Oracle® Retail Category Management Planning and Optimization / Macro Space Optimization

Implementation Guide

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Preface

This Implementation Guide describes post-installation tasks that need to be performed in order to bring Category Management Planning and Optimization / Macro Space Optimization online and ready for production use.

Audience

The Implementation Guide is intended for Oracle Retail Category Management Planning and Optimization / Macro Space Optimization 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 Planning and Optimization / Macro Space Optimization and other systems across the enterprise.

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Related Documents

For more information, see the following documents in the Oracle Retail Category Management Planning and Optimization / Macro Space Optimization Release 16.0 documentation set:

- *Oracle Retail Category Management Planning and Optimization / Macro Space Optimization Installation Guide*

- *Oracle Retail Category Management Planning and Optimization / Macro Space Optimization Release Notes*

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

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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.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

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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 Planning and Optimization (CMPO) brings in the contemporary best-practices from the retail industry as part of its functionality. CMPO is based on the RPAS platform. Key differentiating factors of CMPO, 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 Priority Index (IPI) weights 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.

CMPO 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.

- Macro Space Optimization @Dept - Used to allocate optimum space to the Planogram (POG) departments or department zones in a store.

- Macro Space Optimization @Sub-Category - Used to used to allocate optimum space to the POG sub-categories under a POG department.

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 Planning and Optimization

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.

CMPO 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 CMPO, the implementer needs this knowledge for the following applications:

- Oracle Retail Predictive Application Server (RPAS)

- Oracle Retail Advanced Science Engine (ORASE) (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 CMPO

- Retailer's hierarchical (SKU/store/day) data

- CMPO 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

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Implementation Considerations

The following information needs to be considered before implementing CMPO:

- 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 CMPO, 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.

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

space requirements for CMPO 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 CMPO 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 CMPO 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 CMPO 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 CMPO 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*.

CMPO workbooks contain some views that are formatted as bubble graphs. For the bubble graphs which divide the X and/or Y axes into distinct, labeled, partitions, and which contain measures displaying the calculated partition placement (such as Category Planning workbook's Analyze Category Role views), the bubble placement may not match the calculated placement due to bubble graph padding. For information on how to adjust the padding percentages as desired to synchronize the bubble placement and calculated placement, see the *Oracle Retail Predictive Application Server Administration Guide for the Fusion Client*, Appendix C: Fusion Client Properties Files, Individual Graph Settings section, property axisPaddingPct.

Patch Considerations

There are two types of patches that can affect the CMPO 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 be 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.

Users should have access to workbooks based on their role. The administrator should always follow the principal of least privilege, that is, each user should only be granted access to the product areas for which the user is responsible. Table 2–1 provides guidance on what user roles should have access to each workbook.

Table 2–1   Workbook Access Based on User Roles

Workbook	User Roles
CDT Editor	Application Administrator, Buyer Analyst
Category Management Administration	Application Administrator, Buyer Analyst
Category Planning	Buyer, Buyer Analyst, Category Manager
Macro Space Optimization @ Dept	Store Planning Manager, Store Planner
Macro Space Optimization @ Sub-Category	Store Planning Manager, Store Planner
Assortment Planning Analysis	Buyer, Buyer Analyst, Category Manager

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

Alert Manager

Some real time alerts are pre-configured in the Macro Space Optimization task flows.

No batch alerts are pre-configured in the CMPO solution. However, users may configure alerts normally in a CMPO 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 CMPO, see Chapter 8.

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Build Scripts

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

Installation Dependencies

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

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 CMPO 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.*

CMPO Installation

The CMPO 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 CMPO Domain

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

- Standard RPAS Hierarchy files
- CMPO-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
```

CMPO-Specific Hierarchy Files

The following are the hierarchy files that are specific to CMPO:

- 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

- Planogram Hierarchy File

- Custom Message 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

Field	Description
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
```

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: rsgh.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 CMPO 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:

> **Note:** This file must include private label attribute values. The GA data set's private label attribute name is "pl", and the two attribute values which roll up to "pl" are "pl1" indicating Private Label, and "npl" indicating Non-Private Label. See the example below.

```
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
npl,Non-Private Label,pl,Private Label
pl1,Private Label,pl,Private Label
```

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
```

Planogram Hierarchy File

File name: pogh.csv.dat

File format: comma-separated values file

Fields: POG Sub-Category, POG Category, POG Department

The following table describes the fields in this file.

Field	Description
POG Sub-Category	POG Sub-Category
POG Category	POG Category
POG Department	POG Department

Example:

```
1000000,Ground - 10 ft,100000,Coffee,10000,Shelf Stable Beverages
1000001,Ground - 12 ft,100000,Coffee,10000,Shelf Stable Beverages
2000000,Instant - 8 ft,100000,Coffee,10000,Shelf Stable Beverages
2000001,Instant - 10 ft,100000,Coffee,10000,Shelf Stable Beverages
2000002,Instant - 12 ft,100000,Coffee,10000,Shelf Stable Beverages
3000000,Single Serve - 6 ft,100000,Coffee,10000,Shelf Stable Beverages
3000001,Single Serve - 8 ft,100000,Coffee,10000,Shelf Stable Beverages
4000000,Whole - 4 ft,100000,Coffee,10000,Shelf Stable Beverages
4000001,Whole - 8 ft,100000,Coffee,10000,Shelf Stable Beverages
```

Custom Messages Hierarchy File

File name: cmsh.csv.dat

File format: comma-separated values file

Fields: Custom Messages

The following table describes the field in this file.

Field	Description
Custom Messages	Custom messages used in CMPO

Example:

```
"ACE01","ERROR: Core or Optional set for non-eligible Item"
"ACE02","ERROR: Mandatory Items should be marked as Core"
"ACE03","ERROR: Mandatory Items cannot be Optional"
"ACE04","ERROR: Select Only Core or Optional"
```

Data Files

CMPO is a data-intensive application. The data files required are listed in Chapter 9.

Building the CMPO Domain

The script used to build or patch the CMPO 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 the Fusion Client* 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 CMPO 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 CMPO 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.

4

Data Flow

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

Overview of the CMPO Data Flow

Figure 4–1 shows the data flow between CMPO 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 CMPO and the respective, connected applications. For a detailed description of the data flow, see "Data Flow Descriptions".

Figure 4–1 CMPO Data Flow
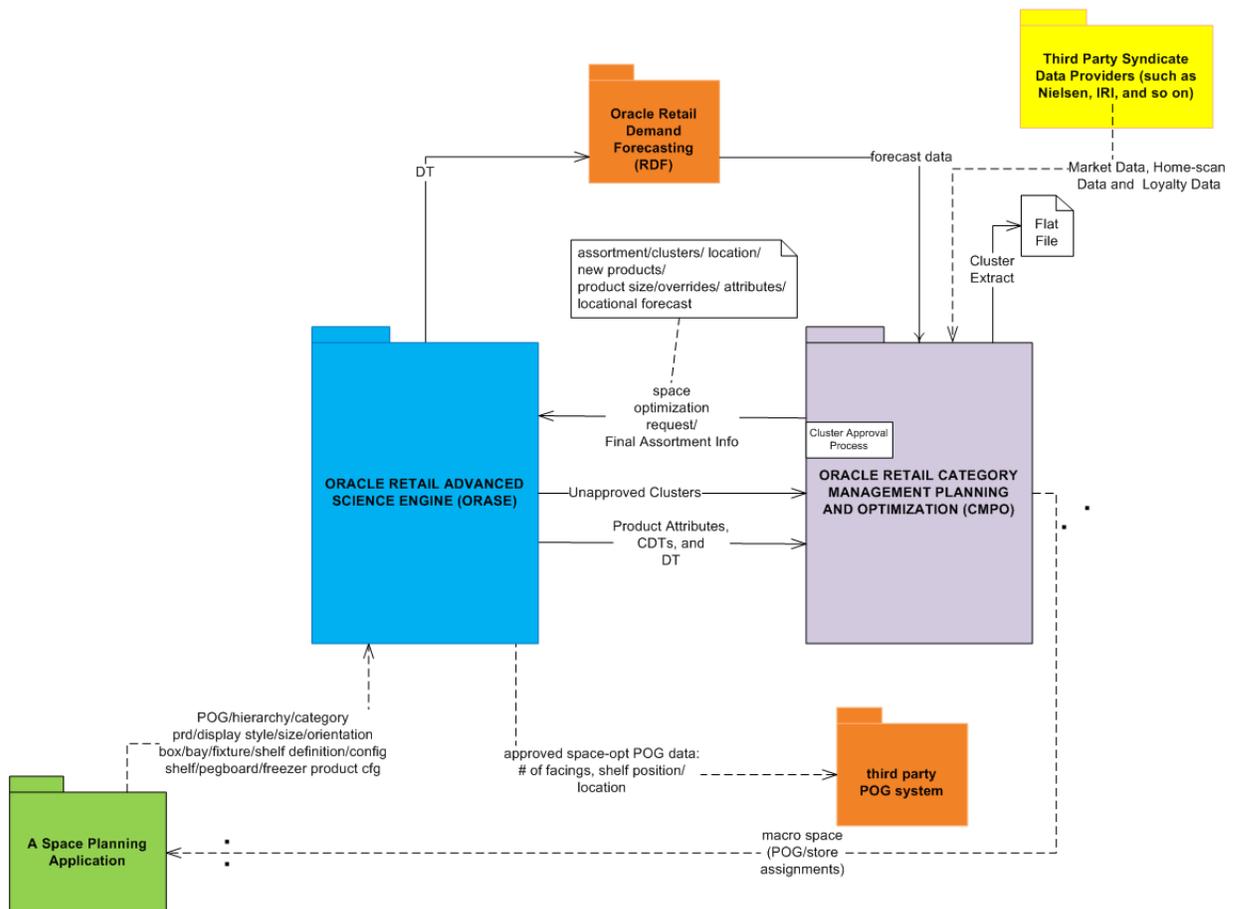
Data Flow Descriptions

The CMPO application is integrated with the Oracle Retail Advanced Science Engine (ORASE) and sources key information that is used in the CMPO 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 CMPO share a common location hierarchy specifically in terms of stores and Trading Area mapping. CMPO sources assortment clusters in the form of .csv files from the Modeling Engine module of ORASE. Grouping of stores or Assortment Clustering in the Modeling Engine module 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. CMPO sources attributes from the Modeling Engine module of ORASE in the form of .csv files. CMPO 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 ORASE.

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 CMPO. CDTs are sourced from the Modeling Engine 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 CMPO. 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 Modeling Engine module of ORASE in the form of .csv files.

5. **Export to ORASE:** CMPO exports category plan, assortment plan, and space management related information to ORASE. There are two types of exports provided to ORASE:

    ■   An export with an assortment optimization request to ORASE from a space management perspective

    ■   An update to ORASE in the form of a final approved assortment and category plans for eventual implementation

Data Flow from External Sources to CMPO

CMPO 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, Axciom, 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 CMPO

CMPO 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 no direct integrations or interfaces available for data flow between RMS and CMPO, 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, cost, space planning and data, collectively referred to as actuals data.

- Product attributes data.

- Placeholder Formalize data. Formalized SKU and Placeholder SKU mapping data will be provided by MDM.

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.

5

Integration

This release of CMPO 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 CMPO script import and export.

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

Export Script

The export script is used for exporting data from CMPO. 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 qrtrclssstr
- drtystrcluslbl qrtrclssstr

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 CMPO. 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 CMPO, 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.

ASO Integration

CMPO enables full integration with ASO using flat files through scripts. This section describes this integration.

ASO Integration using Flat Files

CMPO-ASO integration consists of scheduling the scripts to run in order in a batch cycle to export and import data to and from ASO. Assortments that need to be optimized are exported to ASO in the application by executing the Export to ASO custom menu. The data is stored in staging measures (measure names starting with SOWP) in the domain. Export scripts, scheduled in the batch, export all data from those staging measures into flat files for ASO.

In the same way, processed data in ASO is imported into CMPO using the flat file interface. Imported data is also loaded into staging measures in the domain. The user needs to execute the import custom menu to load the staged data in the domain into the application. There is also a similar process for exporting and importing assortment finalization details.

ASO integration design assumptions:

- An Assortment Set using the flat file interface is a category, group of quarters, and group of trade areas. An Assortment Version within an Assortment Set is a group

of store clusters that the retailer wants to optimize during the integration with ASO. It is identified by a unique ID as the Assortment ID in the flat file interface. Following is its format:

<Category Id>~<First Qrtr Id>~<Last_Qrtr Id>~<Set Id>~<Version_Id>

- Only one Assortment Version for a category can be processed by ASO at any point of time. Only after it is successfully processed in ASO and imported into APO, a user can submit another version of the assortment for the same category.

- After export from CMPO, a user has options to cancel the Assortment Version or Assortment Set in the application. If ASO has successfully processed an Assortment Version within an Assortment Set from CMPO, then users should not cancel that Assortment Set in CMPO. There is no interface to notify ASO that the Assortment Set is cancelled.

- A user can cancel an Assortment Version even if it is processed by ASO, by cancelling that Assortment Version and re-sending a new version to ASO within the same Assortment Set. If ASO receives a new version of an assortment while a previous version is still in process, it will treat the previous version as cancelled and continue processing the new version of the assortment for that Assortment Set.

- ASO Integration by default only exports items marked as mandatory, core, or optional to ASO for optimization. If a retailer wants to export all items to ASO, the scalar measure, WP Export All Items to ASO, needs to be set to true during implementation using the Measure Analysis workbook.

The following diagram shows the overall batch process of the CMPO-ASO integration.

ASO Initial Export

Script Name

export_so_initial.ksh

Usage

