# Oracle® Retail Promotion Intelligence and Promotion Planning and Optimization

Standard Interface

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Oracle Retail Promotion Intelligence and Promotion Planning and Optimization Standard Interface, Release 13.0.3



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**Value-Added Reseller (VAR) Language**

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# Contents

## 2 Standard Interface Specifications

# Preface

Oracle Retail Promotion Intelligence analyzes the results of past promotions and advertising and the affinity effects of products on one another to deliver insight into the performance of a promotional strategy.

Oracle Retail Promotion Planning and Optimization assists you in creating and improving your promotions. It allows you to leverage the information gained from Promotion Intelligence to make the best promotion decisions by using what-if analysis and predictive forecasting.

Promotion Planning and Optimization combines analysis, planning, and implementation components to give retailers the capability to achieve the highest return on their advertising, promotion, and inventory investments.

## Audience

This document is intended for administrators of the Oracle Retail Promotion Intelligence and Promotion Planning and Optimization application.

## Related Documents

For more information, see the following documents in the Oracle Retail PI and PPO documentation set:

- *Oracle Retail Promotion Intelligence and Promotion Planning and Optimization Release Notes*
- *Oracle Retail Promotion Intelligence and Promotion Planning and Optimization Configuration Guide*
- *Oracle Retail Promotion Intelligence and Promotion Planning and Optimization Operations Guide*
- *Oracle Retail Promotion Intelligence User Guide*
- *Oracle Retail Promotion Planning and Optimization User Guide*
- *Oracle Retail Promotion Intelligence and Promotion Planning and Optimization Installation Guide*
- *Oracle Retail Promotion Intelligence and Promotion Planning and Optimization Sample Dataset Guide*

## Customer Support

- https://metalink.oracle.com

When contacting Customer Support, please provide:

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

## Review Patch Documentation

For a base release (".0" release, such as 12.0), Oracle Retail strongly recommends that you read all patch documentation before you begin installation procedures. Patch documentation can contain critical information related to the base release, based on new information and code changes that have been made since the base release.

## Oracle Retail Documentation on the Oracle Technology Network

In addition to being packaged with each product release (on the base or patch level), all Oracle Retail documentation is available on the following Web site:

http://www.oracle.com/technology/documentation/oracle_retail.html

Documentation should be available on this Web site within a month after a product release. Note that documentation is always available with the packaged code on the release date.

## 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. |

# 1

# Standard Interface Descriptions

This chapter contains the following:

# Introduction

An important part of getting the application up and running in a production environment is the gathering and loading of enterprise data. The application requires historical and weekly data to be loaded into the database. The data must be provided in a standard format, as specified in the standard interface specification. The data can then be loaded according to the standard load procedure.

This chapter contains the standard interface descriptions for the data that is loaded into the application. The application requires that customer data be provided in flat files containing pipe-delimited data organized so that the data can be loaded into database tables that follow the formats specified here and in Chapter 2, "Standard Interface Specifications".

The following special characters are not allowed: colon, semi-colon, comma, forward slash, backward slash, any type of quote, any type of apostrophe, <, or >.

Four interfaces (Merchandise Hierarchy Levels, Location Hierarchy Levels, Calendar, and Cross Product Information) that are required by the application are only loaded once. The information contained in these four files is collected during discussions with specific clients; however, the files themselves are not provided by clients but are created and loaded as part of the initial configuration. More information on these three interfaces is provided in *PPO & PI Operations Guide*.

Certain of the interfaces are for internal use only. The column "Internal Data Feed Yes/No" in Table 1–1, " Standard Interfaces" indicates whether or not a specific data feed is internal. In addition, the standard interface descriptions that are internal are labelled as such for each specific interface description.

***Table 1–1 Standard Interfaces***

| Interface Name | Required/ Optional | Timing | Required Specifically for PPO but not for PI Yes/No | Required for PI Only Implementation Yes/No | Internal Data Feed Yes/No |
|---|---|---|---|---|---|
| APE Price Elasticity (created during Implementation phase and during the analytical refresh) | Optional | On Demand | Yes | No | No |
| APE Promotion Elasticity (created during Implementation phase and during the analytical refresh) | Optional | On Demand | Yes | No | No |
| ARM Constant | N/A | N/A | | | Yes |
| ARM Items | N/A | N/A | | | Yes |
| ARM Pull Constant | N/A | N/A | | | Yes |
| ARM Pull Items | N/A | N/A | | | Yes |
| ARM Pull Rules | N/A | N/A | | | Yes |
| ARM Pull Rules LHS | N/A | N/A | | | Yes |
| ARM Pull Rules RHS | N/A | N/A | | | Yes |
| ARM Pull Set Summary | N/A | N/A | | | Yes |
| ARM Rules | N/A | N/A | | | Yes |
| ARM Rules LHS | N/A | N/A | | | Yes |

*Table 1–1 (Cont.) Standard Interfaces*

| Interface Name | Required/ Optional | Timing | Required Specifically for PPO but not for PI Yes/No | Required for PI Only Implementation Yes/No | Internal Data Feed Yes/No |
|---|---|---|---|---|---|
| ARM Rules RHS | N/A | N/A | | | Yes |
| ARM Set Summary | N/A | N/A | | | Yes |
| Baseline | N/A | N/A | | | Yes |
| Calendar | Required | One Time | No | No | No |
| Cross Products Information – described in Chapter 4, "Standard Load." | Required | One Time | No | Yes | No |
| Demand Parameters (created during Implementation phase and during the analytical refresh) | Required | On Demand | Yes | No | No |
| Future Price Cost | Optional | Weekly | Yes | No | No |
| Images | Optional | Weekly | Yes | No | No |
| Inventory | Required | Weekly | No | Yes | No |
| Item Predicted Affinity | N/A | N/A | | | Yes |
| Item Predicted Baseline | N/A | N/A | | | Yes |
| Like Location | Optional | Weekly | Yes | No | No |
| Like Merchandise | Optional | Weekly | Yes | No | No |
| Location Hierarchy | Required | Weekly | No | Yes | No |
| Location Hierarchy Attributes | Required | Weekly | No | No | No |
| Location Hierarchy Levels – described in Chapter 4, "Standard Load." | Required | One Time | No | Yes | No |
| Location Hierarchy Rename | Optional | Weekly | No | Yes | No |
| Merchandise Hierarchy | Required | Weekly | No | Yes | No |
| Merchandise Hierarchy Attributes | Required | Weekly | No | Yes | No |
| Merchandise Hierarchy Levels – described in Chapter 4, "Standard Load." | Required | One Time | No | Yes | No |
| Merchandise Hierarchy Rename | Optional | Weekly | No | Yes | No |
| Merchandise Thresholds (created during Implementation phase and during the analytical refresh) | Optional | On Demand | Yes | No | No |
| Model Accuracy Metric | N/A | N/A | | | Yes |
| Predicted Baseline | N/A | N/A | | | Yes |
| Offers | Required | On Demand | No | Yes | No |
| Period Attributes | Required | On Demand | No | Yes | No |

