 61      | Default<br>WasteP<br>ct  | Default daily<br>wastage percent for<br>spoilage type<br>wastage items. This<br>value defaults to all<br>item locations and<br>represents the<br>average amount of<br>wastage that occurs<br>on a daily basis.<br>Data is optional in<br>this field.                    | Number               | 12                  | NA              | NA               | NA                     | NA                         | Ignored.          |
| 62      | Constan<br>tDimInd       | This field will always<br>have data.                                                                                                                                                                                                                                    | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 63      | Contain<br>sInnerIn<br>d | Indicates that the<br>dimensions of the<br>product are always<br>the same,<br>regardless of the<br>supplier. Valid<br>values are Y and N.<br>This field will always<br>have data for the<br>ITEMHDCRE and<br>ITEMHDMOD<br>records.                                      | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 64      | SellableI<br>nd          | Indicates if the item<br>may be sold as a<br>unit. If it is Y, the<br>item will have its<br>own unique unit<br>retail. If it is N, the<br>item will not have a<br>unit retail.<br>This field will always<br>have data for the<br>ITEMHDCRE and<br>ITEMHDMOD<br>records. | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 65      | Orderab<br>leInd     | Indicates if the item<br>may be ordered as<br>a unit.<br><br>Valid values are:<br><br>Y - Yes, this item/<br>pack may be<br>ordered from a<br>single supplier.<br><br>N - No, this item/<br>pack may not be<br>ordered from a<br>single supplier.<br><br>Non-orderable<br>items might be<br>transformed or<br>produced (in- house<br>bakery items for<br>example) by the<br>retailer. Examples<br>might include, but<br>are not limited to:<br><br>Ground beef item is<br>not orderable<br>because the retailer<br>orders a side of<br>beef and transforms<br>it into ground beef.<br><br>In-house bakery<br>items are not<br>orderable because<br>the retailer<br>produces them in<br>house.<br><br>This field will always<br>have data for the<br>ITEMHDCRE and<br>ITEMHDMOD<br>records. | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |

**Table B-4 (Cont.) RMS Item Header Mapping**

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 66      | PackType             | <p>Indicates if a pack item is a vendor pack or a buyer pack.</p> <p>A vendor pack is a pack that the vendor or supplier recognizes and sells to the retailer. If the pack item is a vendor pack, communication with the supplier will use the vendor pack number.</p> <p>A buyer pack is a pack that a buyer has created for ease of use within the retail business. If the pack item is a buyer pack, communication with the supplier will explode the pack out to its component items.</p> <p>This field will only contain data if the item is a pack item. If the pack item is not orderable, this field must be NULL. Valid values are: V - Vendor, B - Buyer. Data is optional in this field.</p> | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name     | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                           | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 67      | OrderAs<br>Type          | Indicates if a pack item is receivable at the component level or at the pack level (for a buyer pack only). This field is required if a pack item is an orderable buyer pack. This field must be NULL if the pack is sellable only or a vendor pack. This field will only be available if the item is a pack item. Valid values are:<br><br>E - Eaches (component level)<br>P - Pack (buyer pack only)<br>Data is optional in this field. | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 68      | ItemSer<br>viceLev<br>el | Default shipping option for consumers. Valid values include, but are not limited to:<br>2DAY - Second Day<br>GRND - Ground<br>OVRNT - Overnight<br>POVRNT - Priority Overnight<br>Data is optional in this field.                                                                                                                                                                                                                         | Character            | 6                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 69      | GiftWra<br>pInd          | This field contains a value of Y if the item is eligible to be gift wrapped. If not explicitly defined, this field defaults to N.<br><br>This field will always have data for the ITEMHDCRE and ITEMHDMOD records.                                                                                                                                                                                                                        | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                        | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 70      | ShipAloneInd         | This field contains a value of Y if the item must be shipped alone to consumers. If not explicitly defined, this field defaults to N.<br><br>This field will always have data for the ITEMHDRCRE and ITEMHDRMOD records.                                                                                                                                                                                               | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 71      | ItemXformInd         | This field contains a value of Y if the item is associated with an item transformation. The item will either be the sellable item or orderable item in the transformation process.<br>Transformations include a side of beef (orderable transformation item) cut into steaks/ground beef and so on (sellable transformation items).<br><br>This field will always have data for the ITEMHDRCRE and ITEMHDRMOD records. | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 72      | CatchWeightInd       | Indicates whether the item should be weighed when it arrives at a location. Valid values for this field are Y and N.<br><br>This field will always have data for the ITEMHDRCRE and ITEMHDRMOD records.                                                                                                                                                                                                                | Character            | 1                   | itm_item        | MEASURE_REQ_FLAG | NUMBER(1,0)            | NA                         | If Y, then 1.     |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                            | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 73      | CatchWeightType      | This field holds the catch weight type for a simple pack catch weight item. The value is based on the component items order_type and sale_type.<br><br>2 - order_type = Variable Weight, sale_type = Loose Weight<br><br>4 - order_type = Variable Weight, sale_type = Variable Weight Each<br><br>Data is optional in this field and will only exist for catch weight, simple pack items. | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 74      | CatchWeightOrderType | This field holds a code that indicates how catch weight items are ordered. Valid values are:<br>F - Fixed weight<br>V - Variable weight<br>Data is optional in this field and will only exist for catch weight items.                                                                                                                                                                      | Character            | 6                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 75      | CatchWeightSaleType  | This field holds a code that indicates how catch weight items are sold in store locations. Valid values are:<br>V - variable weight each<br>L - Loose weight<br>Data is optional in this field and will only exist for catch weight items.                                                                                                                                                 | Character            | 6                   | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name   | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 76      | CatchW<br>eightUO<br>M | UOM for<br>Catchweight Items.<br>Data is optional in<br>this field and will<br>only exist for catch<br>weight items.                                                                                                                                                                                                                                                                                                                                                                          | Character            | 4                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 77      | Depositl<br>temType    | This is the deposit<br>item component<br>type.<br>A NULL value in<br>this field indicates<br>that this item is not<br>part of a deposit<br>item relationship.<br>Valid values<br>include:<br>E - Contents<br>A - Container<br>Z - Crate<br>T - Returned Item<br>(Empty bottle)<br>P - Complex pack<br>(with deposit items)<br>The Returned Item<br>is flagged only to<br>enable these items<br>to be mapped to a<br>separate GL<br>account if required.<br>Data is optional in<br>this field. | Character            | 6                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 78      | Contain<br>erItem      | This field holds the<br>container item<br>number for a<br>contents item. This<br>field is only<br>populated and<br>required if the<br>DepositItem type is<br>E. It will hold an<br>item number that<br>has a<br>DepositItem type of<br>A.<br>Data is optional in<br>this field.                                                                                                                                                                                                               | Character            | 25                  | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name    | RMS Description                                                                                                                                                                                                                                                                                                         | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 79      | Deposit<br>PricePerUOM  | This field indicates if the deposit amount is included in the price per UOM calculation for a contents item ticket. This value is only required if the DEPOSIT_ITEM_TYPE = E. Valid values are:<br>I - Includes deposit amount<br>E - Excludes deposit amount<br>Data is optional in this field.                        | Character            | 6                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 80      | SOHInq<br>uiryAtPackInd | This field indicates if stock on hand inquiries from downstream systems should be allowed at the pack level for this item. It defaults to N for non-pack items. This field will always have data for the ITEMHDCRE and ITEMHDRMOD records.                                                                              | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 81      | Notional<br>PackInd     | If this indicator is Y, SIM and other downstream systems should track pack inventory at the pack level. If the indicator is N, SIM and other downstream systems track inventory at the component level. It defaults to N for non-pack items. This field will always have data for the ITEMHDCRE and ITEMHDRMOD records. | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                           | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column  | Xstore<br>Data<br>Type    | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                                                                                                             |
|---------|----------------------|-----------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|-------------------|---------------------------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 82      | Comme<br>nts         | Holds any free-form<br>comments<br>associated with the<br>item.<br><br>Data is optional in<br>this field. | Character            | 2000                | NA              | NA                | NA                        | NA                         | Ignored.                                                                                                                                                                                                      |
| NA      | NA                   | NA                                                                                                        | NA                   | NA                  | itm_item        | MERCH_<br>LEVEL_1 | VARCHA<br>R2(60<br>CHAR)  | NA                         | Populated<br>by looking<br>up the<br>parent of<br>the<br>merch_leve<br>l_2 value in<br>loc_org_hie<br>rarchy.                                                                                                 |
| NA      | NA                   | NA                                                                                                        | NA                   | NA                  | itm_item        | ITEM_TY<br>PCODE  | VARCHA<br>R2(30<br>CHAR)  | STAND<br>ARD               | NA                                                                                                                                                                                                            |
| NA      | NA                   | NA                                                                                                        | NA                   | NA                  | itm_item        | DESCRIP<br>TION   | VARCHA<br>R2(254<br>CHAR) | NA                         | Contains<br>synthesized<br>Translation<br>key<br>following<br>the pattern:<br>"+item:<br>[ITEM<br>ID]:descripti<br>on". Key<br>maps to the<br>com_transl<br>ation record<br>populated<br>from RMS<br>ItemLoc. |
| NA      | NA                   | NA                                                                                                        | NA                   | NA                  | itm_item        | NAME              | VARCHA<br>R2(254<br>CHAR) | NA                         | Contains<br>synthesized<br>Translation<br>key<br>following<br>pattern:<br>"+item:<br>[ITEM<br>ID]:descripti<br>on". Key<br>maps to<br>com_transl<br>ation record<br>populated<br>from RMS<br>ItemLoc.         |

Table B-4 (Cont.) RMS Item Header Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table                                                                   | Xstore<br>Column        | Xstore<br>Data<br>Type   | Xstore<br>Default<br>Value                      | Xstore<br>Comment                        |
|---------|----------------------|-----------------|----------------------|---------------------|-----------------------------------------------------------------------------------|-------------------------|--------------------------|-------------------------------------------------|------------------------------------------|
| NA      | NA                   | NA              | NA                   | NA                  | itm_item,<br>itm_item_<br>dimensio<br>n_value,<br>itm_item_<br>dimensio<br>n_type | ORGANI<br>ZATION_I<br>D | NUMBE<br>R(10,0)         | \$<br>{dtv.locat<br>ion.org<br>anizatio<br>nId} | Always<br>uses<br>default<br>value.      |
| NA      | NA                   | NA              | NA                   | NA                  | itm_item,<br>itm_item_<br>dimensio<br>n_value,<br>itm_item_<br>dimensio<br>n_type | CREATE_<br>DATE         | TIMESTA<br>MP(6)         | now()                                           | Not set<br>when Type<br>=ITEMHDR<br>MOD. |
| NA      | NA                   | NA              | NA                   | NA                  | itm_item,<br>itm_item_<br>dimensio<br>n_value,<br>itm_item_<br>dimensio<br>n_type | CREATE_<br>USER_ID      | VARCHA<br>R2(30<br>CHAR) | DATALO<br>ADER                                  | Not set<br>when Type<br>=ITEMHDR<br>MOD. |
| NA      | NA                   | NA              | NA                   | NA                  | itm_item,<br>itm_item_<br>dimensio<br>n_value,<br>itm_item_<br>dimensio<br>n_type | UPDATE_<br>DATE         | TIMESTA<br>MP(6)         | now()                                           | Not set<br>when Type<br>=FULLHDR<br>.    |
| NA      | NA                   | NA              | NA                   | NA                  | itm_item,<br>itm_item_<br>dimensio<br>n_value,<br>itm_item_<br>dimensio<br>n_type | UPDATE_<br>USER_ID      | VARCHA<br>R2(30<br>CHAR) | DATALO<br>ADER                                  | Not set<br>when Type<br>=FULLHDR<br>.    |

## RMS Item Location

Table B-5 describes the RMS Item Location mapping.

