

Oracle® Retail Category Management

Implementation Guide

Release 14.0.0.2

E51669-01

March 2014

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Licensing Note: This media pack includes a Restricted Use license for Oracle Retail Predictive Application Server (RPAS) - Enterprise Engine to support Oracle® Retail Category Management only.

Value-Added Reseller (VAR) Language

Oracle Retail VAR Applications

The following restrictions and provisions only apply to the programs referred to in this section and licensed to you. You acknowledge that the programs may contain third party software (VAR applications) licensed to Oracle. Depending upon your product and its version number, the VAR applications may include:

- (i) the **MicroStrategy** Components developed and licensed by MicroStrategy Services Corporation (MicroStrategy) of McLean, Virginia to Oracle and imbedded in the MicroStrategy for Oracle Retail Data Warehouse and MicroStrategy for Oracle Retail Planning & Optimization applications.
- (ii) the **Wavelink** component developed and licensed by Wavelink Corporation (Wavelink) of Kirkland, Washington, to Oracle and imbedded in Oracle Retail Mobile Store Inventory Management.
- (iii) the software component known as **Access Via™** licensed by Access Via of Seattle, Washington, and imbedded in Oracle Retail Signs and Oracle Retail Labels and Tags.
- (iv) the software component known as **Adobe Flex™** licensed by Adobe Systems Incorporated of San Jose, California, and imbedded in Oracle Retail Promotion Planning & Optimization application.

You acknowledge and confirm that Oracle grants you use of only the object code of the VAR Applications. Oracle will not deliver source code to the VAR Applications to you. Notwithstanding any other term or

condition of the agreement and this ordering document, you shall not cause or permit alteration of any VAR Applications. For purposes of this section, "alteration" refers to all alterations, translations, upgrades, enhancements, customizations or modifications of all or any portion of the VAR Applications including all reconfigurations, reassembly or reverse assembly, re-engineering or reverse engineering and recompilations or reverse compilations of the VAR Applications or any derivatives of the VAR Applications. You acknowledge that it shall be a breach of the agreement to utilize the relationship, and/or confidential information of the VAR Applications for purposes of competitive discovery.

The VAR Applications contain trade secrets of Oracle and Oracle's licensors and Customer shall not attempt, cause, or permit the alteration, decompilation, reverse engineering, disassembly or other reduction of the VAR Applications to a human perceivable form. Oracle reserves the right to replace, with functional equivalent software, any of the VAR Applications in future releases of the applicable program.

Contents

Send Us Your Comments	xi
Preface	xiii
Audience	xiii
Documentation Accessibility	xiii
Related Documents	xiii
Customer Support	xiii
Review Patch Documentation	xiv
Improved Process for Oracle Retail Documentation Corrections	xiv
Oracle Retail Documentation on the Oracle Technology Network	xiv
Conventions	xv
 1 Introduction	
Contents of this Guide	1-3
Key Features of Category Management	1-3
Skills Needed for Implementation	1-4
Applications	1-4
Technical Concepts	1-4
 2 Implementation Considerations	
Historical Data	2-1
Hardware Space Impacts	2-1
Partitioning	2-2
Formatting	2-2
Patch Considerations	2-3
Batch Scheduling	2-3
Security	2-3
Alert Manager	2-4
Internationalization	2-4
 3 Build Scripts	
Installation Dependencies	3-1
Environmental Setup	3-1
RPAS Installation	3-1

RPAS Fusion Client Installation	3-1
Category Management Installation	3-2
Custom Domain Build.....	3-2
Handling Common Hierarchy Files in the Fashion Planning Bundle Applications.....	3-2
Environment Variables.....	3-3
Files Required to Build the Category Management Domain	3-3
Standard RPAS Hierarchy Files	3-3
Calendar Hierarchy File.....	3-3
Product Hierarchy File	3-4
Location Hierarchy File.....	3-5
Category Management-Specific Hierarchy Files	3-6
Right-Hand Side Product Hierarchy File	3-6
Focus Area Attributes Hierarchy File	3-7
Consumer Profile Hierarchy File.....	3-7
Retail Segment File	3-8
Retailer Hierarchy File	3-8
Consumer Segment Hierarchy File	3-9
Linear Number Hierarchy File.....	3-9
Tactic Hierarchy File.....	3-10
Breakpoint Hierarchy File.....	3-10
Product Attributes Hierarchy File	3-10
Strategy Hierarchy File	3-11
Curve Points Hierarchy File	3-11
Data Files.....	3-12
Building the Category Management Domain.....	3-12
Batch Design	3-12
Configuration Files for the RPAS Fusion Client.....	3-13
Creating Users and User Groups.....	3-13
Loading and Extracting Data.....	3-13

4 Data Flow

Overview of the Category Management Data Flow	4-1
Data Flow Descriptions	4-2
Data Flow from External Sources to RCM	4-2
Data Flow between Master Data Management System and RCM	4-2

5 Integration

Export Script.....	5-1
Import Script	5-2
ORASE Integration	5-3
ORASE to RCM	5-3
RCM to ORASE	5-4
ORASE to RCM Data Transformation Script.....	5-5
ORASE to RCM CDT Transformation Script.....	5-6
RCM to ORASE Data Transformation Script.....	5-7
Attributes Data Import Script.....	5-8
SKU-Attributes Map File.....	5-9

Clustering Data Import Script	5-10
Store to Store Cluster Map File	5-10
Demand Transference Data Import Script.....	5-12
DT Similarities Parameters File.....	5-14
DT Assortment Elasticity Parameters File.....	5-14
Attribute Weights and Functional Fit File.....	5-15

6 Configuration Considerations

Calendar (CLND) Hierarchy	6-1
Product (PROD) Hierarchy.....	6-2
Right-Hand Side Product (PROR) Hierarchy	6-4
Location (LOC) Hierarchy.....	6-5
Focus Area Attributes (FAAH) Hierarchy.....	6-6
Consumer Profile (CPRF) Hierarchy	6-6
Retail Segment (RSGH) Hierarchy	6-7
Retailer (RETH) Hierarchy	6-7
Consumer Segment (CSH) Hierarchy	6-7
Linear Number (LNMH) Hierarchy.....	6-8
Tactic (TCTH) Hierarchy	6-8
Breakpoints (PCTH) Hierarchy	6-8
Product Attributes (ATTR) Hierarchy	6-8
Strategy (SGYH) Hierarchy	6-9
Curve Points (CURV) Hierarchy.....	6-9

7 Batch Processing

Batch Script Summary	7-1
Batch Script Summary Table	7-1
Batch Scripts	7-2
cm_batch.ksh	7-2
processcdts.ksh.....	7-3
Before Running Category Management Batch Scripts for the First Time.....	7-4

8 Internationalization

Translation	8-1
--------------------------	------------

9 Data

List of Tables

5-1	Error Codes for exportdata.ksh	5-2
5-2	Error Codes for importdata.ksh.....	5-3
5-3	Transformation Matrix.....	5-4
5-4	Error Codes for rcm_t_data_orase.ksh	5-6
5-5	Error Codes for rcm_t_cdt_orase.ksh.....	5-7
5-6	Error Codes for orase_t_data_rcm.ksh	5-8
5-7	Error Codes for import_rse_attributes.ksh	5-10
5-8	Error Codes for import_rse_clusters.ksh.....	5-12
5-9	Error Codes for import_rse_dt.ksh.....	5-14
7-1	Directories Used by Batch Scripts.....	7-1
7-2	Batch Script Summary	7-2

List of Figures

4-1	Category Management Data Flow.....	4-1
6-1	Calendar Hierarchy	6-2
6-2	Product Hierarchy	6-3
6-3	Right-Hand Side Product Hierarchy.....	6-4
6-4	Location Hierarchy	6-5

Send Us Your Comments

Oracle Retail Category Management Implementation Guide, Release 14.0.0.2

Oracle welcomes customers' comments and suggestions on the quality and usefulness of this document.

Your feedback is important, and helps us to best meet your needs as a user of our products. For example:

- Are the implementation steps correct and complete?
- Did you understand the context of the procedures?
- Did you find any errors in the information?
- Does the structure of the information help you with your tasks?
- Do you need different information or graphics? If so, where, and in what format?
- Are the examples correct? Do you need more examples?

If you find any errors or have any other suggestions for improvement, then please tell us your name, the name of the company who has licensed our products, the title and part number of the documentation and the chapter, section, and page number (if available).

Note: Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the Online Documentation available on the Oracle Technology Network web site. It contains the most current Documentation Library plus all documents revised or released recently.

Send your comments to us using the electronic mail address: retail-doc_us@oracle.com

Please give your name, address, electronic mail address, and telephone number (optional).

If you need assistance with Oracle software, then please contact your support representative or Oracle Support Services.

If you require training or instruction in using Oracle software, then please contact your Oracle local office and inquire about our Oracle University offerings. A list of Oracle offices is available on our web site at <http://www.oracle.com>.

Preface

The Oracle Retail Category Management Implementation Guide describes post-installation tasks that need to be performed in order to bring Category Management online and ready for production use.

Audience

The Implementation Guide is intended for Oracle Retail Category Management application integrators and implementation staff, as well as the retailer's IT personnel. This guide is also intended for business analysts who are looking for information about processes and interfaces to validate the support for business scenarios within Category Management and other systems across the enterprise.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Related Documents

For more information, see the Oracle Retail Category Management Release 14.0 documentation set.

For more information about Oracle Retail Predictive Application Server (RPAS) and the RPAS Fusion Client, see the RPAS documentation set.

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL: <https://support.oracle.com>

When contacting Customer Support, please provide:

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

Review Patch Documentation

When you install the application for the first time, you install either a base release (for example, 14.0) or a later patch release (for example, 14.0.1). If you are installing the base release or additional patch releases, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch releases can contain critical information related to the base release, as well as information about code changes since the base release.

Improved Process for Oracle Retail Documentation Corrections

To more quickly address critical corrections to Oracle Retail documentation content, Oracle Retail documentation may be republished whenever a critical correction is needed. For critical corrections, the republication of an Oracle Retail document may at times not be attached to a numbered software release; instead, the Oracle Retail document will simply be replaced on the Oracle Technology Network Web site, or, in the case of Data Models, to the applicable My Oracle Support Documentation container where they reside.

This process will prevent delays in making critical corrections available to customers. For the customer, it means that before you begin installation, you must verify that you have the most recent version of the Oracle Retail documentation set. Oracle Retail documentation is available on the Oracle Technology Network at the following URL:

<http://www.oracle.com/technetwork/documentation/oracle-retail-100266.html>

An updated version of the applicable Oracle Retail document is indicated by Oracle part number, as well as print date (month and year). An updated version uses the same part number, with a higher-numbered suffix. For example, part number E123456-02 is an updated version of a document with part number E123456-01.

If a more recent version of a document is available, that version supersedes all previous versions.

Oracle Retail Documentation on the Oracle Technology Network

Documentation is packaged with each Oracle Retail product release. Oracle Retail product documentation is also available on the following web site:

<http://www.oracle.com/technetwork/documentation/oracle-retail-100266.html>

(Data Model documents are not available through Oracle Technology Network. These documents are packaged with released code, or you can obtain them through My Oracle Support.)

Documentation should be available on this web site within a month after a product release.

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	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.

Introduction

Effective category management (also referred to as merchandising) is the cornerstone of a successful retail business because it determines the variety and presentation of merchandise. This determination defines the customer's in-store experience. Category management involves managing individual product or merchandise categories as though they were independent business units, each playing a specific role in the retailer's goal to achieve their established business objectives. Broadly, this practice facilitates the determination of the following:

- Roles, strategies, and tactics and their designation into categories and sub-categories across the location hierarchy.
- Pricing and promotion strategies for different categories and sub-categories across the location hierarchy.
- Inventory-related decisions across categories and sub-categories across the retail chain.
- The retailer's standing in the market as compared to the competition.
- Key consumer segments contributing to the retailer's business and plan management of product categories as a result.
- Merchandise-mix or product-mix (also referred to as assortments) for a merchandise category (also known as class in Oracle Retail Merchandising System (RMS) terminology) and a sub-category (also known as sub-class in RMS terminology) across the retail chain - including the cluster and store level across the location hierarchy.
- Space-allocation at the micro and macro-level for different categories and sub-categories at the store and cluster level.

In recent years, retailers have experienced increased difficulty in achieving desired levels of same store sales growth, gross margin, and inventory productivity. This is partly due to smaller buying staffs, shorter product life cycles, increasingly savvy and demanding customers, and cutthroat competition.

In light of these issues, retailers are looking to service their customers better, drive profitable growth, and further differentiate themselves from the competition by tailoring their product offerings to the needs of their local customers. In the past, micro-merchandising or local market assortments were extremely complex, labor intensive, and yielded marginal results.

Oracle Retail Category Management (RCM) brings in the contemporary best-practices from the retail industry as part of its functionality. RCM is based on the RPAS platform. Key differentiating factors of RCM, that facilitate decision making in the category management business practice, include the following:

- A platform to facilitate end-to-end implementation of planning and tracking of Category Management practices based on retail industry best practices.
- Assortment Planning, for store clusters and stores, sometimes referred to as Assortment Rationalization.
- Assortment clusters, commonly referred to as clusters, to group stores across the geography to create category and assortment plans.
- Consumer segment perspectives based on the market's, or trading area's, demographics and psychographic data from third-party syndicated data suppliers.
- Insight into consumer buying patterns through Household Panel Data from third-party syndicated data suppliers.
- Market and competition perspectives based on external data sourced from third-party syndicated data suppliers.
- Consumer Decision Trees to understand the consumer's buying process (consumer segment-wise) in order to align the retailer's product, pricing, and promotional offerings accordingly.
- Item Performance Index (IPI) to rank an item's and a category's performance and derive custom assortments at the cluster and store level.
- Market coverage to understand the retailer's standing in the market from a product-mix perspective and derive custom assortments.
- Demand Transference driven by advanced science to fine-tune assortments.
- Incremental Curve driven by advanced science to derive assortments.

RCM consists of the following tasks:

- Category Planning - Used for analyzing a retailer's business from a market, competition, and consumer perspective. Category Planning is used to set targets and assign roles, strategies, and tactics for individual product categories. Category Plans are created at the sub-category level.
- Assortment Planning Analysis - Used to analyze an assortment's historic performance from a market, competition, and consumer perspective.
- Assortment Planning @ Cluster - Used to create Assortment Plans at the cluster level utilizing the concepts of IPI, Market Coverage, Incremental Curve, and Demand Transference.
- Assortment Planning @ Store - Used to create Assortment Plans at the store level utilizing the concepts of IPI and Demand Transference.

The Category Planning task enables the retailer to perform higher-level category planning activities and Assortment Planning tasks that facilitate the creation of SKU/Item-level Assortment Plans at the cluster and store level.

This solution supports the development of category business plans and assortment plans. It broadly follows the traditional eight-step Category Management business process with the inclusion of the consumer dimension in a few steps to provide the following:

- Analysis of market structure in terms of target shoppers/consumers and evaluation of trading area opportunity
- Performance analysis of individual product categories, based on various retail business parameters, as compared to the market in general and to the competition in particular

- Role assignment to individual product categories
- A blueprint for strategic and tactical action within a category and across categories
- The ability to analyze by consumer segments (sometimes called the ninth step in the Category Management business process)
- A structured, measured set of activities designed to produce specified output, that is, the development and implementation of a written category business plan
- Consumer insight, which is core to this application, brought in by utilizing external market and consumer data sourced from third-party syndicated data suppliers

Consumer segmentation and store clustering can be utilized to tailor assortments to specific markets and consumer segments by providing a profile mix of who is shopping the store and trading area. Store clusters are typically created for each product category in a trading area based upon similarity in consumers, stores, product attributes, sales profiles, and demographics so that assortments can be generated at the store cluster level. Assortments can also be generated at the store level.