*Table 1–1 (Cont.) Standard Interfaces*

| Interface Name | Required/ Optional | Timing | Required Specifically for PPO but not for PI Yes/No | Required for PI Only Implementation Yes/No | Internal Data Feed Yes/No |
|---|---|---|---|---|---|
| Promotion Allocation | Optional | Weekly | No | Yes | No |
| Promotion Campaign | Optional | Weekly | No | No | No |
| Promotion Forecaster | Optional | Daily | Yes | No | No |
| Promotion Offer | Required | Weekly | No | Yes | No |
| Promotion Offer Attributes | Required | Weekly | No | Yes | No |
| Promotion Offer Criteria | Optional | Daily | Yes | No | No |
| Promotion Offer Merchandise | Required | Weekly | No | Yes | No |
| Promotion Offer Version | Required | Daily | Yes | No | No |
| Promotion Store | Required | Weekly | No | Yes | No |
| Promotion Version | Optional | Daily | Yes | No | No |
| Promotions | Required | Weekly | No | Yes | No |
| Seasonal Trend | Optional | On Demand | Yes | No | No |
| Seasonalities | Required | On Demand | Yes | No | No |
| SKU List | Required | Daily | Yes | No | No |
| SKU List Items | Required | Daily | Yes | No | No |
| Store Sets | Required | Weekly | Yes | No | No |
| Store Set Prices | Required | Weekly | Yes | No | No |
| Store Subsets | Required | Weekly | Yes | No | No |
| Store Subset Assignments | Required | Weekly | Yes | No | No |
| TAE Metrics | N/A | N/A | | | Yes |
| TAE Temp Metrics | N/A | N/A | | | Yes |
| Transaction Log | Required | Weekly | No | Yes | No |
| UDE Type (created during Implementation phase) | Required | On Demand | No | Yes | No |
| UDE Value (created during Implementation phase) | Required | On Demand | No | Yes | No |
| Vehicle (created during Implementation phase) | Required | On Demand | No | No | No |
| Vehicle Attributes (created during Implementation phase) | Required | On Demand | No | No | No |

# Standard Interface Descriptions

The following sections provide descriptions of each of the standard interfaces. The descriptions are organized into alphabetical order. Internal data feeds are labelled as such.

## APE Price Elasticity Standard Interface Description

The APE price elasticity interface describes the APE price elasticity data generated by the Affinity Parameter Estimator (APE) component of the application. This is created during the Implementation phase and during the analytical refresh and is part of Analytical Services.

### Data Fields

Five fields describe each record:

- DRIVER_APE_MERCH_NODE_EXT_ID – the external ID for the Driver Merchandise node.
- TARGET_APE_MERCH_NODE_EXT_ID – the external ID for the Target Merchandise node.
- LOC_LEVEL_DESC – the external ID for the external location level.
- LOC_CLIENT_LOAD_ID – the external ID for the location.
- ELASTICITY – the APE-calculated elasticity value.

### An Example

The following table shows sample APE Price Elasticity data.

***Table 1–2 Sample APE Price Elasticity Data***

| Driver | Target | Location Level | Location ID | Elasticity |
|---|---|---|---|---|
| Toys: HIER3_KEY=1 80: HIER4_KEY=2 17: HIER5_KEY=3 17020: | Toys: HIER3_KEY=1 80: HIER4_KEY=2 17: HIER5_KEY=3 17023: | STORE | 3451 | 0.4907 |

## APE Promotion Elasticity Standard Interface Description

The APE price elasticity interface describes the APE promotion elasticity data generated by the Affinity Parameter Estimator (APE) component of the application. This is created during the Implementation phase and during the analytical refresh and is part of Analytical Services.

### Data Fields

Six fields describe each record:

- DRIVER_APE_MERCH_NODE_EXT_ID – the external ID for the Driver Merchandise node.
- TARGET_APE_MERCH_NODE_EXT_ID – the external ID for the Target Merchandise node.
- LOC_LEVEL_DESC – the external ID for the external location level.
- LOC_CLIENT_LOAD_ID – the external ID for the location.

- PROMOTION_EXTERNAL_ATTR – a value generated by concatenating the source column name and its corresponding value.
- ELASTICITY – the APE-calculated elasticity value.

### An Example

The following table shows sample APE Promotion Elasticity data.

***Table 1–3 Sample APE Promotion Elasticity Data***

| Driver | Target | Location Level | Location ID | External Attribute | Elasticity |
|---|---|---|---|---|---|
| Toys:<br>HIER3_KEY=1 80<br>HIER4_KEY=2 17<br>HIER5_KEY=3 17020 | Toys:<br>HIER3_KEY=1 80<br>HIER4_KEY=2 17<br>HIER5_KEY=3 17023 | STORE | 3451 | VEHICLE:vehicle<br>.circular | 0.4907 |

## ARM Constant Standard Interface – Internal

The ARM constant standard interface describes the options provided for a specific ARM (Association Rule Mining) execution. the ARM table is intended to contain data without a distinction between promoted and non-promoted items.

### Data Fields

Ten fields describe each record:

- RUN_ID – the execution ID.
- TID_COUNT – the number of transactions in this run and partition.
- MAXSETSIZE – the maximum frequent set size looked for.
- MINSUPPORT –the minimum number of transaction a set must be found in to be considered frequent. (Note that this could be the result of evaluating minfrequency * TID_count OR minsupport. This will be the larger of the two.
- MINCONFIDENCE – the minimum confidence of a rule.
- MINRCONFIDENCE – the desired minimum reverse confidence.
- LOCATION_ID – the location identifier.
- BEGIN_CALENDAR_DT – the earliest date within this run.
- END_CALENDAR_DT – the latest date within this run.
- MAXRULES – the desired maximum number of rules. After finding all the rules meeting the normal constraints, trim the list of rules to the first N rules as ordered by the support for the rule.

## ARM Items Standard Interface – Internal

The ARM items standard interface defines the items that compose a frequent set.

### Data Fields

Ten fields describe each record:

- RUN_ID – the execution ID.
- SET_ID – the set identifier. The value is unique within this run and partition.
- SET_ITEM_COUNT – the cardinality of the frequent set.