**Table B-5 RMS Item Location Mapping**

| Pos | RMS Field Name | RMS Description                                                                                                                                                                            | RMS Field Type | RMS Max Width | Xstore Table     | Xstore Column | Xstore Data Type  | Xstore Default Value | Xstore Comment                      |
|-----|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|------------------|---------------|-------------------|----------------------|-------------------------------------|
| 0   | Family         | Value is always ITEMLOC. Data will always be present in this field.                                                                                                                        | Character      | 20            | NA               | NA            | NA                | NA                   | Ignored.                            |
| 1   | Type           | Value is always FULLITEMLOC when the program is run in full mode. In delta mode, valid values are:<br>ITEMLOCCRE<br>ITEMLOCMOD<br>ITEMLOCDEL<br>Data will always be present in this field. | Character      | 15            | NA               | NA            | NA                | NA                   | Determine s action.                 |
| 2   | LocType        | This field indicates whether the location is a Store or Warehouse. Valid values are:<br>S - Store<br>W - Warehouse<br>E - External Finisher<br>Data will always be present in this field.  | Character      | 1             | itm_item_options | LEVEL_CODE    | VARCHAR2(30 CHAR) | STORE                | If not S, entire record is ignored. |
| 3   | Location       | This field holds the numeric ID of the store of WH. Data will always be present in this field.                                                                                             | Number         | 10            | itm_item_options | LEVEL_VALUE   | VARCHAR2(30 CHAR) | NA                   | NA                                  |
| 4   | Item           | ID of the item. Data will always be present in this field.                                                                                                                                 | Character      | 25            | itm_item_options | ITEM_ID       | VARCHAR2(60 CHAR) | NA                   | NA                                  |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name  | RMS Description                                                                                                                                                                                                 | RMS Field Type | RMS Max Width | Xstore Table | Xstore Column | Xstore Data Type | Xstore Default Value | Xstore Comment                       |
|-----|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|--------------|---------------|------------------|----------------------|--------------------------------------|
| 5   | ItemParent      | ID of the parent of the item. Item parent does not vary by location, but is included in this feed as a denormalized convenience for downstream systems.<br>Data is optional in this field for many items.       | Character      | 25            | NA           | NA            | NA               | NA                   | Ignored, obtained from ItemHdr feed. |
| 6   | ItemGrandparent | ID of the grandparent of Item. Item grandparent does not vary by location, but is included in this feed as a denormalized convenience for downstream systems.<br>Data is optional in this field for many items. | Character      | 25            | NA           | NA            | NA               | NA                   | Ignored, obtained from ItemHdr feed. |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name    | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | RMS Field Type | RMS Max Width | Xstore Table | Xstore Column | Xstore Data Type | Xstore Default Value | Xstore Comment |
|-----|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|--------------|---------------|------------------|----------------------|----------------|
| 7   | InitialUnitRetail | <p>Initial Unit Retail of the item in the item's standard unit of measure.</p> <p>Data is optional in this field for some type of items. Data is only included in this field for the ITEMLOCCRE and FULLITEMLOC records.</p> <p>After initial item creation, unit retail and other pricing information should come from RPM. If this program is run in full mode and produces FULLITEMLOC records, a full extract from RPM of pricing should also be performed to update all price records.</p> | NA             | NA            | NA           | NA            | NA               | NA                   | Ignored.       |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name     | RMS Description                                                                                                                                                                                                                                                                                                                                                                                       | RMS Field Type | RMS Max Width | Xstore Table     | Xstore Column        | Xstore Data Type  | Xstore Default Value | Xstore Comment                                                                  |
|-----|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|------------------|----------------------|-------------------|----------------------|---------------------------------------------------------------------------------|
| 8   | Selling UnitRetail | Data is optional in this field for some type of items. Data is only included in this field for the ITEMLOCCRE and FULLITEMLOC records.<br>After initial item creation, unit retail and other pricing information should come from RPM. If this program is run in full mode and produces FULLITEMLOC records, a full extract from RPM of pricing should also be performed to update all price records. | Number         | 20            | itm_item_prices  | PRICE                | NUMBER(17,6)      | NA                   | When non-null, a Regular Price Event record will be created in itm_item_prices. |
| 9   | CurrencyCode       | Currency Code of retail values.<br>This field should be populated for the ITEMLOCCRE and FULLITEMLOC records that have InitialUnitRetail and SellingUnitRetail values.                                                                                                                                                                                                                                | NA             | NA            | NA               | NA                   | NA                | NA                   | Ignored.                                                                        |
| 10  | Selling UOM        | Data is optional in this field for some type of items. Data is only included in this field for the ITEMLOCCRE and FULLITEMLOC records.                                                                                                                                                                                                                                                                | Character      | 4             | itm_item_options | UNIT_OF_MEASURE_CODE | VARCHAR2(30 CHAR) | NA                   | NA                                                                              |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | RMS Field Type | RMS Max Width | Xstore Table     | Xstore Column | Xstore Data Type    | Xstore Default Value | Xstore Comment                                                                                                                                                                                                                                                                                                             |
|-----|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|------------------|---------------|---------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11  | Taxable Ind    | Indicates if the item is taxable at the location.<br><br>This field will always have data for FULLITEMLOC, ITEMLOCCRE, and ITEMLOCMOD.                                                                                                                                                                                                                                                                                                                                                                                                         | Character      | 1             | itm_item_options | TAX_GROUP_ID  | VARCHAR2(60 CHAR)   | 0                    | If N, then 0, or configured value, (dataloader-beans.xml).                                                                                                                                                                                                                                                                 |
| 12  | LocalItemDesc  | Contains the local description of the item. This may be the same as the primary description of the item, a regional description of the item (jimmies versus sprinkles in the US or roll versus bap versus cob versus bun in the UK), or a value in a local language (Overlay dress - true black knit at US stores versus Lagenkleid - Strick, tiefschwarz at stores in Germany).<br><br>The intent is that this string is appropriate to print this description on signage/receipts at this location.<br><br>This field will always have data. | Character      | 250           | com_translations | TRANSLATION   | VARCHAR2(4000 CHAR) | NA                   | If translated, ItemDescriptionsEnabled is true (see dataloader-beans.xml), and then com_translations record is created using ItemDesc. It is recommended that translated ItemDescriptionsEnabled be set to false when loading Xcenter because non-local descriptions are used in translation records when loading ItemHdr. |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name | RMS Description                                                                                                                                                                                                                                                                                                                                                               | RMS Field Type | RMS Max Width | Xstore Table | Xstore Column | Xstore Data Type | Xstore Default Value | Xstore Comment |
|-----|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|--------------|---------------|------------------|----------------------|----------------|
| 13  | LocalShorDesc  | May contain an abbreviated local description of the item. This may be the same as the primary abbreviated description of the item, an abbreviation of regional description of the item, or an abbreviation in a local language. The intent is that this string is appropriate to print this description on signage/receipts at this location. Data is optional in this field. | Character      | 120           | NA           | NA            | NA               | NA                   | Ignored.       |
| 14  | Ti             | Number of shipping units (cases) that make up one tier of a pallet of this item for this location. A location may use a local pallet configuration if there are special space or receiving configurations that make typical pallets impractical. Multiply TI by HI to get the total number of cases for a pallet. Data is optional in this field.                             | Number         | 12            | NA           | NA            | NA               | NA                   | Ignored.       |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name     | RMS Description                                                                                                                                                                                                                                                                                         | RMS Field Type | RMS Max Width | Xstore Table | Xstore Column | Xstore Data Type | Xstore Default Value | Xstore Comment |
|-----|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|--------------|---------------|------------------|----------------------|----------------|
| 15  | Hi                 | Number of tiers that make up a complete pallet (height). A location may use a local pallet configuration if there are special space or receiving configurations that make typical pallets impractical. Multiply T1 by HI to get the total number of cases for a pallet. Data is optional in this field. | Number         | 12            | NA           | NA            | NA               | NA                   | Ignored.       |
| 16  | StoreOrderMultiple | Contains the multiple in which the item needs to be shipped from a warehouse to the location. This field will always have data for FULLITEMLOC, ITEMLOCCRE, and ITEMLOCMOD.                                                                                                                             | Character      | 1             | NA           | NA            | NA               | NA                   | Ignored.       |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                             | RMS Field Type | RMS Max Width | Xstore Table     | Xstore Column                        | Xstore Data Type                      | Xstore Default Value | Xstore Comment                                                                                                                                                                                                         |
|-----|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|------------------|--------------------------------------|---------------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 17  | Status         | Current status of item at the location. Valid values are:<br>A - Active, item is valid and can be ordered and sold.<br>I - Inactive, item is valid, but cannot be ordered or sold.<br>C - Discontinued, item is valid and sellable, but no longer orderable .D - Delete, item is pending delete and cannot be ordered or sold.This field will always have data for FULLITEMLOC, ITEMLOCCRE, and ITEMLOCMOD. | Character      | 1             | itm_item_options | ITEM_AVAILABILITY_CODE, STOCK_STATUS | VARCHAR2(30) CHAR, VARCHAR2(60) CHAR) | NA                   | If itemLoc:status=A or C, the item_availability_code is Available. If itemLoc:status=I or D, the item_availability_code is NA. If itemLoc:status=C, the stock_status is DISCONTINUED. Otherwise, stock_status is null. |
| 18  | DailyWastePct  | Average percentage lost from inventory on a daily basis due to natural wastage.<br>Data is optional in this field.                                                                                                                                                                                                                                                                                          | Number         | 12            | NA               | NA                                   | NA                                    | NA                   | Ignored.                                                                                                                                                                                                               |
| 19  | MeasureOfEach  | Size of an each in terms of the uom_of_price, for example, 12 oz. This information can be used in ticketing and display to consumers.<br>Data is optional in this field.                                                                                                                                                                                                                                    | Number         | 12            | NA               | NA                                   | NA                                    | NA                   | Ignored.                                                                                                                                                                                                               |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name | RMS Description                                                                                                                                                                                                                                                                                         | RMS Field Type | RMS Max Width | Xstore Table | Xstore Column | Xstore Data Type | Xstore Default Value | Xstore Comment |
|-----|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|--------------|---------------|------------------|----------------------|----------------|
| 20  | MeasureOfPrice | Size to be used on the ticket in terms of the uom_of_price. For example, if the user wants the ticket to have the label print the price per ounce, this value would be 1. If the user wants the price per 100 grams, this value would be 100. Used in ticketing.<br><br>Data is optional in this field. | Number         | 12            | NA           | NA            | NA               | NA                   | Ignored.       |
| 21  | UomOfPrice     | Unit of measure that is used on the ticket for this item.<br><br>Data is optional in this field.                                                                                                                                                                                                        | Character      | 4             | NA           | NA            | NA               | NA                   | Ignored.       |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name  | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | RMS Field Type | RMS Max Width | Xstore Table | Xstore Column | Xstore Data Type | Xstore Default Value | Xstore Comment |
|-----|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|--------------|---------------|------------------|----------------------|----------------|
| 22  | Primary Variant | This field is used to address sales of PLUs (that is, above transaction level items) when inventory is tracked at a lower level (that is, UPC). This field only contains a value for items one level higher than the transaction level. Valid choices are any transaction level item that is a child of this item. In order to select a transaction level item as the primary variant, the item/location relationship must exist at the transaction level. When a transaction level item is specified as a primary variant for an item higher than the transaction level, an extra pos_mods record will be written. Both the transaction level item (that is, UPC) and the higher than transaction level item (that is, PLU) will be sent to the POS to allow the store to sell the PLU. The information sent for the PLU will be the same information sent for the transaction | Character      | 25            | NA           | NA            | NA               | NA                   | Ignored.       |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name   | RMS Description                                                                                                                                                                                                                                                                                                                                                          | RMS Field Type | RMS Max Width | Xstore Table | Xstore Column | Xstore Data Type | Xstore Default Value | Xstore Comment |
|-----|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|--------------|---------------|------------------|----------------------|----------------|
|     |                  | level item (that is, UPC).<br>Data is optional in this field.                                                                                                                                                                                                                                                                                                            |                |               |              |               |                  |                      |                |
| 23  | Primary CostPack | This field contains an item number that is a simple pack containing the item in the item column for this record. If populated, the cost of the future cost table will be driven from the simple pack and the deals and cost changes for the simple pack.<br>Data is optional in this field.                                                                              | Character      | 25            | NA           | NA            | NA               | NA                   | Ignored.       |
| 24  | Primary Supplier | Numeric identifier of the supplier who will be considered the primary supplier for the specified item/loc. The supplier/origin country combination will determine the value of the unit cost field on item_loc. If the supplier is changed and ELC = N, the unit cost field on item_loc will be updated with the new supplier's cost.<br>Data is optional in this field. | Number         | 10            | NA           | NA            | NA               | NA                   | Ignored.       |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name        | RMS Description                                                                                                                                                                                                                     | RMS Field Type | RMS Max Width | Xstore Table | Xstore Column | Xstore Data Type | Xstore Default Value | Xstore Comment |
|-----|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|--------------|---------------|------------------|----------------------|----------------|
| 25  | Primary OriginCountry | Contains the identifier of the origin country which will be considered the primary country for the specified item/location.<br>Data is optional in this field.                                                                      | Character      | 3             | NA           | NA            | NA               | NA                   | Ignored.       |
| 26  | ReceiveAsType         | This column determines whether the stock on hand for a pack component item or the buyer pack itself will be updated when a buyer pack is received at a warehouse. Valid values are Each or Pack.<br>Data is optional in this field. | Character      | 1             | NA           | NA            | NA               | NA                   | Ignored.       |
| 27  | InboundHandlingDays   | This field indicates the number of inbound handling days for an item at a warehouse type location.<br>Data is optional in this field.                                                                                               | Number         | 2             | NA           | NA            | NA               | NA                   | Ignored.       |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | RMS Field Type | RMS Max Width | Xstore Table | Xstore Column | Xstore Data Type | Xstore Default Value | Xstore Comment |
|-----|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|--------------|---------------|------------------|----------------------|----------------|
| 28  | Source Method  | This value is used to specify how the ad-hoc PO/TSF creation process should source the item/location request. If the value is Warehouse, the process will attempt to fill the request by creating a transfer from the warehouse in the source_wh field. If this warehouse does not have enough inventory to fill the request, a purchase order will be created for the item/location's primary supplier. For warehouses, it is used by Oracle Retail Allocation to determine the valid sources and destinations for warehouse to warehouse allocations. Data is optional in this field. | Character      | 1             | NA           | NA            | NA               | NA                   | Ignored.       |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name    | RMS Description                                                                                                                                                                                                                                                                                                              | RMS Field Type | RMS Max Width | Xstore Table | Xstore Column | Xstore Data Type | Xstore Default Value | Xstore Comment                                                                                                                                  |
|-----|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|--------------|---------------|------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 29  | Source Wh         | This value is used by the ad-hoc PO/ Transfer creation process to determine from which warehouse to fill the stores request. It is also used by the Allocation process to support warehouse to warehouse allocations. A value is required in this field if the sourcing method is Warehouse. Data is optional in this field. | Number         | 10            | NA           | NA            | NA               | NA                   | Ignored.                                                                                                                                        |
| 30  | UinType           | This column contains the unique identification number (UIN) used to identify the instances of the item at the location. Data is optional in this field.                                                                                                                                                                      | Character      | 6             | NA           | NA            | NA               | NA                   | Used to determine a Serialized Item. If empty, itm_item.serialized_item_flag is set to 0. Otherwise, itm_item.serialized_item_flag is set to 1. |
| 31  | UinLabel          | This column contains the label for the UIN when displayed in SIM. Data is optional in this field.                                                                                                                                                                                                                            | Character      | 6             | NA           | NA            | NA               | NA                   | Ignored.                                                                                                                                        |
| 32  | CaptureTimeInProc | This column indicates when the UIN should be captured for an item during transaction processing. Data is optional in this field.                                                                                                                                                                                             | Character      | 6             | NA           | NA            | NA               | NA                   | Ignored.                                                                                                                                        |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name         | RMS Description                                                                                                                                                                                                                                                                                          | RMS Field Type | RMS Max Width | Xstore Table | Xstore Column | Xstore Data Type | Xstore Default Value | Xstore Comment |
|-----|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|--------------|---------------|------------------|----------------------|----------------|
| 33  | ExtUinInd              | This Yes/No indicator indicates if the UIN is being generated in the external system.<br><br>This field will always have data for FULLITEMLOC, ITEMLOCCRE, and ITEMLOCMOD.                                                                                                                               | Character      | 1             | NA           | NA            | NA               | NA                   | Ignored.       |
| 34  | IntentionallyRangedInd | Determines if the location is ranged intentionally by the user for replenishment/ selling (Y) or incidentally ranged (N) by the RMS programs when the item is not ranged to a specific location on the transaction.<br><br>This field will always have data for FULLITEMLOC, ITEMLOCCRE, and ITEMLOCMOD. | Character      | 1             | NA           | NA            | NA               | NA                   | Ignored.       |
| 35  | Costing Location       | Numeric identifier of the costing location for the franchise store.<br><br>This field may contain a store or a warehouse.<br><br>Data is optional in this field.                                                                                                                                         | Number         | 10            | NA           | NA            | NA               | NA                   | Ignored.       |
| 36  | Costing LocType        | This field holds the type of costing location in the CostingLocation field.<br><br>Data is optional in this field.                                                                                                                                                                                       | Character      | 1             | NA           | NA            | NA               | NA                   | Ignored.       |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name     | RMS Description                                                                                                                                                                                                                                | RMS Field Type | RMS Max Width | Xstore Table     | Xstore Column                                        | Xstore Data Type | Xstore Default Value | Xstore Comment                                                                                           |
|-----|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|------------------|------------------------------------------------------|------------------|----------------------|----------------------------------------------------------------------------------------------------------|
| 37  | Launch Date        | Holds the date that the item should first be sold at the location; in the human readable format DD-MON-YYYY.<br><br>Data is optional in this field.                                                                                            | Character      | 12            | NA               | NA                                                   | NA               | NA                   | Ignored.                                                                                                 |
| 38  | QtyKey Options     | Determines whether the qty key on a POS should be used for this item at the location. Valid values include, but are not limited to:<br><br>R - Required<br>P - Prohibited<br>O - Optional<br><br>Data is optional in this field.               | Character      | 6             | itm_item_options | PROMPT_FOR_QUANTITY_FLAG, FORCE_QUANTITY_OF_ONE_FLAG | NUMBER(1,0)      | NA                   | PROMPT_FOR_QUANTITY_FLAG - 1 if R, otherwise 0.<br><br>FORCE_QUANTITY_OF_ONE_FLAG - 1 if P, otherwise 0. |
| 39  | Manual Price Entry | Determines whether the price can/should be entered manually on a POS for this item at the location. Valid values include, but are not limited to:<br><br>R - Required<br>P - Prohibited<br>O - Optional<br><br>Data is optional in this field. | Character      | 6             | itm_item_options | PROMPT_FOR_PRICE_FLAG                                | NUMBER(1,0)      | NA                   | 1 if R, otherwise 0.                                                                                     |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name | RMS Description                                                                                                                                                                                                                                                                                                    | RMS Field Type | RMS Max Width | Xstore Table     | Xstore Column           | Xstore Data Type | Xstore Default Value | Xstore Comment       |
|-----|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|------------------|-------------------------|------------------|----------------------|----------------------|
| 40  | Deposit Code   | Indicates if a deposit is associated with this item at the location. Deposits are not subtracted from the retail of an item uploaded to RMS, and so on. This kind of processing is the responsibility of the client and should occur before sales are sent to Sales Audit and RMS. Data is optional in this field. | Character      | 6             | NA               | NA                      | NA               | NA                   | Ignored.             |
| 41  | FoodStampInd   | Indicates whether the item is approved for food stamps at the location. This indicator does not impact processing in Sales Audit and RMS. Data is optional in this field.                                                                                                                                          | Character      | 1             | itm_item_options | FOODSTAMP_ELIGIBLE_FLAG | NUMBER(1,0)      | NA                   | 1 if Y, otherwise 0. |
| 42  | WicInd         | Indicates whether the item is approved for WIC at the location. This indicator does not impact processing in Sales Audit and RMS. Data is optional in this field.                                                                                                                                                  | Character      | 1             | NA               | NA                      | NA               | NA                   | Ignored.             |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name      | RMS Description                                                                                                                                                                                                                                                                                                                                                   | RMS Field Type | RMS Max Width | Xstore Table | Xstore Column | Xstore Data Type | Xstore Default Value | Xstore Comment |
|-----|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|--------------|---------------|------------------|----------------------|----------------|
| 43  | ProportionalTarePct | Holds the value associated for the packaging in items sold by weight at the location. The proportional tare is the proportion of the total weight of a unit of an item that is packaging (that is, if the tare item is bulk candy, this is the proportional of the total weight of one piece of candy that is the candy wrapper). Data is optional in this field. | Number         | 12            | NA           | NA            | NA               | NA                   | Ignored.       |
| 44  | FixedTareValue      | Holds the value associated for the packaging in items sold by weight at the location. Fixed tare is the tare of the packaging. This value is fixed, regardless of how much of the item is sold (that is, if the tare item is bulk candy, this is weight of the bag and twist tie). Data is optional in this field.                                                | Number         | 12            | NA           | NA            | NA               | NA                   | Ignored.       |
| 45  | FixedTareUom        | Holds the unit of measure value associated with the tare value. Data is optional in this field.                                                                                                                                                                                                                                                                   | Character      | 4             | NA           | NA            | NA               | NA                   | Ignored.       |