Visibility into category roles, strategies, tactics, and financial objectives ensure that SKU/Item level assortments align back to overall category-level objectives.

Contents of this Guide

This implementation guide addresses the following topics:

- Implementation Considerations
- Build Scripts
- Data Flow
- Script Integration
- Configuration Considerations
- Batch Processing
- Internationalization
- Data

Key Features of Category Management

Category Management is a disciplined process for retailers and their supplier partners to treat each category as a business unit with defined strategies and tactics, leveraging multiple data sources, consumer insights and segmentations, to improve the customer experience while delivering increased sales and profits.

Category Management provides the following features:

- Packaged POV on leading edge retail business process concerning category management
- Supports consumer-centric and customer-centric category planning and assortment processes
 - Leverages consumer decision trees
- Embedded forecasting capabilities
 - Enables forward-looking insights to drive planning decisions

- Guides category roles and strategies-driven pricing and promotion tactics

Skills Needed for Implementation

The implementer needs an understanding of the following applications and technical concepts.

Applications

The implementer should understand the interface requirements of the integrated applications and data sources for the master data, demand, and inventory history. For Category Management, the implementer needs this knowledge for the following applications:

- Oracle Retail Predictive Application Server (RPAS)
- Oracle Retail Assortment and Space Optimization (ASO) (optional)

Technical Concepts

The implementer should understand the following technical concepts:

- UNIX system administration, shell scripts, and job scheduling
- Performance constraints based on the retailer's infrastructure
- Technical architecture for Category Management
- Retailer's hierarchical (SKU/store/day) data
- Category Management batch processes
- Setting up an RPAS domain
- A basic understanding of RPAS configuration and how to use the RPAS Configuration Tools
- Understanding of how RPAS rule language works
- Understanding of measures and dimension constructs
- Understanding of how Fusion Client works

Implementation Considerations

The following information needs to be considered before implementing Category Management:

- [Historical Data](#)
- [Hardware Space Impacts](#)
- [Partitioning](#)
- [Formatting](#)
- [Patch Considerations](#)
- [Batch Scheduling](#)
- [Security](#)
- [Alert Manager](#)
- [Internationalization](#)

Historical Data

It is recommended that you have at least two years of historical sales data. Less data can be used, but the more data that is available, the better picture a retailer can obtain of category and assortment performance over time.

Hardware Space Impacts

The following factors can affect size requirements:

- **SKU**—number of items. An item is a specific product that a consumer can purchase. Examples include a specific model of flat screen television, or a particular size, weight, flavor, and packaging of yogurt.
- **Store**—number of physical, internet, and other distinct retail outlets.
- **Product Attributes**—in Category Management, every item is associated with one or more attributes. The attributes are used to construct consumer decision trees. These consumer decision trees capture how consumers in a particular segment make their buying decisions for products in a given category.
- **Consumer Segments**—consumers with similar buying habits are grouped into segments. These segments form the basis of constructing consumer decision trees.

Category Management hosts sales data from a merchandising system, market, loyalty, and other third-party data from commercial data aggregators. During batch processing, Category Management also needs temporary data storage for intermediate

results. The total data storage space requirements for Category Management are estimated to be at least double the storage space of the combined sales, market, loyalty, and other third-party data.

Partitioning

Partitioning is done to avoid contention for resources. Building a workbook and committing data are two processes that can cause contention.

How data is partitioned has an impact on the business process. The Category Management domain is defined as a global domain. For performance reasons, a single domain is not recommended. There should be an even distribution of users across a set of local domains.

It is recommended that the domain be partitioned above the category level, to allow several related categories to be analyzed, compared, and processed in a single local domain. This allows category planners and assortment managers to focus on relevant data sets, and does not affect other users working in other categories when building or committing workbooks.

Consider the following questions when defining the partitioning of the domain:

- How do I partition to meet my business needs?
- How do I partition my users?
- How do I create groups of users to further partition the solution?

Domain partitioning is supported on any Product hierarchy (PROD) or Location hierarchy (LOC) dimension. These hierarchies are standard RPAS hierarchies.

Note: The partitioning level in the Category Management configuration is Department. It is recommended that this not be changed.

In the GA configuration, department is a dimension label. The department dimension is a regular dimension in the product hierarchy, which the customer can rename or delete. One of the major purposes of partitioning in Category Management is to allow multiple category planners and assortment managers to work simultaneously. Another, less important reason is to facilitate the parallelization of the batch process.

Formatting

Formatting can be done in the configuration or the workbook after the domain is built.

- Each worksheet in the Category Management configuration has a measure order as well as measure styles that have been preconfigured. The measures can be displayed in the pre-configured order through the user interface. That format can then be saved to the template.

An implementer can create generic styles for the measures and assign them to measure components or realized measures. For each measure, these styles can be overridden on each workbook template. Formatting can only be changed by using the RPAS Configuration Tools. For more information, see the *Oracle Retail Predictive Application Server Configuration Tools User Guide*.

- Once the domain is built, the implementer can set up worksheet sizes and placements, exception value formatting, gridlines, and other formatting. The

implementer instantiates a workbook of the template to set up specific formatting by using the Format menu. The updated format is then saved to the template so that it is available to all users for any newly created workbooks. For information on how to use the Format menu, see *Oracle Retail Predictive Application Server User Guide for the Fusion Client*.

Patch Considerations

There are two types of patches that can affect the Category Management domain:

- Changes to the code in the RPAS libraries
The configuration is not affected by this type of patch. For these types of changes, applying the patch is a straightforward process.
- Changes to the configuration
These types of changes can be more complex. If you have customizations in the configuration, you can use the ConfigMgr utility to determine the differences between your existing configuration and the new one. Then, you can use the utility to merge the two configurations. Any changes that cannot be applied are written to a change log. For more information, see the *Oracle Retail Predictive Application Server Configuration Tools User Guide*.

Batch Scheduling

Batch scripts are lists of commands or jobs that are run without manual intervention. A batch window is the time frame in which the batch process must run. It is the upper limit on how long the batch can take. Batch scripts are used for importing and exporting data. The retailer needs to decide the best time for running batch scripts within the available batch window.

How often to upload updated sales and inventory data needs to be determined. You have to consider at what interval to load the latest sales and inventory data. It is recommended that this is done on a weekly basis.

For more information on batch scripts, see [Chapter 7](#).

Security

To define workbook template security, the system administrator grants individual users, or user groups, access to specific workbook templates. Granting access to workbook templates provides users the ability to create, modify, save, and commit workbooks for the assigned workbook templates. Users are typically assigned to groups based on their user application (or solution) role. Users in the same group can be given access to workbook templates that belong to that group alone. Users can be assigned to more than one group and granted workbook template access without belonging to the user group that typically uses a specific workbook template. Workbook access is either denied, read-only, or full access. Read-only access allows a user to create a workbook for the template, but the user is not able to edit any values or commit the workbook. The read-only workbook can be refreshed.

When users save a workbook, they assign one of three access permissions to the workbook:

- World—Allow any user to open and edit the workbook
- Group—Allow only those users in their same group to open and edit the workbooks

- User—Allow no other users to open and edit the workbook

Note: A user must have access to the workbook template in order to access the workbook, even if the workbook has world access rights.

For more information on security, see the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*.

Alert Manager

No alerts are pre-configured in the Category Management solution. However, users may configure alerts normally in a Category Management domain.

For more information on configuring Alert Manager, see the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*.

Internationalization

For information on translation for Category Management, see [Chapter 8](#).

Build Scripts

This chapter describes the setup that must be done before building the Category Management domain and the batch script that must be run to build the domain.

Installation Dependencies

RPAS infrastructure (including the server and fusion client) and Category Management must be installed before setting up and configuring Category Management.

For information on installing RPAS server and fusion client, see the *Oracle Retail Predictive Application Server Installation Guide*.

Environmental Setup

Before downloading the installation package to the UNIX server, a central directory structure to support the environment must be created. This central directory is referred to as <CM_HOME>. Set <CM_HOME> to the full path name to RCM home.

RPAS Installation

The Java-based RPAS installation programs that are included with the installation package are used to install the server-side RPAS components on UNIX operating systems.

The RPAS Installer performs the following functions:

- Installs the server.
- Installs the Configuration Tools on the server.
On Windows, an InstallShield package is used to install the Configuration Tools.
- Defines the DomainDaemon port.

RPAS Fusion Client Installation

The RPAS server installation package also includes the following RPAS client:

- RPAS Fusion Client—A web-based client developed using Oracle Application Development Framework (ADF).

Each RPAS client installation package includes a separate installer to help you install the client. For more information on installing the RPAS clients, refer to the *Oracle Retail Predictive Application Server Installation Guide*.

Category Management Installation

The Category Management installer performs the following functions:

- Downloads the configuration and batch scripts into the <CM_HOME>/config and <CM_HOME>/bin directories
- Downloads a set of sample hierarchy and data files into the <CM_HOME>/input directory
- Builds a sample domain at <CM_HOME>/domain/catman

Custom Domain Build

To do a custom build of a domain, perform the following steps:

1. Update the globaldomainconfig.xml file with the correct domain paths.
2. If needed, update the default environment variables in environment.ksh.
3. Run the build.ksh script:

```
./build.ksh
```

Handling Common Hierarchy Files in the Fashion Planning Bundle Applications

The following hierarchy files contain the superset of all the dimensions along the product, location, and calendar hierarchies:

- prod.hdr.csv.dat
- loc.hdr.csv.dat
- clnd.csv.dat

Each hdr.csv.dat (HDR) hierarchy file contains a header line that lists all the dimensions for which position information is contained in the file. The RPAS build process handles these HDR files so that every application extracts the position information relevant to itself and ignores dimensions not configured in the application.

The filterHier utility is run on the HDR files to convert them into standard hierarchy files that are then passed to loadHier. The build process, which uses rpasInstall, can differentiate between standard and HDR hierarchy files. There is no need for the implementer to make any changes in the domain build process.

If using HDR files, the implementer needs to run filterHier before running loadHier. The filterHier utility converts the HDR files into standard hierarchy files that can be processed by loadHier. Note that there is no need to run filterHier if the standard hierarchy files are already available.

Note: The HDR files must reside outside the domain input directory before running filterHier. By default, the filterHier utility puts the newly created filtered hierarchy files into the input folder of the domain.

See the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client* for details on the RPAS utilities.

Environment Variables

In addition to the regular RPAS environment variables, including RPAS_HOME, you must export the following environment variables:

All platforms:

```
export
RPAS_JAVA_CLASSPATH="$RPAS_HOME/lib/rpasjni.jar:$RPAS_
HOME/lib/oracleRpasUtils.jar:$RPAS_HOME/applib/aaijni.jar:$RPAS_
HOME/applib/aaiCatMan.jar:$RPAS_HOME/applib/rseCatMan.jar:$RPAS_JAVA_CLASSPATH"
```

Note: Additional Java environment variables must be set for your particular operation system. These variables are the same for all applications on RPAS. See the "Java Environment" section of the *Oracle Retail Predictive Application Server Installation Guide* for these environment variables.

Files Required to Build the Category Management Domain

Before building the domain, set up the following types of files, which are described below:

- Standard RPAS Hierarchy files
- Category Management-specific Hierarchy files
- Data files

Standard RPAS Hierarchy Files

The following hierarchy files are needed:

- Calendar hierarchy files
- Product hierarchy files
- Location hierarchy files

Note: As with all standard RPAS hierarchies, these hierarchies are configurable as long as they adhere to the RPAS requirements on hierarchy structures.

Calendar Hierarchy File

File name: clnd.csv.dat

File format: comma-separated values file

Fields: Day, Week, Month, Quarter, Season, Year

The following table describes the fields in this file.

Field	Description
Day	Day or date in YYYYMMDD format
Week	Week number
Month	Month number

Field	Description
Quarter	Quarter of the year
Season	Season of the year
Year	Year

Example:

```
DAY20130101,2013D1,W48_2012,1/5/2013,M11_2012,"Dec, FY2012",Q4_2012,"4th Qrtr,
FY2012",S2_2012,"Fall, FY2012",A2012,FY2012
DAY20130102,2013D2,W48_2012,1/5/2013,M11_2012,"Dec, FY2012",Q4_2012,"4th Qrtr,
FY2012",S2_2012,"Fall, FY2012",A2012,FY2012
DAY20130103,2013D3,W48_2012,1/5/2013,M11_2012,"Dec, FY2012",Q4_2012,"4th Qrtr,
FY2012",S2_2012,"Fall, FY2012",A2012,FY2012
DAY20130104,2013D4,W48_2012,1/5/2013,M11_2012,"Dec, FY2012",Q4_2012,"4th Qrtr,
FY2012",S2_2012,"Fall, FY2012",A2012,FY2012
DAY20130105,2013D5,W48_2012,1/5/2013,M11_2012,"Dec, FY2012",Q4_2012,"4th Qrtr,
FY2012",S2_2012,"Fall, FY2012",A2012,FY2012
```

Product Hierarchy File**File name:** prod.csv.dat**File format:** comma-separated values file**Fields:** SKU, Vendor, Style/Color, Style, Sub-Category, Category, Department, Group, Division, Company, Sub-Brand, Brand

The following table describes the fields in this file.

Field	Description
SKU	Unique Stock-keeping Unit Identifier
Vendor	Product Vendor. Vendor is an alternate roll-up from SKU.
Style/Color	Style/Color
Style	Style
Sub-category	Sub-category
Category	Category
Department	Department
Group	Group
Division	Division
Company	Company
Sub-brand	Sub-Brand. Sub-Brand and Brand are alternate roll-ups from SKU.
Brand	Brand

Example:

```
3375772212,3375772212 CTL_BR_NATURAL RTE_CEREAL_14_OUNCE,11,11 STCO_Cardboard,1,1
STYLE_Cardboard,SCLS_BOX,BOX,CLSS_CEREAL,CEREAL,901,901 Cold Foods,31,31
Breakfast,30,30 Grocery,1,1 Acme Home,V2,V2 H thru P by Air,SBRD_PRIVATE_
LABEL,PRIVATE_LABEL_Cereal,BRD_PRIVATE_LABEL,PRIVATE_LABEL
223375772213,223375772213 CTL_BR_NATURAL RTE_CEREAL_14_OUNCE,11,11 STCO_
```

Cardboard,1,1 STYLE_Cardboard,SCLS_BOX,BOX,CLSS_CEREAL,CEREAL,901,901 Cold Foods,31,31 Breakfast,30,30 Grocery,1,1 Acme Home,V2,V2 H thru P by Air,SBRD_PRIVATE_LABEL,PRIVATE_LABEL_Cereal,BRD_PRIVATE_LABEL,PRIVATE_LABEL 223375772214,223375772214 CTL_BR_CRNCH_CRNCH_NTRL_NTRL_CRL_GRANOLA,11,11 STCO_Cardboard,1,1 STYLE_Cardboard,SCLS_BOX,BOX,CLSS_CEREAL,CEREAL,901,901 Cold Foods,31,31 Breakfast,30,30 Grocery,1,1 Acme Home,V2,V2 H thru P by Air,SBRD_PRIVATE_LABEL,PRIVATE_LABEL_Cereal,BRD_PRIVATE_LABEL,PRIVATE_LABEL 223375772215,223375772215 CTL_BR_NATURAL_RTE_CEREAL_10.5_OUNCE,11,11 STCO_Cardboard,1,1 STYLE_Cardboard,SCLS_BOX,BOX,CLSS_CEREAL,CEREAL,901,901 Cold Foods,31,31 Breakfast,30,30 Grocery,1,1 Acme Home,V2,V2 H thru P by Air,SBRD_PRIVATE_LABEL,PRIVATE_LABEL_Cereal,BRD_PRIVATE_LABEL,PRIVATE_LABEL 223375772216,223375772216 CTL_BR_NATURAL_RTE_CEREAL_10.5_OUNCE,11,11 STCO_Cardboard,1,1 STYLE_Cardboard,SCLS_BOX,BOX,CLSS_CEREAL,CEREAL,901,901 Cold Foods,31,31 Breakfast,30,30 Grocery,1,1 Acme Home,V2,V2 H thru P by Air,SBRD_PRIVATE_LABEL,PRIVATE_LABEL_Cereal,BRD_PRIVATE_LABEL,PRIVATE_LABEL

Location Hierarchy File

File name: loc.csv.dat

File format: comma-separated values file

Fields: Store, District, Region, Area, Channel, Chain, Company, Store Cluster, Trading Area, Trading Area Group

The following table describes the fields in this file.