- ITEM_ID – the item identifier, which may be duplicated within each set if the -adindicator option is used.
- MB_COUNT – the number of transactions containing this set.
- LOCATION_ID – the location identifier.
- BEGIN_CALENDAR_DT – the earliest date within this run.
- END_CALENDAR_DT – the latest date within this run.
- INTERNAL_ITEM_ID – the internal item identifier (internal synthetic key, which is distinct for every item_id, ad_idn combination.)
- AD_INT – ad indicator.

## ARM Pull Constant Standard Interface – Internal

The ARM pull constant standard interface describes the options provided for a specific ARM (Association Rule Mining) execution. The ARM Pull is intended to contain data that analyzes sets of items that are on promotion and those that are not on promotion.

### Data Fields

Ten fields describe each record:

- RUN_ID – the execution ID.
- TID_COUNT – the number of transactions in this run and partition.
- MAXSETSIZE – the maximum frequent set size looked for.
- MINSUPPORT – the minimum number of transaction a set must be found in to be considered frequent. (Note that this could be the result of evaluating minfrequency * TID_count OR minsupport. This will be the larger of the two.
- MINCONFIDENCE – the minimum confidence of a rule.
- MINRCONFIDENCE – the desired minimum reverse confidence.
- LOCATION_ID – the location identifier.
- BEGIN_CALENDAR_DT – the earliest date within this run.
- END_CALENDAR_DT – the latest date within this run.
- MAXRULES – the desired maximum number of rules. After finding all the rules meeting the normal constraints, trim the list of rules to the first N rules as ordered by the support for the rule.

## ARM Pull Items Standard Interface – Internal

The ARM pull items standard interface defines the items that compose a frequent set.

### Data Fields

Ten fields describe each record:

- RUN_ID – the execution ID.
- SET_ID – the set identifier. The value is unique within this run and partition.
- SET_ITEM_COUNT – the cardinality of the frequent set.
- ITEM_ID – the item identifier, which may be duplicated within each set if the -adindicator is used.

- MB_COUNT – the number of transactions containing this set.
- LOCATION_ID – the location ID processed.
- BEGIN_CALENDAR_DT – the earliest date within this run.
- END_CALENDAR_DT – the latest date within this run.;
- INTERNAL_ITEM_ID – the internal item identifier (internal synthetic key, which is distinct for every item_id, ad_idn combination.)
- AD_INT – the ad indicator.

## ARM Pull Rules Standard Interface – Internal

The ARM pull rules standard interface provides various metrics that relate to the association of different sets of items, segmented by their promotion status.

### Data Fields

Thirty fields describe each record:

- RUN_ID – the execution ID.
- RULEID – the rule identifier, which is unique for this run and partition.
- CONFIDENCE – the rule confidence.
- REVERSECONFIDENCE – the rule reverse confidence.
- SET_ID_L – the set identifier for combined antecedent and consequent sets.
- SUPPORT_L – the number of transactions in which combined antecedent/consequent sets have occurred.
- SET_ID_A – the set identifier for the antecedent set.
- ITEM_SET_A – the item_set for the antecedent set.
- SUPPORT_A –the number of transactions in which the antecedent set has occurred.
- SET_ID_C – the set identifier for the consequent set.
- ITEM_SET_C – the item_set for the consequent set.
- SUPPORT_C – the number of transactions in which the consequent set has occurred.
- RULE_FAMILY – the item_set family for the combined antecedent and consequent sets. All rules involving the same items are part of the same rule family, regardless of which side of the rule the items appear on and regardless of which items are on ad.
- SET_ITEM_COUNT – the cardinality of the frequent set corresponding to the combined set of antecedent and consequent sets.
- MB_COUNT – the number of transactions in which combined antecedent and consequent sets occurred.
- FREQUENCY – the frequency of combined antecedent/consequent sets.
- MB_AVGQTY – the transaction average quantity.
- MB_AVGDI – the transaction average distinct items.
- MB_AVGQSI – the transaction average QSI.

- MB_AVGREV – the transaction average revenue.
- MB_AVGGM – the transaction average gross margin.
- SET_AVGQTY – the combined antecedent and consequent set average quantity.
- SET_AVGREV – the combined antecedent and consequent set average revenue.
- SET_AVGGM – the combined antecedent and consequent set average gross margin.
- LOCATION_ID – the location identifier.
- BEGIN_CALENDAR_DT – the earliest date within this run.
- END_CALENDAR_DT – the latest date within this run.
- MB_AVGNM – the transaction average net margin.
- SET_AVGNM – the combined antecedent and consequent set average net margin.

## ARM Pull Rules LHS Standard Interface – Internal

The ARM pull rules lhs standard interface provides details about the items that compose the left hand side of an association set. Most notably, it defines the item_ids and the promoted status of the item.

### Data Fields

Nine fields describe each record:

- RUN_ID – the execution ID.
- RULEID – the rule identifier.
- SET_ID – the set identifier for the LHS.
- SET_ITEM_COUNT – the cardinality of the set.
- ITEM_ID – the item identifier.
- LOCATION_ID – the location identifier.
- BEGIN_CALENDAR_DT – the earliest date within this run.
- END_CALENDAR_DT – the latest date within this run.
- AD_INT – the ad indicator.

## ARM Pull Rules RHS Standard Interface – Internal

The ARM pull rules rhs standard interface provides details about the items that compose the right hand side of an association set. Most notably, it defines the item_ids and the promoted status of the item.

### Data Fields

Nine fields describe each record:

- RUN_ID – the execution ID.
- RULEID – the rule identifier.
- SET_ID – the set identifier for the RHS.
- SET_ITEM_COUNT – the cardinality of the set.
- ITEM_ID – the item identifier.

- LOCATION_ID – the location identifier.
- BEGIN_CALENDAR_DT – The earliest date within this run.
- END_CALENDAR_DT – the latest date within this run.
- AD_INT – the ad indicator.

## ARM Pull Set Summary Standard Interface – Internal

The ARM pull set summary standard interface provides various metric that relate to sets of items, segmented by their promotion status.