**Table B-5 (Cont.) RMS Item Location Mapping**

| Pos | RMS Field Name   | RMS Description                                                                                                                                           | RMS Field Type | RMS Max Width | Xstore Table     | Xstore Column          | Xstore Data Type  | Xstore Default Value | Xstore Comment                                                                                 |
|-----|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|------------------|------------------------|-------------------|----------------------|------------------------------------------------------------------------------------------------|
| 46  | Reward Eligible  | Holds whether the item is legally valid for various types of bonus point/award programs at the location.<br>Data is optional in this field.               | Character      | 1             | NA               | NA                     | NA                | NA                   | Ignored.                                                                                       |
| 47  | NatlBrandComItem | Holds the nationally branded item to which the current item should be compared.<br>Data is optional in this field.                                        | Character      | 25            | NA               | NA                     | NA                | NA                   | Ignored.                                                                                       |
| 48  | Return Policy    | Holds the return policy for the item at the location. Retailers may configure any number of return policies.<br>Data is optional in this field.           | Character      | 6             | NA               | NA                     | NA                | NA                   | Ignored.                                                                                       |
| 49  | StopSaleInd      | Indicates that sale of the item should be stopped immediately at the location (that is, in case of recall, and so on).<br>Data is optional in this field. | Character      | 1             | itm_item_options | ITEM_AVAILABILITY_CODE | VARCHAR2(30 CHAR) | NA                   | If stopSaleInd=Y, item_availability_code is RECALL. Otherwise, see the itemLoc:status mapping. |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name          | RMS Description                                                                                                                                                                      | RMS Field Type | RMS Max Width | Xstore Table | Xstore Column | Xstore Data Type | Xstore Default Value | Xstore Comment |
|-----|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|--------------|---------------|------------------|----------------------|----------------|
| 50  | ElectMktClub            | Holds the code that represents the marketing clubs to which the item belongs at the location. Retailers may configure any number of marketing clubs. Data is optional in this field. | Character      | 6             | NA           | NA            | NA               | NA                   | Ignored.       |
| 51  | Report Code             | Code to determine which reports the location should run. Data is optional in this field.                                                                                             | Character      | 6             | NA           | NA            | NA               | NA                   | Ignored.       |
| 52  | ReqShelfLifeOnSelection | Holds the required shelf life for an item on selection in days. This field is not required. Data is optional in this field.                                                          | Number         | 4             | NA           | NA            | NA               | NA                   | Ignored.       |
| 53  | ReqShelfLifeOnReceipt   | Holds the required shelf life for an item on receipt in days. Data is optional in this field.                                                                                        | Number         | 4             | NA           | NA            | NA               | NA                   | Ignored.       |
| 54  | IBShelfLife             | Holds the Investment Buy-specific shelf life for the item/ location in days. Data is optional in this field.                                                                         | Number         | 4             | NA           | NA            | NA               | NA                   | Ignored.       |

**Table B-5 (Cont.) RMS Item Location Mapping**

| Pos | RMS Field Name      | RMS Description                                                                                                                                                                      | RMS Field Type | RMS Max Width | Xstore Table | Xstore Column | Xstore Data Type | Xstore Default Value | Xstore Comment |
|-----|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|--------------|---------------|------------------|----------------------|----------------|
| 55  | StoreReorderableInd | Indicates whether the store may reorder the item. This field is required to be either Y - yes or N - no. The field defaults to N. Data is optional in this field.                    | Character      | 1             | NA           | NA            | NA               | NA                   | Ignored.       |
| 56  | RackSize            | Indicates the rack size that should be used for the item. This field is not required. Data is optional in this field.                                                                | Character      | 6             | NA           | NA            | NA               | NA                   | Ignored.       |
| 57  | FullPalletItem      | Indicates whether a store must reorder an item in full pallets only. This field is required to be either Y - yes or N - no. The field defaults to N. Data is optional in this field. | Character      | 1             | NA           | NA            | NA               | NA                   | Ignored.       |
| 58  | InStoreMarketBasket | Holds the in-store market basket code for this item/ location combination. Data is optional in this field.                                                                           | Character      | 6             | NA           | NA            | NA               | NA                   | Ignored.       |
| 59  | StorageLocation     | Holds the current storage location or bin number for the item at the location. Data is optional in this field.                                                                       | Character      | 7             | NA           | NA            | NA               | NA                   | Ignored.       |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name     | RMS Description                                                                                                               | RMS Field Type | RMS Max Width | Xstore Table     | Xstore Column       | Xstore Data Type | Xstore Default Value | Xstore Comment       |
|-----|--------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|------------------|---------------------|------------------|----------------------|----------------------|
| 60  | AltStorageLocation | Holds the preferred alternate storage location or bin number for the item at the location.<br>Data is optional in this field. | Character      | 7             | NA               | NA                  | NA               | NA                   | Ignored.             |
| 61  | ReturnableInd      | This field contains a value of Yes when the item can be returned to the location.<br>Data is optional in this field.          | Character      | 1             | itm_item_options | NOT_RETURNABLE_FLAG | NUMBER(1,0)      | NA                   | 1 if N, otherwise 0. |
| 62  | RefundableInd      | This field contains a value of Yes when the item is refundable at the location.<br>Data is optional in this field.            | Character      | 1             | NA               | NA                  | NA               | NA                   | Ignored.             |
| 63  | BackOrderInd       | This field contains a value of Yes when the item can be back-ordered to the location.<br>Data is optional in this field.      | Character      | 1             | NA               | NA                  | NA               | NA                   | Ignored.             |

Table B-5 (Cont.) RMS Item Location Mapping

| Pos | RMS Field Name          | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | RMS Field Type | RMS Max Width | Xstore Table                      | Xstore Column   | Xstore Data Type | Xstore Default Value            | Xstore Comment                                     |
|-----|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|-----------------------------------|-----------------|------------------|---------------------------------|----------------------------------------------------|
| 64  | Merch5<br>andisel<br>nd | Note that the MerchandiseInd does not vary by locations (items are not physical entities in one location and fees in another). The MerchandiseInd is denormalized to the item/location level because it is a common use case for some downstream systems to care only about physical or non-physical items. This field is denormalized to assist those systems in their filtering logic. All items, both merchandise and non-merchandise, are exported from RMS. This field will always have data for all records. | Character      | 1             | NA                                | NA              | NA               | NA                              | If N, then NON_PHYSICAL item so record is skipped. |
| 65  | ClearanceInd            | A flag indicating if the item is in clearance price or regular price. "Y" for clearance price and "N" for regular price.                                                                                                                                                                                                                                                                                                                                                                                           |                |               |                                   |                 |                  |                                 |                                                    |
|     | NA                      | NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | NA             | NA            | itm_item,<br>itm_item<br>_options | ORGANIZATION_ID | NUMBER(10,0)     | \${dtv.location.organizationId} | Always uses default value.                         |
|     | NA                      | NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | NA             | NA            | itm_item,<br>itm_item<br>_options | CREATE_DATE     | TIMESTAMP(6)     | now()                           | Not set when Type =ITEMLOCMOD.                     |

**Table B-5 (Cont.) RMS Item Location Mapping**

| Pos | RMS Field Name | RMS Description | RMS Field Type | RMS Max Width | Xstore Table               | Xstore Column  | Xstore Data Type  | Xstore Default Value | Xstore Comment                  |
|-----|----------------|-----------------|----------------|---------------|----------------------------|----------------|-------------------|----------------------|---------------------------------|
|     | NA             | NA              | NA             | NA            | itm_item, itm_item_options | CREATE_USER_ID | VARCHAR2(30 CHAR) | DATAL OADER          | Not set when Type =ITEMLOCMOD.  |
|     | NA             | NA              | NA             | NA            | itm_item, itm_item_options | UPDATE_DATE    | TIMESTAMP(6)      | now()                | Not set when Type =FULLITEMLOC. |
|     | NA             | NA              | NA             | NA            | itm_item, itm_item_options | UPDATE_USER_ID | VARCHAR2(30 CHAR) | DATAL OADER          | Not set when Type =FULLITEMLOC. |

## RMS Merchandise Hierarchy

Table B-6 describes the RMS Merchandise Hierarchy mapping.

**Table B-6 RMS Merchandise Hierarchy Mapping**

| Pos | RMS Field Name | RMS Description                 | RMS Field Type | RMS Max Width | Xstore Table        | Xstore Column | Xstore Data Type | Xstore Default Value | Xstore Comment                                                                                                      |
|-----|----------------|---------------------------------|----------------|---------------|---------------------|---------------|------------------|----------------------|---------------------------------------------------------------------------------------------------------------------|
| 0   | Family         | Value is always MERCHHIERARCHY. | Character      | 20            | ITM_MERCH_HEIRARCHY | NA            | NA               | NA                   | No need to store this information. This information is only consumed by the transformer to determine the feed type. |

Table B-6 (Cont.) RMS Merchandise Hierarchy Mapping

| P<br>os | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table     | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                     |
|---------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|---------------------|------------------|------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 1       | Type                 | <p>Value is always FULL when the program is run in full mode.</p> <p>If the program is run in delta mode, the type will vary, and be composed of the entity (DIVISION, GROUP, DEPT, CLASS, SUBCLASS) and the type of change (CRE, MOD, DEL). Examples include:</p> <p>DIVISIONCRE<br/>DIVISIONMOD<br/>DIVISIONDEL<br/>GROUPCRE<br/>GROUPMOD<br/>GROUPDEL<br/>DEPTCRE<br/>DEPTMOD<br/>DEPTDEL<br/>CLASSCRE<br/>CLASSMOD<br/>CLASSDEL<br/>SUBCLASSCRE<br/>SUBCLASSMOD<br/>SUBCLASSDEL</p> <p><b>Note:</b> Deleting a node of the merchandise hierarchy is unusual, and can only be done if no items are associated with the node.</p> | Character            | 15                  | ITM_MERCH_HIERARCHY | NA               | NA                     | NA                         | No need to store this information. This information is only consumed by the transformer to determine the action type. |

**Table B-6 (Cont.) RMS Merchandise Hierarchy Mapping**

| P<br>os | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                            | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table     | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                             |
|---------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|---------------------|------------------|------------------------|----------------------------|-----------------------------------------------|
| 2       | HierarchyLevel       | Value is always DIVISION, GROUP, DEPT, CLASS, SUBCLASS. This field cannot be null.<br><br>This information identifies the level of the merchandise hierarchy that is described by this record.<br><br>It is not possible to modify a HierarchyLevel on an existing record. | Character            | 10                  | ITM_MERCH_HIERARCHY | level_code       | VARCHAR2(30 CHAR)      | NA                         | level                                         |
| 3       | HierarchyNodeId      | HierarchyNodeId is only unique within a HierarchyLevel (meaning it is possible, for example, that there is both a DIVISION 1 and a GROUP 1 in the full merchandise hierarchy).<br><br>It is not possible to modify HierarchyNodeId on an existing record.                  | Number               | 10                  | ITM_MERCH_HIERARCHY | heirarchy_id     | VARCHAR2(60 CHAR)      | NA                         | heirarchy id+first letter of hierarchy level. |
| 4       | HierarchyNodeName    | Name of the organizational hierarchy entity. This field cannot be null.<br><br>Description data is only sent in the primary integration language of the system.<br><br>HierarchyNodeName can be modified.                                                                  | Character            | 150                 | ITM_MERCH_HIERARCHY | description      | VARCHAR2(254 CHAR)     | NA                         | node name                                     |

**Table B-6 (Cont.) RMS Merchandise Hierarchy Mapping**

| P<br>os | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                         | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table     | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                                                                                                |
|---------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|---------------------|------------------|------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5       | ParentLevel          | Level of the organizational hierarchy above the current node. Both ParentLevel and ParentId should be evaluated to correctly traverse the hierarchy.<br><br>It is not possible to modify ParentLevel on an existing record.                                             | Character            | 10                  | ITM_MERCH_HEIRARCHY | NA               | NA                     | NA                         | This ID is used to validate the parent child relationship. It is not persisted into the database, but plays a key role in the parent child relationship validation of the merchandise hierarchy. |
| 6       | ParentId             | ID of the level of the organizational hierarchy above the current node. Both ParentLevel and ParentId should be evaluated to correctly traverse the hierarchy.<br><br>ParentId can be modified, meaning it is possible to change the division to which a group belongs. | Number               | 10                  | ITM_MERCH_HEIRARCHY | parent_id        | VARCHAR2(60 CHAR)      | NA                         | parent heirarchy id                                                                                                                                                                              |

Table B-6 (Cont.) RMS Merchandise Hierarchy Mapping

| P<br>os | RMS<br>Field<br>Name                  | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 7       | Grandp<br>arentMe<br>rchDispl<br>ayId | Only populated for<br>SUBCLASS<br>entities. For<br>subclasses, this<br>column holds the<br>department ID used<br>for display<br>purposes in RMS<br>(department is the<br>grandparent of<br>subclass).<br><br>Note that in RMS,<br>dept, class, and<br>subclass display<br>IDs are combined<br>to form a composite<br>unique key. Every<br>department can<br>have a class 1.<br>Every class in<br>Department 1000<br>can have a<br>subclass 1. Looking<br>only at the display<br>IDs, all three values<br>are required for<br>uniqueness. | Number               | 4                   | NA              | NA               | NA                     | NA                         | NA                |

**Table B-6 (Cont.) RMS Merchandise Hierarchy Mapping**

| P<br>os | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 8       | parentMerchDisplayId | <p>Only populated for CLASS and SUBCLASS entities.</p> <p>For classes, this column holds the department ID used for display purposes in RMS (department is the parent of class).</p> <p>For subclasses, this column holds the class ID used for display purposes in RMS.</p> <p>Note that in RMS, dept, class, and subclass display IDs are combined to form a composite unique key. Every department can have a class 1. Every class in Department 1000 can have a subclass 1. Looking only at the display IDs, all three values are required for uniqueness.</p> | Number               | 4                   | NA              | NA               | NA                     | NA                         | NA                |

Table B-6 (Cont.) RMS Merchandise Hierarchy Mapping

| P<br>os | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table             | Xstore<br>Column   | Xstore<br>Data<br>Type   | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------------------|--------------------|--------------------------|----------------------------|-------------------|
| 9       | merchDi<br>splayId   | Only populated for DEPARTMENT, CLASS, and SUBCLASS entities.<br><br>For departments, this column holds the department display ID.<br><br>For classes, this column holds the class display ID.<br><br>For subclasses, this column holds the subclass display ID.<br><br>Note that in RMS, dept, class, and subclass display IDs are combined to form a composite unique key. Every department can have a class 1. Every class in Department 1000 can have a subclass 1. Looking only at the display IDs, all three values are required for uniqueness. | Number               | 4                   | NA                          | NA                 | NA                       | NA                         | NA                |
|         | NA                   | NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | NA                   | NA                  | ITM_MER<br>CH_HEIR<br>ARCHY | CREATE_<br>DATE    | TIMESTA<br>MP(6)         | NA                         | NA                |
|         | NA                   | NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | NA                   | NA                  | ITM_MER<br>CH_HEIR<br>ARCHY | CREATE_<br>USER_ID | VARCHA<br>R2(30<br>CHAR) | NA                         | NA                |
|         | NA                   | NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | NA                   | NA                  | ITM_MER<br>CH_HEIR<br>ARCHY | UPDATE_<br>DATE    | TIMESTA<br>MP(6)         | NA                         | NA                |
|         | NA                   | NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | NA                   | NA                  | ITM_MER<br>CH_HEIR<br>ARCHY | UPDATE_<br>USER_ID | VARCHA<br>R2(30<br>CHAR) | NA                         | NA                |

## RMS Organizational Hierarchy

Table B-7 describes the RMS Organizational Hierarchy mapping.