Field	Description
Store	Store
District	District
Region	Region
Area	Area
Channel	Channel
Chain	Chain
Company	Company
Store Cluster	Store Cluster. This is a group of stores with similar characteristics. Alternate roll-up from Store.
Trading Area	Trading Area. One or more Store Clusters form a Trading Area.
Trading Area Group	Trading Area Group
Store Group	Store Group. This is a user-defined dimension and is not required to be included in the loc.csv.dat load file.

Example:

1000,1000 Charlotte,401,401 Southeast,400,Southeast,2,South,1,Brick & Mortar,1,Chain 1,1,Retailer Ltd,A,Store Cluster A,1,Trading Area 1,1,All Trading Areas
 1001,1001 Atlanta,400,400 Southeast,400,Southeast,2,South,1,Brick & Mortar,1,Chain 1,1,Retailer Ltd,A,Store Cluster A,1,Trading Area 1,1,All Trading Areas
 1003,1003 Boston,201,201 Northeast,200,Northeast,1,North,1,Brick & Mortar,1,Chain 1,1,Retailer Ltd,A,Store Cluster A,1,Trading Area 1,1,All Trading Areas
 1009,1009 Albuquerque,300,300 Southwest,300,Southwest,2,South,1,Brick &

Mortar,1,Chain 1,1,Retailer Ltd,A,Store Cluster A,1,Trading Area 1,1,All Trading Areas
1010,1010 Los Angeles,301,301 Southwest,300,Southwest,2,South,1,Brick &
Mortar,1,Chain 1,1,Retailer Ltd,A,Store Cluster A,1,Trading Area 1,1,All Trading Areas

Category Management-Specific Hierarchy Files

The following are the hierarchy files that are specific to Category Management:

- Right-Hand Side Product Hierarchy File
- Focus Area Attributes Hierarchy File
- Consumer Profile Hierarchy File
- Retail Segment Hierarchy File
- Retailer Hierarchy File
- Consumer Segment Hierarchy File
- Linear Number Hierarchy File
- Tactic Hierarchy File
- Breakpoints Hierarchy File
- Product Attributes Hierarchy File
- Strategy Hierarchy File
- Curve Points Hierarchy File

Right-Hand Side Product Hierarchy File

File name: pror.csv.dat

File format: comma-separated values file

Fields: SKU, Vendor, Style/Color, Style, Sub-Category, Category, Department, Group, Division, Company, Sub-Brand, Brand

The following table describes the fields in this file.

Field	Description
SKU	Unique Stock-keeping Unit Identifier
Vendor	Product Vendor. Vendor is an alternate roll-up from SKU.
Style/Color	Style/Color
Style	Style
Sub-Category	Sub-Category
Category	Category
Department	Department
Group	Group
Division	Division
Company	Company
Sub-Brand	Sub-Brand. Sub-Brand and Brand are alternate roll-ups from SKU.

Field	Description
Brand	Brand

Example:

```

3375772212,3375772212 CTL_BR_NATURAL RTE_CEREAL_14_OUNCE,11,11 STCO_Cardboard,1,1
STYLE_Cardboard,SCLS_BOX,BOX,CLSS_CEREAL,CEREAL,901,901 Cold Foods,31,31
Breakfast,30,30 Grocery,1,1 Acme Home,V2,V2 H thru P by Air,SBRD_PRIVATE_
LABEL,PRIVATE_LABEL_Cereal,BRD_PRIVATE_LABEL,PRIVATE_LABEL
223375772213,223375772213 CTL_BR_NATURAL RTE_CEREAL_14_OUNCE,11,11 STCO_
Cardboard,1,1 STYLE_Cardboard,SCLS_BOX,BOX,CLSS_CEREAL,CEREAL,901,901 Cold
Foods,31,31 Breakfast,30,30 Grocery,1,1 Acme Home,V2,V2 H thru P by Air,SBRD_
PRIVATE_LABEL,PRIVATE_LABEL_Cereal,BRD_PRIVATE_LABEL,PRIVATE_LABEL
223375772214,223375772214 CTL_BR_CRNCH_CRNCH_NTRL_NTRL_CRL_GRANOLA,11,11 STCO_
Cardboard,1,1 STYLE_Cardboard,SCLS_BOX,BOX,CLSS_CEREAL,CEREAL,901,901 Cold
Foods,31,31 Breakfast,30,30 Grocery,1,1 Acme Home,V2,V2 H thru P by Air,SBRD_
PRIVATE_LABEL,PRIVATE_LABEL_Cereal,BRD_PRIVATE_LABEL,PRIVATE_LABEL
223375772215,223375772215 CTL_BR_NATURAL RTE_CEREAL_10.5_OUNCE,11,11 STCO_
Cardboard,1,1 STYLE_Cardboard,SCLS_BOX,BOX,CLSS_CEREAL,CEREAL,901,901 Cold
Foods,31,31 Breakfast,30,30 Grocery,1,1 Acme Home,V2,V2 H thru P by Air,SBRD_
PRIVATE_LABEL,PRIVATE_LABEL_Cereal,BRD_PRIVATE_LABEL,PRIVATE_LABEL
223375772216,223375772216 CTL_BR_NATURAL RTE_CEREAL_10.5_OUNCE,11,11 STCO_
Cardboard,1,1 STYLE_Cardboard,SCLS_BOX,BOX,CLSS_CEREAL,CEREAL,901,901 Cold
Foods,31,31 Breakfast,30,30 Grocery,1,1 Acme Home,V2,V2 H thru P by Air,SBRD_
PRIVATE_LABEL,PRIVATE_LABEL_Cereal,BRD_PRIVATE_LABEL,PRIVATE_LABEL

```

Focus Area Attributes Hierarchy File**File name:** faah.csv.dat**File format:** comma-separated values file**Field:** Focus Area

The following table describes the field in this file.

Field	Description
Focus Area	The focus area name

Example:

```

fa1,Attributes
fa2,Market Basket
fa3,Loyalty
fa4,Performance

```

Consumer Profile Hierarchy File**File name:** cprf.csv.dat**File format:** comma-separated values file**Fields:** Consumer Profile, Consumer Profile Type

The following table describes the fields in this file.

Field	Description
Consumer profile	This represents the gradations within a particular demographic measure. For example, if the demographic measure is "Household Size", then the profile represents the breakdown within that information, such as, 1, 2, 3-4, 5-6, and 7+.
Consumer Profile Type	This is the consumer demographic information, such as Household Income, Head of Household Age, Children's Ages, Life Stage, or Household Size.

Example:

```

cprd100,"$0 - $19,999",cprt0,Household Income
cprd101,"$20,000 - $29,999",cprt0,Household Income
cprd102,"$30,000 - $39,999",cprt0,Household Income
cprd103,"$40,000 - $49,999",cprt0,Household Income
cprd104,"$50,000 - $69,999",cprt0,Household Income
cprd105,"$70,000 - $89,999",cprt0,Household Income
cprd106,"$90,000 - $109,999",cprt0,Household Income
cprd107,"$110,000 - $149,999",cprt0,Household Income
cprd108,"$150,000+",cprt0,Household Income
cprd200,18-24,cprt1,Head of Household Age
cprd201,25-34,cprt1,Head of Household Age
cprd202,35-50,cprt1,Head of Household Age
cprd203,51-60,cprt1,Head of Household Age
cprd204,61-67,cprt1,Head of Household Age
cprd205,68+,cprt1,Head of Household Age

```

Retail Segment File**File name:** rsgd.csv.dat**File format:** comma-separated values file**Field:** Retailer Type

The following table describes the field in this file.

Field	Description
Retailer Type	The various broad segments of the retail market.

Example:

```

rsgd1,Grocery
rsgd2,Convenience/Gas
rsgd3,Drug
rsgd4,Super-Centers
rsgd5,Warehouse Club
rsgd6,Dollar Stores
rsgd7,Mass Merch Without Supers
rsgd8,All Other Channels

```

Retailer Hierarchy File**File name:** reth.csv.dat**File format:** comma-separated values file**Field:** Retailer

The following table describes the field in this file.

Field	Description
Retailer	A simple listing of competitor names.

Example:

```
ret1,Retailer 1
ret2,Retailer 2
ret3,Retailer 3
```

Consumer Segment Hierarchy File**File name:** csh.csv.dat**File format:** comma-separated values file**Fields:** Consumer Segment Version, Consumer Segment

The following table describes the fields in this file.

Field	Description
Consumer Segment Version	The version (1, 2, 3,..., or Summer, Fall,...) of a given consumer segment.
ConsumerSegment	A name that identifies a group of consumers with similar buying patterns, such as "Getting By" or "Empty Nester".

Example:

```
s1CDT1,Soccer Mom CDT Version 1,s1,Soccer Mom
s1CDT2,Soccer Mom CDT Version 2,s1,Soccer Mom
s1CDT3,Soccer Mom CDT Version 3,s1,Soccer Mom
s1CDT4,Soccer Mom CDT Version 4,s1,Soccer Mom
s1CDT5,Soccer Mom CDT Version 5,s1,Soccer Mom
s2cdt1,Natural N Healthy CDT Version 1,s2,Natural N Healthy
s2cdt2,Natural N Healthy CDT Version 2,s2,Natural N Healthy
s2cdt3,Natural N Healthy CDT Version 3,s2,Natural N Healthy
s2cdt4,Natural N Healthy CDT Version 4,s2,Natural N Healthy
s2cdt5,Natural N Healthy CDT Version 5,s2,Natural N Healthy
```

Linear Number Hierarchy File**File name:** lnmh.csv.dat**File format:** comma-separated values file**Field:** Linear Number

The following table describes the field in this file.

Field	Description
LinearNumber	01, 02, 03,...

Example:

```
01, 01
02, 02
03, 03
04, 04
05, 05
```

06,06
07,07
08,08
09,09
10,10

Tactic Hierarchy File

File name: tcth.csv.dat

File format: comma-separated values file

Field: Tactic

The following table describes the field in this file.

Field	Description
Tactic	The name of an area within Category Management where multiple approaches might be relevant.

Example:

1,Assortment
2,Pricing
3,Promotion
4,Space
5,Inventory

Breakpoint Hierarchy File

File name: pcth.csv.dat

File format: comma-separated values file

Field: Breakpoint

The following table describes the field in this file.

Field	Description
Breakpoint	A threshold used in calculating information about an assortment, such as fragmentation.

Example:

bp1,50%
bp2,75%
bp3,80%
bp4,85%
bp5,90%
bp6,95%
bp7,99%
bp8,Wif_1
bp9,Wif_2
bp10,Wif_3

Product Attributes Hierarchy File

File name: attr.csv.dat

File format: comma-separated values file

Fields: Attribute Value, Attribute Name

The following table describes the fields in this file.

Field	Description
Attribute Value	The various values that an attribute might have. For example, the "package type" attribute might take the values "bag", "box", or "convenience".
Attribute Name	The name of a product attribute, such as "brand", "family type", "flavor", "grain", "package type", "size", or "temperature".

Example:

```
familytype_adult,ADULT,familytype,Family Type
familytype_convenience,CONVENIENCE,familytype,Family Type
familytype_family,FAMILY,familytype,Family Type
familytype_kids,KIDS,familytype,Family Type
flavor_almond,ALMOND,flavor,Flavor
flavor_apple,APPLE,flavor,Flavor
flavor_banana,BANANA,flavor,Flavor
flavor_berries,BERRIES,flavor,Flavor
flavor_berry,BERRY,flavor,Flavor
flavor_caramel,CARAMEL,flavor,Flavor
flavor_chocolate,CHOCOLATE,flavor,Flavor
flavor_cinnimon,CINNIMON,flavor,Flavor
```

Strategy Hierarchy File

File name: sgyh.csv.dat

File format: comma-separated values file

Field: Strategy

The following table describes the field in this file.

Field	Description
Strategy	The name of a category strategy.

Example:

```
STRTG1,Traffic Building
STRTG2,Transaction Building
STRTG3,Profit Contribution
STRTG4,Cash Generating
STRTG5,Excitement Creating
STRTG6,Image Enhancing
STRTG7,Turf Defending
```

Curve Points Hierarchy File

File name: curv.csv.dat

File format: comma-separated values file

Field: Curve Number

This hierarchy is used in demand transference calculations. The following table describes the field in this file.

Field	Description
Curve Number	Represents the number of SKUs under consideration by various demand transference calculations.

Example:

```
001,001 sku
002,002 skus
003,003 skus
...
098,098 skus
099,099 skus
100,100 skus
```

Data Files

Category Management is a data-intensive application. The data files required are listed in [Chapter 9](#).

Building the Category Management Domain

The script used to build or patch the Category Management domain is described in this section. The script is located in the <CM_HOME>/bin directory.

Batch Design

This section contains detailed information on the Building a Domain script:

Script

build.ksh

Usage

build.ksh

Notes

- The script overwrites an existing domain, so it should never be run on top of an existing domain unintentionally. Updating an existing domain should be done through the <CM_HOME>/bin/patch_cm_keepformats.ksh or <CM_HOME>/bin/patch_cm_deleteformats.ksh scripts.
- The script uses the Configuration Tools rpasInstall utility to build a domain. See the *Oracle Retail Predictive Application Server Administration Guide* for details on this utility.
- The script also uses the following RPAS utilities: mace and loadmeasure. See the *Oracle Retail Predictive Application Server Administration Guide* for details on these utilities.
- All hierarchy and measure files are placed in the <CM_HOME>/input directory.
- The script also processes all pre-prepared consumer decision tree files. This creates multiple dynamic hierarchies that provide the ability to aggregate information as determined by a consumer decision tree. It expects these pre-prepared consumer decision trees to be in <CM_HOME>/input/cdtdata/. Any file in this directory ending with .xml is assumed to be a CDT file and will be processed by the CDT Parser.

Configuration Files for the RPAS Fusion Client

The Category Management installation software enables you to install the activity taskflow and online help files for the RPAS Fusion Client. In order to install the activity taskflow files, the RPAS Fusion Client must already be installed. For more information on installing the RPAS Fusion Client, refer to the *Oracle Retail Predictive Application Server Installation Guide*.

During the RPAS Fusion Client installation, the installer automatically sets up the RPAS domain connection configurations in the ProfileList.xml file. In case you choose to set up the domain connection after the installation or set up an additional domain, you must manually set up the connection. For more information, refer to the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*.

Creating Users and User Groups

For greater security, users and user groups are not automatically created when you build or patch a domain. To create users and user groups, you must use the usermgr utility. To learn more about usermgr, see the Operational Utilities chapter of the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*.