### Data Fields

Twenty fields describe each record:

- RUNID – the run identifier.
- SET_ID – the set identifier.
- ITEM_SET_FAMILY – the delimited string of concatenated item IDs. The contents of the frequent set. This is the same as item_set, except that there are never [@0, @1] annotations. The items determine the item_set_family, regardless of what is on ad.
- ITEM_SET – the delimited string of concatenated item IDs. The contents of the frequent set. this is optionally annotated with [@0. @1] to indicate which items are on ad.
- SET_ITEM_COUNT – the cardinality of the frequent set.
- MB_COUNT – the number of transactions containing this set.
- FREQUENCY – the frequency of occurrence of this frequent set.
- MB_AVGQTY – the transaction average quantity.
- MB_AVGDI – the transaction average distinct items.
- MB_AVGQSI – the transaction average QSI.
- MB_AVGREV – the transaction average revenue.
- MB_AVGGM – the transaction average gross margin.
- SET_AVGQTY – the set average quantity.
- SET_AVGREV – the set average revenue.
- SET_AVGGM – the set average gross margin.
- LOCATION_ID – the location identifier.
- BEGIN_CALENDAR_DT – the earliest date within this run.
- END_CALENDAR_DT – the latest date within this run.
- MB_AVGNM – the transaction average net margin.
- SET_AVGNM – the set average net margin.

## ARM Rules Standard Interface – Internal

The ARM rules standard interface provides various metrics that relate to the association of different sets of items.

### Data Fields

Thirty fields describe each record:

- RUN_ID – the execution ID.
- RULEID – the rule identifier, which is unique within this run and partition.
- CONFIDENCE – the rule confidence.
- REVERSECONFIDENCE – the rule reverse confidence.
- SET_ID_L – the set identifier for combined antecedent and consequent sets.
- SUPPORT_L – the number of transaction in which combined antecedent/consequent sets occurred.
- SET_ID_A – the set identifier for the antecedent set.
- ITEM_SET_A – the item_set for the antecedent set.
- SUPPORT_A – the number of transactions in which the antecedent set occurred.
- SET_ID_C – the set identifier for the consequent set.
- ITEM_SET_C – the item_set for the consequent set.
- SUPPORT_C – the number of transactions in which the consequent set occurred.
- RULE_FAMILY – the item_set family for the combined antecedent and consequent set. All rules involving the sam items are part of the same rule family, regardless of which side of the rule the items appear on and regardless of which items are on ad.
- SET_ITEM_COUNT – the cardinality of the frequent set corresponding to the combined set of antecedent and consequent sets.
- MB_COUNT – the number of transactions in which combined antecedent/consequent sets occurred.
- FREQUENCY – the frequency of the combined antecedent/consequent sets.
- MB_AVGQTY – the transaction average quantity.
- MB_AVGDI – the transaction average distinct items.
- MB_AVGQSI – the transaction average QSI.
- MB_AVGREV – the transaction average revenue.
- MB_AVGGM – the transaction average gross margin.
- SET_AVGQTY – the combined antecedent and consequent set average quantity.
- SET_AVGREV – the combined antecedent and consequent set average revenue.
- SET_AVGGM – the combined antecedent and consequent set average gross margin.
- LOCATION_ID – the location identifier.
- BEGIN_CALENDAR_DT – the earliest date within this run.
- END_CALENDAR_DT – the latest date within this run.

- MB_AVGNM – the transaction average net margin.
- SET_AVGNM – the combined antecedent and consequent set average net margin.

## ARM Rules LHS Standard Interface – Internal

The ARM rules lhs standard interface provides details about the items that compose the left hand side of an association set. Most notably, it defines the item IDs.

### Data Fields

Nine fields describe each record:

- RUN_ID – the execution ID.
- RULEID – the rule identifier.
- SET_ID – the set identifier for the LHS.
- SET_ITEM_COUNT – the cardinality of the set.
- ITEM_ID – the item identifier.
- LOCATION_ID –the location identifier.
- BEGIN_CALENDAR_DT – the earliest date within this run.
- END_CALENDAR_DT –the latest date within this run.
- AD_INT –the ad indicator.

## ARM Rules RHS Standard Interface – Internal

The ARM rules rhs standard interface provides details about the items that compose the right hand side of an association set. Most notable, it defines the item IDs.

### Data Fields

Nine fields describe each record:

- RUN_ID – the execution ID.
- RULEID – the rule identifier.
- SET_ID – the set identifier for the RHS.
- SET_ITEM_COUNT – the cardinality of the set.
- ITEM_ID – the item identifier.
- LOCATION_ID – the location identifier.
- BEGIN_CALENDAR_DT – the earliest date within this run.
- END_CALENDAR_DT – the latest date within this run.
- AD_INT – the ad indicator.

## ARM Set Summary Standard Interface – Internal

The ARM set summary standard interface provides various metrics that relate to sets of items, segmented by their promotion status.

### Data Fields

Twenty fields describe each record:

- RUNID – the run identifier.
- SET_ID – the set identifier.
- ITEM_SET_FAMILY – the delimited string of concatenated item IDs. The contents of the frequent set. The same as item_set, except that there are never [@0, @1] annotations. the items determine the item_set family, regardless of what is on ad.
- ITEM_SET – the delimited string of concatenated item IDs. The contents of the frequent set. Optionally annotated with [@0, @1] to indicate which items are on ad.
- SET_ITEM_COUNT – the cardinality of the frequent set.
- MB_COUNT – the number of transactions containing this set.
- FREQUENCY – the frequency of occurrence of this frequent set.
- MB_AVGQTY – the transaction average quantity.
- MB_AVGDI – the transaction average distinct items.
- MB_AVGQSI – the transaction average QSI.
- MB_AVGREV – the transaction average revenue.
- MB_AVGGM – the transaction average gross margin.
- SET_AVGQTY – the set average quantity.
- SET_AVGREV – the set average revenue.
- SET_AVGGM – the set average gross margin.
- LOCATION_ID – the location identifier.
- BEGIN_CALENDAR_DT – the earliest date within this run.
- END_CALENDAR_DT – the latest date within this run.
- MB_AVGNM – the transaction average net margin.
- SET_AVGNM – the set average net margin.

## Baseline Standard Interface – Internal

The baseline standard interface describes various metrics regarding the historic baseline for an item, location, or period. A baseline sale is defined as a sale during a period in which an item is not promoted. Each record in the file represents the baseline sales for a single location, merchandise, and period. The location and merchandise are at the same organization level as the level defined for the PROMOTE_ANALYSIS level with ASH_CP_TBL.

### Data Fields

Twenty-five fields describe each record:

- RUN_ID – the execution ID.
- LOCATION_ID – the internal location identifier.