**Table B-7 RMS Organizational Hierarchy Mapping**

| <b>P<br/>o<br/>s</b> | <b>RMS<br/>Field<br/>Name</b> | <b>RMS Description</b>        | <b>RMS<br/>Field<br/>Type</b> | <b>RMS<br/>Max<br/>Width</b> | <b>Xstore<br/>Table</b> | <b>Xstore<br/>Column</b> | <b>Xstore<br/>Data<br/>Type</b> | <b>Xstore<br/>Default<br/>Value</b> | <b>Xstore<br/>Comment</b> |
|----------------------|-------------------------------|-------------------------------|-------------------------------|------------------------------|-------------------------|--------------------------|---------------------------------|-------------------------------------|---------------------------|
| 0                    | Family                        | Value is always ORGHIERARCHY. | Character                     | 20                           | NA                      | NA                       | NA                              | NA                                  | Ignored.                  |

Table B-7 (Cont.) RMS Organizational Hierarchy Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment  |
|-------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|--------------------|
| 1           | Type                 | <p>Value is always FULL when the program is run in full mode.</p> <p>If the program is run in delta mode, the type will vary, and be composed of the entity (COMP, CHAIN, AREA, REGION, DISTRICT, STORE, WH) and the type of change (CRE, MOD, DEL). Examples include:</p> <p>COMPCRE - Creation of a Company node.</p> <p>COMPMOD - Modification of a Company node.</p> <p>CHAINCRE - Creation of Chain node.</p> <p>CHAINMOD - Modification of a Chain node.</p> <p>CHAINDEL - Delete of Chain node.</p> <p>AREACRE - Creation of an Area node.</p> <p>AREAMOD - Modification of Area node.</p> <p>AREADEL - Delete of Area node.</p> <p>REGIONCRE - Creation of Region node.</p> <p>REGIONMOD - Modification of Region node.</p> <p>REGIONDEL - Delete of Region node.</p> <p>DISTRICTCRE - Creation of District node.</p> | Character            | 15                  | NA              | NA               | NA                     | NA                         | Determines action. |

Table B-7 (Cont.) RMS Organizational Hierarchy Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                           | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table   | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                           |
|-------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------|------------------|------------------------|----------------------------|-------------------------------------------------------------|
|             | Type<br>(Continued)  | DISTRICTMOD - Modification of District node.<br>DISTRICTDEL - Delete of a District node.<br>STORECRE - Creation of a Store node.<br>STOREMOD - Modification of Store node.<br>STOREDEL - Delete of Store node.<br>WHCRE - Creation of WH node.<br>WHMOD - Modification of WH node.<br>WHDEL - Delete of WH node.<br><b>Note:</b> Deletion of Company node is not allowed. | NA                   | NA                  | NA                | NA               | NA                     | NA                         | NA                                                          |
| 2           | HierarchyLevel       | Value is always COMPANY, CHAIN, AREA, REGION, DISTRICT, STORE, or WAREHOUSE. This field cannot be null.<br>This information identifies the level of the organizational hierarchy that is described by this record.<br>It is not possible to modify a HierarchyLevel on an existing record.                                                                                | Character            | 10                  | loc_org_hierarchy | org_code         | VARCHAR2(30 CHAR)      | NA                         | For the root COMPANY node, the column is hard-coded as "*". |

Table B-7 (Cont.) RMS Organizational Hierarchy Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                        | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table   | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                            |
|-------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------|------------------|------------------------|----------------------------|--------------------------------------------------------------|
| 3           | HierarchyNodeId      | This information identifies the node of the organizational hierarchy that is described by this record. This field cannot be null.<br><br>HierarchyNodeid is only unique within a HierarchyLevel (meaning it is possible, for example, that there is both a DISTRICT 1 and a REGION 1 in the full organizational hierarchy).<br><br>It is not possible to modify HierarchyNodeid on an existing record. | Number               | 10                  | loc_org_hierarchy | org_code         | VARCHAR2(60 CHAR)      | NA                         | For the root COMPANY node, the column is hard-coded as "**". |
| 4           | HierarchyNodeName    | Name of the organizational hierarchy entity. This field cannot be null.<br><br>Description data is only sent in the primary integration language of the system.<br><br>HierarchyNodeName can be modified.                                                                                                                                                                                              | Character            | 150                 | loc_org_hierarchy | description      | VARCHAR2(254 CHAR)     | NA                         | NA                                                           |

Table B-7 (Cont.) RMS Organizational Hierarchy Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table   | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                                            |
|-------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------|------------------|------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| 5           | ParentLevel          | <p>Level of the organizational hierarchy above the current node. Both ParentLevel and ParentId should be evaluated to correctly traverse the hierarchy.</p> <p>ParentLevel is null for the COMPANY, but will exist for all other hierarchy levels. Warehouses always have the COMPANY node as their ParentLevel.</p> <p>It is not possible to modify ParentLevel on an existing record.</p>                                                                                                                                                | Character            | 10                  | loc_org_hierarchy | parent_code      | VARCHAR2(30 CHAR)      | NA                         | <p>For the root COMPANY node, the column is hard-coded as null.</p> <p>For the second level CHAIN node, the column is hard-coded to "*".</p> |
| 6           | ParentId             | <p>ID of the level of the organizational hierarchy above the current node. Both ParentLevel and ParentId should be evaluated to correctly traverse the hierarchy.</p> <p>ParentId is null for the COMPANY, but will exist for all other hierarchy levels. Warehouses always have the COMPANY node ID as their ParentId.</p> <p>ParentId can be modified, meaning it is possible to change the REGION ID that a DISTRICT ID belongs to (but a DISTRICT will always belong to a REGION as it is not possible to change the ParentLevel).</p> | Number               | 10                  | loc_org_hierarchy | parent_value     | VARCHAR2(60 CHAR)      | NA                         | <p>For the root COMPANY node, the column is hard-coded as null.</p> <p>For the second level CHAIN node, the column is hard-coded to "*".</p> |

Table B-7 (Cont.) RMS Organizational Hierarchy Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                               | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table   | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                          |
|-------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------|------------------|------------------------|----------------------------|------------------------------------------------------------------------------------------------------------|
| 7           | MgrName              | Manager of the current node of the hierarchy.<br><br>MgrName is null for the COMPANY, and is optional for CHAIN, AREA, REGION, DISTRICT, and WAREHOUSE. It will always exist for STORE in Cre and Mod records.<br><br>MrgName can be modified.                                                                                                | Number               | 10                  | loc_org_hierarchy | level_mgr        | VARCHAR2(254 CHAR)     | NA                         | NA                                                                                                         |
| 8           | CurrencyCode         | Currency of the current node of the hierarchy.<br><br>CurrencyCode is null for the COMPANY and optional for CHAIN, AREA, REGION, DISTRICT, and WAREHOUSE. It will always exist for STORE in Cre and Mod records.<br><br>CurrencyCode can be modified for a CHAIN, AREA, REGION, and DISTRICT. It cannot be modified for a STORE or Warehouse. | Character            | 3                   | NA                | NA               | NA                     | NA                         | Ignored.                                                                                                   |
| NA          | NA                   | NA                                                                                                                                                                                                                                                                                                                                            | NA                   | NA                  | loc_org_hierarchy | level_order      | NUMBER(10,0)           | NA                         | 0 - COMPANY<br>10 - CHAIN<br>20 - AREA<br>30 - REGION<br>40 - DISTRICT<br>1000 - STORE<br>2000 - Warehouse |

**Table B-7 (Cont.) RMS Organizational Hierarchy Mapping**

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table       | Xstore<br>Column    | Xstore<br>Data<br>Type   | Xstore<br>Default<br>Value                  | Xstore<br>Comment                             |
|-------------|----------------------|-----------------|----------------------|---------------------|-----------------------|---------------------|--------------------------|---------------------------------------------|-----------------------------------------------|
| N<br>A      | NA                   | NA              | NA                   | NA                  | loc_org_h<br>ierarchy | sort_order          | NUMBE<br>R(10,0)         | NA                                          | Always set<br>to 0.                           |
| N<br>A      | NA                   | NA              | NA                   | NA                  | loc_org_h<br>ierarchy | inactive_fl<br>ag   | NUMBE<br>R(1,0)          | NA                                          | Use default<br>0.                             |
| N<br>A      | NA                   | NA              | NA                   | NA                  | loc_org_h<br>ierarchy | ORGANIZ<br>ATION_ID | NUMBE<br>R(10,0)         | \$<br>{dtv.locat<br>ion.organi<br>zationId} | Always<br>uses default<br>value.              |
| N<br>A      | NA                   | NA              | NA                   | NA                  | loc_org_h<br>ierarchy | CREATE_<br>DATE     | TIMESTA<br>MP(6)         | now()                                       | Not set<br>when Type<br>represents<br>UPDATE. |
| N<br>A      | NA                   | NA              | NA                   | NA                  | loc_org_h<br>ierarchy | UPDATE_<br>DATE     | TIMESTA<br>MP(6)         | now()                                       | Not set<br>when Type<br>represents<br>CREATE. |
| N<br>A      | NA                   | NA              | NA                   | NA                  | loc_rtl_loc           | UPDATE_<br>USER_ID  | VARCHA<br>R2(30<br>CHAR) | DATALO<br>ADER                              | Always set.                                   |

## RMS Related Item Detail

Table B-8 describes the RMS Related Item Detail mapping.

**Table B-8 RMS Related Item Detail Mapping**

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                            | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|-------------|----------------------|----------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 0           | Family               | Value is always<br>ITEMS. Data will<br>always be present<br>in this field. | Character            | 20                  | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-8 (Cont.) RMS Related Item Detail Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table                          | Xstore<br>Column                     | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                            |
|-------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|------------------------------------------|--------------------------------------|------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------|
| 1           | Type                 | Value is always FULLREITEMDET when the program is run in full mode.<br>If the program is run in delta mode, the type will vary based on the type of change (CRE, MOD, DEL). Valid values are:<br>RELITEMDETCRE<br>RELITEMDETMOD<br>RELITEMDETDEL<br>Data will always be present in this field. | Character            | 15                  | NA                                       | NA                                   | NA                     | NA                         | Determines Action. RelationshipType is looked up from rms_related_item_head by RelationshipId, Location, and OrganizationId. |
| 2           | RelationshipID       | Unique identifier for each relationship header.<br>Data will always be present in this field.                                                                                                                                                                                                  | Number               | 10                  | itm_substitute_items, itm_attached_items | EXTERNAL_ID                          | VARCHAR2(60 CHAR)      | NA                         | NA                                                                                                                           |
| 3           | RelatedItem          | Item ID of the related item<br>Data will always be present in this field.                                                                                                                                                                                                                      | Character            | 25                  | itm_substitute_items, itm_attached_items | ATTACHED_ITEM_ID, SUBSTITUTE_ITEM_ID | VARCHAR2(60 CHAR)      | NA                         | NA                                                                                                                           |
| 4           | Location             | For corporate level files, this field holds the string CORPORATE.<br>In location specific files, this field holds the numeric ID of the store of WH.<br>Data will always be present in this field.                                                                                             | Character            | 10                  | itm_substitute_items, itm_attached_items | LEVEL_VALUE                          | VARCHAR2(60 CHAR)      | NA                         | NA                                                                                                                           |

Table B-8 (Cont.) RMS Related Item Detail Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                        | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table                             | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|-------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|---------------------------------------------|------------------|------------------------|----------------------------|-------------------|
| 5           | Priority             | Priority is only defined if the relationship is of the type SUBS at the related item header level. In the case of multiple related substitute items, this column could be used (optionally) to define relative priority. If there are multiple substitute items, it is possible not to define a priority, in which case all possible substitutions have the same relative priority.<br>Data is optional in this field. | Number               | 4                   | NA                                          | NA               | NA                     | NA                         | Ignored.          |
| 6           | StartDate            | Optional start date that the item should be used in the relationship in DD-MON-YYYY format. If defined, this date indicates the first date the item should be offered as an upsell, substitute, or cross sell.<br>Data is optional in this field.                                                                                                                                                                      | Character            | 11                  | itm_substitute_items,<br>itm_attached_items | BEGIN_DATE_TIME  | TIMESTAMP(6)           | NA                         | NA                |
| 7           | EndDate              | Optional end date that the item should be used in the relationship; in DD-MON-YYYY format. If defined, this date indicates the last date the item should be offered as an upsell, substitute or cross sell.<br>Data is optional in this field.                                                                                                                                                                         | Character            | 11                  | itm_substitute_items,<br>itm_attached_items | END_DATE_TIME    | TIMESTAMP(6)           | NA                         | NA                |

Table B-8 (Cont.) RMS Related Item Detail Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table                             | Xstore<br>Column      | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value      | Xstore<br>Comment                     |
|-------------|----------------------|-----------------|----------------------|---------------------|---------------------------------------------|-----------------------|------------------------|---------------------------------|---------------------------------------|
| N<br>A      | NA                   | NA              | NA                   | NA                  | itm_substitute_items,<br>itm_attached_items | ORGANIZATION_ID       | NUMBER(10,0)           | \${dtv.location.organizationId} | Always uses default value.            |
| N<br>A      | NA                   | NA              | NA                   | NA                  | itm_substitute_items,<br>itm_attached_items | CREATE_DATE           | TIMESTAMP(6)           | now()                           | Not set when Type =RELITEM DETMOD.    |
| N<br>A      | NA                   | NA              | NA                   | NA                  | itm_substitute_items,<br>itm_attached_items | CREATE_USER_ID        | VARCHAR2(30 CHAR)      | DATALOADER                      | Not set when Type =RELITEM DETMOD.    |
| N<br>A      | NA                   | NA              | NA                   | NA                  | itm_substitute_items,<br>itm_attached_items | UPDATE_DATE           | TIMESTAMP(6)           | now()                           | Not set when Type =FULLRELI TEMDET.   |
| N<br>A      | NA                   | NA              | NA                   | NA                  | itm_substitute_items,<br>itm_attached_items | UPDATE_USER_ID        | VARCHAR2(30 CHAR)      | DATALOADER                      | Not set when Type =FULLRELI TEMDET.   |
| N<br>A      | NA                   | NA              | NA                   | NA                  | itm_attached_items                          | PROMPT_TO_ADD_FLAG    | NUMBER(1,0)            | TRUE                            | Configurable in dataloader-beans.xml. |
| N<br>A      | NA                   | NA              | NA                   | NA                  | itm_attached_items                          | PROMPT_TO_ADD_MSG_KEY | VARCHAR2(254 CHAR)     | _commonAttachedItemsPrompt      | Configurable in dataloader-beans.xml. |

## RMS Related Item Header

Table B-9 describes the RMS Related Item Header mapping.

Table B-9 RMS Related Item Header Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                    | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table       | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                                                                                        |
|-------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------------|------------------|------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0           | Family               | Value is always ITEMS. Data will always be present in this field.                                                                                                                                                                                                                                  | Character            | 20                  | NA                    | NA               | NA                     | NA                         | Ignored.                                                                                                                                                                                 |
| 1           | Type                 | Value is always FULLRELITEMHDR when the program is run in full mode.<br>If the program is run in delta mode, the type will vary based on the type of change (CRE, MOD, DEL). Valid values are:<br>RELITEMHEADCRE<br>RELITEMHEADMOD<br>RELITEMHEADDEL<br>Data will always be present in this field. | Character            | 15                  | NA                    | NA               | NA                     | NA                         | Determines action. MOD will move records between itm_substitute_items and item_attached_items when the modified record represents a relationship type change between CRSL/UPSL and SUBS. |
| 2           | RelationshipID       | Unique identifier for each relationship header.<br>Data will always be present in this field.                                                                                                                                                                                                      | Number               | 20                  | rms_related_item_head | RELATIONSHIP_ID  | NUMBER(20,0)           | NA                         | Used as externalid in itm_substitute_items and item_attached_items records.                                                                                                              |
| 3           | Item                 | Item for which the relationships are defined.<br>Data will always be present in this field.                                                                                                                                                                                                        | Character            | 25                  | rms_related_item_head | ITEM             | VARCHAR2(25 CHAR)      | NA                         | When SUBS, this is the primaryItem.<br>When CRSL/UPSL, this is the soldItem.                                                                                                             |

**Table B-9 (Cont.) RMS Related Item Header Mapping**

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                         | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table               | Xstore<br>Column          | Xstore<br>Data<br>Type    | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                |
|-------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------------|---------------------------|---------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------|
| 4           | Location             | For corporate level files, this field holds the string CORPORATE.<br><br>In location specific files, this field holds the numeric ID of the store of WH.<br><br>Data will always be present in this field.                                                              | Character            | 10                  | rms_relat<br>ed_item_<br>head | LOCATIO<br>N              | VARCHA<br>R2(10<br>CHAR)  | NA                         | Used as levelValue in itm_substitute_items and item_attached_items records.                                      |
| 5           | Relation<br>shipName | Name given to the relationship.<br><br>Data will always be present in this field for the RELITEMHEADCR E and RELITEMHEADMOD records, but will not be present for RELITEMHEADDE L records.                                                                               | Character            | 255                 | rms_relat<br>ed_item_<br>head | RELATIO<br>NSHIP_N<br>AME | VARCHA<br>R2(255<br>CHAR) | NA                         | Ignored.                                                                                                         |
| 6           | Relation<br>shipType | Describes the type of relationship. Valid values are:<br>CRSL Cross Sell<br>SUBS Substitution<br>UPSL Up Sell<br><br>Data will always be present in this field for the RELITEMHEADCR E and RELITEMHEADMOD records, but will not be present for RELITEMHEADDE L records. | Character            | 6                   | rms_relat<br>ed_item_<br>head | RELATIO<br>NSHIP_T<br>YPE | VARCHA<br>R2(6<br>CHAR)   | NA                         | Determines the .type of Xstore related item. SUBS = Xstore Substitute Items, CRSL/ UPSL = Xstore Attached Items. |

**Table B-9 (Cont.) RMS Related Item Header Mapping**

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table       | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment               |
|-------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------------|------------------|------------------------|----------------------------|---------------------------------|
| 7           | MandatoryInd         | <p>This field indicates whether the relationship should be mandatory.</p> <p>For example, an item such as a laptop may have a mandatory cross sell relationship. The related items could be power cords for the US, UK, Mainland Europe, India, and so on. When the laptop is sold, it should be mandatory that one of the related power cords also be selected. Note that Merchandising/ Sales Audit do not validate that the mandatory related item is also sold.</p> <p>Generally, only cross sell relationships are mandatory. Substitution and upsell relationships can be defined as mandatory, but in those cases, the definition of mandatory is at the discretion of the client and generally means that substitution or upsell must, as business process, be offered to consumers.</p> <p>Data will always be present in this field for the RELITEMHEADCR E and RELITEMHEADMO D records, but will not be present for</p> | Character            | 1                   | rms_related_item_head | MANDATORY_IND    | VARCHAR2(1 CHAR)       | NA                         | No logic is based on this data. |

Table B-9 (Cont.) RMS Related Item Header Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description             | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table               | Xstore<br>Column                      | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value                      | Xstore<br>Comment                                             |
|-------------|----------------------|-----------------------------|----------------------|---------------------|-------------------------------|---------------------------------------|------------------------|-------------------------------------------------|---------------------------------------------------------------|
|             |                      | RELITEMHEADDE<br>L records. |                      |                     |                               |                                       |                        |                                                 |                                                               |
| N<br>A      | NA                   | NA                          | NA                   | NA                  | rms_relat<br>ed_item_<br>head | ORGANIZ<br>ATION_ID                   | NUMBE<br>R(10,0)       | \$<br>{dtv.locat<br>ion.orga<br>nizationl<br>d} | Always<br>uses default<br>value.                              |
| N<br>A      | NA                   | NA                          | NA                   | NA                  | rms_relat<br>ed_item_<br>head | CREATE_<br>DATE                       | TIMESTA<br>MP(6)       | now()                                           | Not set<br>when Type<br>=ITEMHDR<br>MOD.                      |
| N<br>A      | NA                   | NA                          | NA                   | NA                  | rms_relat<br>ed_item_<br>head | UPDATE_<br>DATE                       | TIMESTA<br>MP(6)       | now()                                           | Not set<br>when Type<br>=FULLRELI<br>TEMHDR                   |
| N<br>A      | NA                   | NA                          | NA                   | NA                  | item_item<br>_options         | ATTACHE<br>D_ITEMS<br>_FLAG           | NUMBE<br>R(1,0)        | NA                                              | Set to 1<br>when CRSL<br>or UPSL,<br>otherwise 0<br>for Item. |
| N<br>A      | NA                   | NA                          | NA                   | NA                  | item_item<br>_options         | SUBSTIT<br>UTE_AVA<br>ILABLE_F<br>LAG | NUMBE<br>R(1,0)        | NA                                              | Set to 1<br>when SUBS,<br>otherwise 0<br>for Item.            |

## RMS Store

Table B-10 describes the RMS Store mapping.