```
$ ./export_so_initial.ksh
```

Notes

This script exports multiple files which contain the initial assortment related metrics passed on to ASO for optimization. The Assortment ID in ASO is a concatenation of the Assortment ID, Assortment Set ID, and Assortment Version in CMPO using a separator (~) that links the related items in each file. The Assortment Set ID is the same as the Assortment ID excluding the version.

All files created after successful execution of this script are placed into $CM_MASTER_DOMAIN/output/export_so.<*timestamp*>.

ASO Initial Export Files

- Assortment Plan - so_assortment_stg.txt: This file contains the Assortment ID, Assortment Set ID, ASO request type, Assortment Type, Role, Tactics, and Strategies.

  Example:

  ```
  10000~q4_2014~q4_2014~1~1|10000~q4_2014~q4_2014~1|CLS~10000|"Coffee -
  4th Qrtr, FY2014 - 4th Qrtr,
  FY2014"|Northwest|1|1|Destination|"Assortment:Maintain,Space:Increase"|
  Cash Generating
  ```

- Assortment Product - so_assort_product_strcltr_stg.txt: This file contains the Assortment ID, Assortment SKU, and priority for SKUs.

  Example:

  ```
  10000~q4_2014~q4_2014~1~1|56|1236880|0|1
  ```

- Assortment Placeholder-Like Product - so_assort_phprod_like_prod_stg.txt: This file contains the placeholder products included in the assortment.

  Example:

  ```
  10000~q4_2014~q4_2014~1~1|Placeholder 1|temp-sku1|1234600
  ```

- Cluster - so_assort_cluster_stg.txt: This file contains store cluster information.

  Example:

  ```
  10000~q4_2014~q4_2014~1~1|12| |Mainstream - Large - A (Northwest)|
  2014-11-02|2015-01-31
  ```

- Store - so_assort_cluster_member_stg.txt: This file contains the store-cluster mapping.

  Example:

  ```
  10000~q4_2014~q4_2014~1~1|58|12||
  ```

- Price Cost - so_assort_proloc_pricecost_stg.txt: This file contains price and cost information for SKUs.

  Example:

  ```
  10000~q4_2014~q4_2014~1~1|1236874|58|5.2|2.3
  ```

- Forecast - so_assort_proloc_fcst_stg.txt: This file contains the forecast for all SKUs.

  Example:

  ```
  10000~q4_2014~q4_2014~1~1|1236880|58|2015-01-31|829.79
  ```

- New Product Other Attributes - so_assort_phprod_attr_stg.txt: This file contains the SKU-Attribute Map for new SKUs.

  Example:

  ```
  10000~q4_2014~q4_2014~1~1|temp-sku1|CLS~10000~roast|CLS~10000~french_
  roast
  ```

ASO Initial Import

Script Name

import_so_initial.ksh

Usage

```
$ ./import_so_initial.ksh
```

Notes

This script imports the processed assortment file from ASO into the CMPO assortment file.

From ASO, it contains the Assortment ID, SKU ID, store ID, and other ASO metrics such as Average Sales Units and Retail, Average Gross Profit, POG Length, Service Level, Average Days of Supply, and so on.

Before running the script, the ASO extract file should be placed into $CM_INPUTHOME by name "so_assort_int.txt".

Example:

```
1|Coffee - 4th Qrtr, FY2014 - 4th Qrtr, FY2014|Northwest|10000~q4_2014~q4_
2014~1|10000~q4_2014~q4_2014~1~1|CLS~1000~10000|Coffee|Routine|Cash
Generating|Assortment:Increase,Space:Increase|1|Mainstream - Large - A
(Northwest)|12|2014-11-02|2015-01-31|3380|56|56|1023
Seattle|79|1236841|1236841|1236841 - Folgers 100% Columbian Non-Flavored
Regular - Caffeinated 12 oz
Jar|7|105.039|721.655|360.822|0.462|235.809|340.849|30.817|1|336|336|2015-
10-01
```

ASO provides a single table view extract with all columns into a single file which may contain assortment data for more than a particular date. This script processes that file from ASO, and filters required records which are greater than the Last Export Date present in the date file $CM_INPUTHOME/so_last_exp_date.txt. It creates two input files, import_asrt_plan.txt and import_finalize_asrt.txt. First, the import_asrt_plan.txt file uses this script to load the optimized assortment data. The second file is then used as input by the SO Finalize Import process to load the finalized assortment sets.

At the successful completion of this script, it also updates the so_last_exp_date.txt file with the latest export date present in the ASO extract file, so that already processed records will be filtered in next run. If the so_last_exp_date.txt is not present or empty, this script processes all records coming from ASO.

ASO Finalize Export

Script Name

export_so_finalize.ksh

Usage

```
$ ./export_so_finalize.ksh
```

Notes

This script exports the finalized assortments details in CMPO to ASO for further implementation. Assortments are finalized in ASO at the Assortment Set ID level. This script creates two files, Finalized Assortments and Finalized SKU Mapping.

All files created after successful execution of this script are placed in $CM_MASTER_DOMAIN/output/export_so.<*timestamp*>.

ASO Finalize Export Files

- Finalized Assortments - so_assortment_finalized_stg.txt: This file contains the Assortment Set ID, Category Key, and Assortment Label which were finalized in CMPO.

  Example:

  ```
  10000~q4_2014~q4_2014~1|CLS~10000|"Coffee - 4th Qrtr, FY2014 - 4th
  Qrtr, FY2014"
  ```

- Finalized SKU Mapping - so_assort_phprod_finalized_stg.txt: This file contains the placeholder SKU and Formalized Mapping SKU details for the Assortment set which was finalized.

  Example:

  ```
  10000~q4_2014~q4_2014~1|temp-sku1|1234567|New SKU Label
  ```

ASO Finalize Import

Script Name

import_so_finalize.ksh

Usage

```
$ ./import_so_finalize.ksh
```

Notes

This script imports the Assortment Sets which are finalized in ASO. This process formally informs CMPO that ASO also processed the Assortments which are finalized in CMPO.

Input for this script is created by the ASO Initial Import process script, which filters the finalization records from the ASO input file and creates the im-port_finalize_ asrt.txt file in the $CM_MASTERDOMAIN/input directory. If the file is not empty, it has only one column with the list of Assortment Set IDs which are finalized in ASO.

Example:

```
10000~q4_2014~q4_2014~1
```

After the successful execution of this script, the ASO Finalized Set (SOWPFinalizedU) value is set the same as the Assortment Set value. There is no custom menu in the application to load this flag from this staging measure. The user can either rebuild or refresh the workbook to get this updated data. This process is needed only if the user wants to create another assortment optimization request for the same quarter/category/trade area which was already finalized both in CMPO and ASO.

ORASE Integration

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

ORASE to CMPO

ORASE exports several data files which can be imported into CMPO. 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.

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

ORASE to CMPO Data Transformation Script

The flat-file data exported from ORASE and imported into CMPO 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.

<delimeter> 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 CMPO 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 CMPO 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 CMPO 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 CMPO CDT Transformation Script

The CDT files exported from ORASE and imported into CMPO 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.

CMPO to ORASE Data Transformation Script

The flat-file data exported from ORASE and imported into CMPO 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.

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

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: exportMeasure, awk, sort, exportHier, head, rm, touch, mv.
15	Yes	Delimiter not specified, or attribute name field specified with -n but no attribute value field specified with -v.

Attributes Data Import Script

The attributes import script is used for importing attributes hierarchy and measure data into CMPO. 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).

> **Note:** Product Attribute Value/Label are used in the application as pick-list values. In RPAS, "," and ":" are reserved characters for picklist and range definitions of a measure with a UI Type of picklist. These characters cannot be used to define the LABEL part of a picklist Value/Label pair. So those characters should not be present in Product Attribute Value/Labels.

> **Note:** To achieve private label SKU attributions, Private Label SKUs must be mapped to the position indicating Private Label in the atv dimension. The GA data set's private label attribute name is "pl", and the two attribute values which roll up to "pl" are "pl1" indicating Private Label, and "npl" indicating Non-Private Label. Therefore, to indicate a SKU is private label, its SKU-Attribute map must be "pl1". This private label indicator is configurable. For more information, see "Product Hierarchy File" in Chapter 3, and the data notes on measure DRTYAttrValTx in Table 9–2 and measure DRDVPvtLblSkuTx in Table 9–1.

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: loadHier, loadmeasure, 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 CMPO. The store to store cluster mapping is stored in two measures which are loaded into Dynamic Hierarchy Dimensions for selected CMPO 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.

Formalize Placeholder Script

Placeholder SKUs are created using standard DPM functionality. The Formalize Placeholder script is used to formalize the placeholder SKUs with actual SKUs from the MDM system. The Placeholder-Formalized SKU Mapping file should be provided by MDM system either on a daily or weekly basis before the formalized SKU data flow through the product hierarchy file. Only after formalization, the MDM solution should send the formalized SKUs in a normal hierarchy file. This script uses the standard RPAS informalPositionMgr and renamePositions utilities to formalize and rename the placeholder position with the actual SKU position in both the PROD and PROR hierarchies.

Script Name:

formalize_ph.ksh

Usage:

```
formalize_ph.ksh
```

Input Files

The file imported by this script is:

- Placeholder - Formalized SKU Map File: formalize_ph.csv.dat

Input Location and Format

The input file is expected to be in the $CM_BATCH directory. The file is described in "Placeholder - Formalized SKU Map File".

Output Effect

Placeholder SKUs are formalized and renamed with the Formalized SKU information in both the PROD and PROR hierarchies.

Placeholder - Formalized SKU Map File

File Name:

formalize_ph.csv.dat

File format:

comma-separated values file

Fields:

Placeholder SKU, Formalized SKU

The following table describes the fields in this file.

Field	Description
Placeholder SKU	Placeholder SKU ID
Formalized SKU	Formalized SKU ID

Example:

```
dpm1,1234615
dpm2,1234616
dpm3,1234617
```

Demand Transference Data Import Script

The Demand Transference import script is used for importing the data required for CMPO 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/tdar/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 impordata.ksh or in one of the following commands: loadmeasure, mace, 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"
```

6

Configuration Considerations

This chapter provides information on the configuration changes that can be made for CMPO. For some retailers, parts of the released version of the CMPO configuration might fit perfectly. However, it is anticipated that changes are needed to make the CMPO 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
- Planogram (POGH) Hierarchy
- Custom Message (CMSH) Hierarchy

Calendar (CLND) Hierarchy

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

Figure 6–1   Calendar Hierarchy
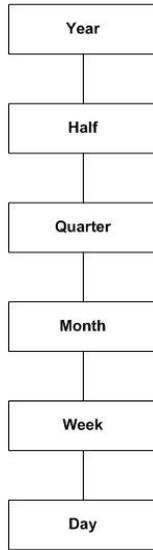
Name	Label	Hierarchy Type	Child
YEAR	Year	Main	SSN
SSN	Half	Main	QRTR
QRTR	Quarter	Main	MNTH
MNTH	Month	Main	WEEK
WEEK	Week	Main	DAY
DAY	Day	Main	None

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.

CMPO 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 CMPO configuration for the purpose of illustration. They can be modified or removed without requiring changes to any other elements of the CMPO configuration. Other dimensions and hierarchy branches may also be added without requiring changes to other elements of the CMPO configuration.

Product (PROD) Hierarchy

Figure 6–2 shows the PROD hierarchy in the CMPO configuration.

Figure 6–2   Product Hierarchy
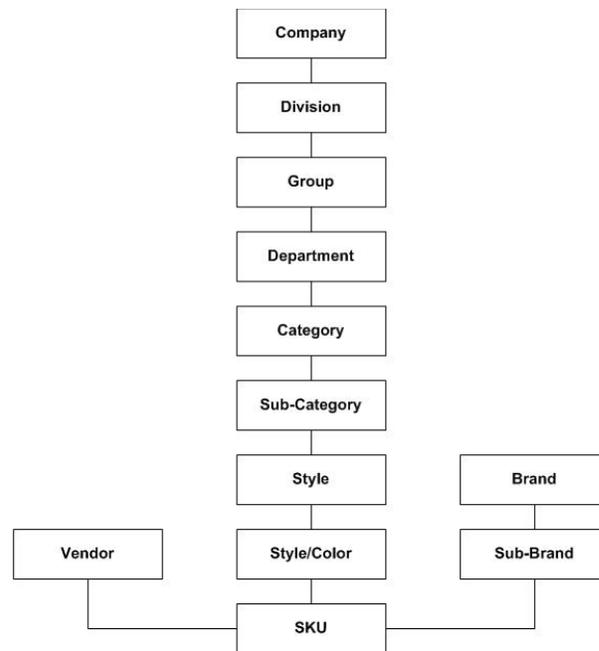
Name	Label	Hierarchy Type	Child
CMMP	Company	Main	DVSN
DVSN	Division	Main	PGRP
PGRP	Group	Main	DEPT
DEPT	Department	Main	CLSS
CLSS	Category	Main	SCLS
SCLS	Sub-category	Main	STYL
STYL	Style	Main	STCO
STCO	Style/Color	Main	SKU
SKU	SKU	Main	None
VNDR	Vendor	Alternate	SKU
BRD	Brand	Alternate	SBRD
SBRD	Sub-Brand	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 CMPO 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 CMPO 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 CMPO 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 CMPO configuration.

Figure 6–3 Right-Hand Side Product Hierarchy
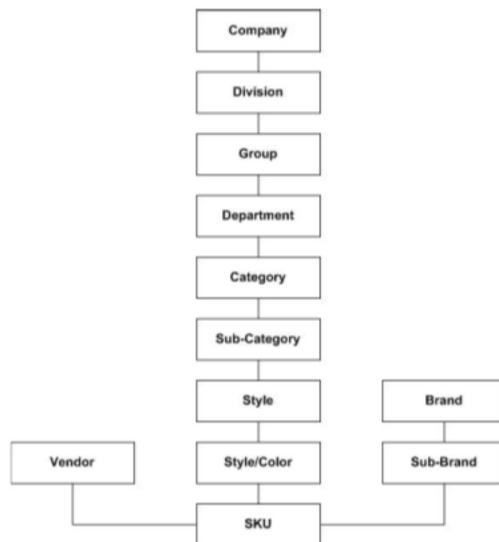
Name	Label	Hierarchy Type	Child
CMMR	Company	Main	DVSR
DVSR	Division	Main	PGRR
PGRR	Group	Main	DEPR
DEPR	Department	Main	CLSR
CLSR	Category	Main	SCLR
SCLR	Sub-category	Main	STYR
STYR	Style	Main	STCR
STCR	Style/Color	Main	SKUR

Name	Label	Hierarchy Type	Child
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 CMPO 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 CMPO configuration.

Figure 6–4   Location Hierarchy
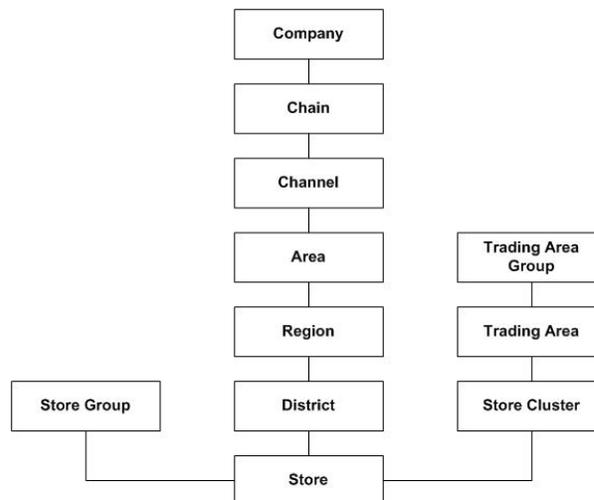
Name	Label	Hierarchy Type	Child
CMPN	Company	Main	CHN
CHN	Chain	Main	CHNL
CHNL	Channel	Main	AREA
AREA	Area	Main	RGN
RGN	Region	Main	DISTR

Name	Label	Hierarchy Type	Child
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 CMPO configuration imposes few constraints on the structure of this hierarchy.

However, the alternate rollup of Store Cluster and Trading Area is integral to CMPO 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 Priority Index (IPI) weights.