Loading and Extracting Data

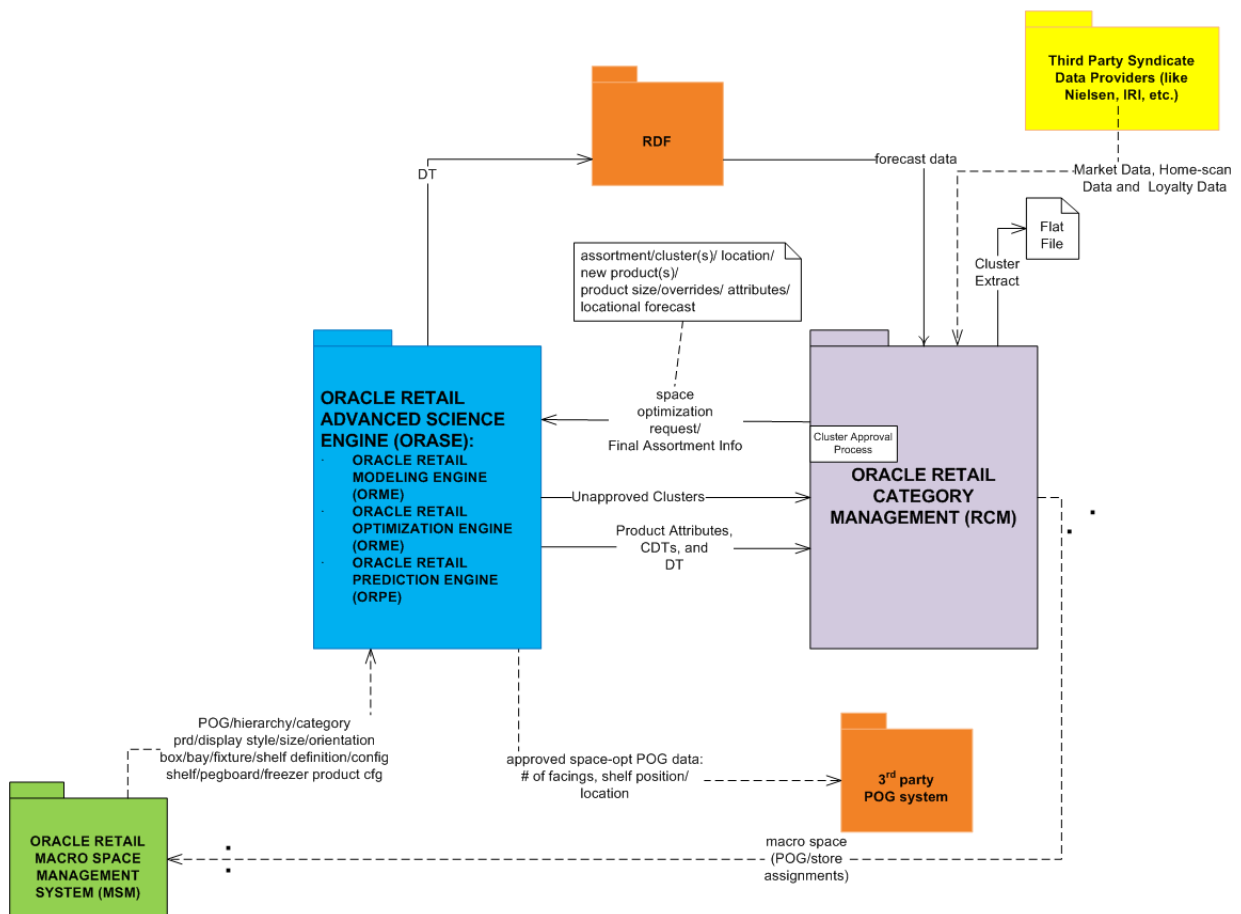
Data is loaded into Category Management using the standard RPAS approach. See the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client* for details on formatting the load data files and on the utilities that enable administrators to load data into RPAS. If you are using script integration, see [Chapter 5](#). For information on other batch scripts, see [Chapter 7](#).

This chapter describes the flow of data between RCM and other applications.

Overview of the Category Management Data Flow

Figure 4–1 shows the data flow between Category Management and other applications. It is important to note that the dotted-lines in the data flow diagram indicate that there are no established interfaces between RCM and the respective, connected applications. For a detailed description data flow, see "Data Flow Descriptions".

Figure 4–1 Category Management Data Flow



Data Flow Descriptions

The RCM application is integrated with the Oracle Retail Advanced Science Engine (ORASE) and sources key information that is used in the Category Management process flow. Key integration points include the following:

- 1. Import of Assortment Cluster Data:** Stores are grouped into Assortment Clusters or Clusters to be used to create Assortment Plans at the cluster level. ORASE and RCM share a common location hierarchy specifically in terms of Stores and Trading Area mapping. RCM sources assortment clusters in the form of .csv files from the Oracle Retail Modeling Engine (ORME) module, which is part of ORASE. Grouping of stores or Assortment Clustering in ORME is based on various parameters such as Consumer Segment Profiles, Store Attributes, Performance Attributes, Product Attributes, and so on.
- 2. Import and Export of Product Attributes:** Product Attributes, or simply Attributes, consist of attribute names and attribute values at the SKU/Item level. RCM sources attributes from ORME in the form of .csv files. RCM provides the facility to add and modify attribute values that map to SKUs/Items. There is an export facility available to communicate the changes to the Master Data Management system and to eventually reach ORME.
- 3. Import of Consumer Decision Trees (CDTs):** CDTs are used to understand the consumer buying process and to identify key product attributes that influence consumer buying decisions from a consumer segment profile perspective. This ensures that key product attribute based products are present in the assortment. The CDT is expected to be in the form of a .XML file and use categories, trading areas, consumer segments, and attributes consistent with those found in RCM. CDTs are sourced from the ORME module of ORASE.
- 4. Import of Demand Transference (DT) Data:** An Application Programming Interface (API) consisting of Java libraries is used to perform DT calculations in RCM. This API requires measures such as assortment elasticity for categories, similarity between SKUs/Items, DT-specific Attribute Weights, and Functional Fitment of attributes to categories. This information is sourced from the ORME module of ORASE in the form of .csv files.
- 5. Export to ORASE:** RCM exports category plan, assortment plan and space management related information to the Oracle Retail Optimization Engine (OROE) module of ORASE. There are two types of exports provided to OROE:
 - An export with an assortment optimization request to OROE from a space management perspective
 - An update to OROE in the form of a final approved assortment and category plans for eventual implementation

Data Flow from External Sources to RCM

RCM has a special data requirement that brings in consumer-centricity and the retailer's market standing into the Category Management practice. A lot of this data is sourced from third-party syndicated data suppliers, also referred to as external market data providers. Examples of external market data providers include AC Nielsen, Symphony IRI, Axcion, and FICO. The standard RPAS import facility is used to bring this data in from external sources. This is not depicted in [Figure 4–1](#).

Data Flow between Master Data Management System and RCM

RCM is much like other RPAS-based planning products in that it shares information with a Master Data Management System (MDM) or Oracle Retail Merchandising

System (RMS). RMS, in general, acts as an MDM system. This is not depicted in [Figure 4-1](#). Although there are no direct integrations or interfaces available for data flow between RMS and RCM, it sources the foundation data and key operational data from RMS like any other application. The following information is sourced from the MDM system:

- Product and Location hierarchy data
- Operational data such as sales, promotional sales, private label sales, sales by consumer segment, cost, space planning and data, collectively referred to as actuals data
- Product attributes data

Master Data Management system is used in a general sense here, meaning it could be an actual merchandising system or a data warehouse that draws from a merchandising system.

Integration

This release of Category Management has defined, supported integration processes for exporting data to and importing data from Oracle Retail Advanced Science Engine (ORASE). These integration processes are detailed in this chapter. In addition, there are basic, supported import and export scripts that can be used as a basis for a customer-defined integration with other systems.

This chapter describes the basic Category Management script import and export.

All Category Management import and export-related scripts and files are located in <CM_HOME>/bin.

Export Script

The export script is used for exporting data from Category Management. The export consists of a single script along with a control file.

Script Name:

exportdata.ksh

Usage:

exportdata.ksh <control-file>

Control File Name:

exportlist.txt

Control File Content and Format

The control file contains a list of measures to be exported and their desired export intersections, separated by a space. The intersections must conform to RPAS standards (four characters per dimension, right padded with underscores if less than length four). For example:

- drtynumfacingsv sku_str_week
- drtyshelfcapv sku_str_week
- drtysqftv sku_str_week
- drtystrclustx qrtrclsstr
- drtystrcluslbl qrtrclsstr

Output Location and Format

The output files are written to the <CM_MASTERDOMAIN>/output directory. The output file names are the measure names from the control file. The exportMeasure

utility is used to export data in CSV (comma-separated values) format. This maintains the consistency of start and width attributes across different applications. See the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client* for details on this utility.

Environment Variables

Only CM_HOME needs to be defined prior to running the script. Other required environment variables are set in the <CM_HOME>/bin/environment.ksh script. These may be adjusted to redefine the output directory, and so on.

Log Files

Processing logs for this script are written to the <CM_HOME>/logs/<date_dir>/exportdata.<unique_id> directory. Here,

- <date_dir> is a directory with a name corresponding to the date the script was run, in the format YYYY-MM-DD.
- <unique_id> is a system-generated string of numbers that is unique in this context.

Inside this folder, the log file is called exportdata.log. Additional folders are created for every invocation of the script.

Error Codes

exportdata.ksh detects several error conditions, as shown in [Table 5–1](#).

Table 5–1 Error Codes for exportdata.ksh

Error Code	Abort Required?	Error Description
6	Yes	<control-file> not passed as an argument to the script.
13	Yes	Domain not found.

Import Script

The import script is used for importing data to Category Management. The import consists of a single script along with a control file.

Script Name:

importdata.ksh

Usage:

```
importdata.ksh <control-file>
```

Control File Name:

importlist.txt

Control File Content and Format

The control file contains a list of measures to be imported. For example:

- drtyattrvaltx
- drtynumfacingsv
- drtynumfacingsv
- drtysqftv

Input Location and Format

The input files are expected to be in the <domain>/input directory. The input file names must match the target measure names in Category Management, suffixed with ".csv.ovr". The loadmeasure utility is used to import data in CSV (comma-separated values) format. See the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client* for details on this utility.

Environment Variables

Only CM_HOME must be defined prior to running the script. Other required environment variables are set in the <CM_HOME>/bin/environment.ksh script. These may be adjusted to alter entities such as the log level.

Log Files

Processing logs for this script are written to the <CM_HOME>/logs/<date_dir>/importdata.<unique_id> directory. Here,

- <date_dir> is a directory with a name corresponding to the date the script was run, in the format YYYY-MM-DD.
- <unique_id> is a system generated string of numbers that is unique in this context.

Inside this folder, the log file is called importdata.log. Additional folders are created for every invocation of the script.

Error Codes

importdata.ksh detects several error conditions, as shown in [Table 5–2](#).

Table 5–2 Error Codes for importdata.ksh

Error Code	Abort Required?	Error Description
6	Yes	<control-file> not passed as an argument to the script.
13	Yes	Domain not found.

ORASE Integration

RCM and ORASE are integrated with an exchange of data. This section describes the RCM exports which ORASE can receive, as well as, the ORASE exports which RCM can receive.

ORASE to RCM

ORASE exports several data files which can be imported into RCM. Following are lists of the files:

Attribute Information:

- Product Attributes Hierarchy - attr.csv.dat. This hierarchy load file contains the Product Attributes definition.
- Loaded Attribute Value ID - drtyattrvaltx.csv.ovr. This measure load file contains the SKU-Product Attributes mapping.

Demand Transference Files:

- Assortment Elasticity - drtyassrtelasv.csv.ovr. This measure load file contains the Assortment Category Elasticity Parameters.

- Attribute Weights and Functional Fit - drtyattrwgtv.csv.ovr. This measure load file contains both Category-Attribute Weights and Category-Attribute Functional Fit.
- Similarities - drtysiminv.csv.ovr. This measure load file contains the SKU Similarities Parameters.

Cluster Information:

Store Clusters - rsestrclst.csv. This measure load file contains Store Cluster Name and Store Cluster Label data.

Consumer Decision Trees:

CDTs - *.xml. Any number of consumer decision tree (CDT) files in XML format.

RCM to ORASE

RCM exports several data files using the Export to ASO @ Cluster and Export to ASO @ Store custom menus within the AP workbook, which can be imported into ORASE. Following are lists of the files:

ASO Exports:

- Assortment Plan - asrt_plan.txt. This file contains ASO request type, Assortment Type, Role, Tactics, and Strategies.
- Assortment Product - asrt_prod.txt. This file contains the Assortment type and priority for SKUs.
- Assortment Placeholder-Like Product - asrt_ph_like_prod.txt. This file contains the placeholder products included in the assortment.
- Cluster - cluster.txt. This file contains store cluster information.
- Store - store.txt. This file contains the store-cluster mapping.
- Price Cost - price_cost.txt. This file contains price and cost information for SKUs.
- Forecast - forecast.txt. This file contains the forecast for all SKUs.
- New Product Other Attributes - new_prod_attr.txt. This file contains the SKU-Attribute Map for new SKUs.

Transformation between ORASE and RPAS Format

The format used by RPAS and ORASE for categories and attributes is not the same. The ORASE format is to add a class prefix before the attribute name ID, attribute value ID, and category ID, but the RPAS format does not utilize this prefix. [Table 5–3](#) describes differences, by way of example, between the two formats.

Table 5–3 Transformation Matrix

	RPAS Format	ORASE Format
Attribute Name ID	brandtier	CLS~1000~10000~brandtier
Attribute Value ID	brandtier~national_ mainstream	CLS~1000~10000~brandtier~national_ mainstream
Category ID	1000_10000	CLS~1000~10000

In the table, ORASE format, the class prefix used is "CLS~1000~10000." This is a concatenation of a text string CLS denoting class, in addition to the department ID 1000, and the class ID 10000. RPAS does not utilize this prefix. In addition, when

concatenating the department and class IDs together to form the class position ID, RPAS uses an underscore rather than tilde separator.

The RCM import and export scripts described in the following sections contain code which can be utilized to transform between these formats.

ORASE to RCM Data Transformation Script

The flat-file data exported from ORASE and imported into RCM is transformed using a script.

Script Name

rcm_t_data_orase.ksh

Usage

```
rcm_t_data_orase.ksh -f <file> -d <delimiter> [-a <field1,field2,...>] -c
<field1,field2,...>
```

<file> is the path and file name of the file to be transformed. The script will look for the file in the path specified.

<delimiter> is the delimiter used to separate fields in the input file.

<fieldx>, when used after the -a option, indicates a field containing attribute name or attribute value IDs to be transformed. If multiple fields contain data needing transformation, specify them in comma-separated format. For example "-a 1, 2, 3".

<fieldx>, when used after the -c option, indicates a field containing category name IDs to be transformed. If multiple fields contain data needing transformation, specify them in comma-separated format. For example "-c 4, 5".

Notes

This script may be called from the command line.

Additionally, this script is invoked from within other integration scripts when called with the -r option. Specifically, import_rse_attributes.ksh, described in ["Attributes Data Import Script"](#), when called with the -r option, will call rcm_t_data_orase.ksh to transform the attribute ID fields of the attribute hierarchy and SKU-attribute map before loading the data into the RCM domain. The script import_rse_clusters.ksh, described in ["Clustering Data Import Script"](#), when called with the -r option, will call rcm_t_data_orase.ksh to transform the category ID field before loading the data into the RCM domain. The script import_rse_dt.ksh, described in ["Demand Transference Data Import Script"](#), when called with the -r option, will call rcm_t_data_orase.ksh to transform the assortment elasticity category ID field and attribute weights and functional fit category and attribute name ID fields before loading into the RCM domain. Each of these three scripts use a delimiter of the comma character ("-d ,").