- MERCHANDISE_ID – the internal merchandise identifier.
- PERIOD_ID – the period/date (YYYY-MM-DD).
- PERIOD_DAYS – the number of days within the period that historic data was available for processing.
- PERIOD_BD_RATE – the base demand rate of sale during the period.
- PERIOD_BDVR_RATE – the base demand visit rate for the item during the period.
- PERIOD_NORMAL_PRICE – the average non-promoted price of the item during the period.
- PERIOD_AVG_DISCOUNT – the average percent of the normal price the item was sold for.
- PERIOD_COST – the average cost of the item during the period.
- PERIOD_STORE_COVERAGE – the percent of stores with base demand during the period.
- DAY1_WT – the daily weight for which sales occurred on the day 1 of the period.
- DAY2_WT – the daily weight for which sales occurred on the day 2 of the period.
- DAY3_WT – the daily weight for which sales occurred on the day 3 of the period.
- DAY4_WT – the daily weight for which sales occurred on the day 4 of the period.
- DAY5_WT – the daily weight for which sales occurred on the day 5 of the period.
- DAY6_WT – the daily weight for which sales occurred on the day 6 of the period.
- DAY7_WT – the daily weight for which sales occurred on the day 7 of the period.
- PROMO_PERIOD – the indicator that signifies that the item was promoted during the period. A value of 1 = yes.
- CLEARANCE_PERIOD – the indicator that signifies that the item was on clearance during the period. A value of 1 = yes.
- DARK_PERIOD – the indicator that signifies whether the period was a dark (i.e., non-promoted_ period. A value of 1 = yes.
- BAD_RATIO_PERIOD – the indicator that signifies that the period has a bad sales period.

## Calendar Standard Interface Description

The calendar interface describes a retailer's fiscal calendar. Each record in the file corresponds to a single fiscal week.

### Data Fields

Seven fields describe each calendar record, which represents a fiscal week:

- EOP_CALENDAR_DT – the last day of the fiscal week, which is usually Saturday.
- FISCAL_YR – the number of the fiscal year for the record.
- FISCAL_QTR – the number of the fiscal quarter for the record.
- FISCAL_MO – the number of the fiscal month for the record.

- FISCAL_WK – the number of the fiscal week for the record.
- CALENDAR_WK – an alternative number for the calendar week for the record.
- SEASON – the number identifying the season associated with the calendar week.

### An Example

The following table shows sample data for five weeks of a fiscal calendar.

***Table 1–4 Sample Calendar Data***

| EOP Calendar Date | Fiscal Year | Fiscal Quarter | Fiscal Month | Fiscal Week | Calendar Week | Season |
|---|---|---|---|---|---|---|
| 2004-02-07 | 2004 | 1 | 1 | 1 | 1 | 1 |
| 2004-02-14 | 2004 | 1 | 1 | 2 | 2 | 1 |
| 2004-02-21 | 2004 | 1 | 1 | 3 | 3 | 1 |
| 2004-02-28 | 2004 | 1 | 1 | 4 | 4 | 1 |
| 2004-03-06 | 2004 | 1 | 2 | 5 | 1 | 1 |

### Technical Notes

The following list provides details to consider regarding the calendar data.

- The calendar must include all weeks, beginning with the earliest historical sales record and extending at least two years into the future.
- Each year included in the data must contain 52 – 53 weeks.
- The calendar file can be sent weekly or loaded all at once during the initial configuration of the application. If provided all at once, it should contain all the historic data and extend at least three years into the future.
- Retailers can use the SEASON field to designate different seasons within the fiscal year. For example, a retailer might divide the fiscal year into two seasons.

## Demand Parameters Standard Interface

The demand parameters standard interface describes the mapping between the analytical parameter values generated by Analytical Services and a specific merchandise/location/attribute. This is created during the Implementation phase and during the analytical refresh.

### Data Fields

Nine fields describe each record:

- MERCHANDISE_LEVEL – the external merchandise level.
- MERCHANDISE_KEY – the key from the merchandise hierarchy for the item.
- LOCATION_LEVEL – the external location level.
- LOCATION_KEY – the key from the location hierarchy for the item.
- ITEM_ATTRIBUTE – the item attribute for the parameter (set to% by default).
- PARAMETER_NAME – the name of the parameter. The names can be DEFAULT_GAMMA, DEFAULT_ALPHA, CRITICAL_INVENTORY, or ZERO_INVENTORY.
- PARAMETER_VALUE – the value assigned to the parameter.

- AS_PARAMETER_ID – a number that uniquely identifies the record across all output tables and can be used to trace issues. It is not an analytical value.
- AS_VERSION_NUMBER – the version number for the current run of the output, which is set by APC and can be used to track versions.

## Future Price and Cost Standard Interface Description

The future price and cost interface describes future changes for price and cost. Data must be provided at the forecasting level of the hierarchy (for example the SKU level for merchandise and at the CHAIN level for location). The level depends on the application configuration.

### Data Fields

Seven fields describe each record:

- MERCH_CLIENT_LOAD_ID – the customer's merchandise ID.
- MERCH_LEVEL_DESC – the merchandise level description.
- LOC_CLIENT_LOAD_ID – the customer's location ID.
- LOC_LEVEL_DESC – the location level description.
- EFFECTIVE_DT – the date of the change.
- PRICE – the changed price.
- COST – the changed cost.

### An Example

The following is an example of the data for a future price and cost record:

***Table 1–5 Future Price and Cost Example Data***

| Merch Client Load ID | Merch Level Desc | Loc Client Load ID | Loc Level Desc | Effective Dt | Price | Cost |
|---|---|---|---|---|---|---|
| T0000011506 | SKU | 0 | CHAIN | 2006-04-06 | 23.29 | 12.35 |

## Images Standard Interface Description

The images interface describes the data feed that is used by clients to import their image library. the application maintains a catalog of references to the images, not the images themselves.

### Data Fields

Thirteen fields describe each record:

- NAME – the display name for the image.
- EXTERNAL_NAME – the ID for the image that is meaningful to the client. It is unique across all images.
- DESCRIPTION – an optional description of the image.
- FILE_NAME – the filename for the image.
- KEYWORDS – keywords placeholder.
- FILE_SIZE – the size of the image file.
- WIDTH – the image width.

- HEIGHT – the image height.
- RESOLUTION – the on-screen resolution of the image.
- DEPTH – the depth of the image.
- FILE_TYPE_ENUM – the image file type. Must be JPEG (0).
- MERCH_CLIENT_LOAD_ID – the client-specific category ID.
- LEVEL_DESC – the client-specific merchandise hierarchy level description.

### An Example

The following is an example of the data for an images record.

*Table 1–6 Images Example Data*

| Name | External Name | Description | File Name | Keywords | File Size | Width | Height | Resolution | Depth | File Type Enum | Merch Client Load ID | Level Desc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CG Barbie Convertible | barbie caligirl convertible | Barbie car | barbie cgconvertible.jpg | barbie | 1024 | 30 | 40 | | | 0 | T000008493 | SKU |

## Inventory Standard Interface Description

The inventory interface describes a client's historical inventory data.