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 position must be one of sX, where X equals 1 to 7.
- The consumer segment version dimension position 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. The customer should advance plan how many Consumer Decision Trees (CDTs) they will need for each combination of category, trading area, and consumer segment. The Consumer Segment Hierarchy load file then must include a Consumer Segment Version position for each of these Consumer Segments. As a result, during domain build, the domain will include enough versions to hold the anticipated number of CDTs.

As a point of reference, the GA hierarchy load file contains 5 Consumer Segment Versions for each of the 7 Consumer Segments.

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 CMPO 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 CMPO 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 CMPO.

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.

Planogram (POGH) Hierarchy

The planogram hierarchy represents planogram details used in a space planning application. This hierarchy is intended to capture all planogram details used by the Macro Space Optimization module.

Name	Label	Hierarchy Type	Child
PDEP	POG Department	Main	PCAT
PCAT	POG Category	Main	PSUB
PSUB	POG Sub-Category	Main	None

Custom Message (CMSH) Hierarchy

All custom messages used in CMPO are loaded as hierarchy positions to enable the translation of custom messages to different languages. It is a single dimensional hierarchy with only one dimension, CMSD. By default, all positions are loaded in English during the hierarchy load. Custom message position names are hard coded in the application, so users should not change the position names. However, if needed during implementation, custom messages can be changed if more descriptive messages are needed.

If a user wants to change the language of custom messages, the user needs to load the provided r_cmsdlabel.csv.ovr using the standard loadmeasure utility after removing languages not needed from that file.

7

Batch Processing

This chapter contains a summary of the scripts that are used to maintain CMPO 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	CMPO 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
deleteCdts.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

Script

cm_batch.ksh

No arguments are expected or processed by the script.

Notes

This script is performs many functions related to keeping information within CMPO 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.

■ Process all CDT XML files residing in the domain's cdt_interface/import directory.