This script will transform the specified fields from ORASE format to RPAS format as detailed in [Table 5-3](#).

Log Files

Processing logs for this script, when called from the command line, are written to the <CM_HOME>/logs/<date_dir>/rcm_t_data_orase.<unique_id> directory. If invoked from within another import script, the log for this script will be one level deeper from the calling script. For example, <CM_HOME>/logs/<date_dir>/<calling script>.<unique_id>/rcm_t_data_orase.<unique_id>. Here,

- `<date_dir>` is a directory with a name corresponding to the date the script was run, in the format YYYY-MM-DD.
- `<unique_id>` is a system-generated string of numbers that is unique in this context.

Inside this folder, the log file is called `rcm_t_data_orase.log`. Additional folders are created for every invocation of the script.

Error Codes

`rcm_t_data_orase.ksh` detects the following error condition, as shown in [Table 5–4](#).

Table 5–4 Error Codes for `rcm_t_data_orase.ksh`

Error Code	Abort Required?	Error Description
1	Yes	Failure in one of the following commands: mv, touch, or incorrect usage.

ORASE to RCM CDT Transformation Script

The CDT files exported from ORASE and imported into RCM are transformed using a script.

Script Name

`rcm_t_cdt_orase.ksh`

Usage

`rcm_t_cdt_orase.ksh -f <cdtfile>`

`<cdtfile>` is the path and file name of the file to be transformed. The script will look for the file in the path specified.

Notes

This script may be called from the command line. However, it is also invoked from within the `processcdts.ksh` script when called with the `-r` option.

This script will transform the `<cdt>` tag's category element, from ORASE format to RPAS format according to [Table 5–3](#). It will also transform all `<attribute>` tags' name and value elements, from ORASE format to RPAS format according to [Table 5–3](#).

Log Files

Processing logs for this script, when called from the command line, are written to the `<CM_HOME>/logs/<date_dir>/rcm_t_cdt_orase.<unique_id>` directory. If invoked from within another import script, the log for this script will be one level deeper from the calling script. For example, `<CM_HOME>/logs/<date_dir>/<calling script>.<unique_id>/rcm_t_cdt_orase.<unique_id>`. Here,

- `<date_dir>` is a directory with a name corresponding to the date the script was run, in the format YYYY-MM-DD.
- `<unique_id>` is a system-generated string of numbers that is unique in this context.

Inside this folder, the log file is called `rcm_t_cdt_orase.log`. Additional folders are created for every invocation of the script.

Error Codes

rcm_t_cdt_orase.ksh detects several error conditions, as shown in [Table 5-5](#).

Table 5-5 Error Codes for rcm_t_cdt_orase.ksh

Error Code	Abort Required?	Error Description
1	Yes	Failure in one of the following commands: mv, sed, or incorrect usage.
3	Yes	The CDT file specified by the -f option is not found.

RCM to ORASE Data Transformation Script

The flat-file data exported from ORASE and imported into RCM is transformed using a script.

Script Name

orase_t_data_rcm.ksh

Usage

```
orase_t_data_rcm.ksh -f <file> -d <delimiter> [-n <field1,field2,...>] [-v
<field1,field2,...>] [-c <field1,field2,...>]
```

<file> is the path and file name of the file to be transformed. The script looks for the file in the path specified.

<delimiter> is the delimiter used to separate fields in the input file. If the delimiter needed is the pipe character ("|"), specify "-f PIPE".

<fieldx>, when used after the -n option, indicates a field containing attribute name IDs to be transformed. If multiple fields contain data needing transformation, specify them in comma-separated format. For example, "-n 1, 2, 3".

<fieldx>, when used after -v option, indicates a field containing attribute value IDs to be transformed. If multiple fields contain data needing transformation, specify them in comma-separated format. For example, "-v 1, 2, 3".

<fieldx>, when used after -c option, indicates a field containing category name IDs to be transformed. If multiple fields contain data needing transformation, specify them in comma-separated format. For example, "-c 4, 5".

Notes

Since -n, -v, and -c are optional, if none are specified, the script will exit gracefully with nothing to do.

If -n is specified but -v is not, the script will exit, as an attribute name field is required to correctly prefix the -n field.

This script may be called from the command line.

Additionally, this script can be called by export_so.ksh, which is run during execution of the Export to ASO @ Cluster and Export to ASO @ Store custom menus inside the Assortment Planning workbook. In this context, the script export_so.ksh reads the environment variable (from environment.ksh) TRANSFORM_RMS_FORMAT. If this variable is set to "on," then the orase_t_data_rcm.ksh is invoked. It will be called twice, once for the new_prod_attr.txt file (to transform fields 3 and 4) and a second time for the asrt_plan.txt file (to transform field 2).

This script will transform the specified fields from RPAS format to ORASE format as detailed in [Table 5-3](#).

Log Files

Processing logs for this script, when called from the command line, are written to the `<CM_HOME>/logs/<date_dir>/orase_t_data_rcm.<unique_id>` directory. If invoked from within another script, for example, `export_so.ksh`, the log for this script will be one level deeper from the calling script. For example, `<CM_HOME>/logs/<date_dir>/export_so.<unique_id>/orase_t_data_rcm.<unique_id>`. Here:

- `<date_dir>` is a directory with a name corresponding to the date the script was run, in the format YYYY-MM-DD.
- `<unique_id>` is a system-generated string of numbers that is unique in this context.

Inside this folder, the log file is called `orase_t_data_rcm.log`. Additional folders are created for every invocation of the script.

Error Codes

`orase_t_data_rcm.ksh` detects several error conditions, as shown in [Table 5-6](#).

Table 5-6 Error Codes for `orase_t_data_rcm.ksh`

Error Code	Abort Required?	Error Description
1	Yes	Incorrect usage, or failure in one of the following commands or command-line utilities: <code>exportMeasure</code> , <code>awk</code> , <code>sort</code> , <code>exportHier</code> , <code>head</code> , <code>rm</code> , <code>touch</code> , <code>mv</code> .
15	Yes	Delimiter not specified, or attribute name field specified with <code>-n</code> but no attribute value field specified with <code>-v</code> .

Attributes Data Import Script

The attributes import script is used for importing attributes hierarchy and measure data into Category Management. The data is expected to be generated by ORASE. The import consists of a single script.

Script Name:

`import_rse_attributes.ksh`

Usage:

`import_rse_attributes.ksh [-r]`

The `-r` option indicates that attribute name IDs and attribute value IDs contained in the processed files should be transformed from ORASE format to RPAS format by removing the Class Prefix.

Input Files

The files imported by this script are:

- Product Attributes Hierarchy file: `attr.csv.dat`
- SKU-Attribute Map file: `drtyattrvaltx.csv.ovr`

Input Location and Format

The input files are expected to be in the `<domain>/input` directory.

The Product Attributes Hierarchy file, attr.csv.dat, is described in [Chapter 3](#). The SKU-Attribute Map file is described in ["SKU-Attributes Map File"](#).

SKU-Attributes Map File

File Name:

drtyattrvaltx.csv.ovr

File format:

comma-separated values file

Fields:

SKU, Product Attribute Name, Product Attribute Value

The following table describes the fields in this file.

Field	Description
SKU	SKU ID in the Product Hierarchy
Product Attribute Name	Product Attribute Name Position ID
Product Attribute Value	Product Attribute Value Position ID

Example:

```
"1234615","formatsize","12_oz"
"1234615","manufacturingprocess","non_organic"
"1234615","pl","npl"
"1234615","roast","light_roast"
"1234615","segment","de_caffeinated"
```

Note: The Attribute Name and Attribute Value fields must be the position names (such as non_organic), not the position labels (such as, Non Organic).

Algorithm

If the -r option is specified, the rcm_t_data_orase.ksh script is called to remove prefixes from the attribute name and attribute value ID fields. It calls RPAS loadHier to load the Product Attributes hierarchy file, converts the SKU-Attributes map contents to lower case, and calls RPAS loadmeasure to load the SKU-Attributes map file.

Environment Variables

Only CM_HOME must be defined prior to running the script. Other required environment variables are set in the <CM_HOME>/bin/environment.ksh script. These may be adjusted to alter entities such as the log level.

Log Files

Processing logs for this script are written to the <CM_HOME>/logs/<date_dir>/import_rse_attributes.<unique_id> directory. Here,

- <date_dir> is a directory with a name corresponding to the date the script was run, in the format YYYY-MM-DD.

- <unique_id> is a system generated string of numbers that is unique in this context. Inside this folder, the log file is called `import_rse_attributes.log`. Additional folders are created for every invocation of the script.

Error Codes

`import_rse_attributes.ksh` detects several error conditions, as shown in [Table 5–7](#).

Table 5–7 Error Codes for `import_rse_attributes.ksh`

Error Code	Abort Required?	Error Description
1	Yes	Failure in one of the following commands: <code>loadHier</code> , <code>loadmeasure</code> , or other Unix shell commands.
3	Yes	One of the load files is not found in the <CM_MASTERDOMAIN>/input directory.

Clustering Data Import Script

The clustering import script is used for importing store to store cluster mapping data into Category Management. The store to store cluster mapping is stored in two measures which are loaded into Dynamic Hierarchy Dimensions for selected Category Management workbooks. The data is expected to be generated by ORASE. The import consists of a single script.

Script Name:

`import_rse_clusters.ksh`

Usage:

`import_rse_clusters.ksh [-r]`

The `-r` option indicates that category IDs contained in the processed file should be transformed from ORASE format to RPAS format by removing the Class Prefix and changing the separator of the category ID from `~` to `_`.

Input Files

The file imported by this script is:

- Store to Store Cluster map file: `rsestrclst.csv`

Input Location and Format

The input file is expected to be in the <domain>/input directory.

The map file is described in ["Store to Store Cluster Map File"](#).

Output Effect

The input file is split into two entities, one holding the store cluster position and the other holding the store cluster labels. Each is then loaded into the RPAS measures `DRTYStrClusTx` and `DRTYStrClusLbl`.

Store to Store Cluster Map File

File Name:

`rsestrclst.csv`

File format:

comma-separated values file

Fields:

Effective Start Date, Effective End Date, Category, Store, Store Cluster Position, Store Cluster Label

The following table describes the fields in this file.

Field	Description
Effective Start Date	Effective Start Date in dayYYYYMMDD format
Effective End Date	Effective End Date in dayYYYYMMDD format
Category	Category ID in the Product Hierarchy
Store	Store ID in the Location Hierarchy
Store Cluster Position	Store Cluster Position ID
Store Cluster Label	Store Cluster Position Label

Example:

```
"day20121221","day20131219","10000","4","200","Cluster Set 1"
"day20121221","day20131219","10000","2","200","Cluster Set 1"
"day20121221","day20131219","20000","2","205","Cluster Set 1"
"day20121221","day20131219","20000","3","205","Cluster Set 1"
"day20121221","day20131219","40000","148","218","Cluster Set 4"
"day20121221","day20131219","40000","149","218","Cluster Set 4"
```

Algorithm:

If the -r option is specified, the rcm_t_data_orase.ksh script is called to remove prefixes from the category ID field.

During processing of the script, the end date is discarded. The remaining data is loaded into two temporary measures with an intersection of day/clss/str. When loading at day, if multiple rows of data for the same intersection exist, the last one will trump the earlier data.

Once the data is loaded into the two temporary measures at day, mace is invoked to aggregate the data into measures at qrtr/clss/str. During aggregation, if multiple records at day roll up to the same quarter, the data for the first row is retained.

Final result of the load is that the quarter, class, store, and store cluster position are written to the store cluster position measure, DRTYStrClusTx. The quarter, class, store, and store cluster label are written to the store cluster label measure, DRTYStrClusLbl.

These measures then become the load files for the Dynamic Hierarchy Dimension positions in the Assortment Planning workbook.

Environment Variables

Only CM_HOME must be defined prior to running the script. Other required environment variables are set in the <CM_HOME>/bin/environment.ksh script. These may be adjusted to alter entities such as the log level.

Log Files

Processing logs for this script are written to the <CM_HOME>/logs/<date_dir>/import_rse_clusters.<unique_id> directory. Here,

- <date_dir> is a directory with a name corresponding to the date the script was run, in the format YYYY-MM-DD.
- <unique_id> is a system generated string of numbers that is unique in this context.

Inside this folder, the log file is called import_rse_clusters.log. Additional folders are created for every invocation of the script.

Error Codes

import_rse_clusters.ksh detects the following error condition, as shown in [Table 5–8](#).

Table 5–8 Error Codes for import_rse_clusters.ksh

Error Code	Abort Required?	Error Description
1	Yes	Failure in one of the following commands: loadmeasure, regmeasure, mace, or other Unix shell commands.

Demand Transference Data Import Script

The Demand Transference import script is used for importing the data required for Category Management to utilize the ORASE calculations. The data is expected to be generated by ORASE. The import consists of a single script.

Script Name:

import_rse_dt.ksh

Usage:

import_rse_dt.ksh [-r]

The -r option indicates that category IDs contained in the Elasticity and Weights/Functional Fit file should be transformed from ORASE format to RPAS format by removing the Class Prefix and changing the separator of the category ID from ~ to _. Also, the attribute name ID field in Weights/Functional Fit will be transformed from ORASE format to RPAS format by removing the prefix from the Attribute Name ID field.

Input Files

The files imported by this script are:

- Similarities file: drtysiminv.csv.ovr
- Elasticity file: drtyassrtelasv.csv.ovr
- Weights and Functional Fit file: drtyattrwgtv.csv.ovr

Input Location and Format

The input files are expected to be in the <domain>/input directory.

The input files are described below.

Output Effect

The Similarities and Elasticity files are loaded straight into the RPAS measures DRTYSimInV and DRTYAssrtElasV. The Weights and Functional Fit file is loaded into two RPAS measures DRTYAttrWgtV and DRTYFuncFitB

Algorithm:

The script invokes the importdata.ksh with a control file of import_dt.txt, containing the DT data to be imported. The three data files are loaded into four measures.

The first two files are loaded into RPAS Measures DRTYSimInV and DRTYAssrtElasV.

The third data file is loaded into two measures by loading the first, second, third, fourth, and fifth fields into the Weights measure DRTYAttrWgtV, and the first, second, third, fourth, and sixth fields into the Loaded Functional Fit measure DRHDFuncFitB. It will then run a rule group to aggregate out the Trading Area and Consumer Segment dimensions in the Loaded Functional Fit data (with intersection clss/tar/csd/atn) to the final measure DRTYFuncFitB used in the calculations (with intersection clss/atn).

For the similarities and elasticity data, the Effective Start and End date fields are ignored.

Control File Name:

importlist_dt.txt

Control File Content and Format

The control file contains a list of measures to be imported from ORASE for Demand Transference. The contents are:

- drtysiminv
- drtyassrtelasv
- drtyattrwgtv,drhdfuncfitb

Environment Variables

Only CM_HOME must be defined prior to running the script. Other required environment variables are set in the <CM_HOME>/bin/environment.ksh script. These may be adjusted to alter entities such as the log level.

Log Files

Processing logs for this script are written to the <CM_HOME>/logs/<date_dir>/import_rse_dt.<unique_id> directory. Here,

- <date_dir> is a directory with a name corresponding to the date the script was run, in the format YYYY-MM-DD.
- <unique_id> is a system generated string of numbers that is unique in this context.

Inside this folder, the log file is called import_rse_dt.log. Additional folders are created for every invocation of the script.

Error Codes

import_rse_dt.ksh detects the following error condition, as shown in [Table 5-9](#).

Table 5–9 Error Codes for `import_rse_dt.ksh`

Error Code	Abort Required?	Error Description
1	Yes	Failure in the call to <code>impordata.ksh</code> or in one of the following commands: <code>loadmeasure</code> , <code>mace</code> , or other Unix shell commands.