### Data Fields

Twenty-seven fields describe each record:

- MERCHANDISE_KEY – the key from the merchandise hierarchy for the item. All items must be at the same level in the merchandise hierarchy, which for the application is the Item level.
- LOCATION_KEY – the key from the location hierarchy for the item. All items must be at the same level in the location hierarchy, which for the application is the Store level.
- FISCAL_YR – the fiscal year of the sales record.
- FISCAL_WK – the fiscal week of the sales record.
- END_OH_QTY – the number of units of on-hand inventory at the end of the period.
- END_OO_QTY – the number of inventory units in transit to the location at the end of the period.
- UNIT_RTL – the item's ticketed price at the end of the period.
- UNIT_CST – the item's unit cost at the end of the period.
- INIT_RTL – the item's ticketed price at the start of the season.
- RECEIPT_QTY – the total store receipts (in units) from the distribution centers and from transfers.
- GRSS_SLS_QTY – the gross number of new units sold for the item at the location. This excludes returns.

- GRSS_SLS_AMT – the gross dollar amount of new sales for the item at the location during the period. This excludes returns.
- NET_SLS_QTY – the net number of units sold of the item at the location. This includes returns.
- NET_SLS_AMT – the net dollar amount of sales for the item at the location during the period. This includes returns.
- TOT_DSC_AMT – the total discount amount.
- PROMO_MKDN_DSC_AMT – the total promotional markdown discount amount.
- SELLIT_MKDN_DSC_AMT – the total sell-it discount amount.
- CLR_DSC_AMT – the total clearance discount amount.
- FREIGHT – the freight cost.
- GRSS_PROFIT_AMT – the total gross margin (profit).
- DUMMY – a dummy field.
- POS_SLS_QTY – the number of new units sold of the item at the location during the period.
- POS_SLS_AMT – the dollar amount of the new sales for the item at the location during the period.
- MD_SALES_QTY – the units sold while on markdown.
- MD_SALES_AMT – the sales dollars of the units sold while on markdown.
- POS_MD_AMT – the total difference in weekly sales dollars between the promotional sales price and the inventory price.
- PERM_MD_AMT – includes distribution center, on hand, in transit, and store on hand.

### An Example

The following is an example of the data for an inventory record. Only the first five fields, which are required, are shown.

***Table 1–7 Inventory Example Data***

| Merchandise Key | Location Key | Fiscal Yr | Fiscal Wk | End OH Qty |
|---|---|---|---|---|
| T0000084953 | 5773 | 2004 | 9 | 2568 |

## Item Predicted Affinity Standard Interface – Internal

The item predicted affinity standard interface describes the predicted affinity metrics for an item and a promotion.

### Data Fields

Eighteen fields describe each record:

- RUN_ID – the execution ID.
- PROMO_ID – the internal promotion ID.
- OFFER_ID – the internal offer ID.
- PROMO_OFFER_ITEM_ID – the internal promotion, offer, item ID.

- PROMO_VEH_PG_POS_ID – the internal promotion, vehicle, page, position ID.
- MERCHANDISE_ID – the internal merchandise identifier.
- LOCATION_ID – the internal location identifier.
- APC_NODE_ID – the internal ID of the APE node.
- APC_NODE_DESC – the description of the APE node.
- APC_NODE_DEPTH – the depth of the APE node on the APE tree.
- BASE_RO S – the total baseline rate of sale.
- BASE_AVG – the baseline average sales.
- BASE_SALES – the baseline total sales.
- BASE_GM – the baseline total gross margin.
- PROMO_ROS – the total promotion rate of sale.
- PROMO_AVG – the average promotion sales.
- PROMO_SALES – the total promotion sales.
- PROMO_GM – the total promotion gross margin.

## Item Predicted Baseline Standard Interface – Internal

The item predicted baseline standard interface describes several metrics for an item's predicted baseline sales.

### Data Fields

Thirty-four fields describe each record:

- RUN_ID – the execution ID.
- PROMO_ID – the internal promotion ID.
- OFFER_ID – the internal offer ID.
- PROMO_OFFER_ITEM_ID – the internal promotion offer item ID.
- PROMO_VEH_PG_POS_ID – the internal promotion vehicle page position ID.
- MERCHANDISE_ID – the internal merchandise ID.
- LOCATION_ID – the internal location ID.
- STATUS – the status of the record.
- CONFIDENCE – the confidence in the prediction results, expressed as a percentage.
- NORMAL_PRICE – the normal sales price for an item.
- NORMAL_SALES – the normal sales total for the item.
- EFF_PRICE – the effective sales price for the item.
- EFF_SALES – the effective sales total for the item.
- EFF_DISCOUNT – the effective discount amount per item/transaction.
- EFF_DISCOUNT_AMT – the effective discount total for the item.
- EFF_COST – the effective cost of the item.
- AD_PRICE – the advertised/promotion price for this item during this promotion.

- PROMO_COST – the total cost of the item for the total demand during the promotion.
- BASE_ROS – the baseline rate of sale.
- BASE_AVG – the baseline average sales.
- BASE_SALES – the baseline total sales.
- BASE_GM – the baseline gross margin.
- PROMO_ROS – the promotion rate of sales.
- PROMO_AVG – the promotion average sales.
- PROMO_SALES – the promotion total sales.
- PROMO_GM – the promotion gross margin.
- AFF_BASE_ROS – the affinity baseline rate of sale.
- AFF_BASE_AVG_ROS – the affinity baseline average rate of sale.
- AFF_BASE_SALES – the affinity baseline total sales.
- AFF_BASE_GM – the affinity baseline gross margin.
- AFF_PROMO_ROS – the affinity promotion average rate of sale.
- AFF_PROMO_AVG_ROS – the affinity promotion average rate of sale.
- AFF_PROMO_SALES – the affinity promotion total sales.
- AFF_PROMO_GM – the affinity promotion gross margin.

## Like Location Standard Interface Description

The like location interface is used to substitute an item or location that has no sales history with an item or location that, according to the customer, has a history that will produce the same kind of forecast.

### Data Fields

Four fields describe each record:

- LOC_CLIENT_LOAD_ID – the customer's location ID for the location without promotion history.
- LOC_LEVEL_DESC – the location level description.
- LIKE_LOC_CLIENT_LOAD_ID – the customer's like location ID for the location with promotion history information available. These attributes are used for the substitution.
- LIKE_LOC_LEVEL_DESC – the like location level description.