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 CMPO. 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>] [-r]
```

<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.

-r indicates that the RMS-style category, attribute name, and attribute value positions will be transformed into RPAS-format using a call to rcm_t_cdt_orase.ksh.

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.

deleteCdts.ksh

Script
deleteCdts.ksh

Usage
```
deleteCdts.ksh
```

Notes
This script is used to delete Consumer Decision Trees (CDTs) from the CMPO RPAS domain. The operations performed by this batch script depend on user operations in the Category Management Administration workbook.

In the Category Management Administration workbook/CDT Maintenance step/Delete CDTs view, the user may select CDTs for deletion. This workbook must be committed. Then, run the deleteCdts.ksh script from the UNIX command line. The script works on the domain specified by the $CM_MASTERDOMAIN variable in the $CM_HOME/bin/environment.ksh script.

Running deleteCDTs.ksh from the command line removes CDT information from all measures associated with those CDTs marked for deletion in the view:

- The string measures storing the XML representation of the deleted CDT are cleared.

- CDTS deleted are not available for selection in the Assortment Planning workbook's wizard train-stop for selecting CDT Version.

- Dynamic Hierarchy Dimension levels created from processing the deleted CDT, using Accept XML in the workbook, or using the processcdts.ksh from the command line, are removed from the system.

- CDT Editor no longer shows the deleted CDT.

- The Delete CDT measure in the Delete CDTs view is cleared.

Before Running CMPO 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*.

8

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*.

> **Note:** The Custom Message hierarchy enables the translation of custom messages. For more information, see "Custom Message (CMSH) Hierarchy.".

9

Data

A broad and detailed data set is required to use the capabilities of CMPO to their fullest. Some of the data required is relatively easy to obtain, for example, information about sales, cost, space, and the like. Other data 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 CMPO. Data to be loaded into these measures must be supplied at the proper intersection with the proper measure (or file) name.

The measures are grouped by type of data. Each of the following sections contains a table which describes the measures in that group. Each section also has a description of the group and effect of missing data for that group. The Optional or Required row in the following tables is intended to convey the importance of the data to the overall business process of the CMPO workflow. It does not necessarily indicate that the data feed is required in order to build a domain with success.

The following groups of data are described:

- Actuals Data
- Admin Weight Data
- Household Data
- Last Year Assortment Data
- Market Data
- MFP Location Data
- MSM Data
- ORASE Data
- Space Data

Actuals Data

These measures are historical sales data from a transactional system, such as, RMS.

These measures are all data that is similar to that produced by ORASE, but is currently loaded. The data is used in the AP workbook to enable the store clustering by attributes dynamic hierarchy, and in both CP and AP for analysis.

Effect of Missing Actuals Data

- TY Sales measures are the basis of all planning and most analysis in CM. This data is not optional.

- The BOP and EOP measures are only used in the average inventory calculation. This affects the scorecard in AP and the Set Inventory Screen in CP.

- DRTYPromoSlsbyCSR, DRTYSlsbyCSR, and DRTYSlsbyCSU are used for display and calculation of gross profit. So, the effect of missing data would be limited to the measures shown on screen being blank. Also, this information is currently loaded into CM from static load files, but is included in this section as it is related to the functionality ORASE currently provides.

- DRTYRseStrClst*Lbl and DRTYRseStrClst*Tx are used for the dynamic hierarchy in AP to allow the users to sort stores based on store attributes. These are distinct from the product attributes that are used extensively elsewhere.

Table 9–1   Actuals Data Measures

Measure Name	Attribute	Value
DRTYConSegDistV	File Name	drtyconsegdistv.csv.ovr
	Label	TY Consumer Seg Distribution
	Description	Default Role This Year Consumer Segment Distribution Value
	Optional or Required	Optional
	Type	real
	Base Intx	qrtr/scls/tdar/csd
	Assortment Planning	No
	Category Planning	No
	Administration	No
DRTYBOPR	File Name	drtybopr.csv.ovr
	Label	TY BOP R
	Description	Default Role This Year Beginning of Period Inventory Retail
	Optional or Required	Optional
	Type	real
	Base Intx	week/sku/str
	Assortment Planning	No
	Category Planning	No
	Administration	No

Table 9–1   (Cont.) Actuals Data Measures

Measure Name	Attribute	Value
DRTYEOPR	File Name	drtyeopr.csv.ovr
	Label	TY EOP R
	Description	Default Role This Year Ending of Period Inventory Retail
	Optional or Required	Optional
	Type	real
	Base Intx	week/sku/str
	Assortment Planning	No
	Category Planning	No
	Administration	No
DRTYMktPromoSlsR	File Name	drtymktpromoslsr.csv.ovr
	Label	TY Market Promo Sales R
	Description	Default Role This Year Market Promo Sales Retail
	Optional or Required	Optional
	Type	real
	Base Intx	qrtr/scls/tdar
	Assortment Planning	No
	Category Planning	Yes
	Administration	No
DRTYMktPromoSlsU	File Name	drtymktpromoslsu.csv.ovr
	Label	TY Market Promo Sales U
	Description	Default Role This Year Market Promo Sales Units
	Optional or Required	Optional
	Type	real
	Base Intx	qrtr/scls/tdar
	Assortment Planning	No
	Category Planning	Yes
	Administration	No
DRTYPromoSlsR	File Name	drtypromoslsr.csv.ovr
	Label	TY Promo Sales R
	Description	Default Role This Year Promo Sales Retail
	Optional or Required	Required
	Type	real
	Base Intx	week/sku/str
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No

Table 9–1   (Cont.) Actuals Data Measures

Measure Name	Attribute	Value
DRTYPromoSlsU	File Name	drtypromoslsu.csv.ovr
	Label	TY Promo Sales U
	Description	Default Role This Year Promo Sales Units
	Optional or Required	Required
	Type	real
	Base Intx	week/sku/str
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No
DRDVPvtLblSkuTx	File Name	drdvpvtlblskutx.csv.ovr
	Label	Private Label SKU Attribute Value
	Description	Private Label SKU Attribute Value
	Optional or Required	Optional The NA value of this measure is "pl1". To use a different value, load this measure with a different value, or run the mace command to set the measure to a different string. This value must match the private label position name defined in the Product Attributes Hierarchy.
	Type	string
	Base Intx	scalar
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	Yes
DRTYSlsC	File Name	drtyslsc.csv.ovr
	Label	TY Sales C
	Description	Default Role This Year Sales Item Cost
	Optional or Required	Required
	Type	real
	Base Intx	week/sku/str
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No

Table 9–1   (Cont.) Actuals Data Measures

Measure Name	Attribute	Value
DRTYSlsR	File Name	drtyslsr.csv.ovr
	Label	TY Sales R
	Description	Default Role This Year Sales Retail
	Optional or Required	Required
	Type	real
	Base Intx	week/sku/str
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No
DRTYSlsU	File Name	drtyslsu.csv.ovr
	Label	TY Sales U
	Description	Default Role This Year Sales Units
	Optional or Required	Required
	Type	real
	Base Intx	week/sku/str
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No

Admin Weight Data

These measures are used in the calculation of IPIs. They are set by an Administrator.

Effect of Missing Admin Weight Data

The Admin Weight measures are seeded into the AP @ Cluster workbook through a custom menu. Blank data here results in blank data being seeded in IPIs, and since these are an integral part of the IPI calculation, IPIs will also be zero. The user can override any of these weight values in the Assortment Planning workbook.

The quarter and week mapping information is used throughout the application to calculate LY versions of data. It is vital that it be populated.

The WP CDT Pre Range measure is a mask measure used to set the pre-range for the AP workbook. A blank pre-range measure will cause a workbook build error. It should be set to display the CDTs available per quarter/category/trading area.

The Fragmentation Analysis Breakpoint measure is used by the CMFragmentAnalysisExpr special expression. If it is blank, the results returned for Fragmentation, Contribution, Proliferation, and Accumulative Ranking will be zero for both market and retailer data. This will make most of the Market Analysis in Assortment Planning Analysis worthless.

The CDT Labels can be edited in the admin workbook and are displayed in the CDT Editor workbook. The CDT Editor workbook will not operate properly without this data.

The tactic values are used in all of the workbooks. This data can be manually entered through an admin screen if a load file is not available. The effect of missing tactics in CP is that a user would not be able to select tactics in the corresponding step. The effect in AP would be that the Review Tactics worksheet in the Review Assortment Scorecard would not show any data.

Table 9–2   Admin Weight Data Measures

Measure Name	Attribute	Value
ADDVAttrNWgtV	File Name	addvattrnwgtv.csv.ovr
	Label	Attribute Name Weight
	Description	Administrator Default Value Attribute Name Weight Value
	Optional or Required	Optional
	Type	Real
	Base Intx	scls/csd/atn/sgyd
	Assortment Planning	Yes
	Category Planning	No
	Administration	Yes
ADDVAttrVWgtV	File Name	addvattrvwgtv.csv.ovr
	Label	Attribute Value Weight
	Description	Administrator Default Value Attribute Value Weight Value
	Optional or Required	Optional
	Type	Real
	Base Intx	scls/csd/atv/sgyd
	Assortment Planning	Yes
	Category Planning	No
	Administration	Yes
ADDVConSegWgtV	File Name	addvconsegwgtv.csv.ovr
	Label	Consumer Seg Weight
	Description	Administrator Default Value Consumer Segment Weight Value
	Optional or Required	Optional
	Type	real
	Base Intx	clss/tdar/csd
	Assortment Planning	No
	Category Planning	Yes
	Administration	Yes

Table 9–2   (Cont.) Admin Weight Data Measures

Measure Name	Attribute	Value
ADDVFocArWgtV	File Name	addvfocarwgtv.csv.ovr
	Label	Focus Area Weight
	Description	Administrator Default Value Focus Area Weight Value
	Optional or Required	Optional
	Type	real
	Base Intx	scls/far/csd/sgyd
	Assortment Planning	Yes
	Category Planning	No
	Administration	Yes
ADDVGPpWgtV	File Name	addvgppwgtv.csv.ovr
	Label	Gross Profit % Weight
	Description	Administrator Default Value Gross Profit % Weight Value
	Optional or Required	Optional
	Type	real
	Base Intx	scls/far/csd/sgyd
	Assortment Planning	Yes
	Category Planning	No
	Administration	Yes
ADDVGPWgtV	File Name	addvgpwgtv.csv.ovr
	Label	Gross Profit Weight
	Description	Administrator Default Value Gross Profit Weight Value
	Optional or Required	Optional
	Type	real
	Base Intx	scls/far/csd/sgyd
	Assortment Planning	Yes
	Category Planning	No
	Administration	Yes
ADDVLoyWgtV	File Name	addvloywgtv.csv.ovr
	Label	Loyalty Weight
	Description	Administrator Default Value Loyalty Weight Value
	Optional or Required	Optional
	Type	real
	Base Intx	scls/far/csd/sgyd
	Assortment Planning	Yes
	Category Planning	No
	Administration	Yes

Table 9–2   (Cont.) Admin Weight Data Measures

Measure Name	Attribute	Value
ADDVMktBWgtV	File Name	addvmktbwgtv.csv.ovr