DT Similarities Parameters File

File Name:

`drtysiminv.csv.ovr`

File format:

comma-separated values file

Fields:

SKU, Trading Area, Consumer Segment, Similar SKU, Similarity, Effective Start Date, Effective End Date

The following table describes the fields in this file.

Field	Description
SKU	SKU ID in the Product Hierarchy
Trading Area	Trading Area ID in the Location Hierarchy
Consumer Segment	Consumer Segment ID in the Consumer Segment Hierarchy
Similar SKU	SKU ID in the Product Hierarchy
Similarity	Number indicating the similarity between the two SKUs
Effective Start Date	Date in YYYY-MM-DD format indicating effective start date of the similarity
Effective End Date	Date in YYYY-MM-DD format indicating effective end date of the similarity

Example:

```
"1235719","2","s3","1236880",".4779967","2013-11-10",""
"1235719","2","s6","1235572",".6059371","2013-11-10",""
"1235719","2","s1","1235854",".8803831","2013-11-10",""
"1235719","2","s7","1234615",".4367552","2013-11-10",""
"1235719","2","s3","1234753",".4779967","2013-11-10",""
"1235719","2","s3","1234828",".4779967","2013-11-10",""
```

DT Assortment Elasticity Parameters File

File Name:

`drtyassrtelasv.csv.ovr`

File format:

comma-separated values file

Fields:

Category ID, Trading Area, Consumer Segment, Assortment Elasticity, Effective Start Date, Effective End Date

The following table describes the fields in this file.

Field	Description
Category ID	Category ID in the Product Hierarchy
Trading Area	Trading Area ID in the Location Hierarchy
Consumer Segment	Consumer Segment ID in the Consumer Segment Hierarchy
Assortment Elasticity	Number representing the Category Elasticity
Effective Start Date	Date in YYYY-MM-DD format indicating effective start date of the similarity
Effective End Date	Date in YYYY-MM-DD format indicating effective end date of the similarity

Example:

```
"10000","3","s6","-.4476855","2013-11-10",""
"10000","100","s4","-.4954495","2013-11-10",""
"10000","1","s3","-.2911932","2013-11-10",""
"10000","4","s6","-.3327132","2013-11-10",""
"10000","4","s1","-.3327132","2013-11-10",""
"10000","100","s6","-.4954495","2013-11-10",""
```

Attribute Weights and Functional Fit File

File Name:

drtyattrwgtv.csv.ovr

File format:

comma-separated values file

Fields:

Category ID, Trading Area, Consumer Segment, Attribute Name, Weight, Functional Fit

The following table describes the fields in this file.

Field	Description
Category ID	Category ID in the Product Hierarchy
Trading Area	Trading Area ID in the Location Hierarchy
Consumer Segment	Consumer Segment ID in the Consumer Segment Hierarchy
Attribute Name	Attribute Name in the Attribute Hierarchy
Weight	Normalized weight for the attribute
Functional Fit	Boolean where 0 indicates regular attribute and 1 indicates the weight is disregarded

Example:

```
"10000","2","s6","pl",".1820273","0"  
"10000","2","s6","roast",".0641755","0"  
"10000","2","s6","segment",".1054169","0"  
"10000","2","s6","brandtier",".0554414","0"  
"10000","2","s4","tradetype",".1427163","0"
```

Configuration Considerations

This chapter provides information on the configuration changes that can be made for Category Management. For some retailers, parts of the released version of the Category Management configuration might fit perfectly. However, it is anticipated that changes are needed to make the Category Management configuration match the organization of the retailer.

Hierarchies are limited to the determination of hierarchy aspects that pertain directly to dimensions, attributes, facts, and escalation. Due to RPAS limitations on intersection, distinct hierarchies must exist for the construction of all intersections to support all facts. No more than one dimension from any hierarchy can exist in a measure intersection.

For information on the configuration changes that can be made, see the following sections:

- [Calendar \(CLND\) Hierarchy](#)
- [Product \(PROD\) Hierarchy](#)
- [Right-Hand Side Product \(PROR\) Hierarchy](#)
- [Location \(LOC\) Hierarchy](#)
- [Focus Area Attributes \(FAAH\) Hierarchy](#)
- [Consumer Profile \(CPRF\) Hierarchy](#)
- [Retail Segment \(RSGH\) Hierarchy](#)
- [Retailer \(RETH\) Hierarchy](#)
- [Consumer Segment \(CSH\) Hierarchy](#)
- [Linear Number \(LNMH\) Hierarchy](#)
- [Tactic \(TCTH\) Hierarchy](#)
- [Breakpoints \(PCTH\) Hierarchy](#)
- [Product Attributes \(ATTR\) Hierarchy](#)
- [Strategy \(SGYH\) Hierarchy](#)
- [Curve Points \(CURV\) Hierarchy](#)

Calendar (CLND) Hierarchy

Figure 6–1 shows the CLND hierarchy in the RCM configuration.

Figure 6–1 Calendar Hierarchy



Name	Label	Hierarchy Type	Child
YEAR	Year	Main	SSN
SSN	Half	Main	QRTR
QRTR	Quarter	Main	MNTH
MNTH	Month	Main	WEEK
WEEK	Week	Main	DAY
DAY	Day	Main	None

The Calendar hierarchy represents time in all RPAS solutions. It is a required hierarchy. RPAS requires a dimension named day (Day). This level is not displayed in the solution.

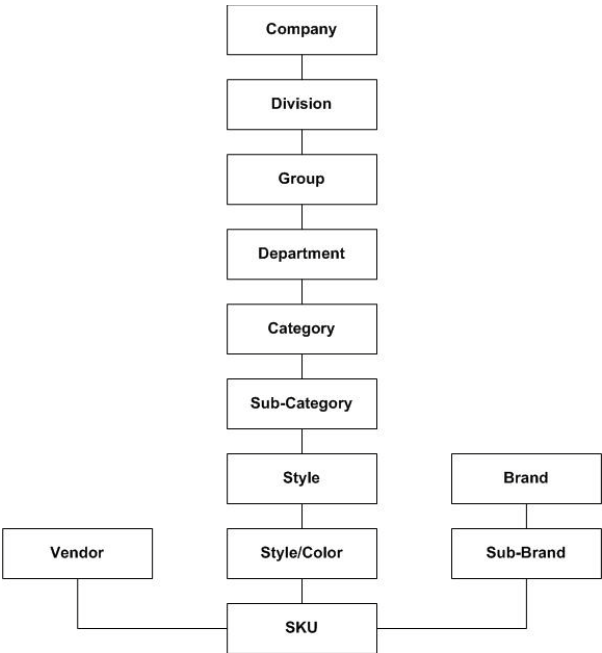
Category Management has many measures with a time component. Most "actuals" data (such as sales, cost, margins, and markdowns) is stored at the week level. Many calculations (such as market share and market growth) and index-type information (loyalty, penetration, and buyer conversion) are used at the quarter level. Basic RPAS functionality allows the user to view time-dependent data at any desired aggregate level.

With this in mind, a retailer implementation can structure the Calendar hierarchy in any way that best suits the retailer's functional needs. Dimensions other than week and quarter have been included in the Category Management configuration for the purpose of illustration. They can be modified or removed without requiring changes to any other elements of the Category Management configuration. Other dimensions and hierarchy branches may also be added without requiring changes to other elements of the Category Management configuration.

Product (PROD) Hierarchy

Figure 6–2 shows the PROD hierarchy in the Category Management configuration.

Figure 6–2 Product Hierarchy



Name	Label	Hierarchy Type	Child
CMMP	Company	Main	DVSN
DVSN	Division	Main	PGRP
PGRP	Group	Main	DEPT
DEPT	Department	Main	CLSS
CLSS	Category	Main	SCLS
SCLS	Sub-category	Main	STYL
STYL	Style	Main	STCO
STCO	Style/Color	Main	SKU
SKU	SKU	Main	None
VNDR	Vendor	Alternate	SKU
BRD	Brand	Alternate	SBRD
SBRD	Sub-Brand	Alternate	SKU

The product hierarchy represents the retailer's merchandise (that is, merchandise that the retailer sells through its retail channels). Much of the work in Category Management focuses on the category and sub-category levels. Some workbooks and worksheets are focused on working with data at the SKU level. Style and Style-color levels are included in the configuration in between SKU and Sub-category.

A Category Management domain is typically partitioned at Department level or higher. Partitioning the domain above category allows multiple categories to be compared and analyzed side-by-side.

Several alternate rollups are provided for SKU. One relates SKU to Vendor and the other to Sub-brand and Brand. These alternate rollups provide additional insight and options for analysis.

The product hierarchy is also the base on which dynamic hierarchies are built. These dynamic hierarchies are created based on a consumer decision tree (CDT). They form an additional alternate hierarchy based on SKU. The dynamic hierarchies are based on product attributes (see [Product Attributes \(ATTR\) Hierarchy](#)) and can have a varying number of levels. Further, the rollup path can differ for different products.

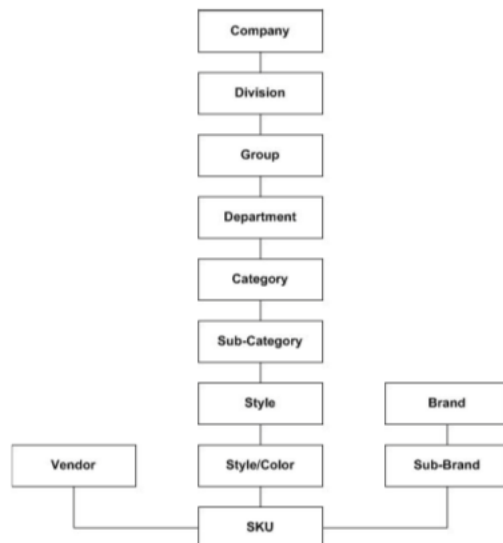
Note: Any changes to this hierarchy must be accompanied by changes to all the elements that employ the particular level that is being modified or removed. Adding levels or branches or changing labels should not require any changes to the Category Management configuration.

Further, any changes to the product hierarchy should be replicated to the right-hand side product hierarchy (PROR). This is important in keeping cross-product information available and up-to-date. For more information, see ["Right-Hand Side Product \(PROR\) Hierarchy"](#).

Right-Hand Side Product (PROR) Hierarchy

[Figure 6–3](#) shows the Right-Hand Side Product (PROR) hierarchy in the Category Management configuration.

Figure 6–3 Right-Hand Side Product Hierarchy



Name	Label	Hierarchy Type	Child
CMMR	Company	Main	DVSR
DVSR	Division	Main	PGRR
PGRR	Group	Main	DEPR
DEPR	Department	Main	CLSR
CLSR	Category	Main	SCLR
SCLR	Sub-category	Main	STYR
STYR	Style	Main	STCR

Name	Label	Hierarchy Type	Child
STCR	Style/Color	Main	SKUR
SKUR	SKU	Main	None
VNDR	Vendor	Alternate	SKUR
BRDR	Brand	Alternate	SBRR
SBRR	Sub-brand	Alternate	SKUR

The right-hand side product hierarchy (RHS Product or PROR) needs to be an exact replica of the main product hierarchy. The purpose of this hierarchy is to allow RCM to store and use various cross-product quantities related to Demand Transference (DT). Examples of these quantities include Item-Item Similarities, Demand Transferred, Substitutable Demand, and so on.

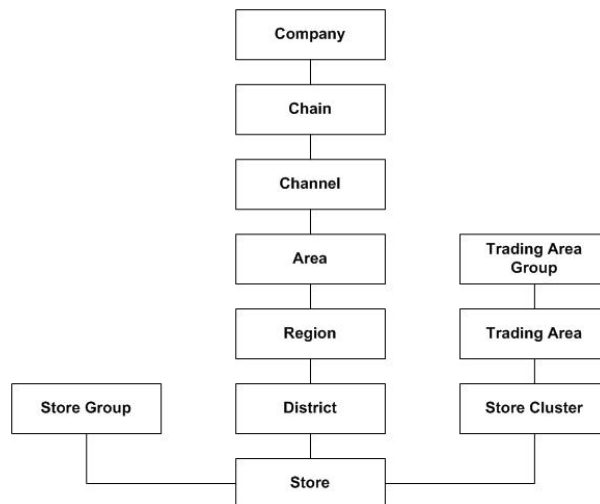
The DT calculations are always related back to SKUs in the main product hierarchy. So there is no partitioning done or dynamic hierarchies built on PROR.

Note: Any changes to the main product (PROD) hierarchy must be replicated into the right-hand side product (PROR) hierarchy. This ensures that the demand transference data and calculations are complete and reliable.

Location (LOC) Hierarchy

Figure 6–4 shows the LOC hierarchy in the Category Management configuration.

Figure 6–4 Location Hierarchy



Name	Label	Hierarchy Type	Child
CMPN	Company	Main	CHN
CHN	Chain	Main	CHNL
CHNL	Channel	Main	AREA
AREA	Area	Main	RGN

Name	Label	Hierarchy Type	Child
RGN	Region	Main	DISTR
DISTR	District	Main	STR
STR	Store	Main	None
TDAR	Trading Area	Alternate	STRC
TDRG	Trading Area Group	Alternate	TDAR
STRC	Store Cluster	Alternate	STR
STRG	Store Group	Alternate	STR

The Location hierarchy represents the retailer's retail locations and their rollups. The Category Management configuration imposes few constraints on the structure of this hierarchy.

However, the alternate rollup of Store Cluster and Trading Area is integral to Category Management functionality. Store Clusters and Trading Areas allow the retailer to define groups of stores with common characteristics, such as assortments carried, sales patterns, customer segments served, and so on. This alternate rollup need not be tied to geography.

Focus Area Attributes (FAAH) Hierarchy

The focus area attributes hierarchy is used to list various facets of a category that a category manager might be interested in. Combined with strategies (another hierarchy), they are instrumental in the setup and calculation of Item Performance Indicators (IPIs).

This hierarchy is intended to be customized for the individual customer's needs.

It is a single dimension hierarchy. The only dimension is Focus Area (FAR).

Consumer Profile (CPRF) Hierarchy

The consumer profile hierarchy is used to represent all demographic information about a retailer's consumers. This hierarchy is intended to be customized for the individual customer's needs.

The type of information that is intended to be represented in this hierarchy includes:

- Household income
- Head of household age
- Children's ages
- Lifestage
- Household size

Each demographic measure can have a number of gradations within it. For example, the Lifestage Consumer Profile Type might have the following profiles within it:

- Starting Out
- Young with Toddlers
- Young Family
- Singles/Couples without children

- Middle-aged Family
- Empty Nesters
- Retired Couples
- Older Singles

Name	Label	Hierarchy Type	Child
CPRT	Consumer Profile Type	Main	CPRD
CPRD	Consumer Profile	Main	None

Retail Segment (RSGH) Hierarchy

The retail segment hierarchy is a single dimension hierarchy that contains broad segments of the retail market. This hierarchy is intended to be customized for the individual customer's needs.

It is a single dimension hierarchy. The only dimension is Retailer Type (RSGD).

Examples of what might be listed in this hierarchy include:

- Grocery
- Convenience/Gas
- Drug
- Super-centers
- Warehouse Club
- Dollar Stores

Retailer (RETH) Hierarchy

The retailer hierarchy is used to maintain a list of competitors. This is used for comparing certain metrics between the retailer and competitors. This hierarchy is intended to be customized for the individual customer's needs.

It is a single dimension hierarchy. The only dimension is Retailer (RETD).