Table B-10 RMS Store Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                             | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|-----------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 0       | Family               | Value is always<br>STORES. Data will<br>always be present<br>in this field. | Character            | 20                  | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-10 (Cont.) RMS Store Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                         | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table                       | Xstore<br>Column      | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment  |
|---------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|---------------------------------------|-----------------------|------------------------|----------------------------|--------------------|
| 1       | Type                 | Value is always FULL when the program is run in full mode.<br><br>If the program is run in delta mode, the type will vary based on the type of change (CRE, MOD, DEL). Valid values are:<br>STORECRE - Creation of an Area node<br>STOREMOD - Modification of Area node<br>STOREDEL - Delete of Area node<br>Data will always be present in this field. | Character            | 15                  | NA                                    | NA                    | NA                     | NA                         | Determines action. |
| 2       | StoreId              | Contains the unique ID of the store. Data will always be present in this field.                                                                                                                                                                                                                                                                         | Number               | 10                  | loc_rtl_loc , tax_rtl_loc_tax_mapping | STORE_NBR, RTL_LOC_ID | NUMBE R(10,0)          | NA                         | NA                 |
| 3       | StoreName            | Contains the full name of the store. Data will always be present in this field for creation and modification records.                                                                                                                                                                                                                                   | Character            | 150                 | loc_rtl_loc                           | DESCRIPTION           | VARCHA R(254)          | NA                         | NA                 |
| 4       | StoreName10          | Contains a shortened, no more than 10 character name, for the store. Data will always be present in this field for creation and modification records.                                                                                                                                                                                                   | Character            | 10                  | loc_rtl_loc                           | STORE_NAME            | VARCHA R(254)          | NA                         | NA                 |
| 5       | StoreNameAbbr        | Contains an abbreviation for the store name. Data will always be present in this field for creation and modification records.                                                                                                                                                                                                                           | Character            | 3                   | NA                                    | NA                    | NA                     | NA                         | Ignored.           |

Table B-10 (Cont.) RMS Store Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                       | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 6       | StoreNameSec         | Contains an secondary name for this store. Data in this field is optional.                                                                                                                            | Character            | 150                 | NA              | NA               | NA                     | NA                         | Ignored.          |
| 7       | StoreClassId         | Contains the code letter indicating the class of which the store is a member. Valid values are A, B, C, D, E, and X. Data will always be present in this field for creation and modification records. | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 8       | StoreClassDesc       | Contains the description of the store class. Data will always be present in this field for creation and modification records.                                                                         | Character            | 250                 | NA              | NA               | NA                     | NA                         | Ignored.          |
| 9       | Manager              | Contains the name of the store manager. Data will always be present in this field. for creation and modification records.                                                                             | Character            | 120                 | loc_rtl_loc     | STORE_MANAGER    | VARCHAR(254)           | NA                         | NA                |
| 10      | OpenDate             | Contains the date on which the store opened. Data will always be present in this field for creation and modification records. Format is YYYYMMDD.                                                     | Date                 | 8                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 11      | CloseDate            | Contains the date on which the store closed. Data in this field is optional. Format is YYYYMMDD.                                                                                                      | Date                 | 8                   | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-10 (Cont.) RMS Store Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                     | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table         | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment       |
|---------|----------------------|---------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------|------------------|------------------------|----------------------------|-------------------------|
| 12      | AquireDate           | Contains the date on which the store was acquired. Data in this field is optional. Format is YYYYMMDD.              | Date                 | 8                   | NA                      | NA               | NA                     | NA                         | Ignored.                |
| 13      | RemodelDate          | Contains the date on which the store was last remodeled. Data in this field is optional. Format is YYYYMMDD.        | Date                 | 8                   | NA                      | NA               | NA                     | NA                         | Ignored.                |
| 14      | FaxNumber            | Contains the fax number for the store. Data in this field is optional.                                              | Character            | 20                  | loc_rtl_loc             | TELEPHONE_2      | VARCHAR(32)            | NA                         | Optional fax number.    |
| 15      | PhoneNumber          | Contains the phone number for the store. Data in this field is optional.                                            | Character            | 20                  | loc_rtl_loc             | TELEPHONE_1      | VARCHAR(32)            | NA                         | Optional phone number.  |
| 16      | Email                | Holds the email address for the location. Data in this field is optional.                                           | Character            | 100                 | loc_rtl_loc             | EMAIL_ADDRESS    | VARCHAR(254)           | NA                         | Optional email address. |
| 17      | TotalSquareFeet      | Contains the total square footage of the store. Data in this field is optional.                                     | Number               | 8                   | NA                      | NA               | NA                     | NA                         | Ignored.                |
| 18      | SellingSquareFeet    | Contains the total square footage of the stores selling area. Data in this field is optional.                       | Number               | 8                   | NA                      | NA               | NA                     | NA                         | Ignored.                |
| 19      | LinearDistance       | Holds the total merchandisable space of the location. Data in this field is optional.                               | Number               | 8                   | NA                      | NA               | NA                     | NA                         | Ignored.                |
| 20      | VatRegion            | Contains the number of the Value Added Tax region in which this store is contained. Data in this field is optional. | Number               | 4                   | tax_rtl_loc_tax_mapping | taxLocationId    | VARCHAR2(60)           | NA                         | NA                      |

Table B-10 (Cont.) RMS Store Mapping

| Po<br>s | RMS<br>Field<br>Name    | RMS Description                                                                                                                                 | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 21      | VatIncl<br>nd           | Indicates whether Value Added Tax will be included in the retail prices for the store. Valid values are Y or N. Data in this field is optional. | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 22      | StockHo<br>ldingIn      | This column indicates whether the store can hold inventory. Data will always be present in this field for creation and modification records.    | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 23      | Channel<br>Id           | Contains the channel with which the store is associated. Data in this field is optional.                                                        | Number               | 4                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 24      | Channel<br>Name         | Contains the name of the channel. Data in this field is optional.                                                                               | Character            | 120                 | NA              | NA               | NA                     | NA                         | Ignored.          |
| 25      | StoreFo<br>rmat         | Contains the number indicating the format of the store. Data in this field is optional.                                                         | Number               | 4                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 26      | StoreFo<br>rmatNa<br>me | Contains the description of the format of the store (for example, mall, standalone, city express, and so on). Data in this field is optional.   | Character            | 60                  | NA              | NA               | NA                     | NA                         | Ignored.          |
| 27      | MallNa<br>me            | Contains the name of the mall in which the store is located. Data in this field is optional.                                                    | Character            | 120                 | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-10 (Cont.) RMS Store Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                          | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 28      | District             | Contains the number of the district in which the store is a member. Data will always be present in this field. for creation and modification records. Further organizational hierarchy information is available in the Organizational Hierarchy Extract. | Number               | 10                  | NA              | NA               | NA                     | NA                         | Ignored.          |
| 29      | Transfer<br>Zone     | NA                                                                                                                                                                                                                                                       | Number               | 4                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 30      | Default<br>Wh        | Contains the number of the warehouse that may be used as the default for creating cross-dock masks.                                                                                                                                                      | Number               | 10                  | NA              | NA               | NA                     | NA                         | Ignored.          |
| 31      | StopOrd<br>erDays    | Contains the number of days before a store closing when the store will stop accepting orders. This column is used when the store_close_date is defined.                                                                                                  | Number               | 3                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 32      | StartOr<br>derDays   | Contains the number of days before the store_open_date that the store will begin accepting orders. Data will always be present in this field. for creation and modification records.                                                                     | Number               | 3                   | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-10 (Cont.) RMS Store Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                        | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment  |
|---------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|--------------------|
| 33      | CurrencyCode         | This field contains the currency code under which the store operates. Data will always be present in this field. for creation and modification records.                                                                                                                                                                                                                                                | Character            | 3                   | loc_rtl_loc     | CURRENCY_ID      | VARCHAR(3)             | NA                         | ISO Currency Code. |
| 34      | StoreLangISOC<br>ode | This column identifies the language to be used for the given store. Data will always be present in this field for creation and modification records.                                                                                                                                                                                                                                                   | Character            | 6                   | NA              | NA               | NA                     | NA                         | Ignored.           |
| 35      | TranNo<br>Generate   | Contains the level at which unique POS transaction numbers are generated. If the store has one sequence number that is used for all registers, then the value in this column will be S (Store). Otherwise, the store has unique sequence numbers for each register and the value in this column will be R (Register). Data will always be present in this field for creation and modification records. | Character            | 6                   | NA              | NA               | NA                     | NA                         | Ignored.           |
| 36      | IntPOSInd            | Indicates whether or not the POS system at the store is integrated. Data will always be present in this field for creation and modification records.                                                                                                                                                                                                                                                   | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.           |

Table B-10 (Cont.) RMS Store Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                     | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 37      | DunsNu<br>mber       | This field holds the Dun and Bradstreet (D&B) number to identify the store. A D&B number is a unique identification number for each physical location of a business. A DUNS number may be issued to any business worldwide, and is required by many credit reporting, national government, and trade organizations. Data in this field is optional. | Character            | 9                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 38      | DunsLo<br>c          | Legacy, generally not used. Data in this field is optional.                                                                                                                                                                                                                                                                                         | Character            | 4                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 39      | SisterSt<br>ore      | This field holds a store number which is used to relate the current store to the historical data of an existing store. Data in this field is optional.                                                                                                                                                                                              | Number               | 10                  | NA              | NA               | NA                     | NA                         | Ignored.          |
| 40      | TsfEntit<br>yId      | Data in this field is optional.                                                                                                                                                                                                                                                                                                                     | Number               | 10                  | NA              | NA               | NA                     | NA                         | Ignored.          |
| 41      | OrgUnitI<br>d        | Column contains the organizational unit ID value. Data in this field is optional.                                                                                                                                                                                                                                                                   | Number               | 15                  | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-10 (Cont.) RMS Store Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                             | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------|
| 42      | AutoRcv              | This column indicates whether the client is allowing automatic receipt for the store. Valid values are Y (Yes), N (No), and D (System Default). Default value should be D. Data will always be present in this field for creation and modification records. | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 43      | Remerc<br>hInd       | Identifies stores that are undergoing a significant re-merchandising effort. Defaults to N. Other values may be present if AIP is integrated with RMS. Data will always be present in this field for creation and modification records.                     | Character            | 1                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 44      | StoreTy<br>pe        | This indicates whether a particular store is a franchise (F) or company store (C). Data will always be present in this field for creation and modification records.                                                                                         | Character            | 6                   | NA              | NA               | NA                     | NA                         | Ignored.          |
| 45      | WFCust<br>omer       | Numeric ID of the customer. Data in this field is optional.                                                                                                                                                                                                 | Number               | 10                  | NA              | NA               | NA                     | NA                         | Ignored.          |
| 46      | Timezo<br>ne         | Indicates the time zone of the store. For example, America/New_York. Data will always be present in this field for creation and modification records.                                                                                                       | Character            | 64                  | NA              | NA               | NA                     | NA                         | Ignored.          |

Table B-10 (Cont.) RMS Store Mapping

| Po<br>s | RMS<br>Field<br>Name        | RMS Description                                                                                                                                                                                                                           | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table                         | Xstore<br>Column               | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value         | Xstore<br>Comment                                                              |
|---------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------------------------------|--------------------------------|------------------------|------------------------------------|--------------------------------------------------------------------------------|
| 47      | Custom<br>erOrder<br>LocInd | This column determines whether the location is a customer order location. If the indicator is Y, the location can be used by OMS for sourcing/ fulfillment or both. Otherwise, it cannot be used. It is used only for the company stores. | Character            | 1                   | NA                                      | NA                             | NA                     | NA                                 | Ignored.                                                                       |
| NA      | NA                          | NA                                                                                                                                                                                                                                        | NA                   | NA                  | loc_rtl_loc                             | STORE_ NBR                     | VARCHA R(254)          | NA                                 | Always RMS StoreId.                                                            |
| NA      | NA                          | NA                                                                                                                                                                                                                                        | NA                   | NA                  | loc_rtl_loc , tax_rtl_lo c_tax_ma pping | ORGANIZ ATION_ID               | NUMBE R(10,0)          | \$ {dtv.locat ion.orga nizationId} | Always uses the default value.                                                 |
| NA      | NA                          | NA                                                                                                                                                                                                                                        | NA                   | NA                  | loc_rtl_loc                             | LOCATIO N_TYPE                 | VARCHA R(60)           | STORE                              | Value can be configured in dataloader-beans.xml. If not configured, then null. |
| NA      | NA                          | NA                                                                                                                                                                                                                                        | NA                   | NA                  | loc_rtl_loc                             | use_till_a ccountabil ity_flag | NUMBE R(1,0)           | FALSE                              | Value can be configured in dataloader-beans.xml.                               |
| NA      | NA                          | NA                                                                                                                                                                                                                                        | NA                   | NA                  | loc_rtl_loc                             | CREATE_ DATE                   | TIMESTA MP(6)          | now()                              | Not set when Type = STOREMO D.                                                 |
| NA      | NA                          | NA                                                                                                                                                                                                                                        | NA                   | NA                  | loc_rtl_loc                             | CREATE_ USER_ID                | VARCHA R2(30 CHAR)     | DATALO ADER                        | Not set when Type = STOREMO D.                                                 |
| NA      | NA                          | NA                                                                                                                                                                                                                                        | NA                   | NA                  | loc_rtl_loc                             | UPDATE_ DATE                   | TIMESTA MP(6)          | now()                              | Always set.                                                                    |

Table B-10 (Cont.) RMS Store Mapping

| Pos | RMS Field Name | RMS Description | RMS Field Type | RMS Max Width | Xstore Table | Xstore Column  | Xstore Data Type  | Xstore Default Value | Xstore Comment |
|-----|----------------|-----------------|----------------|---------------|--------------|----------------|-------------------|----------------------|----------------|
| NA  | NA             | NA              | NA             | NA            | loc_rtl_loc  | UPDATE_USER_ID | VARCHAR2(30 CHAR) | DATALOADER           | Always set.    |

## RMS Store Address

Table B-11 describes the Store Address mapping.