	Label	Market Basket Weight
	Description	Administrator Default Value Market Basket Weight Value
	Optional or Required	Optional
	Type	real
	Base Intx	scls/far/csd/sgyd
	Assortment Planning	Yes
	Category Planning	No
	Administration	Yes
ADDVSlsRWgtV	File Name	addvslsrwgtv.csv.ovr
	Label	Sales R Weight
	Description	Administrator Default Value Sales R Weight Value
	Optional or Required	Optional
	Type	real
	Base Intx	scls/far/csd/sgyd
	Assortment Planning	Yes
	Category Planning	No
	Administration	Yes
ADDVSlsUWgtV	File Name	addvslsuwgtv.csv.ovr
	Label	Sales U Weight
	Description	Administrator Default Value Sales U Weight Value
	Optional or Required	Optional
	Type	real
	Base Intx	scls/far/csd/sgyd
	Assortment Planning	Yes
	Category Planning	No
	Administration	Yes
ADLYQrtrMapTx	File Name	adlyqrtrmaptx.csv.ovr
	Label	LY Quarter Mapping
	Description	Administrator Last Year Quarter Mapping Text
	Optional or Required	Required
	Type	string
	Base Intx	qrtr
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	Yes

Table 9–2 (Cont.) Admin Weight Data Measures

Measure Name	Attribute	Value
ADLYWeekMapTx	File Name	adlyweekmaptx.csv.ovr
	Label	LY Week Mapping
	Description	Administrator Last Year Week Mapping Text
	Optional or Required	Required
	Type	string
	Base Intx	week
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	Yes
ADWPCDTLblTx	File Name	adwpcdtlbltx.csv.ovr
	Label	WP CDT Label
	Description	Administrator Working Plan CDT Label Text
	Optional or Required	Required
	Type	string
	Base Intx	qrtr/clss/tdar/csvd
	Assortment Planning	No
	Category Planning	No
	Administration	Yes
ADWPCDTPrerngB	File Name	adwpcdtprerngb.csv.ovr
	Label	WP CDT Pre Range
	Description	Administrator Working Plan CDT Pre Range
	Optional or Required	Optional
	Type	Boolean
	Base Intx	qrtr/clss/tdar/csvd
	Assortment Planning	Yes
	Category Planning	No
	Administration	Yes
ADWPTacticTx	File Name	adwptactictx.csv.ovr
	Label	WP Tactic Values
	Description	Administrator Working Plan Tactic Values Text
	Optional or Required	Optional
	Type	string
	Base Intx	scls/tdar/lnum/tctd
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	Yes

Table 9–2   (Cont.) Admin Weight Data Measures

Measure Name	Attribute	Value
DRTYFragBrkptp	File Name	drtyfragbrkptp.csv.ovr
	Label	TY Fragmentation Analysis Breakpoints %
	Description	Default Role This Year Fragmentation Analysis Breakpoints Percent
	Optional or Required	Required
	Type	real
	Base Intx	pctd
	Assortment Planning	Yes
	Category Planning	No
	Administration	Yes

Household Data

These measures are all data purchased from a 3rd party data aggregator. Almost all of the data is used in analysis and reference only. Very few of the measures are used as system input to a plan. The few exceptions are listed below.

Effect of Missing Household Data

For the most part, all of these measures are used either analysis screens in CP or AP. In AP, these are almost all found in the AP Analysis task. In CP, most are used in the Assign Category Role step. If data is missing for these measures, the measures will just show zeros for all positions.

The few measures that are used in calculation are:

- DRTYLoyaltyX is used in the IPI calculation in AP @ Cluster. If this data is missing, the loyalty contribution to the IPI score will be zero.

- DRTYItmPentrp and DRTYPrchFreqV are both used in the recommended Role calculation in CP for Industry Model A. If this information is missing, the system will be unable to calculate a recommended role for model A.

- DRTYPentrp, DRTYLoyaltyp, and DRTYSpendX are used to calculate the Value Share measure in CP (in the Analyze Competition view). If any of these measures are missing, the value share will be zero.

Table 9–3   Household Data Measures

Measure Name	Attribute	Value
DRTYAvgBsktValV	File Name	drtyavgbsktvalv.csv.ovr
	Label	TY Avg Basket Value
	Description	Default Role This Year Average Basket Value
	Optional or Required	Optional
	Type	real
	Base Intx	tdar/csd
	Assortment Planning	No
	Category Planning	Yes
	Administration	No
DRTYBuyersL0p	File Name	drtybuyersl0p.csv.ovr
	Label	TY % Buyers @ SKU %
	Description	Default Role This Year % Buyers @ SKU Percent
	Optional or Required	Optional
	Type	real
	Base Intx	sku/tdar/rsgd
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYBuyersL3p	File Name	drtybuyersl3p.csv.ovr
	Label	TY % Buyers @ Sub-Cat %
	Description	Default Role This Year % Buyers @ Sub-Category Percent
	Optional or Required	Optional
	Type	real
	Base Intx	scls/tdar/rsgd
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYBuyersL4p	File Name	drtybuyersl4p.csv.ovr
	Label	TY % Buyers @ Cat %
	Description	Default Role This Year % Buyers @ Category Percent
	Optional or Required	Optional
	Type	real
	Base Intx	clss/tdar/rsgd
	Assortment Planning	Yes
	Category Planning	No
	Administration	No

Table 9–3   (Cont.) Household Data Measures

Measure Name	Attribute	Value
DRTYByerConvRtV	File Name	drtybyerconvrtv.csv.ovr
	Label	TY Buyer Conversion Rate
	Description	Default Role This Year Buyer Conversion Rate Value
	Optional or Required	Optional
	Type	real
	Base Intx	scls/str/retd/csd
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No
DRTYDollarsL0p	File Name	drtydollarsl0p.csv.ovr
	Label	TY % Dollars @ SKU %
	Description	Default Role This Year % Dollars @ SKU Percent
	Optional or Required	Optional
	Type	real
	Base Intx	sku/tdar/rsgd
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYDollarsL3p	File Name	drtydollarsl3p.csv.ovr
	Label	TY % Dollars @ Sub-Cat %
	Description	Default Role This Year % Dollars @ Sub-Category Percent
	Optional or Required	Optional
	Type	real
	Base Intx	scls/tdar/rsgd
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYDollarsL4p	File Name	drtydollarsl4p.csv.ovr
	Label	TY % Dollars @ Cat %
	Description	Default Role This Year % Dollars @ Category Percent
	Optional or Required	Optional
	Type	real
	Base Intx	clss/tdar/rsgd
	Assortment Planning	Yes
	Category Planning	No
	Administration	No

Table 9–3   (Cont.) Household Data Measures

Measure Name	Attribute	Value
DRTYItmPentrL0p	File Name	drtyitmpentrl0p.csv.ovr
	Label	TY Item Penetration @ SKU %
	Description	Default Role This Year Item Penetration @ SKU Percent
	Optional or Required	Optional
	Type	real
	Base Intx	sku/tdar
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYItmPentrL3p	File Name	drtyitmpentrl3p.csv.ovr
	Label	TY Item Penetration @ Sub-Cat %
	Description	Default Role This Year Item Penetration @ Sub-Category Percents
	Optional or Required	Optional
	Type	real
	Base Intx	scls/tdar
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYItmPentrL4p	File Name	drtyitmpentrl4p.csv.ovr
	Label	TY Item Penetration @ Cat %
	Description	Default Role This Year Item Penetration @ Category Percent
	Optional or Required	Optional
	Type	real
	Base Intx	clss/tdar
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYItmPentrp	File Name	drtyitmpentrp.csv.ovr
	Label	TY Item Penetration %
	Description	Default Role This Year Item Penetration Percent
	Optional or Required	Optional
	Type	real
	Base Intx	qrtr/clss/tdar
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No

Table 9–3   (Cont.) Household Data Measures

Measure Name	Attribute	Value
DRTYItmRevpByerL0V	File Name	drtyitmrevpbyerl0v.csv.ovr
	Label	TY Item Revenue per Buyer @ SKU
	Description	Default Role This Year Item Revenue per Buyer @ SKU Value
	Optional or Required	Optional
	Type	real
	Base Intx	sku/tdar
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYItmRevpByerL3V	File Name	drtyitmrevpbyerl3v.csv.ovr
	Label	TY Item Revenue per Buyer @ Sub-Cat
	Description	Default Role This Year Item Revenue per Buyer @ Sub-Category Value
	Optional or Required	Optional
	Type	real
	Base Intx	scls/tdar
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYItmRevpByerL4V	File Name	drtyitmrevpbyerl4v.csv.ovr
	Label	TY Item Revenue per Buyer @ Cat
	Description	Default Role This Year Item Revenue per Buyer @ Category Value
	Optional or Required	Optional
	Type	real
	Base Intx	clss/tdar
	Assortment Planning	Yes
	Category Planning	NA
	Administration	NA

Table 9–3   (Cont.) Household Data Measures

Measure Name	Attribute	Value
DRTYItmSpndPromoL0p	File Name	drtyitmspndpromol0p.csv.ovr
	Label	TY % Item Spend on Promo @ SKU %
	Description	Default Role This Year % Item Spend on Promo @ SKU Percent
	Optional or Required	Optional
	Type	real
	Base Intx	sku/tdar
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYItmSpndPromoL3p	File Name	drtyitmspndpromol3p.csv.ovr
	Label	TY % Item Spend on Promo @ Sub-Cat %
	Description	Default Role This Year % Item Spend on Promo @ Sub-Category Percent
	Optional or Required	Optional
	Type	real
	Base Intx	scls/tdar
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYItmSpndPromoL4p	File Name	drtyitmspndpromol4p.csv.ovr
	Label	TY % Item Spend on Promo @ Cat %
	Description	Default Role This Year % Item Spend on Promo @ Category Percent
	Optional or Required	Optional
	Type	real
	Base Intx	clss/tdar
	Assortment Planning	Yes
	Category Planning	No
	Administration	No

Table 9–3   (Cont.) Household Data Measures

Measure Name	Attribute	Value
DRTYItmSpndpTrpL0V	File Name	drtyitmspndptrpl0v.csv.ovr
	Label	TY Item Spend per Item per Trip @ SKU
	Description	Default Role This Year Item Spend per Item per Trip @ SKU Value
	Optional or Required	Optional
	Type	real
	Base Intx	sku/tdar
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYItmSpndpTrpL3V	File Name	drtyitmspndptrpl3v.csv.ovr
	Label	TY Item Spend per Item per Trip @ Sub-Cat
	Description	Default Role This Year Item Spend per Item per Trip @ Sub-Category Value
	Optional or Required	Optional
	Type	real
	Base Intx	scls/tdar
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYItmSpndpTrpL4V	File Name	drtyitmspndptrpl4v.csv.ovr
	Label	TY Item Spend per Item per Trip @ Cat
	Description	Default Role This Year Item Spend per Item per Trip @ Category Value
	Optional or Required	Optional
	Type	real
	Base Intx	clss/tdar
	Assortment Planning	Yes
	Category Planning	No
	Administration	No

Table 9–3   (Cont.) Household Data Measures

Measure Name	Attribute	Value
DRTYItmTrpspByerL0V	File Name	drtyitmtrpspbyerl0v.csv.ovr
	Label	TY Item Trips per Item Buyer @ SKU
	Description	Default Role This Year Item Trips per Item Buyer @ SKU Value
	Optional or Required	Optional
	Type	real
	Base Intx	sku/tdar
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYItmTrpspByerL3V	File Name	drtyitmtrpspbyerl3v.csv.ovr
	Label	TY Item Trips per Item Buyer @ Sub-Cat
	Description	Default Role This Year Item Trips per Item Buyer @ Sub-Category Value
	Optional or Required	Optional
	Type	int
	Base Intx	scls/tdar
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYItmTrpspByerL4V	File Name	drtyitmtrpspbyerl4v.csv.ovr
	Label	TY Item Trips per Item Buyer @ Cat
	Description	Default Role This Year Item Trips per Item Buyer @ Category Value
	Optional or Required	Optional
	Type	real
	Base Intx	clss/tdar
	Assortment Planning	Yes
	Category Planning	No
	Administration	No

Table 9–3   (Cont.) Household Data Measures

Measure Name	Attribute	Value
DRTYLoyaltyp	File Name	drtyloyaltyp.csv.ovr
	Label	TY Loyalty (% of Buyer Spend at Retailer)
	Description	Default Role This Year Loyalty (% of Buyer Spend at Retailer) Percent
	Optional or Required	Optional
	Type	real
	Base Intx	tdar/retd
	Assortment Planning	No
	Category Planning	Yes
	Administration	No
DRTYLoyaltyX	File Name	drtyloyaltyx.csv.ovr
	Label	TY Loyalty Index
	Description	Default Role This Year Loyalty Index
	Optional or Required	Optional
	Type	real
	Base Intx	sku/str/csd
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYMktBasketX	File Name	drtymktbasketx.csv.ovr