Consumer Segment (CSH) Hierarchy

The consumer segment hierarchy is used for listing the consumer segments and the versions of each. A consumer segment is a classification of consumers with similar characteristics and buying patterns. Examples of consumer segments include "Soccer Mom" or "Golden Years". The consumer segment hierarchy is mainly used as the main characteristic of a consumer decision tree, which specifies the buying patterns for each consumer segment. The buying patterns may vary slightly from year to year or season to season, so multiple versions of consumer segments are supported.

Note the following about this hierarchy:

- The consumer segment dimension must be one of sX, where X equals 1 to 7.
- The consumer segment version dimension must be one of sXcdtY, where X equals 1 to 7 and Y equals 1 to 5.
- The labels for these dimensions are user-choice or the GA labels can be used.

This hierarchy is intended to be customized for the individual customer's needs.

Name	Label	Hierarchy Type	Child
CSD	Consumer Segment	Main	CSVD
CSVD	Version	Main	None

Linear Number (LNMH) Hierarchy

The linear number hierarchy is included for utility. It simply consists of a list of numbers. These numbers are used in various places in Category Management wherever a list of items are needed. It is used, for example, in an admin screen to define lists of tactics that will be combined to form a pick list that changes its values based on product, location, and topic.

This hierarchy should be modified with care. Adding new positions to the hierarchy can be done without affecting current functionality. For example, changing or deleting existing positions will cause rules to break. Care should be taken to modify affected rules and measures when modifying or deleting existing positions in this hierarchy.

It is a single dimension hierarchy. The only dimension is Linear Number (LNUM).

Tactic (TCTH) Hierarchy

The tactic hierarchy represents areas within Category Management where one or more choices of approach may be relevant. For example, the tactic hierarchy might contain an entry for "Pricing" or "Promotion". Individual tactics within each area (for example, "Pricing" might include "Match competition but do not lead" or "Do not initiate price decreases") are broken out by combining the tactic hierarchy with the linear number hierarchy.

This hierarchy is intended to be customized for the individual customer's needs.

It is a single dimension hierarchy. The only dimension is Tactic (TCTD).

Breakpoints (PCTH) Hierarchy

The breakpoint hierarchy represents thresholds used in the calculation of fragmentation, contribution, and ranking of SKUs within an assortment. Breakpoint positions are typically named to represent a certain numeric level (50%, 75%,...) or could be named to represent scenarios (such as "Base", "High", "What If").

This hierarchy is intended to be customized for the individual customer's needs.

It is a single dimension hierarchy. The only dimension is Breakpoint (PCTD).

Product Attributes (ATTR) Hierarchy

The product attributes hierarchy represents attributes associated with products. These attributes are used to group products within categories. This grouping is what consumer decision trees are built on and are used when showing dynamic rollups in Category Management.

This hierarchy is intended to capture all product attributes for all product types. The attributes are then assigned to individual products. This assignment is used when processing the dynamic rollups.

This hierarchy is intended to be customized for the individual customer's needs.

Name	Label	Hierarchy Type	Child
ATN	Attribute Name	Main	ATV
ATV	Attribute Value	Main	None

Strategy (SGYH) Hierarchy

The strategy hierarchy represents broad actions designed to enhance a category. Sample strategies might include:

- Traffic building
- Transaction building
- Profit contribution
- Cash generating
- Excitement creating
- Image enhancing
- Turf defending

This hierarchy is intended to be customized for the individual customer's needs.

It is a single dimension hierarchy. The only dimension is Strategy (sgyd).

Curve Points (CURV) Hierarchy

The curve points hierarchy facilitates calculations related to the Incremental Curve functionality within Demand Transference (DT). The incremental curve functionality calculates the aggregate amount of demand transferred based on the number of changed items in the assortment. So, while it is related to SKUs, it is expressed in terms of number of SKUs and is not representative of any one SKU.

It is a single dimension hierarchy. The only dimension is Curve Point (cnum). It should contain as many positions as the number of items that are expected to be substituted in what-if scenarios in planning an assortment.

Batch Processing

This chapter contains a summary of the scripts that are used to maintain Category Management through batch processing.

Before the first batch run, the system environment must be set up, along with certain data measures (batch parameters) that control the batch calculations. Pre-batch setup is described in this chapter.

See the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client* for details on formatting load data files and on utilities that enable administrators to load data into RPAS.

Note: Comma-separated values (CSV) files are recommended to reduce the sizes of load files.

Batch Script Summary

The following directories are used by the batch scripts. These directories are subdirectories of the <CM_HOME> directory. The <CM_HOME> directory is defined by the implementer.

Table 7–1 Directories Used by Batch Scripts

Directory Name	Content of the Directory
bin	Batch scripts
config	Category Management template configuration
domain	Domains
input	Input files for building the domain
logs	Log files from running any of the batch scripts
temp	Temporary files used by the batch scripts

Batch Script Summary Table

[Table 7–2](#) summarizes the available batch scripts, rule groups, and custom menu actions. The batch scripts are located in the <CM_HOME>/bin directory.

The following information is included in the table:

- Name of the batch operation
- Type (rule group, script, custom menu)
- Suggestion on how often to run the script

- List of other batch operations on which there is a dependency

Table 7–2 Batch Script Summary

Name	Type	Suggested Frequency	Dependencies
cm_batch.ksh	Script	Weekly	None
processcdts.ksh	Script	As needed	None

Scripts and custom menus write processing information to the batch log files. These are located by default at <CM_HOME>/logs and are grouped by date and script name. The logs contain detailed information on batch execution, including indications of errors, exceptions, or failures. If there are no errors, the batch completed successfully.

Batch Scripts

This section contains detailed information on the batch scripts cm_batch.ksh and processcdts.ksh.

cm_batch.ksh

Script

cm_batch.ksh

No arguments are expected or processed by the script.

Notes

This script performs many functions related to keeping information within RCM current and consistent. The operations that are performed by this script include the following:

- Calculating the elapsed period, functionality provided by RPAS to ensure historical data is read-only.
- Applying the elapsed period to market and retailer measures within the solution.
- Propagating changes made by administrative updates to various other measures, such as repopulating picklists.
- Refreshing the forecasted sales information.
- Refreshing the timeshifted LY data for market and retailer information.
- Aggregating and pre-calculating information for later, faster use in workbooks.
- Refreshing product attribute values.

The script should be run regularly and frequently - daily or weekly being recommended. It may also be run whenever there are significant updates to data; the updates should be applied to the system.

Note that if RPAS_TODAY is set, the script uses this instead of the current system date. This could be useful, for example, for testing.

The actions the script takes are done by invoking various rule groups within RCM. There are dependencies between the various rule groups, and running the rule groups out of the order specified in cm_batch.ksh can lead to unpredictable results.

Processing logs for this script are written to the <CM_HOME>/logs/<date_dir>/<calling_script>/cm_batch<unique id> directory. Here,

- <date_dir> is a directory with a name corresponding to the date the script was run, in the format YYYY-MM-DD.
- <calling_script> is the name of the script that calls the cm_batch.ksh script, along with a <unique id>. Most often, this directory is called "build" or omitted. If the script is called directly from the command line, this will be blank.
- <unique id> is a system generated string of numbers that is unique in this context.

Inside this folder, the log file is called cm_batch.log. Additional folders are created for every invocation of the script.

processcdts.ksh

Script

processcdts.ksh

Usage

```
processcdts.ksh -f <cdtfile> [-l <label>]
```

<cdtfile> is the name of the XML file that contains a consumer decision tree (CDT). The script expects the CDT file to be in the <domain>/cdt_interface/import directory.

<label> is an optional label that is stored in the domain for the given CDT.

Notes

This script is used to load CDT XML files into the domain. It is called by build.ksh, which performs the initial domain build and the Accept XML custom menu. It parses the XML and translates the structure described in the file into measures that are used to create dynamic workbook hierarchies.

The script calls a java utility to perform the XML parsing and dynamic hierarchy measure construction. The java class files are located in \$RPAS_HOME/applib/aaiCatMan.jar. This jar file must be present in the correct location for the processcdts.ksh script to run. The script also ensures that the environment variable RPAS_JAVA_CLASSPATH contains the path to this jar.

Processed CDTs are stored in the <domain>/cdt_interface/processed/cdts directory. The script generates a large number of measure load files, named DHD_Name* and DHD_Label*, and loads them into the domain. The processed DHD_Name* and DHD_Label* measures are copied with other loaded measures to the <domain>/input/processed directory.

Processing logs for this script are written to the <CM_HOME>/logs/<date_dir>/<calling_script>/processcdts<unique id> directory. Here,

- <date_dir> is a directory with a name corresponding to the date the script was run, in the format YYYY-MM-DD.
- <calling_script> is the name of the script that calls the processcdts.ksh script, along with a <unique id>. Most often, this directory is called "build" or "acceptEditedCdts", after the scripts that most often call processcdts.ksh. If the script is called directly from the command line, this will be blank.
- <unique id> is a system generated string of numbers that is unique in this context.

Inside this folder, the log file is called processcdts.log. Additional folders are created for every invocation of the script.

When the domain is first built, a fixed number of versions are allotted for CDTs for each consumer segment. `processcdts.ksh` loads each CDT into the first available slot for that category/trading area/consumer segment. If there are more CDTs for a particular category/trading area/consumer segment than there are available slots, `processcdts.ksh` will exit with an error message. New version slots must be created, via Dynamic Position Management. See the *Oracle Retail Predictive Application Server Configuration Tools User Guide* and the *Oracle Retail Predictive Application Server User Guide for the Fusion Client* for more information on Dynamic Position Management.

Before Running Category Management Batch Scripts for the First Time

Before running Category Management batch scripts for the first time, do the following:

1. Set the following variables:
 - `RPAS_HOME`
 - `RPAS_JAVA_CLASSPATH`
 - `LD_LIBRARY_PATH` (only for Solaris and Linux Operating Systems)
 - `LIBPATH` (only for AIX)
 - `SHLIB_PATH` (only for HP-UX)
 - `PATH`
2. Update the following variable settings in the file `$CM_HOME/bin/environment.ksh` to reflect current directory paths and environment:
 - `CM_HOME`
 - `CM_DOMAINHOME`
 - `CM_MASTERDOMAIN`
 - `CM_CONFIGNAME`
 - `CM_CDTSTORE`
 - `CM_CONFIGHOME`
 - `CM_EXPORT`
 - `CM_INPUTHOME`
 - `CM_LOG_DIR`
 - `CM_TEMP`
 - `CM_BATCH`
 - `RECORDLOGLEVEL`
 - `RPAS_LOG_LEVEL`
 - `RPAS_TODAY`

The following syntax allows the script to set a default value for each variable when it is not defined, but leaves the value unchanged if the variable has been previously defined in, for example, the user's `.profile`:

```
: ${variable:=value}
```

The directory `$CM_HOME/bin` should exist and be added to the `PATH` variable.

The values for `RPAS_LOG_LEVEL` and `RECORDLOGLEVEL` can be any one of the following: all, profile, debug, audit, information, warning, error, or none. These two variables are usually both set to warning or both set to error.

3. Make sure to include both `$RPAS_HOME/bin` and `$CM_HOME/bin` in the `PATH` variable. Also, add the full directory path containing the Batch Script Architecture scripts to the `PATH` variable. For more information, see the *Oracle Retail Batch Script Architecture Implementation Guide*.

Internationalization

Internationalization is the process of creating software that can be translated more easily. Changes to the code are not specific to any particular market.

Oracle Retail applications have been internationalized to support multiple languages.

Translation

Translation is the process of interpreting and adapting text from one language into another. Although the code itself is not translated, components of the application that are translated include the following:

- Graphical user interface (GUI)
- Error messages

The following components are not translated:

- Documentation (online help, release notes, installation guide, user guide, operations guide)
- Batch programs and messages
- Log files
- Configuration tools
- Reports
- Demonstration data
- Training materials

The user interface has been translated into the following languages:

- Chinese (Simplified)
- Chinese (Traditional)
- Croatian
- Dutch
- French
- German
- Greek
- Hungarian
- Italian

- Japanese
- Korean
- Polish
- Portuguese (Brazilian)
- Russian
- Spanish
- Swedish
- Turkish

Note: For information about adding languages for the first time or for translation information in general, see the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*.

A broad and detailed data set is required to use the capabilities of Category Management to their fullest. Some of the data required is relatively easy to obtain, for example, information about sales, cost, space, and the like. Other is only available from a data aggregator such as Nielsen or Symphony IRI. Examples of this type of data include information on product and category performance for the market as a whole. Still other data might be sliced in a particular way to provide insight about a particular facet of a customer's buying behavior.

This chapter deals with the data that ideally must be supplied in order to obtain the most benefit from Category Management. Each row represents a measure in Category Management. Data to be loaded into these measures must be supplied at the proper intersection with the proper measure (or file) name.

File Name	Measure Name	Label	Description	Type	Base Intx
addvattrnwgtv.csv.ovr	ADDVAttrNWgtV	Attribute Name Weight	Administrator Default Value Attribute Name Weight Value	real	scls/csd/ atn/sgyd
addvattrvwgtv.csv.ovr	ADDVAttrVWgtV	Attribute Value Weight	Administrator Default Value Attribute Value Weight Value	real	scls/csd/ atv/sgyd
addvconsegdistv.csv.ovr	ADDVConSegDistV	Consumer Seg Distribution	Administrator Default Value Consumer Segment Distribution Value	real	clss/tdar/ csd
addvconsegwgtv.csv.ovr	ADDVConSegWgtV	Consumer Seg Weight	Administrator Default Value Consumer Segment Weight Value	real	clss/tdar/ csd
addvexcwgtv.csv.ovr	ADDVExcWgtV	Exclusivity Weight	Administrator Default Value Exclusivity Weight Value	real	scls/far/c sd/sgyd
addvfocarwgtv.csv.ovr	ADDVFocArWgtV	Focus Area Weight	Administrator Default Value Focus Area Weight Value	real	scls/far/c sd/sgyd
addvgppwgtv.csv.ovr	ADDVGPPWgtV	Gross Profit % Weight	Administrator Default Value Gross Profit % Weight Value	real	scls/far/c sd/sgyd

File Name	Measure Name	Label	Description	Type	Base Intx
addvgpwgtv.csv.ovr	ADDVGPWgtV	Gross Profit Weight	Administrator Default Value Gross Profit Weight Value	real	scls/far/csd/sgyd
addvloywgtv.csv.ovr	ADDVLoyWgtV	Loyalty Weight	Administrator Default Value Loyalty Weight Value	real	scls/far/csd/sgyd
addvmktbwgtv.csv.ovr	ADDVMktBWgtV	Market Basket Weight	Administrator Default Value Market Basket Weight Value	real	scls/far/csd/sgyd
addvslsrwgtv.csv.ovr	ADDVSlRWgtV	Sales R Weight	Administrator Default Value Sales R Weight Value	real	scls/far/csd/sgyd
addvsluwgtv.csv.ovr	ADDVSlUWgtV	Sales U Weight	Administrator Default Value Sales U Weight Value	real	scls/far/csd/sgyd
addvswitwgtv.csv.ovr	ADDVSwitWgtV	Switching Weight	Administrator Default Value Switching Weight Value	real	scls/far/csd/sgyd
addvworthwgtv.csv.ovr	ADDVWorthWgtV	Worth Weight	Administrator Default Value Worth Weight Value	real	scls/far/csd/sgyd
adlyqrtrmaptx.csv.ovr	ADLYQrtrMapTx	LY Quarter Mapping	Administrator Last Year Quarter Mapping Text	string	qrtr
adlyweekmaptx.csv.ovr	ADLYWeekMapTx	LY Week Mapping	Administrator Last Year Week Mapping Text	string	week
adwpcdtlbltx.csv.ovr	ADWPCDTLbITx	WP CDT Label	Administrator Working Plan CDT Label Text	string	qrtr/clss/tdar/csvd
adwpcdtprengb.csv.ovr	ADWPCDTPrengB	WP CDT Pre Range	Administrator Working Plan CDT Pre Range	Boolean	qrtr/clss/tdar/csvd
adwptactictx.csv.ovr	ADWPTacticTx	WP Tactic Values	Administrator Working Plan Tactic Values Text	string	scls/tdar/lnum/tc td
drtyannlspndx.csv.ovr	DRTYAnnIspndX	TY Annual Spend Index	Default Role This Year Annual Spend Index	real	qrtr/clss/tdar/csd
drtyassrtelasv.csv.ovr	DRTYAssrtElasV	TY Assortment Elasticity	Default Role This Year ORASE Data Value	real	clss/tdar/csd
drtyattrvaltx.csv.ovr	DRTYAttrValTx	Loaded Attribute Value ID	Attribute Value Position IDs loaded from external sources	string	sku/atn