Table B-11 RMS Store Address Mapping

| Pos | RMS Field Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                                                       | RMS Field Type | RMS Max Width | Xstore Table | Xstore Column | Xstore Data Type | Xstore Default Value | Xstore Comment                                                                                                                                                                                                                |
|-----|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|--------------|---------------|------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0   | Family         | Value is always STORES. Data will always be present in this field.                                                                                                                                                                                                                                                                                                                                                                    | Character      | 20            | NA           | NA            | NA               | NA                   | Ignored.                                                                                                                                                                                                                      |
| 1   | Type           | Value is always FULL when the program is run in full mode.<br><br>If the program is run in delta mode, the type will vary based on the type of change (CRE, MOD, DEL). Valid values are:<br><br>STOREDTLCRE<br>Creation of store address information.<br><br>STOREDTLMOD<br>Modification of store address information.<br><br>STOREDTLDEL<br>Deletion of store address information.<br><br>Data will always be present in this field. | Character      | 15            | NA           | NA            | NA               | NA                   | Determines action.<br><br>FULL, STOREDTLCRE, and STOREDTL MOD are all interpreted as updates to an existing loc_rtl_loc record. STOREDTL DEL results in the setting of all non-PK address mapped fields with an empty string. |
| 2   | StoreId        | Contains the unique ID of the store.<br><br>Data will always be present in this field.                                                                                                                                                                                                                                                                                                                                                | Number         | 10            | loc_rtl_loc  | RTL_LOC_ID    | NUMBER(10,0)     | NA                   | NA                                                                                                                                                                                                                            |

Table B-11 (Cont.) RMS Store Address Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                     | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                       |
|---------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|----------------------------|-------------------------------------------------------------------------|
| 3       | AddrType             | Contains the code used to identify the address type. Data will always be present in this field.                                                                     | Character            | 2                   | NA              | NA               | NA                     | NA                         | Must match the configurable AddrType code, otherwise record is ignored. |
| 4       | AddrTypeDesc         | Description of the address type code. Common examples include:<br><br>01 - Business, 02 - Postal, 03 - Returns, 04 - Order, 05 - Invoice, 06 - Remittance Optional. | Character            | 20                  | NA              | NA               | NA                     | NA                         | Ignored.                                                                |
| 5       | PrimaryAddrInd       | Indicates whether the address is the primary address for the address type. Valid values are Y and N. Data will always be present in this field.                     | Character            | 1                   | NA              | NA               | NA                     | NA                         | If not Y, the entire record is ignored.                                 |
| 6       | Add1                 | Contains the first line of the address. Data will always be present in this field for STOREDTLCRE and STOREDTLMOD.                                                  | Character            | 240                 | loc_rtl_loc     | ADDRESS1         | VARCHAR2(254 CHAR)     | NA                         | NA                                                                      |
| 7       | Add2                 | Contains the second line of the address. Optional.                                                                                                                  | Character            | 240                 | loc_rtl_loc     | ADDRESS2         | VARCHAR2(254 CHAR)     | NA                         | NA                                                                      |
| 8       | Add3                 | Contains the third line of the address. Optional.                                                                                                                   | Character            | 240                 | loc_rtl_loc     | ADDRESS3         | VARCHAR2(254 CHAR)     | NA                         | NA                                                                      |
| 9       | City                 | Contains the name of the city that is associated with the address. Data will always be present in this field for STOREDTLCRE and STOREDTLMOD.                       | Character            | 120                 | loc_rtl_loc     | CITY             | VARCHAR2(30 CHAR)      | NA                         | NA                                                                      |

Table B-11 (Cont.) RMS Store Address Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                     | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value      | Xstore<br>Comment          |
|---------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|-----------------|------------------|------------------------|---------------------------------|----------------------------|
| 10      | County               | Contains the county name for the location. Optional.                                                                                                | Character            | 250                 | NA              | NA               | NA                     | NA                              | NA                         |
| 11      | State                | Contains the state abbreviation for the address. Optional.                                                                                          | Character            | 3                   | loc_rtl_loc     | STATE            | VARCHAR2(30 CHAR)      | NA                              | NA                         |
| 12      | Country              | Contains the country where the address exists, using ISO 3166-1 alpha-2. Data will always be present in this field for STOREDTLCRE and STOREDTLMOD. | Character            | 3                   | loc_rtl_loc     | COUNTRY          | VARCHAR2(254 CHAR)     | NA                              | NA                         |
| 13      | PostCode             | Contains the postal code name for the location. Optional.                                                                                           | Character            | 30                  | loc_rtl_loc     | POSTAL_CODE      | VARCHAR2(30 CHAR)      | NA                              | NA                         |
| 14      | JurisdictionCode     | Contains the tax jurisdiction code for the location. Optional.                                                                                      | Character            | 10                  | NA              | NA               | NA                     | NA                              | Ignored.                   |
| 15      | Contact Name         | Contains the name of the contact person at this address. Optional.                                                                                  | Character            | 120                 | NA              | NA               | NA                     | NA                              | Ignored.                   |
| 16      | Contact Phone        | Contains a phone number of the contact person at this address. Optional.                                                                            | Character            | 20                  | NA              | NA               | NA                     | NA                              | Ignored.                   |
| 17      | Contact Fax          | Contains a fax number of the contact person at this address. Optional.                                                                              | Character            | 20                  | NA              | NA               | NA                     | NA                              | Ignored.                   |
| 18      | Contact Email        | Contains an email for the contact person at this address. Optional.                                                                                 | Character            | 100                 | NA              | NA               | NA                     | NA                              | Ignored.                   |
| NA      | NA                   | NA                                                                                                                                                  | NA                   | NA                  | loc_rtl_loc     | ORGANIZATION_ID  | NUMBER(10,0)           | \${dtv.location.organizationId} | Always uses default value. |
| NA      | NA                   | NA                                                                                                                                                  | NA                   | NA                  | loc_rtl_loc     | UPDATE_DATE      | TIMESTAMP(6)           | now()                           | NA                         |

Table B-11 (Cont.) RMS Store Address Mapping

| Po<br>s | RMS<br>Field<br>Name | RMS Description | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table | Xstore<br>Column   | Xstore<br>Data<br>Type   | Xstore<br>Default<br>Value | Xstore<br>Comment |
|---------|----------------------|-----------------|----------------------|---------------------|-----------------|--------------------|--------------------------|----------------------------|-------------------|
| NA      | NA                   | NA              | NA                   | NA                  | loc_rtl_loc     | UPDATE_<br>USER_ID | VARCHA<br>R2(30<br>CHAR) | DATALO<br>ADER             | NA                |

## RMS VAT

Table B-12 describes the RMS VAT mapping.

Table B-12 RMS VAT Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                       | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table                                                                | Xstore<br>Column                | Xstore<br>Data<br>Type   | Xstore<br>Default<br>Value | Xstore<br>Comment                                        |
|-------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|--------------------------------------------------------------------------------|---------------------------------|--------------------------|----------------------------|----------------------------------------------------------|
| 0           | Family               | Value is always VAT. Data will always be present in this field.                                                                                                                                                                                                                                                                                                                       | Character            | 20                  | NA                                                                             | NA                              | NA                       | NA                         | Ignored.                                                 |
| 1           | Type                 | Value is always FULL when the program is run in full mode.<br><br>If the program is run in delta mode, the type will vary based on the type of change (CRE, MOD, DEL). Valid values are:<br><br>VATCRE - Creation of VAT information.<br><br>VATMOD - Modification of VAT information.<br><br>VATDEL - Deletion of VAT information.<br><br>Data will always be present in this field. | Character            | 15                  | NA                                                                             | NA                              | NA                       | NA                         | Determines action.                                       |
| 2           | VatRegion            | ID of the VAT region. Stores are assigned to a VAT region (if VAT is used in RMS). This field will always have data.                                                                                                                                                                                                                                                                  | Number               | 4                   | tax_tax_loc,<br>tax_tax_authority,<br>tax_tax_group_rule,<br>tax_tax_rate_rule | TAX_LOC_ID,<br>TAX_AUTHORITY_ID | VARCHA<br>R2(60<br>CHAR) | NA                         | Use RMS VAT region ID as the tax authority ID in Xstore. |

Table B-12 (Cont.) RMS VAT Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table                                            | Xstore<br>Column       | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                                     |
|-------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|------------------------------------------------------------|------------------------|------------------------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 3           | VatRegionName        | This field contains the alphanumeric identification for the VAT code.<br><br>Valid values include, but are not limited to:<br>S - Standard<br>C - Composite<br>Z - Zero<br>E - Exempt<br><br>This field will always have data. | Character            | 120                 | tax_tax_loc,<br>tax_tax_authority                          | NAME,<br>DESCRIPTION   | VARCHAR(254)           | NA                         | Use RMS VAT region name as the tax authority name in Xstore.                                                                          |
| 4           | VatCode              | This field contains the description of the VAT Code. This field will always have data in the VATCRE and VATMOD records.                                                                                                        | Character            | 6                   | tax_tax_group,<br>tax_tax_group_rule,<br>tax_tax_rate_rule | TAX_GROUP_ID           | VARCHAR(60)            | NA                         | NA                                                                                                                                    |
| 5           | VatCodeDesc          | This field contains the description of the VAT Code. This field will always have data in the VATCRE and VATMOD records.                                                                                                        | Character            | 120                 | tax_tax_group,<br>tax_tax_group_rule                       | NAME,<br>DESCRIPTION   | VARCHAR(254)           | NA                         | For the root COMPANY node, the column is hard-coded as null.<br><br>For the second level CHAIN node, the column is hard-coded to "*". |
| 6           | ActiveDate           | This field is the date the VAT code is active for the VAT region, in human readable format DD-MON-YYYY.<br><br>This field will always have data.                                                                               | Character            | 12                  | tax_tax_rate_rule                                          | PERCENTAGE             | NUMBER(8,6)            | NA                         | NA                                                                                                                                    |
| 7           | VatRate              | VAT rate for the VAT code/VAT region.<br><br>This field will always have data in the VATCRE and VATMOD records.                                                                                                                | Number               | 20                  | tax_tax_rate_rule                                          | EFFECTIVE_DATE<br>TIME | TIMESTAMP(6)           | NA                         | NA                                                                                                                                    |

Table B-12 (Cont.) RMS VAT Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table        | Xstore<br>Column                      | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                                                       |
|-------------|----------------------|-----------------|----------------------|---------------------|------------------------|---------------------------------------|------------------------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| N<br>A      | NA                   | NA              | NA                   | NA                  | tax_tax_g<br>roup_rule | TAX_TYP<br>CODE                       | VARCHA<br>R(30)        | VAT                        | Always<br>uses default<br>value.                                                                                                                        |
| N<br>A      | NA                   | NA              | NA                   | NA                  | tax_tax_g<br>roup_rule | TAX_RUL<br>E_SEQ_<br>NBR              | NUMBE<br>R(10,0)       | 1                          | Always<br>uses default<br>value. The<br>assumption<br>is that there<br>can only be<br>one tax rule<br>per VAT<br>region/VAT<br>code<br>combination<br>. |
| N<br>A      | NA                   | NA              | NA                   | NA                  | tax_tax_g<br>roup_rule | TAXED_A<br>T_TRANS<br>_LEVEL_<br>FLAG | NUMBE<br>R(1,0)        | TRUE                       | A<br>configuratio<br>n spring<br>loaded by<br>the<br>transformer.<br>The out-of-<br>box default<br>is TRUE.                                             |

Table B-12 (Cont.) RMS VAT Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table       | Xstore<br>Column  | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------|----------------------|-----------------|----------------------|---------------------|-----------------------|-------------------|------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             | NA                   | NA              | NA                   | NA                  | tax_tax_r<br>ate_rule | EXPR_D<br>ATETIME | TIMESTA<br>MP(6)       | NA                         | <p>This has to be derived by the integration layer.</p> <p>During a CRE/FULL, if there is a subsequent rate rule as sorted by effective date, expire this rate rule by setting its expiration date to be 1 millisecond less than the effective date of the subsequent rate rule; otherwise do not expire this rate rule by setting its expiration date to NULL.</p> <p>During a CRE/FULL, if there is a prior rate rule as sorted by effective date, expire the prior rate rule by setting its expiration date to be 1 millisecond less than this effective date.</p> |

Table B-12 (Cont.) RMS VAT Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table       | Xstore<br>Column                     | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                                                                                                                                  |
|-------------|----------------------|-----------------|----------------------|---------------------|-----------------------|--------------------------------------|------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NA          | NA                   | NA              | NA                   | NA                  | NA                    | EXPR_D<br>ATETIME<br>(Continue<br>d) | NA                     | NA                         | During a<br>DEL, if<br>there is a<br>prior rate<br>rule as<br>sorted by<br>effective<br>date,<br>extend the<br>prior rate<br>rule by<br>setting its<br>expiration<br>date to be<br>the<br>expiration<br>date of this<br>rate rule. |
| NA          | NA                   | NA              | NA                   | NA                  | tax_tax_r<br>ate_rule | TAX_RUL<br>E_SEQ_<br>NBR             | NA                     | 1                          | Always<br>uses the<br>default<br>value. The<br>assumption<br>is that there<br>can only be<br>one tax rule<br>per VAT<br>region/VAT<br>code<br>combination<br>.                                                                     |
| NA          | NA                   | NA              | NA                   | NA                  | tax_tax_r<br>ate_rule | TAX_RAT<br>E_RULE_<br>SEQ            | NUMBE<br>R(10,0)       | NA                         | This has to<br>be derived<br>by the<br>integration<br>layer. For a<br>newly<br>created VAT<br>rate, its<br>sequence<br>number is<br>one after<br>the<br>maximum<br>rate rule<br>sequence<br>number in<br>the table.                |

Table B-12 (Cont.) RMS VAT Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table                                                                                                      | Xstore<br>Column                     | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                 |
|-------------|----------------------|-----------------|----------------------|---------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------|------------------------|----------------------------|-------------------------------------------------------------------------------------------------------------------|
| N<br>A      | NA                   | NA              | NA                   | NA                  | tax_tax_a<br>uthority                                                                                                | ROUNDI<br>NG_COD<br>E                | VARCHA<br>R(30)        | HALF_U<br>P                | A<br>configuratio<br>n spring<br>loaded by<br>the<br>transformer.<br>The out-of-<br>box default<br>is<br>HALF_UP. |
| N<br>A      | NA                   | NA              | NA                   | NA                  | tax_tax_a<br>uthority                                                                                                | ROUNDI<br>NG_DIGI<br>TS_QUA<br>NTITY | NUMBE<br>R(10,0)       | 2                          | A<br>configuratio<br>n spring<br>loaded by<br>the<br>transformer.<br>The out-of-<br>box default<br>is 2.          |
| N<br>A      | NA                   | NA              | NA                   | NA                  | tax_tax_lo<br>c,<br>tax_tax_a<br>uthority,<br>tax_tax_g<br>roup,<br>tax_tax_g<br>roup_rule,<br>tax_tax_r<br>ate_rule | EXTERN<br>AL_SYST<br>EM              | VARCHA<br>R(30)        | RMS                        | Always<br>uses the<br>default<br>value.                                                                           |
| N<br>A      | NA                   | NA              | NA                   | NA                  | tax_tax_lo<br>c,<br>tax_tax_a<br>uthority,<br>tax_tax_g<br>roup,<br>tax_tax_g<br>roup_rule,<br>tax_tax_r<br>ate_rule | ORG_CO<br>DE                         | VARCHA<br>R(30)        | *                          | Always<br>uses the<br>default<br>value.                                                                           |
| N<br>A      | NA                   | NA              | NA                   | NA                  | tax_tax_lo<br>c,<br>tax_tax_a<br>uthority,<br>tax_tax_g<br>roup,<br>tax_tax_g<br>roup_rule,<br>tax_tax_r<br>ate_rule | ORG_VA<br>LUE                        | VARCHA<br>R(60)        | *                          | Always<br>uses the<br>default<br>value.                                                                           |

Table B-12 (Cont.) RMS VAT Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table                                                                                                      | Xstore<br>Column    | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value                      | Xstore<br>Comment                             |
|-------------|----------------------|-----------------|----------------------|---------------------|----------------------------------------------------------------------------------------------------------------------|---------------------|------------------------|-------------------------------------------------|-----------------------------------------------|
| N<br>A      | NA                   | NA              | NA                   | NA                  | tax_tax_lo<br>c,<br>tax_tax_a<br>uthority,<br>tax_tax_g<br>roup,<br>tax_tax_g<br>roup_rule,<br>tax_tax_r<br>ate_rule | ORGANIZ<br>ATION_ID | NUMBE<br>R(10,0)       | \$<br>{dtv.locat<br>ion.orga<br>nizationI<br>d} | Always<br>uses the<br>default<br>value.       |
| N<br>A      | NA                   | NA              | NA                   | NA                  | tax_tax_lo<br>c,<br>tax_tax_a<br>uthority,<br>tax_tax_g<br>roup,<br>tax_tax_g<br>roup_rule,<br>tax_tax_r<br>ate_rule | CREATE_<br>DATE     | TIMESTA<br>MP(6)       | now()                                           | Not set<br>when Type<br>represents<br>UPDATE. |
| N<br>A      | NA                   | NA              | NA                   | NA                  | tax_tax_lo<br>c,<br>tax_tax_a<br>uthority,<br>tax_tax_g<br>roup,<br>tax_tax_g<br>roup_rule,<br>tax_tax_r<br>ate_rule | UPDATE_<br>DATE     | TIMESTA<br>MP(6)       | now()                                           | Not set<br>when Type<br>represents<br>CREATE. |

## RMS VAT Item

Table B-13 describes the RMS VAT Item mapping.



### Note:

Do not import a .dat file containing multiple VATITEM records with the same item ID. More than one record for the same item ID could result in an undesired outcome.