	Label	TY Market Basket Index
	Description	Default Role This Year Market Basket Index
	Optional or Required	Optional
	Type	real
	Base Intx	sku/str/csd
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYMktTAHHp	File Name	drtymkttahhp.csv.ovr
	Label	TY Market Trading Area HH %
	Description	Default Role This Year Market Trading Area Household Percent
	Optional or Required	Optional
	Type	real
	Base Intx	tdar/cprd
	Assortment Planning	No
	Category Planning	Yes
	Administration	No

Table 9–3   (Cont.) Household Data Measures

Measure Name	Attribute	Value
DRTYRtlTAHHp	File Name	drtyrtltahhp.csv.ovr
	Label	TY Retailer Trading Area HH %
	Description	Default Role This Year Retailer Trading Area Household Percent
	Optional or Required	Optional
	Type	real
	Base Intx	tdar/cprd
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No
DRTYMktTASpndp	File Name	drtymkttaspndp.csv.ovr
	Label	TY Market Trading Area Spend %
	Description	Default Role This Year Market Trading Area Spend Percent
	Optional or Required	Optional
	Type	real
	Base Intx	tdar/cprd
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	NA
DRTYNumCatBsktV	File Name	drtynumcatbsktv.csv.ovr
	Label	TY # of Categories in Basket
	Description	Default Role This Year Number of Categories in Basket Value
	Optional or Required	Optional
	Type	real
	Base Intx	tdar/csd
	Assortment Planning	No
	Category Planning	Yes
	Administration	No
DRTYPentrp	File Name	drtypentrp.csv.ovr
	Label	TY Penetration (% Buying at Retailer)
	Description	Default Role This Year Penetration (% Buying at Retailer) Percent
	Optional or Required	Optional
	Type	real
	Base Intx	tdar/retd
	Assortment Planning	No
	Category Planning	Yes
	Administration	No

Table 9–3   (Cont.) Household Data Measures

Measure Name	Attribute	Value
DRTYPrchFreqV	File Name	drtyprchfreqv.csv.ovr
	Label	TY Purchase Frequency
	Description	Default Role This Year Purchase Frequency Value
	Optional or Required	Optional
	Type	real
	Base Intx	qrtr/clss/tdar/csd
	Assortment Planning	No
	Category Planning	Yes
	Administration	No
DRTYRtlTASpndp	File Name	drtyrtltaspndp.csv.ovr
	Label	TY Store Cluster Attribute 3
	Description	Default Role This Year Retailer Trading Area Spend Percent
	Optional or Required	Optional
	Type	real
	Base Intx	tdar/cprd
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No
DRTYShopFreqV	File Name	drtyshopfreqv.csv.ovr
	Label	TY Shopping Frequency
	Description	Default Role This Year Shopping Frequency
	Optional or Required	Optional
	Type	real
	Base Intx	tdar/csd
	Assortment Planning	No
	Category Planning	Yes
	Administration	No
DRTYSpendX	File Name	drtyspendx.csv.ovr
	Label	TY Spend Index
	Description	Default Role This Year Spend Index (Buyer Spend Compared to Average Spend) Index
	Optional or Required	Optional
	Type	real
	Base Intx	tdar/retd
	Assortment Planning	No
	Category Planning	Yes
	Administration	No

Table 9–3 (Cont.) Household Data Measures

Measure Name	Attribute	Value
DRTYTopShopX	File Name	drtytopshopx.csv.ovr
	Label	TY Top Shopper Index
	Description	Default Role This Year Top Shopper Index
	Optional or Required	Optional
	Type	real
	Base Intx	scls/str/retd
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYTtlShopperX	File Name	drtyttlshopperx.csv.ovr
	Label	TY Total Shoppers Index
	Description	Default Role This Year Total Shoppers Index
	Optional or Required	Optional
	Type	real
	Base Intx	tdar/csd
	Assortment Planning	No
	Category Planning	Yes
	Administration	No

Last Year Assortment Data

These measures are all last year assortment data which tell what items are in core and what are optional items. This information is used in Demand Transference to validate the effect adding or removing an assortment to Ly assortment data.

Effect of Missing Last Year Assortment Data

All items which are part of the current year assortment will be considered to be totally new items. DT will have more of an impact on a totally new item than an existing item with valid historical sales.

Table 9–4   Last Year Assortment Data Measures

Measure Name	Attribute	Value
ACCPAsrtCoreB	File Name	accpasrtcoreb.csv.ovr
	Label	CP Assort Core
	Description	Assortment Planning @ Cluster Current Plan Final Assortment Core Boolean
	Optional or Required	Optional
	Type	Boolean
	Base Intx	week/sku/str
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
ACCPAsrtOptnB	File Name	accpasrtoptnb.csv.ovr
	Label	CP Assort Optn
	Description	Assortment Planning @ Cluster Current Plan Final Assortment Core Boolean
	Optional or Required	Optional
	Type	Boolean
	Base Intx	week/sku/str
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
ACCPMandB	File Name	accpmandb.csv.ovr
	Label	CP Mandatory
	Description	Assortment Planning @ Cluster Current Plan Mandatory for Assortment Boolean
	Optional or Required	Optional
	Type	Boolean
	Base Intx	week/sku/str
	Assortment Planning	Yes
	Category Planning	No
	Administration	No

Table 9–4   (Cont.) Last Year Assortment Data Measures

Measure Name	Attribute	Value
ACWPAsrtCoreB	File Name	acwpasrtcoreb.csv.ovr
	Label	WP Assort Core
	Description	Assortment Planning @ Cluster Working Plan Final Assortment Core Boolean
	Optional or Required	Optional
	Type	Boolean
	Base Intx	week/sku/str
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
ACWPAsrtOptnB	File Name	acwpasrtoptnb.csv.ovr
	Label	WP Assort Optn
	Description	Assortment Planning @ Cluster Working Plan Final Assortment Optional Boolean
	Optional or Required	Optional
	Type	Boolean
	Base Intx	week/sku/str
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
ACWPMandB	File Name	acwpmandb.csv.ovr
	Label	WP Mandatory
	Description	Assortment Planning @ Cluster Working Plan Mandatory for Assortment Boolean
	Optional or Required	Optional
	Type	Boolean
	Base Intx	week/sku/str
	Assortment Planning	Yes
	Category Planning	No
	Administration	No

Market Data

These measures are all data purchased from a third-party data aggregator. Almost all of the data is used in analysis and reference only. Very few of the measures are used as system input to a plan. The few exceptions are listed below.

Effect of Missing Market Data

This data is again mostly used for analysis, and missing the input data would just mean that the corresponding measures in CP or AP would just show nothing. The exceptions are:

- DRTYMktBasketX is used in the IPI calculation in AP @ Cluster. If this data is missing, the market basket contribution to the IPI score will be zero.

- DRTYMktSlsR and DRTYMktSlsU are used extensively in both CP and AP. In CP, they are used for display and analysis only. In AP, in addition to being used for static analysis, both are possible inputs to the fragmentation expression. The fragmentation expression drives the fragmentation, contribution, proliferation, and accumulative ranking analyses in the Market Analysis of AP. Also, the like item functionality in AP has the ability to clone market sales to retailer sales if desired. Missing this data would affect all areas listed.

Table 9–5   Market Data Measures

Measure Name	Attribute	Value
DRTYAnnlSpndX	File Name	drtyannlspndx.csv.ovr
	Label	TY Annual Spend Index
	Description	Default Role This Year Annual Spend Index
	Optional or Required	Optional
	Type	real
	Base Intx	qrtr/clss/tdar/csd
	Assortment Planning	No
	Category Planning	Yes
	Administration	No
DRTYMktSlsbyCSR	File Name	drtymktslsbycsr.csv.ovr
	Label	TY Market Sales by Consumer Seg R
	Description	Default Role This Year Market Sales by Consumer Segment Retail
	Optional or Required	Optional
	Type	Real
	Base Intx	qrtr/scls/tdar/csd
	Assortment Planning	No
	Category Planning	Yes
	Administration	No
DRTYMktSlsR	File Name	drtymktslsr.csv.ovr
	Label	TY Market Sales R
	Description	Default Role This Year Market Sales Retail
	Optional or Required	Optional
	Type	real
	Base Intx	week/sku/tdar/retd
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No

Table 9–5   (Cont.) Market Data Measures

Measure Name	Attribute	Value
DRTYMktSlsU	File Name	drtymktslsu.csv.ovr
	Label	TY Market Sales U
	Description	Default Role This Year Market Sales Units
	Optional or Required	Optional
	Type	real
	Base Intx	week/sku/tdar/retd
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No
DRTYMktTurnRr	File Name	drtymktturnrr.csv.ovr
	Label	TY Market Inv Turn
	Description	Default Role This Year Market Inventory Turn Retail Ratio
	Optional or Required	Optional
	Type	real
	Base Intx	qrtr/clss/tdar
	Assortment Planning	No
	Category Planning	Yes
	Administration	No
DRTYNumBsktwCatV	File Name	drtynumbsktwcatv.csv.ovr
	Label	TY # Baskets with Category
	Description	Default Role This Year Number Baskets with Category Value
	Optional or Required	Optional
	Type	real
	Base Intx	qrtr/clss/tdar/csd
	Assortment Planning	No
	Category Planning	Yes
	Administration	No
DRTYTrnsSzwCatV	File Name	drtytrnsszwcatv.csv.ovr
	Label	TY Transaction Size with Category
	Description	Default Role This Year Transaction Size with Category Value
	Optional or Required	Optional
	Type	real
	Base Intx	qrtr/clss/tdar/csd
	Assortment Planning	No
	Category Planning	Yes
	Administration	No

MFP Location Data

These measures are all financial budget data coming from Merchandise Financial Planning (MFP) and Location Planning data. MFP plan data is used for creating an IPI assortment using them as targets and also in the initial seeding of the plan. Loc Plan data is used to split MFP data from channel to store level.

Effect of Missing MFP Location Data

MFP data is used for seeding an initial assortment plan and also for creating IPI assortments in Assortment Planning by using it as targets for assortments. If the data is not available, MFP targets cannot be used for optimizing assortments.

MFP Plan, which comes at channel level, will be shown at the store level in the Assortment Planing workbook.It is split to the location level using Loc Plan sales curve if Loc Plan is available. If loc plan is not available, the MFP plan will be split to the store level using Ly measures in batch.

Table 9–6   MFP Location Data Measures

Measure Name	Attribute	Value
DRTYLPSlsC	File Name	locplan_sales.csv.ovr
	Label	Loc Plan Sales C
	Description	Default Role This Year Location Plan Item Cost
	Optional or Required	Optional
	Type	real
	Base Intx	week/scls/str
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No
DRTYLPSlsR	File Name	locplan_sales.csv.ovr
	Label	Loc Plan Sales R
	Description	Default Role This Year Location Plan Sales Retail
	Optional or Required	Optional
	Type	real
	Base Intx	week/scls/str
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No

Table 9–6   (Cont.) MFP Location Data Measures

Measure Name	Attribute	Value
DRTYLPSlsU	File Name	locplan_sales.csv.ovr
	Label	Loc Plan Sales U
	Description	Default Role This Year Location Plan Sales Units
	Optional or Required	Optional
	Type	real
	Base Intx	week/scls/str
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No
DRMfSlsC	File Name	mfp_sales.csv.ovr
	Label	MFP Sales C
	Description	Default Role MFP Sales Item Cost
	Optional or Required	Required
	Type	real
	Base Intx	week/scls/chnl
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No
DRMfSlsR	File Name	mfp_sales.csv.ovr
	Label	MFP Sales R
	Description	Default Role MFP Sales Retail
	Optional or Required	Required
	Type	real
	Base Intx	week/scls/chnl
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No
DRMfSlsU	File Name	mfp_sales.csv.ovr
	Label	MFP Sales U
	Description	Default Role MFP Sales Units
	Optional or Required	Required
	Type	real
	Base Intx	week/scls/chnl
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No

MSM Data

These measures are all data used by the MSO special expression for space optimization.