## Like Merchandise Standard Interface Description

The like merchandise interface describes the association between an item and a similar item. The data feed can be used to add or remove associations. Note that since the data feed can remove most entries in the target table, it is expected that a user will either use the data feed exclusively or the UI exclusively. (In either case, the data feed can be used to initially set up the system.) Data can be loaded incrementally; a full refresh is not necessary. The INACTIVE flag for rows to be removed must be set to 1 (Inactive).

### Data Feeds

Five fields describe a like merchandise record:

- MERCH_CLIENT_LOAD_ID – the customer's merchandise ID for merchandise without promotion history.
- MERCH_LEVEL_DESC – the merchandise level description.
- LIKE_MERCH_CLIENT_LOAD_ID – the customer's like merchandise ID for merchandise with promotion history available. These attributes are used for the substitution.
- LIKE_MERCH_LEVEL_DESC – the like merchandise level description.
- INACTIVE - status of the data that is used to identify whether or not the data is to be added or removed. Values are 0 = Active and 1 = Inactive. The flag for items to be removed must be set to 1.

## Location Hierarchy Standard Interface Description

The location hierarchy interface describes how a retailer categorizes locations. The location hierarchy begins with the highest level, such as company or chain, and typically extends to the lowest level, the store. For example, a three-level location hierarchy might consist of Company, Region, and Store. Each entry (row) in the location hierarchy standard interface describes a specific location. In the example of a location hierarchy shown in Table 1–8, " Location Hierarchy Sample Data", each record describes the region and company of a specific store.

### Data Fields

The location hierarchy can have up to twelve levels. Each level in the location hierarchy, just like the merchandise hierarchy, is described by three fields:

- HIERARCHY_ID – an identifier or value for the hierarchy level that is meaningful to the end user. It does not have to be unique.
- HIERARCHY_KEY – a key used to identify the location level that is unique across the chain for that level. It is used to reference the location in other data files.
- HIERARCHY_DESC – a description for the level that describes that level in the location hierarchy.

These three fields are required for each level of the location hierarchy that is used. For example, if a retailer's location hierarchy contains three levels, then the location hierarchy file will contain nine required fields. Any unused fields in the location hierarchy file should be present in the file as NULL (that is, consecutive delimiters) when the file is sent in delimited file format.

### An Example

The following table shows sample data for a three-level location hierarchy that consists of Company, Region, and Store.

***Table 1–8 Location Hierarchy Sample Data***

| Hierarchy 1 (Company) | | | Hierarchy 2 (Region) | | | Hierarchy 3 (Store) | | |
|---|---|---|---|---|---|---|---|---|
| **ID** | **Key** | **Desc** | **ID** | **Key** | **Desc** | **ID** | **Key** | **Desc** |
| 1 | 1 | Full Line | 1 | FL1 | Northeast | 1000 | 1000 | New York |
| 1 | 1 | Full Line | 2 | FL2 | Southeast | 1001 | 1001 | Atlanta |
| 1 | 1 | Full Line | 2 | FL2 | Southeast | 1010 | 1010 | Charlotte |
| 1 | 1 | Full Line | 3 | FL3 | Resort | 1002 | 1002 | Puerto Rico |
| 2 | 2 | Outlet | 1 | O1 | Northeast | 2000 | 2000 | Philadelphia |
| 2 | 2 | Outlet | 2 | O2 | Southeast | 1003 | 1003 | Atlanta |

### Technical Notes

The following list provides details to consider regarding the location hierarchy data.

- The best way to create a unique Key for each level in the location hierarchy depends on the retailer's hierarchy data. Whenever possible, the hierarchy Keys should not be dependent on higher levels in the hierarchy. In this way, the application can automatically detect and handle hierarchy moves without additional data. For more information on how the application manages location hierarchy changes, see "Location Hierarchy Rename Standard Interface Description" on page 1-25.
- The location hierarchy file must contain a record for each location that is referenced in any of a given week's data files.
- The location hierarchy must be described consistently throughout the data file: each hierarchy node must have the same hierarchy ancestors for all records in the file that describes the hierarchy node. In the example shown in Table 1–8 on page 23, the two records describing the hierarchy above Region FL2 are identical. Note that this consistency requirement applies to all three of the hierarchy fields (Key, ID, and Desc). Inconsistent values for hierarchy descriptions are a common reason why some location hierarchy records fail to load.
- Each node in a hierarchy can only have one parent node.
- The lowest level in the location hierarchy should be the level at which sales data is provided.
- The historical location hierarchy should contain a record for each location that is referenced in any historical sales records, even if the location is now closed. It is recommended that retailers provide a single location hierarchy file for all the historical data, rather than one file for each historical week.

## Location Hierarchy Attributes Standard Interface

The Location Hierarchy Attributes interface provides store-level attributes for stores the have been defined in the Location Hierarchy standard interface. It also provides the definition and attributes for distribution centers. The application uses the information to create store sets and to view history by store attributes. The values for OPEN_DT and CLOSE_DT can be provided in advance so that the application can include either new stores or exclude stores that are closing from the upcoming planning.

### Data Feeds

Twenty-eight fields describe each record:

- Location_Key – the unique identifier for location hierarchy.
- LOCATION_LEVEL – the level within location hierarchy.
- MARKET_NAME – the market name.
- STORE_CITY – the city.
- STORE_STATE – the state.
- LOCATION_TYPE – the store class.
- STORE_NAME – the store name.
- STORE_POSTAL_CODE – the store postal code.
- NSLS_SQF T – the net square footage.
- GRSS_SQFT – the gross square footage.
- OPEN_DT – the beginning of promotion.
- CLOSE_DT – the end of promotion.
- CLIMATE – the climate code.
- STORE_FASHION_SEGMENT – the fashion segment code.
- STORE_AD_GROUP – the ad designation.
- STORE_SSC – the store service center (DC) number.
- STORE_CLSS_IND – the store class size.
- SSC_IND – the store service center indicator.
- STORE_CHST_1 – the store characteristic 1.
- STORE_CHST_2 – the store characteristic 2.
- STORE_CHST_3 – the store characteristic 3.
- PRICING_GROUP – the pricing group.
- COMBO_STORE – the combo store.
- TAXABILITY – the taxability.
- STORE_ZIP – the store zip code.
- VOLUME_GR – the gross volume.
- STORE_CLASS – the store class.
- GRS_ARE_SQFT – the gross square area.