Table B-13 RMS VAT Item Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                                  | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table  | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment   |
|-------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|------------------|------------------|------------------------|----------------------------|---------------------|
| 0           | Family               | Value is always VATITEM. Data will always be present in this field.                                                                                                                                                                                                                                                                                                                              | Character            | 20                  | NA               | NA               | NA                     | NA                         | Ignored.            |
| 1           | Type                 | Value is always FULL when the program is run in full mode.<br><br>If the program is run in delta mode, the type will vary based on the type of change (CRE, MOD, DEL). Valid values are:<br>VATITEMCRE - Creation of VAT Item information.<br>VATITEMMOD - Modification of VAT Item information.<br>VATITEMDEL - Deletion of VAT Item information.<br>Data will always be present in this field. | Character            | 15                  | NA               | NA               | NA                     | NA                         | Determines actions. |
| 2           | Item                 | ID of the item.<br>Data will always be present in this field.                                                                                                                                                                                                                                                                                                                                    | Character            | 25                  | itm_item_options | item_id          | VARCHAR(60 CHAR)       | NA                         | NA                  |
| 3           | VatRegion            | ID of the VAT region. Stores are assigned to a VAT region if VAT is used in RMS. Additional information about VAT Regions is stored in RMS, but is not integrated out of the system. VAT region information may need to be synchronized to downstream systems as a manual process. This field will always have data.                                                                             | Number               | 4                   | NA               | NA               | NA                     | NA                         | Ignored.            |

Table B-13 (Cont.) RMS VAT Item Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                                                                                                                                                   | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table  | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                                                                                              |
|-------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|------------------|------------------|------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4           | ActiveDate           | Date that the VAT rate becomes active, in DD-MON-YYYY format.<br><br>This field will always have data in the VATITEMCRE and VATITEMMOD records.                                                                                                                                                                                                                                   | Character            | 11                  | NA               | NA               | NA                     | NA                         | Ignored.                                                                                                                                                                                       |
| 5           | VatType              | The field describes what the VAT rate applies to:<br>C - Cost values<br>R - Retail values<br>B - Both Cost and Retail values<br><br>This field will always have data.                                                                                                                                                                                                             | Character            | 1                   | NA               | NA               | NA                     | NA                         | Record ignored when VatType=C.                                                                                                                                                                 |
| 6           | VatCode              | This field contains the alphanumeric identification for the VAT code.<br><br>Valid values include, but are not limited to:<br>S - Standard<br>C - Composite<br>Z - Zero<br>E - Exempt<br><br>If additional VAT Codes are defined in RMS, the VAT code information may need to be synchronized to downstream systems as a manual process.<br><br>This field will always have data. | Character            | 6                   | itm_item_options | tax_group_id     | VARCHAR(60)            | NA                         | Column tax_group_id is set to null if Type is VATITEMDEL.<br><br>Column tax_group_id is unchanged when VatType is C.<br><br>Otherwise, column tax_group_id is set to the value of the VatCode. |
| 7           | VatRate              | VAT rate for the item/VAT region.<br><br>This field will always have data in the VATITEMCRE and VATITEMMOD records.                                                                                                                                                                                                                                                               | Number               | 20                  | NA               | NA               | NA                     | NA                         | Ignored.                                                                                                                                                                                       |

Table B-13 (Cont.) RMS VAT Item Mapping

| P<br>o<br>s | RMS<br>Field<br>Name | RMS Description                                                                                                                                                                                                                                      | RMS<br>Field<br>Type | RMS<br>Max<br>Width | Xstore<br>Table  | Xstore<br>Column | Xstore<br>Data<br>Type | Xstore<br>Default<br>Value | Xstore<br>Comment |
|-------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|------------------|------------------|------------------------|----------------------------|-------------------|
| 8           | Reverse<br>VatInd    | Indicates if the item is subject to reverse charge VAT at the VAT region. VAT reversal can apply to invoices on some items in some VAT regions. Valid values are Y and N. This field will always have data in the VATITEMCRE and VATITEMMOD records. | Character            | 1                   | NA               | NA               | NA                     | NA                         | Ignored.          |
| NA          | NA                   | NA                                                                                                                                                                                                                                                   | NA                   | NA                  | itm_item_options | UPDATE_USER_ID   | VARCHAR2(30 CHAR)      | DATALOADER                 | NA                |
| NA          | NA                   | NA                                                                                                                                                                                                                                                   | NA                   | NA                  | itm_item_options | UPDATE_DATE      | TIMESTAMP(6)           | now()                      | NA                |

## RPM Clearance Price

The following tables describe the RPM Clearance Price mapping.

[Table B-14](#) describes the Clearance Price FDETL record mapping. FDETL records are interpreted as Create or Update events.

Table B-14 RPM Clearance Price FDETL Record Mapping

| P<br>o<br>s | RPM Field<br>Name    | RPM Description                                    | RPM<br>Field<br>Type | Xstore<br>Table | Xstore<br>Column | Xstore<br>Data Type | Xstore<br>Default<br>Value | Xstore<br>Comment                  |
|-------------|----------------------|----------------------------------------------------|----------------------|-----------------|------------------|---------------------|----------------------------|------------------------------------|
| 0           | Record<br>Descriptor | File Detail Marker (1 per clearance create/modify) | Char(5)              | NA              | NA               | NA                  | NA                         | Used to determine unit type.       |
| 1           | Line Id              | Unique line identification                         | Number(10)           | NA              | NA               | NA                  | NA                         | Ignored.                           |
| 2           | Event Type           | CRE = Create, MOD = Modify                         | Char(3)              | NA              | NA               | NA                  | NA                         | Used to determine the action type. |
| 3           | Id                   | Clearance identifier                               | Number(15)           | itm_item_prices | EXTERNAL_ID      | VARCHAR2(60 CHAR)   | NA                         | NA                                 |
| 4           | Item                 | Item identifier                                    | Char(25)             | itm_item_prices | ITEM_ID          | VARCHAR2(60 CHAR)   | NA                         | NA                                 |

**Table B-14 (Cont.) RPM Clearance Price FDETL Record Mapping**

| P<br>o<br>s | RPM Field Name          | RPM Description                             | RPM Field Type | Xstore Table    | Xstore Column   | Xstore Data Type  | Xstore Default Value            | Xstore Comment                                                                                           |
|-------------|-------------------------|---------------------------------------------|----------------|-----------------|-----------------|-------------------|---------------------------------|----------------------------------------------------------------------------------------------------------|
| 5           | Effective Date          | Clearance Effective Date (YYYYMMDDHH24MISS) | Date           | itm_item_prices | EFFECTIVE_DATE  | TIMESTAMP(6)      | NA                              | NA                                                                                                       |
| 6           | Selling Retail          | Selling retail with price change applied    | Number(20,4)   | itm_item_prices | PRICE           | NUMBER(17,6)      | NA                              | NA                                                                                                       |
| 7           | Selling Retail UOM      | Selling retail unit of measure              | Char(4)        | NA              | NA              | NA                | NA                              | Ignored                                                                                                  |
| 8           | Selling Retail Currency | Selling retail currency                     | Char(3)        | NA              | NA              | NA                | NA                              | Ignored (assumed to be base Currency).                                                                   |
| 9           | Reset Clearance ID      | Clearance reset identification              | Number(15)     | NA              | NA              | NA                | NA                              | Used to detect clearance reset. Clearance reset is when this value exactly matches the ID field's value. |
| NA          | NA                      | NA                                          | NA             | itm_item_prices | ORGANIZATION_ID | NUMBER(10,0)      | \${dtv.location.organizationId} | Always uses default value.                                                                               |
| NA          | NA                      | NA                                          | NA             | itm_item_prices | PROPERTY_CODE   | VARCHAR2(60 CHAR) | NA                              | CLEARANCE_PRICE when Clearance event, or REGULAR_PRICE when Clearance Reset event.                       |
| NA          | NA                      | NA                                          | NA             | itm_item_prices | CREATE_DATE     | TIMESTAMP(6)      | now()                           | Not set when EventType = Mod.                                                                            |

**Table B-14 (Cont.) RPM Clearance Price FDETL Record Mapping**

| P<br>o<br>s | RPM Field Name | RPM Description | RPM Field Type | Xstore Table    | Xstore Column   | Xstore Data Type  | Xstore Default Value | Xstore Comment                |
|-------------|----------------|-----------------|----------------|-----------------|-----------------|-------------------|----------------------|-------------------------------|
| NA          | NA             | NA              | NA             | itm_item_prices | CREATE_USER_ID  | VARCHAR2(30 CHAR) | DATALOADER           | Not set when EventType = Mod. |
| NA          | NA             | NA              | NA             | itm_item_prices | UPDATE_DATE     | TIMESTAMP(6)      | now()                | Always set.                   |
| NA          | NA             | NA              | NA             | itm_item_prices | UPDATE_USER_ID  | VARCHAR2(30 CHAR) | DATALOADER           | Always set.                   |
| NA          | NA             | NA              | NA             | itm_item_prices | EXTERNAL_SYSTEM | VARCHAR2(60 CHAR) | RPM-CLRPC            | NA                            |

Table B-15 describes the Clearance Price FDELE record mapping. FDELE records are interpreted as Delete events.

**Table B-15 RPM Clearance Price FDELE Record Mapping**

| P<br>o<br>s | RPM Field Name    | RPM Description                                   | RPM Field Type | Xstore Table    | Xstore Column   | Xstore Data Type  | Xstore Default Value            | Xstore Comment               |
|-------------|-------------------|---------------------------------------------------|----------------|-----------------|-----------------|-------------------|---------------------------------|------------------------------|
| 0           | Record Descriptor | File Detail Delete Marker (1per clearance delete) | Char(5)        | NA              | NA              | NA                | NA                              | Used to determine unit type. |
| 1           | Line Id           | Unique line identification                        | Number(10)     | NA              | NA              | NA                | NA                              | Ignored.                     |
| 2           | Id                | Clearance identifier                              | Number(15)     | itm_item_prices | EXTERNAL_ID     | VARCHAR2(60 CHAR) | NA                              | NA                           |
| 3           | Item              | Item identifier                                   | Char(25)       | itm_item_prices | ITEM_ID         | VARCHAR2(60 CHAR) | NA                              | NA                           |
|             | NA                | NA                                                | NA             | itm_item_prices | ORGANIZATION_ID | NUMBER(10,0)      | \${dtv.location.organizationId} | Always uses default value.   |
|             | NA                | NA                                                | NA             | itm_item_prices | EXTERNAL_SYSTEM | VARCHAR2(60 CHAR) | RPM-CLRPC                       | NA                           |

## RPM Regular Price

The following tables describe the RPM Regular Price mapping.

Table B-16 describes the Regular Price FDETL record mapping. FDETL records are interpreted as Create or Update events.

**Table B-16 RPM Regular Price FDETL Record Mapping**

| Po<br>s | RPM Field<br>Name                | RPM Description                                                                                                      | RPM<br>Field<br>Type | Xstore<br>Table     | Xstore<br>Column             | Xstore<br>Data Type   | Xstore<br>Default<br>Value | Xstore<br>Comment                                                                                                                |
|---------|----------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------|---------------------|------------------------------|-----------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 0       | Record<br>Descriptor             | File Detail Marker (1<br>per price change<br>create or modify)                                                       | Char(5)              | NA                  | NA                           | NA                    | NA                         | Type of<br>event.                                                                                                                |
| 1       | Line Id                          | Unique line<br>identification                                                                                        | Number(1<br>0)       | NA                  | NA                           | NA                    | NA                         | Ignored.                                                                                                                         |
| 2       | Event Type                       | CRE = Create,<br>MOD = Modify                                                                                        | Char(3)              | NA                  | NA                           | NA                    | NA                         | Used by<br>the<br>transforme<br>r to<br>determine<br>the type of<br>event.                                                       |
| 3       | Id                               | Price change<br>identifier                                                                                           | Number(1<br>5)       | itm_item_pr<br>ices | EXTERNAL<br>_ID              | VARCHAR<br>2(60 CHAR) | NA                         | NA                                                                                                                               |
| 4       | Item                             | Item identifier                                                                                                      | Char(25)             | itm_item_pr<br>ices | ITEM_ID                      | VARCHAR<br>2(60 CHAR) | NA                         | NA                                                                                                                               |
| 5       | Effective<br>Date                | Effective Date of the<br>price change<br>(YYYYMMDDHH24<br>MISS)                                                      | NA                   | itm_item_pr<br>ices | EFFECTIV<br>E_DATE           | TIMESTAM<br>P(6)      | NA                         | NA                                                                                                                               |
| 6       | Selling<br>Unit<br>Change<br>Ind | Indicates whether<br>the selling unit retail<br>changed with this<br>price event (0 = no<br>change, 1 =<br>changed). | Number(1<br>)        | NA                  | NA                           | NA                    | NA                         | This field<br>need not<br>be<br>persisted<br>in the<br>Xstore<br>database.<br>This field<br>is used in<br>transforme<br>r logic. |
| 7       | Selling<br>Retail                | Selling retail with<br>price change<br>applied                                                                       | Number(2<br>0,4)     | itm_item_pr<br>ices | PRICE                        | NUMBER(1<br>7,6)      | NA                         | NA                                                                                                                               |
| 8       | Selling<br>Retail<br>UOM         | Selling retail unit of<br>measure                                                                                    | Char(4)              | itm_item            | UNIT_OF_<br>MEASURE<br>_CODE | VARCHAR<br>2(30 BYTE) | NA                         | Ignored.                                                                                                                         |
| 9       | Selling<br>Retail<br>Currency    | Selling retail<br>currency                                                                                           | Char(3)              | NA                  | NA                           | NA                    | NA                         | Ignored<br>(assumed<br>to be base<br>Currency).                                                                                  |
| 10      | Multi-Unit<br>Change<br>Ind      | Did multi-unit retail<br>change with this<br>price event (0 = no<br>change, 1 =<br>changed)                          | Number(1<br>)        | NA                  | NA                           | NA                    | NA                         | NA                                                                                                                               |

Table B-16 (Cont.) RPM Regular Price FDETL Record Mapping

| Po<br>s | RPM Field<br>Name      | RPM Description                      | RPM<br>Field<br>Type | Xstore<br>Table     | Xstore<br>Column    | Xstore<br>Data Type   | Xstore<br>Default<br>Value                      | Xstore<br>Comment                                                                                  |
|---------|------------------------|--------------------------------------|----------------------|---------------------|---------------------|-----------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 11      | Multi-Units            | NA                                   | Number(1<br>2,4)     | NA                  | NA                  | NA                    | NA                                              | NA                                                                                                 |
| 12      | Multi-Unit<br>Retail   | Number of multi-<br>units            | Number(2<br>0,4)     | NA                  | NA                  | NA                    | NA                                              | NA                                                                                                 |
| 13      | Multi-Unit<br>UOM      | Multi-Unit Retail unit<br>of measure | Char(4)              | NA                  | NA                  | NA                    | NA                                              | NA                                                                                                 |
| 14      | Multi-Unit<br>Currency | Multi-Unit Retail<br>Currency        | Char(3)              | NA                  | NA                  | NA                    | NA                                              | NA                                                                                                 |
| NA      | NA                     | NA                                   | NA                   | itm_item_pr<br>ices | ORGANIZA<br>TION_ID | NUMBER(1<br>0,0)      | \$<br>{dtv.locat<br>ion.orga<br>nizationI<br>d} | Always<br>uses the<br>default<br>value.                                                            |
| NA      | NA                     | NA                                   | NA                   | itm_item_pr<br>ices | PROPERT<br>Y_CODE   | VARCHAR<br>2(60 CHAR) | NA                                              | REGULAR<br>_PRICE<br>will be the<br>value.                                                         |
| NA      | NA                     | NA                                   | NA                   | itm_item_pr<br>ices | CREATE_D<br>ATE     | TIMESTAM<br>P(6)      | now()                                           | Current<br>time<br>stamp. Not<br>set when<br>the event<br>type<br>=MOD.                            |
| NA      | NA                     | NA                                   | NA                   | itm_item_pr<br>ices | CREATE_U<br>SER_ID  | VARCHAR<br>2(30 CHAR) | DATALO<br>ADER                                  | This is the<br>user ID<br>stored in<br>the<br>database.<br>Not set<br>when<br>event type<br>= Mod. |
| NA      | NA                     | NA                                   | NA                   | itm_item_pr<br>ices | UPDATE_D<br>ATE     | TIMESTAM<br>P(6)      | now()                                           | Current<br>time<br>stamp.<br>Field value<br>only set<br>when<br>event<br>type=MOD<br>.             |

**Table B-16 (Cont.) RPM Regular Price FDETL Record Mapping**

| Pos | RPM Field Name | RPM Description | RPM Field Type | Xstore Table    | Xstore Column   | Xstore Data Type  | Xstore Default Value | Xstore Comment                                                                            |
|-----|----------------|-----------------|----------------|-----------------|-----------------|-------------------|----------------------|-------------------------------------------------------------------------------------------|
| NA  | NA             | NA              | NA             | itm_item_prices | UPDATE_USER_ID  | VARCHAR2(30 CHAR) | DATALOADER           | DATALOADER will be the user ID stored in the database. Set only when the event type=MOD . |
| NA  | NA             | NA              | NA             | itm_item_prices | EXTERNAL_SYSTEM | VARCHAR2(60 CHAR) | RPM-REGPC            | NA                                                                                        |

Table B-17 describes the Regular Price FDELE record mapping. FDELE records are interpreted as Delete events.