Space optimization in CMPO can be done at either of two levels: department or subcategory. Performing the optimization is dependent upon planogram and space constraint information that is generated outside of CMPO. The key data needed by the space optimization expression are planogram length, planogram profit, and space constraint information.

At the department level, this information is contained in the measures MDWPpoglengthSu, MDWPpogprofitR, and MDHddavailspaceSu. For the subcategory-level optimization, the information is contained in MSWPpoglengthLu, MSWPpogprofitR, and MSHdsavailspaceLu.

In either case, this information must be prepared and loaded like any other measure file.

Effect of Missing MSM Data

If the planogram and space data for either the department or the subcategory level are incomplete or not available, it is not possible to perform space optimization in CMPO.

Table 9–7   MSM Data Measures

Measure Name	Attribute	Value
MDWPpoglengthSu	File Name	mdwppoglengthsu.csv.ovr
	Label	MD WP POG Space Square Units
	Description	MSO Department Planners Working Plan Square Units
	Optional or Required	Required
	Type	real
	Base Intx	qrtr/str/lnum/pdep
	Assortment Planning	No
	Category Planning	No
	Macro Space Optimization	Yes
	Administration	Yes
MDWPpogprofitR	File Name	mdwppogprofitr.csv.ovr
	Label	MD WP POG Gross Profit R
	Description	MSO Department Planners Working Plan Retail
	Optional or Required	Required
	Type	real
	Base Intx	qrtr/str/lnum/pdep
	Assortment Planning	No
	Category Planning	No
	Macro Space Optimization	Yes
	Administration	Yes

Table 9–7   (Cont.) MSM Data Measures

Measure Name	Attribute	Value
MSWPpoglengthLu	File Name	mswppoglengthlu.csv.ovr
	Label	MS WP POG Length Linear Units
	Description	MSO Sub-Category Planners Working Plan Linear Units
	Optional or Required	Required
	Type	real
	Base Intx	qrtr/str/lnum/psub
	Assortment Planning	No
	Category Planning	No
	Macro Space Optimization	Yes
	Administration	Yes
MSWPpogprofitR	File Name	mswppogprofitr.csv.ovr
	Label	MS WP POG Gross Profit R
	Description	MSO Sub-Category Planners Working Plan Retail
	Optional or Required	Required
	Type	real
	Base Intx	qrtr/str/lnum/psub
	Assortment Planning	No
	Category Planning	No
	Macro Space Optimization	Yes
	Administration	Yes
DRTYdavailspaceSu	File Name	space_constraints_dept.csv.ovr
	Label	TY Total Available Space Square Units
	Description	Default Role This Year Dept Level Square Units
	Optional or Required	Optional
	Type	real
	Base Intx	qrtr/str/pdep
	Assortment Planning	No
	Category Planning	No
	Macro Space Optimization	Yes
	Administration	No

Table 9–7   (Cont.) MSM Data Measures

Measure Name	Attribute	Value
DRTYdcurrspaceSu	File Name	space_constraints_dept.csv.ovr
	Label	TY Current Space Square Units
	Description	Default Role This Year Dept Level Square Units
	Optional or Required	Optional
	Type	real
	Base Intx	qrtr/str/pdep
	Assortment Planning	No
	Category Planning	No
	Macro Space Optimization	Yes
	Administration	No
DRTYdspaceincV	File Name	space_constraints_dept.csv.ovr
	Label	TY Space Increment
	Description	Default Role This Year Space Increment - Dept Level Value
	Optional or Required	Optional
	Type	real
	Base Intx	qrtr/str/pdep
	Assortment Planning	No
	Category Planning	No
	Macro Space Optimization	Yes
	Administration	No
DRTYscurrspaceLu	File Name	space_constraints_subcat.csv.ovr
	Label	TY Current Space Square Units
	Description	Default Role This Year Dept Level Square Units
	Optional or Required	Optional
	Type	real
	Base Intx	qrtr/str/pdep
	Assortment Planning	No
	Category Planning	No
	Macro Space Optimization	Yes
	Administration	No

Table 9–7   (Cont.) MSM Data Measures

Measure Name	Attribute	Value
DRTYsspaceincV	File Name	space_constraints_subcat.csv.ovr
	Label	TY Space Increment
	Description	Default Role This Year Space Increment - Sub-Category Level Value
	Optional or Required	Optional
	Type	real
	Base Intx	qrtr/str/pdep
	Assortment Planning	No
	Category Planning	No
	Macro Space Optimization	Yes
	Administration	No
DRTYlocspaceSu	File Name	store_space.csv.ovr
	Label	TY Total Store Space Square Units
	Description	Default Role This Year Square Units
	Optional or Required	Optional
	Type	real
	Base Intx	qrtr/str
	Assortment Planning	No
	Category Planning	No
	Macro Space Optimization	Yes
	Administration	No

ORASE Data

These measures are all data that is produced by ORASE. The data is used extensively in the AP workbook to drive clustering, attribute weighting, and various functions related to DT.

Effect of Missing ORASE Data

- DRHdFuncFitB is a parameter to the CMNewItemSimilarityExpr. Without this data, calculating similarities for new items will not work. This will affect other DT-related calculations.

- DRTYAssrtElasV is an input to many DT-related calculations, including CMDemandTransferExpr, CMSignificantTranSkusExpr, and CMIncrementCurveExpr special expressions. This will limit the ability to perform assortment sales, substitutable sku, and incremental curve DT calculations for both cluster and store-level assortments.

- DRTYAttrValTx is another vital measure in CM. It can either be loaded or imported from ORASE. Data related to this measure are used in CDT processing, CDT validation, and in short it is intimately tied to attributes, which are used extensively in AP. The data is also exported to ASO.

■ DRTYAttrWgtV are calculated attribute name-level weights. They are used along with DRHdFuncFitB in the CMNewItemSimilarityExpr special expression. See DRHdFuncFitB (above) for more information on the effect of omitting this measure. It is also used as default values for the attribute weights used in the IPI calculation.

■ DRTYSimInV is also an input to the CMNewItemSimilarityExpr special expression. See DRHdFuncFitB (above) for more information.

■ DRTYStrClusLbl and DRTYStrClusTx are the measures that define the dynamic hierarchy for store clustering in the AP workbook. Omitting these will cause the AP workbook to use the store to store cluster rollup defined in the LOC hierarchy load file.

Table 9–8   ORASE Data Measures

Measure Name	Attribute	Value
DRHdFuncFitB	File Name	drtyattrwgtv.csv.ovr
	Label	Loaded Functional Fit
	Description	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.
	Optional or Required	Required
	Type	Boolean
	Base Intx	clss/tdar/csd/atn
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYAssrtElasV	File Name	drtyassrtelasv.csv.ovr
	Label	TY Assortment Elasticity
	Description	Default Role This Year ORASE Data Value
	Optional or Required	Required
	Type	real
	Base Intx	clss/tdar/csd
	Assortment Planning	Yes
	Category Planning	No
	Administration	No

Table 9–8   (Cont.) ORASE Data Measures

Measure Name	Attribute	Value
DRTYAttrValTx	File Name	drtyattrvaltx.csv.ovr
	Label	Loaded Attribute Value ID
	Description	Attribute Value Position IDs loaded from external sources
	Optional or Required	Required
	Type	string **Note:** The string value must be a position in the atv dimension of the attr hierarchy. Private Label SKUs should be mapped to the position indicating Private Label in the atv dimension.
	Base Intx	sku/atn
	Assortment Planning	Yes
	Category Planning	No
	Administration	Yes
DRTYAttrWgtV	File Name	drtyattrwgtv.csv.ovr
	Label	TY Attribute Weight
	Description	TY Attribute Weight
	Optional or Required	Required
	Type	real
	Base Intx	scls/tdar/csd/atn
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYRseStrClst1Lbl	File Name	drtyrsestrclst1lbl.csv.ovr
	Label	TY Store Cluster Attribute 1 Label
	Description	Default Role This Year Store Cluster Attribute 1 Label
	Optional or Required	Optional
	Type	string
	Base Intx	clss/str
	Assortment Planning	Yes
	Category Planning	No
	Administration	No

Table 9–8 (Cont.) ORASE Data Measures

Measure Name	Attribute	Value
DRTYRseStrClst1Tx	File Name	drtyrsestrclst1tx.csv.ovr
	Label	TY Store Cluster Attribute 1
	Description	Default Role This Year Store Cluster Attribute 1 Text
	Optional or Required	Optional
	Type	string
	Base Intx	clss/str
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYRseStrClst2Lbl	File Name	drtyrsestrclst2lbl.csv.ovr
	Label	TY Store Cluster Attribute 2 Label
	Description	Default Role This Year Store Cluster Attribute 2 Label
	Optional or Required	Optional
	Type	string
	Base Intx	clss/str
	Assortment Planning	Yes
	Category Planning	NA
	Administration	NA
DRTYRseStrClst2Tx	File Name	drtyrsestrclst2tx.csv.ovr
	Label	TY Store Cluster Attribute 2
	Description	Default Role This Year Store Cluster Attribute 2 Text
	Optional or Required	Optional
	Type	string
	Base Intx	clss/str
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYRseStrClst3Lbl	File Name	drtyrsestrclst3lbl.csv.ovr
	Label	TY Store Cluster Attribute 3 Label
	Description	Default Role This Year Store Cluster Attribute 3 Label
	Optional or Required	Optional
	Type	string
	Base Intx	clss/str
	Assortment Planning	Yes
	Category Planning	No
	Administration	No

Table 9–8   (Cont.) ORASE Data Measures

Measure Name	Attribute	Value
DRTYRseStrClst3Tx	File Name	drtyrsestrclst3tx.csv.ovr
	Label	TY Store Cluster Attribute 3
	Description	Default Role This Year Store Cluster Attribute 3 Text
	Optional or Required	Optional
	Type	string
	Base Intx	clss/str
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYSimInV	File Name	drtysiminv.csv.ovr
	Label	TY Similarity In
	Description	Default Role This Year ORASE Data Value
	Optional or Required	Required
	Type	real
	Base Intx	sku/tdar/csd/skur
	Assortment Planning	Yes
	Category Planning	No
	Administration	No
DRTYStrClusLbl	File Name	drtystrclus.csv.ovr
	Label	Store Cluster Label
	Description	Default Role This Year Dynamic Store Cluster Label. The Label is appended to the Store Cluster Name in the Store Cluster Name load file.
	Optional or Required	Optional
	Type	string
	Base Intx	qrtr/clss/str
	Assortment Planning	No
	Category Planning	Yes
	Administration	No
DRTYStrClusTx	File Name	drtystrclus.csv.ovr
	Label	Store Cluster Name
	Description	Default Role This Year Dynamic Store Cluster Text
	Optional or Required	Optional
	Type	string
	Base Intx	qrtr/clss/str
	Assortment Planning	Yes
	Category Planning	No
	Administration	No

Space Data

These measures are very basic space information. They are used for analysis and are included in graphs in both CP and AP.

Effect of Missing Space Data

- DRTYNumFacingsV, DRTYShelfCapV, and DRTYSqFtV are shown in CP in the Assign Category Tactics tab, in the Review Space Effectiveness worksheet.

- DRTYSqFtV is also shown in AP Analysis in the Performance Analysis step, the Performance Quadrant Analysis tab, in the Sales and Profit per Sq Ft view.

In both cases, missing data will just show up as zeros in a table or data points clustered at zero in a graph.

Table 9–9   Space Data Measures

Measure Name	Attribute	Value
DRTYNumFacingsV	File Name	drtynumfacingsv.csv.ovr
	Label	TY Total # of Facings
	Description	Default Role This Year Total Number of Facings Value
	Optional or Required	Optional
	Type	real
	Base Intx	week/sku/str
	Assortment Planning	No
	Category Planning	Yes
	Administration	No
DRTYShelfCapV	File Name	drtyshelfcapv.csv.ovr
	Label	TY Total Shelf Capacity
	Description	Default Role This Year Total Shelf Capacity Value
	Optional or Required	Optional
	Type	real
	Base Intx	week/sku/str
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No
DRTYSqFtV	File Name	drtysqftv.csv.ovr
	Label	TY Total Square Footage
	Description	Default Role This Year Total Square Footage Value
	Optional or Required	Optional
	Type	real
	Base Intx	week/sku/str
	Assortment Planning	Yes
	Category Planning	Yes
	Administration	No