File Name	Measure Name	Label	Description	Type	Base Intx
drtyattrwgtv.csv.ovr	DRTYAttrWgtV	TY Attribute Weight	TY Attribute Weight	real	scls/tdar /csd/atn
	DRHdFuncFitB	Loaded Functional Fit	Functional Fit data is combined with Attribute Weights data inside the ORASE export. The Loaded Functional Fit is appended to the TY Attribute Weight into the TY Attribute Weight load file.	Boolean	clss/tdar /csd/atn
drtyavgbsktvalv.csv.ovr	DRTYAvgBsktValV	TY Avg Basket Value	Default Role This Year Average Basket Value	real	tdar/csd
drtybopr.csv.ovr	DRTYBOPR	TY BOP R	Default Role This Year Beginning of Period Inventory Retail	real	week/sku /str
drtybuyersl0p.csv.ovr	DRTYBuyersL0p	TY % Buyers @ SKU %	Default Role This Year % Buyers @ SKU Percent	real	sku/tdar /rsgd
drtybuyersl3p.csv.ovr	DRTYBuyersL3p	TY % Buyers @ Sub-Cat %	Default Role This Year % Buyers @ Sub-Category Percent	real	scls/tdar /rsgd
drtybuyersl4p.csv.ovr	DRTYBuyersL4p	TY % Buyers @ Cat %	Default Role This Year % Buyers @ Category Percent	real	clss/tdar /rsgd
drtybyerconvrtv.csv.ovr	DRTYByerConvRtV	TY Buyer Conversion Rate	Default Role This Year Buyer Conversion Rate Value	real	scls/str/r etd/csd
drtyconsworthx.csv.ovr	DRTYConsWorthX	TY Consumer Worth Index	Default Role This Year Index	real	sku/str/c sd
drtydollarsl0p.csv.ovr	DRTYDollarsL0p	TY % Dollars @ SKU %	Default Role This Year % Dollars @ SKU Percent	real	sku/tdar /rsgd
drtydollarsl3p.csv.ovr	DRTYDollarsL3p	TY % Dollars @ Sub-Cat %	Default Role This Year % Dollars @ Sub-Category Percent	real	scls/tdar /rsgd
drtydollarsl4p.csv.ovr	DRTYDollarsL4p	TY % Dollars @ Cat %	Default Role This Year % Dollars @ Category Percent	real	clss/tdar /rsgd
drtyeopr.csv.ovr	DRTYEOPR	TY EOP R	Default Role This Year Ending of Period Inventory Retail	real	week/sku /str
drtyexclusivityx.csv.ovr	DRTYExclusivityX	TY Exclusivity Index	Default Role This Year Index	real	sku/str/c sd

File Name	Measure Name	Label	Description	Type	Base Intx
drtyfragbrkptp.csv.ovr	DRTYFragBrkptp	TY Fragmentation Analysis Breakpoints %	Default Role This Year Fragmentation Analysis Breakpoints Percent	real	pctd
drtyitmpentrl0p.csv.ovr	DRTYItmPentrL0p	TY Item Penetration @ SKU %	Default Role This Year Item Penetration @ SKU Percent	real	sku/tdar
drtyitmpentrl3p.csv.ovr	DRTYItmPentrL3p	TY Item Penetration @ Sub-Cat %	Default Role This Year Item Penetration @ Sub-Category Percents	real	scls/tdar
drtyitmpentrl4p.csv.ovr	DRTYItmPentrL4p	TY Item Penetration @ Cat %	Default Role This Year Item Penetration @ Category Percent	real	clss/tdar
drtyitmpentrp.csv.ovr	DRTYItmPentrp	TY Item Penetration %	Default Role This Year Item Penetration Percent	real	qrtr/clss/tdar
drtyitmrevpbyerl0v.csv.ovr	DRTYItmRevPByerL0V	TY Item Revenue per Buyer @ SKU	Default Role This Year Item Revenue per Buyer @ SKU Value	real	sku/tdar
drtyitmrevpbyerl3v.csv.ovr	DRTYItmRevPByerL3V	TY Item Revenue per Buyer @ Sub-Cat	Default Role This Year Item Revenue per Buyer @ Sub-Category Value	real	scls/tdar
drtyitmrevpbyerl4v.csv.ovr	DRTYItmRevPByerL4V	TY Item Revenue per Buyer @ Cat	Default Role This Year Item Revenue per Buyer @ Category Value	real	clss/tdar
drtyitmSPndPromoL0p.csv.ovr	DRTYItmSpndPromoL0p	TY % Item Spend on Promo @ SKU %	Default Role This Year % Item Spend on Promo @ SKU Percent	real	sku/tdar
drtyitmSPndPromoL3p.csv.ovr	DRTYItmSpndPromoL3p	TY % Item Spend on Promo @ Sub-Cat %	Default Role This Year % Item Spend on Promo @ Sub-Category Percent	real	scls/tdar
drtyitmSPndPromoL4p.csv.ovr	DRTYItmSpndPromoL4p	TY % Item Spend on Promo @ Cat %	Default Role This Year % Item Spend on Promo @ Category Percent	real	clss/tdar
drtyitmSPndPTrpL0v.csv.ovr	DRTYItmSpndPTrpL0V	TY Item Spend per Item per Trip @ SKU	Default Role This Year Item Spend per Item per Trip @ SKU Value	real	sku/tdar
drtyitmSPndPTrpL3v.csv.ovr	DRTYItmSpndPTrpL3V	TY Item Spend per Item per Trip @ Sub-Cat	Default Role This Year Item Spend per Item per Trip @ Sub-Category Value	real	scls/tdar

File Name	Measure Name	Label	Description	Type	Base Intx
drtyitmspndptrpl4v.csv.ovr	DRTYItmSpndpTrpL4V	TY Item Spend per Item per Trip @ Cat	Default Role This Year Item Spend per Item per Trip @ Category Value	real	clss/tdar
drtyitmtrpsbyerl0v.csv.ovr	DRTYItmTrpspByerL0V	TY Item Trips per Item Buyer @ SKU	Default Role This Year Item Trips per Item Buyer @ SKU Value	real	sku/tdar
drtyitmtrpsbyerl3v.csv.ovr	DRTYItmTrpspByerL3V	TY Item Trips per Item Buyer @ Sub-Cat	Default Role This Year Item Trips per Item Buyer @ Sub-Category Value	int	scls/tdar
drtyitmtrpsbyerl4v.csv.ovr	DRTYItmTrpspByerL4V	TY Item Trips per Item Buyer @ Cat	Default Role This Year Item Trips per Item Buyer @ Category Value	real	clss/tdar
drtyloyaltyp.csv.ovr	DRTYLoyaltyp	TY Loyalty (% of Buyer Spend at Retailer)	Default Role This Year Loyalty (% of Buyer Spend at Retailer) Percent	real	tdar/ret d
drtyloyaltyx.csv.ovr	DRTYLoyaltyX	TY Loyalty Index	Default Role This Year Loyalty Index	real	sku/str/csd
drtymktbasketx.csv.ovr	DRTYMktBasketX	TY Market Basket Index	Default Role This Year Market Basket Index	real	sku/str/csd
drtymktpromoslr.csv.ovr	DRTYMktPromoSlsR	TY Market Promo Sales R	Default Role This Year Market Promo Sales Retail	real	qrtr/scls/tdar
drtymktpromoslsu.csv.ovr	TY Market Promo Sales U	TY Market Promo Sales U	Default Role This Year Market Promo Sales Units	real	qrtr/scls/tdar
drtymktslsbycsr.csv.ovr	DRTYMktSlsbyCSR	TY Market Sales by Consumer Seg R	Default Role This Year Market Sales by Consumer Segment Retail	real	qrtr/scls/tdar/csd
drtymktslsr.csv.ovr	DRTYMktSlsR	TY Market Sales R	Default Role This Year Market Sales Retail	real	week/sku/tdar/ret d
drtymktslsu.csv.ovr	DRTYMktSlsU	TY Market Sales U	Default Role This Year Market Sales Units	real	week/sku/tdar/ret d
drtymkttahhp.csv.ovr	DRTYMktTAHHp	TY Market Trading Area HH %	Default Role This Year Market Trading Area Household Percent	real	tdar/cprd
drtymkttaspondp.csv.ovr	DRTYMktTASpondp	TY Market Trading Area Spend %	Default Role This Year Market Trading Area Spend Percent	real	tdar/cprd
drtymktturnrr.csv.ovr	DRTYMktTurnRr	TY Market Inv Turn	Default Role This Year Market Inventory Turn Retail Ratio	real	qrtr/clss/tdar

File Name	Measure Name	Label	Description	Type	Base Intx
drtynumbsktwcatv.csv.ovr	DRTYNumBsktwCatV	TY # Baskets with Category	Default Role This Year Number Baskets with Category Value	real	qrtr/clss/ tdar/csd
drtynumcatbsktv.csv.ovr	DRTYNumCatBsktV	TY # of Categories in Basket	Default Role This Year Number of Categories in Basket Value	real	tdar/csd
drtynumfacingsv.csv.ovr	DRTYNumFacingsV	TY Total # of Facings	Default Role This Year Total Number of Facings Value	real	week/sku/ /str
drtypentrp.csv.ovr	DRTYPentrp	TY Penetration (% Buying at Retailer)	Default Role This Year Penetration (% Buying at Retailer) Percent	real	tdar/retd
drtyprchfreqv.csv.ovr	DRTYPrchFreqV	TY Purchase Frequency	Default Role This Year Purchase Frequency Value	real	qrtr/clss/ tdar/csd
drtypromoslsbycsr.csv.ovr	DRTYPromoSlsbyCSR	TY Promo Sales by Consumer Seg R	Default Role This Year Promo Sales by Consumer Segment Retail	real	week/sku/ /str/csd
drtypromoslsr.csv.ovr	DRTYPromoSlsR	TY Promo Sales R	Default Role This Year Promo Sales Retail	real	week/sku/ /str
drtypromoslsu.csv.ovr	DRTYPromoSlsU	TY Promo Sales U	Default Role This Year Promo Sales Units	real	week/sku/ /str
drtypvtlblslsc.csv.ovr	DRTYPvtLblSlsC	TY Private Label Sales AUC	Default Role This Year Private Label Sales Item Cost	real	week/sku/ /str
drtypvtlblslsr.csv.ovr	DRTYPvtLblSlsR	TY Private Label Sales R	Default Role This Year Private Label Sales Retail	real	week/sku/ /str
drtypvtlblslsu.csv.ovr	DRTYPvtLblSlsU	TY Private Label Sales U	Default Role This Year Private Label Sales Units	real	week/sku/ /str
drtyrsestrclst1lbl.csv.ovr	DRTYRseStrClst1Lbl	TY Store Cluster Attribute 1 Label	Default Role This Year Store Cluster Attribute 1 Label	string	clss/str
drtyrsestrclst1tx.csv.ovr	DRTYRseStrClst1Tx	TY Store Cluster Attribute 1	Default Role This Year Store Cluster Attribute 1 Text	string	clss/str
drtyrsestrclst2lbl.csv.ovr	DRTYRseStrClst2Lbl	TY Store Cluster Attribute 2 Label	Default Role This Year Store Cluster Attribute 2 Label	string	clss/str
drtyrsestrclst2tx.csv.ovr	DRTYRseStrClst2Tx	TY Store Cluster Attribute 2	Default Role This Year Store Cluster Attribute 2 Text	string	clss/str

File Name	Measure Name	Label	Description	Type	Base Intx
drtyrsestrclst3lbl.csv.ovr	DRTYRseStrClst3Lbl	TY Store Cluster Attribute 3 Label	Default Role This Year Store Cluster Attribute 3 Label	string	clss/str
drtyrsestrclst3tx.csv.ovr	DRTYRseStrClst3Tx	TY Store Cluster Attribute 3	Default Role This Year Store Cluster Attribute 3 Text	string	clss/str
drtyrtltaspndp.csv.ovr	DRTYRtlTASpndp	TY Retailer Trading Area Spend %	Default Role This Year Retailer Trading Area Spend Percent	real	tdar/cprd
drtyshelfcapv.csv.ovr	DRTYShelfCapV	TY Total Shelf Capacity	Default Role This Year Total Shelf Capacity Value	real	week/sku/str
drtyshopfreqv.csv.ovr	DRTYShopFreqV	TY Shopping Frequency	Default Role This Year Shopping Frequency	real	tdar/csd
drtysiminv.csv.ovr	DRTYSimInV	TY Similarity In	Default Role This Year ORASE Data Value	real	sku/tdar/csd/skur
drtyslsbycsr.csv.ovr	DRTYSlSbyCSR	TY Sales by Consumer Seg R	Default Role This Year Sales by Consumer Segment Retail	real	week/sku/str/csd
drtyslsbycsu.csv.ovr	DRTYSlSbyCSU	TY Sales by Consumer Seg U	Default Role This Year Sales by Consumer Segment Units	real	week/sku/str/csd
drtyslsc.csv.ovr	DRTYSlS C	TY Sales AUC	Default Role This Year Sales Item Cost	real	week/sku/str
drtyslsr.csv.ovr	DRTYSlS R	TY Sales R	Default Role This Year Sales Retail	real	week/sku/str
drtyslsu.csv.ovr	DRTYSlS U	TY Sales U	Default Role This Year Sales Units	real	week/sku/str
drtyspendx.csv.ovr	DRTYSpndX	TY Spend Index	Default Role This Year Spend Index (Buyer Spend Compared to Average Spend) Index	real	tdar/retd
drtysqftv.csv.ovr	DRTYSqFtV	TY Total Square Footage	Default Role This Year Total Square Footage Value	real	week/sku/str
drtystrclus.csv.ovr	DRTYStrClusLbl	Store Cluster Label	Default Role This Year Dynamic Store Cluster Label. The Label is appended to the Store Cluster Name in the Store Cluster Name load file.	string	qrtr/clss/str
drtystrclus.csv.ovr	DRTYStrClusTx	Store Cluster Name	Default Role This Year Dynamic Store Cluster Text	string	qrtr/clss/str

File Name	Measure Name	Label	Description	Type	Base Intx
drtyswitchingx.csv.ovr	DRTYSwitchingX	TY Switching Index	Default Role This Year Index	real	sku/str/csd
drtytopshopx.csv.ovr	DRTYTopShopX	TY Top Shopper Index	Default Role This Year Top Shopper Index	real	scls/str/retd
drtytrnsszwcstv.csv.ovr	DRTYTrnsSzwCatV	TY Transaction Size with Category	Default Role This Year Transaction Size with Category Value	real	qrtr/clss/tdar/csd
drtyttlshopperx.csv.ovr	DRTYTtlShopperX	TY Total Shoppers Index	Default Role This Year Total Shoppers Index	real	tdar/csd