**Table B-17 RPM Regular Price FDELE Record Mapping**

| Pos | RPM Field Name    | RPM Description                                      | RPM Field Type | Xstore Table    | Xstore Column   | Xstore Data Type  | Xstore Default Value            | Xstore Comment                                      |
|-----|-------------------|------------------------------------------------------|----------------|-----------------|-----------------|-------------------|---------------------------------|-----------------------------------------------------|
| 0   | Record Descriptor | File Detail Delete Marker (1per price change delete) | Char(5)        | NA              | NA              | NA                | NA                              | Used by the transformer to determine the unit type. |
| 1   | Line Id           | Unique line identification                           | Number(10)     | NA              | NA              | NA                | NA                              | Ignored.                                            |
| 2   | Id                | Price change identifier                              | Number(15)     | itm_item_prices | EXTERNAL_ID     | VARCHAR2(60 CHAR) | NA                              | NA                                                  |
| 3   | Item              | Item identifier                                      | Char(25)       | itm_item_prices | ITEM_ID         | VARCHAR2(60 CHAR) | NA                              | NA                                                  |
| NA  | NA                | NA                                                   | NA             | itm_item_prices | ORGANIZATION_ID | NUMBER(10,0)      | \${dtv.location.organizationid} | NA                                                  |
| NA  | NA                | NA                                                   | NA             | itm_item_prices | EXTERNAL_SYSTEM | VARCHAR2(60 CHAR) | RPM-CLRPC                       | NA                                                  |

## RPM Promotions

Table B-18 describes the RPM Promotions mapping.

Table B-18 RPM Promotions Record Mappings

| RPM Record Name | RPM Field Name    | RPM Field Type | RPM Default Value | RPM Description                                                              | Xstore Table | Xstore Field        | Xstore Comment |
|-----------------|-------------------|----------------|-------------------|------------------------------------------------------------------------------|--------------|---------------------|----------------|
| FHEAD           | Record Descriptor | Char(5)        | FHEAD             | File head marker                                                             | NA           | NA                  | NA             |
|                 | Line ID           | Number(10)     | 1                 | Unique line identifier                                                       | NA           | NA                  | NA             |
|                 | File Type         | Char(5)        | PROMO             | Promotions                                                                   | NA           | NA                  | NA             |
|                 | Export Timestamp  | Number(10)     |                   | System clock timestamp (YYYYMMDDHHMISS)                                      | NA           | NA                  | NA             |
|                 | Format Version    | Char(5)        | 1.0               | File Format Version                                                          | NA           | NA                  | NA             |
|                 | Location          | Number(10)     |                   | Location identifier                                                          | NA           | NA                  | NA             |
|                 | Location Type     | Char(1)        |                   | S = Store, W = Warehouse                                                     | NA           | NA                  | NA             |
| TIMBPE          | Record Descriptor | Char(5)        | TIMBPE            | Promotion (transaction head). Defines an action associated with a promotion. | NA           | NA                  | NA             |
|                 | Line ID           | Number(10)     |                   | Unique line identifier                                                       | NA           | NA                  | NA             |
|                 | Event Type        | Char(3)        |                   | CRE = Create, MOD = Modify                                                   | NA           | NA                  | NA             |
| TPDTL           | Record Descriptor | Char(5)        | TPDTL             | Promotion Detail Component. Defines a new component.                         | NA           | NA                  | Ignored.       |
|                 | Line ID           | Number(10)     |                   | Unique line identifier                                                       | NA           | NA                  | Ignored.       |
|                 | Promo ID          | Number(10)     |                   | Promotion identifier                                                         | prc_deal     | deal_id (partially) | NA             |
|                 | Promo Comp ID     | Number(10)     |                   | Promotion Component Id                                                       | prc_deal     | deal_id (partially) | NA             |
|                 | Promo Name        | Char(160)      |                   | Promotion Header Name                                                        | NA           | NA                  | Ignored.       |
|                 | Promo Desc        | Char(640)      |                   | Promotion Header Description                                                 | NA           | NA                  | Ignored.       |
|                 | Promo Comp Desc   | Char(160)      |                   | Promotion Component Name                                                     | prc_deal     | description         | NA             |

**Table B-18 (Cont.) RPM Promotions Record Mappings**

| RPM Record Name | RPM Field Name       | RPM Field Type | RPM Default Value | RPM Description                                                                                                                                                                                                                                                                                                                          | Xstore Table   | Xstore Field        | Xstore Comment                                                     |
|-----------------|----------------------|----------------|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------------|--------------------------------------------------------------------|
|                 | Promo Type           | Number(2)      |                   | Valid values:<br>0 = Multi-Buy Promotion<br>1 = Simple Promotion<br>2 = Threshold Promotion<br>3 = Finance Promotion (formerly tied to a value of 6)<br>4 = Transaction Promotion                                                                                                                                                        | NA             | NA                  | Determines structure of resulting deal                             |
|                 | Promo Comp Detail ID | Number(10)     |                   | Promotion Component Detail identifier                                                                                                                                                                                                                                                                                                    | prc_deal       | deal_id (partially) | NA                                                                 |
|                 | Date Start           | Date           |                   | Start Date of Promotion Component Detail (YYYYMMDDHH24 MISS)                                                                                                                                                                                                                                                                             | prc_deal       | effective_date      | NA                                                                 |
|                 | End Date             | Date           |                   | End Date of Promotion Component Detail (YYYYMMDDHH24 MISS)                                                                                                                                                                                                                                                                               | prc_deal       | end_date            | NA                                                                 |
|                 | Apply to Code        | Number(1)      |                   | Holds the Apply to Code for the promotion detail. Determines if the promotion is applied to regular retail only (no clearances in effect), clearance retail only (only when a clearance is in effect), or both regular and clearance retail.<br><br>Valid values:<br>0 = Regular Only<br>1 = Clearance Only<br>2 = Regular and Clearance | prc_field_test | NA                  | ApplyTo is mapped to an additional field test (PRICE BETWEEN X Y). |
|                 | Discount Limit       | Number(3)      |                   | The number of times that the promotion can be applied to a transaction.                                                                                                                                                                                                                                                                  | prc_deal       | iterationCap        | NA                                                                 |

Table B-18 (Cont.) RPM Promotions Record Mappings

| RPM Record Name | RPM Field Name               | RPM Field Type | RPM Default Value | RPM Description                                                                                                                                         | Xstore Table        | Xstore Field | Xstore Comment                                                                                                       |
|-----------------|------------------------------|----------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|----------------------------------------------------------------------------------------------------------------------|
|                 | Apply Order                  | Number(1)      |                   | Application Order of the Promotion                                                                                                                      | NA                  | NA           | Ignored.                                                                                                             |
|                 | Threshold ID                 | Number(6)      |                   | Threshold identifier                                                                                                                                    | NA                  | NA           | Ignored.                                                                                                             |
|                 | Customer Type ID             | Number(10)     |                   | Customer Type identifier                                                                                                                                | NA                  | NA           | Ignored.                                                                                                             |
|                 | Threshold Qualification Type | Number(1)      |                   | The qualification type for the threshold. Will only be populated for threshold promotions. Valid values are 0 for item level and 1 for threshold level. | NA                  | NA           | Ignored.                                                                                                             |
| TPGRP           | Record Descriptor            | Char(5)        | TPGRP             | Promotion Detail Group                                                                                                                                  | NA                  | NA           | Ignored.                                                                                                             |
|                 | Line ID                      | Number(10)     |                   | Unique line identifier                                                                                                                                  | NA                  | NA           | Ignored.                                                                                                             |
|                 | Group ID                     | Number(10)     |                   | Group Number                                                                                                                                            | prc_deal_item       | ordinal      | Mapped structurally, not by value.                                                                                   |
| TGLIST          | Record Descriptor            | Char(5)        | TGLIST            | Promotion Group List. Defines an item list.                                                                                                             | NA                  | NA           | Ignored.                                                                                                             |
|                 | Line ID                      | Number(10)     |                   | Unique line identifier                                                                                                                                  | NA                  | NA           | Ignored.                                                                                                             |
|                 | List ID                      | Number(10)     |                   | List identifier                                                                                                                                         | NA                  | NA           | Ignored.                                                                                                             |
|                 | Reward Application           | Number(1)      |                   | How this reward is applied to the promotion detail.                                                                                                     | NA                  | NA           | Not mapped directly, but rather used to determine whether an action from the underlying TPDSC record should be used. |
|                 | Description                  | Char(120)      |                   | Description                                                                                                                                             | NA                  | NA           | Ignored.                                                                                                             |
|                 | Price Range Min              | Number(20, 4)  |                   | Contains price range promotion minimum valid retail value.                                                                                              | prc_deal_field_test | NA           | Mapped to an additional field test (PRICE BETWEEN X Y).                                                              |

**Table B-18 (Cont.) RPM Promotions Record Mappings**

| RPM Record Name | RPM Field Name    | RPM Field Type | RPM Default Value | RPM Description                                                                                        | Xstore Table            | Xstore Field | Xstore Comment                                                                                                         |
|-----------------|-------------------|----------------|-------------------|--------------------------------------------------------------------------------------------------------|-------------------------|--------------|------------------------------------------------------------------------------------------------------------------------|
|                 | Price Range Max   | Number(20, 4)  |                   | Contains price range promotion maximum valid retail value.                                             | prc_deal_fi<br>eld_test | NA           | Mapped to an additional field test (PRICE BETWEEN X Y).                                                                |
| TLITM           | Record Descriptor | Char(5)        | TLITM             | Promotion Group List. RPM defines lists by providing SKUs of eligible items.                           | NA                      | NA           | Ignored.                                                                                                               |
|                 | Line ID           | Number(10)     |                   | Unique line identifier                                                                                 | NA                      | NA           | Ignored.                                                                                                               |
|                 | Item ID           | Char(25)       |                   | Transaction Item Identifier                                                                            | prc_deal_fi<br>eld_test | value1       | Mapped as SKU EQUAL field test.                                                                                        |
| TPDSC           | Record Descriptor | Char(5)        | TPDSC             | Discount Detail for List. Defines a discount to apply to a preceding list of items.                    | NA                      | NA           | Ignored.                                                                                                               |
|                 | Line ID           | Number(10)     |                   | Unique line identifier                                                                                 | NA                      | NA           | Ignored.                                                                                                               |
|                 | Change Type       | Number(2)      |                   | Change Type<br>Valid values:<br>-1 = No Change<br>0 = Percent Off<br>1 = Amount Off<br>2 = Fixed Price | prc_deal_it<br>em       | action       | Type of action:<br>AMOUNT_ OFF ><br>CURRENC Y_ OFF<br>PERCENT_ OFF ><br>PERCENT_ OFF<br>FIXED_ PRI CE ><br>NEW_ PRIC E |
|                 | Change Amount     | Number(20, 4)  |                   | Change Amount                                                                                          | prc_deal_it<br>em       | action_arg   | Discount amount when Change Type is AMOUNT_ OFF or FIXED_ PRI CE. Negated for AMOUNT_ OFF.                             |

Table B-18 (Cont.) RPM Promotions Record Mappings

| RPM Record Name | RPM Field Name     | RPM Field Type | RPM Default Value | RPM Description                                         | Xstore Table  | Xstore Field                        | Xstore Comment                                                                                                                                                |
|-----------------|--------------------|----------------|-------------------|---------------------------------------------------------|---------------|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 | Change Currency    | Char(3)        |                   | Change Currency                                         | NA            | NA                                  | Ignored.                                                                                                                                                      |
|                 | Change Percent     | Number(20, 4)  |                   | Change Percent                                          | prc_deal_item | action_arg                          | Discount amount when Change Type is PERCENT_OFF. Negated.                                                                                                     |
|                 | Change Selling UOM | Char(4)        |                   | Change Selling UOM                                      | NA            | NA                                  | Ignored.                                                                                                                                                      |
|                 | Qual Type          | Number(2)      |                   | Qualification Type                                      | NA            | NA                                  | Affects where the Qual Value goes.                                                                                                                            |
|                 | Qual Value         | Number(2)      |                   | Qualification Value                                     | prc_deal_item | min_qty / max_qty or min_item_total | Target field is picked based on the Qual Type value. PRC_DEAL_ITEM.max_qty either gets the same value or receives some big number depending on the deal type. |
|                 | Change Duration    | Number(20, 4)  |                   | Change Duration                                         | NA            | NA                                  | Ignored.                                                                                                                                                      |
| TPISR           | Record Descriptor  | Char(5)        | TPISR             | This record type is ignored for now.                    | NA            | NA                                  | Ignored.                                                                                                                                                      |
|                 | Line ID            | Number(10)     |                   | Unique line identifier                                  | NA            | NA                                  | Ignored.                                                                                                                                                      |
|                 | Item ID            | Char(25)       |                   | Transaction Item Identifier                             | NA            | NA                                  | Ignored.                                                                                                                                                      |
|                 | Selling Retail     | Number(20, 4)  |                   | Selling retail of the item                              | NA            | NA                                  | Ignored.                                                                                                                                                      |
|                 | Selling UOM        | Char(4)        |                   | Selling UOM of the item                                 | NA            | NA                                  | Ignored.                                                                                                                                                      |
|                 | Effective Date     | Date           |                   | Effective Date of the selling retail - YYYYMMDDHH24MISS | NA            | NA                                  | Ignored.                                                                                                                                                      |

Table B-18 (Cont.) RPM Promotions Record Mappings

| RPM Record Name | RPM Field Name          | RPM Field Type | RPM Default Value | RPM Description                                | Xstore Table | Xstore Field | Xstore Comment |
|-----------------|-------------------------|----------------|-------------------|------------------------------------------------|--------------|--------------|----------------|
|                 | Selling Retail Currency | Char(3)        |                   | Selling retail currency                        | NA           | NA           | Ignored.       |
| TPCDT           | Record Descriptor       | Char(5)        | TPCDT             | Credit Detail                                  | NA           | NA           | Ignored.       |
|                 | Credit Detail ID        | Number(10)     |                   | Credit Detail Identifier                       | NA           | NA           | Ignored.       |
|                 | Line ID                 | Number(10)     |                   | Unique line identifier                         | NA           | NA           | Ignored.       |
|                 | Credit Type             | Char(40)       |                   | Credit Type                                    | NA           | NA           | Ignored.       |
|                 | binNumberFrom           | Number(10)     |                   | Bin Number From                                | NA           | NA           | Ignored.       |
|                 | binNumberTo             | Number(10)     |                   | Bin Number To                                  | NA           | NA           | Ignored.       |
|                 | Commission Rate         | Number(10)     |                   | Commission Rate                                | NA           | NA           | Ignored.       |
|                 | Comments                | Char(160)      |                   | Comments                                       | NA           | NA           | Ignored.       |
| TPCIL           | Record Descriptor       | Char(5)        | TPCIL             | Cancel Item Loc                                | NA           | NA           | Ignored.       |
|                 | Line ID                 | Number(10)     |                   | Unique line identifier                         | NA           | NA           | Ignored.       |
|                 | Promo ID                | Number(10)     |                   | Identifier of the promotion                    | NA           | NA           | Ignored.       |
|                 | Promo Comp ID           | Number(10)     |                   | Promotion Component Identifier                 | NA           | NA           | Ignored.       |
|                 | Promo Comp Detail ID    | Number(10)     |                   | Promotion Component Detail identifier          | NA           | NA           | Ignored.       |
|                 | Item ID                 | Char(25)       |                   | Transaction Item Identifier for item           | NA           | NA           | Ignored.       |
|                 | Cancellation Date       | Date           |                   | Cancellation effective date - YYYYMMDDHH24MISS | NA           | NA           | Ignored.       |
| TTAIL           | Record Descriptor       | Char(5)        | TTAIL             | Transaction Tail                               | NA           | NA           | NA             |
|                 | Line ID                 | Number(10)     |                   | Unique line identifier                         | NA           | NA           | NA             |
| FPDEL           | Record Descriptor       | Char(5)        | FPDEL             | Delete Promotion                               | NA           | NA           | NA             |
|                 | Line ID                 | Number(10)     |                   | Unique line identifier                         | NA           | NA           | NA             |
|                 | Promo ID                | Number(10)     |                   | The ID of the promotion                        | NA           | NA           | NA             |
|                 | Promo Comp ID           | Number(10)     |                   | Promotion Component Identifier                 | NA           | NA           | NA             |

Table B-18 (Cont.) RPM Promotions Record Mappings

| RPM Record Name | RPM Field Name       | RPM Field Type | RPM Default Value | RPM Description                                           | Xstore Table | Xstore Field | Xstore Comment |
|-----------------|----------------------|----------------|-------------------|-----------------------------------------------------------|--------------|--------------|----------------|
|                 | Promo Comp Detail ID | Number(10)     |                   | Promotion Component Detail identifier                     | NA           | NA           | NA             |
|                 | Group ID             | Number(10)     |                   | Group Number                                              | NA           | NA           | NA             |
|                 | List ID              | Number(10)     |                   | List identifier                                           | NA           | NA           | NA             |
|                 | Item ID              | Char(25)       |                   | Transaction Item Identifier for item                      | NA           | NA           | NA             |
| FTAIL           | Record Descriptor    | Char(5)        | FTAIL             | File tail marker                                          | NA           | NA           | NA             |
|                 | Line ID              | Number(10)     |                   | Unique line identifier                                    | NA           | NA           | NA             |
|                 | Number of lines      | Number(10)     |                   | Number of lines in the file not including FHEAD and FTAIL | NA           | NA           | NA             |