## Location Hierarchy Rename Standard Interface Description

The location hierarchy rename interface facilitates moving locations within the location hierarchy. You can rename any node in the hierarchy by supplying the old node name, the new node name, and the level in the hierarchy. You cannot do this through the Location Hierarchy Standard Interface.

This interface is used to change the external_name, which is the client load ID that is used as the primary key (not the label or description). By providing the LH Rename data feed boefore the actual location hierarchy load, the system can notify the application that the node has received a new primary key, but all the aggregates remain the same.

## Merchandise Hierarchy Standard Interface Description

The merchandise hierarchy interface describes how a retailer categorizes merchandise. The merchandise hierarchy begins with the highest level, such as company or division, and typically extends to the style-color level. For example, a five-level merchandise hierarchy might consist of Division, Department, Class, Style, and Color. Each entry (row) in the merchandise hierarchy standard interface describes the hierarchy for a specific piece of merchandise. In the example of a merchandise hierarchy shown in Table 1–9 on page 26, the merchandise is an item of a specific color, and each row in the file describes the Division, Department, Class, and Style to which the specific color belongs.

### Data Fields

The merchandise hierarchy can have up to fifteen levels. Each level in the merchandise hierarchy is described by three fields:

- HIERARCHY_ID – an identifier or value for the hierarchy level that is meaningful to the end user. It does not have to be unique.
- HIERARCHY_KEY – a key used to identify the merchandise level that is unique across the chain for that level. It is used to reference the merchandise in other data files.
- HIERARCHY_DESC – a description for the level that describes that level in the merchandise hierarchy.

These three fields are required for each level of the merchandise hierarchy that is used. For example, if a retailer's merchandise hierarchy contains five levels, then the merchandise hierarchy file will contain fifteen required fields. Any unused fields in the merchandise hierarchy file should be present in the file as NULL (that is, consecutive delimiters) when the file is sent in delimited file format.

Note that the weekly load process expects the merchandise hierarchy to remain the same. It tries to reconcile changes between the new data feed and the existing data by comparing the client_load_id and the level of each record.

- If a particular client_load_id (at a certain level) is present in the feed, but not in the target database, then the node/SKU is added.
- If a particular client_load_id (at a certain level) is present in the feed and in the target database, then the node/SKU is updated, if necessary.
- If a particular client_load_id (at a certain level) is present in the target database but is not in the feed, then the node/SKU is de-activated.

### An Example

The following table shows sample data for a five-level hierarchy that consists of Division, Department, Class, Style, and Color. (The hierarchy descriptions are not included here).

***Table 1–9 Merchandise Hierarchy Sample Data***

| Hierarchy 1 (Division) | | Hierarchy 2 (Dept.) | | Hierarchy 3 (Class) | | Hierarchy 4 (Style) | | Hierarchy 5 (Color) | |
|---|---|---|---|---|---|---|---|---|---|
| **ID** | **Key** | **ID** | **Key** | **ID** | **Key** | **ID** | **Key** | **ID** | **Key** |
| 1 | 1 | 10 | 10 | 20 | 1020 | 1234 | 101234 | 9 | 101234509 |
| 1 | 1 | 10 | 10 | 20 | 1020 | 1234 | 101234 | 12 | 101234512 |
| 6 | 6 | 60 | 60 | 20 | 6020 | 1234 | 601234 | 12 | 601234512 |

In this example, the class, style, and color levels all have ID values that are not unique across the chain. Because of this, the Key values for these three levels cannot be the same as the ID values. The unique Key values for these three levels were created by combining values from higher levels in the hierarchy. The Key for the Class level was created by appending the Class ID to the Department Key. The Key for the Style level was created by appending the Style ID to the Department Key.

### Technical Notes

The following list provides details to consider regarding the merchandise hierarchy data.

- The best way to create a unique Key for each level in the merchandise hierarchy depends on the retailer's hierarchy data. Whenever possible, the hierarchy Keys should not be dependent on higher levels in the hierarchy. In this way, the application can automatically detect and handle hierarchy moves without additional data. For more information on how the application manages merchandise hierarchy changes, see "Merchandise Hierarchy Rename Standard Interface Description" on page 1-28.
- The merchandise hierarchy file must contain a record for each product that is referenced in any other of a given week's data files.
- The merchandise hierarchy must be described consistently throughout the data file: each hierarchy node must have the same hierarchy ancestors for all records in the file that describes the hierarchy node. In the example shown in Table 1–9 on page 26, the first two records describe the hierarchy above Style 101234 in an identical way. Note that this consistency requirement applies to all three of the hierarchy fields (Key, ID, and Desc). Inconsistent values for hierarchy descriptions are a common reason why some merchandise hierarchy records fail to load.
- Each node in a hierarchy can only have one parent node.
- The lowest level in the merchandise hierarchy must be the level at which sales and distribution data are provided.
- The historical data files should include a record for each product that is referenced in any historical sales records, even if the product is inactive. It is recommended that retailers provide a single merchandise hierarchy file for all the historical data, rather than one file for each historical week.

## Merchandise Hierarchy Attributes Standard Interface Description

The merchandise hierarchy attributes interface provides information about merchandise attributes at various levels in the MH, principally lot/color/line/sku. This information is used to provide context for merchandise during planning and allocation. This data is historical data.

### Data Feeds

Forty-four fields describe each record:

- MERCHANDISE_KEY – the unique identifier for the merchandise hierarchy.
- MERCHANDISE_LEVEL – the level within the merchandise hierarchy.
- BRAND – the ID of the brand.
- BRAND_DESC – the description of the brand.
- VENDOR – the number of the supplier. This field contains the manufacturer number when the supplier is set as a warehouse.
- VENDOR_DESC – the description of the supplier.
- ITEM_SIZE – the physical size of the item.
- CATEGORY - the category.
- CATEGORY_DESC – the description of the category.
- REPORT_CLIENT_ID – the client ID associated with the report.
- START_DT – the date specifying the beginning of the plan.
- FIRST_CREATE_DT – the date when the merchandise was first introduced.
- LAST_MODIFIED_DT – the time stamp of the last modification.
- PROD_LEVEL – the product level.
- COST – the wholesale cost.
- RETAIL – the retail price.
- PACK_SIZE – the pack size (inner).
- SIZE_RANGE_DESC – the description of the size range.
- DISP_CODE – the disposition code.
- PURCH_TYPE – values are Basic (B), Fashion (F), and Key (K).
- GRP_IN – the group indicator.
- PROD_TYPE – the product type.
- BRAND_NAME – the brand name.
- CNTL_RKL – the control rkl.
- COLL_ID – the ID of the collection.
- COLL_NAME – the name of the collection.
- MSTR_COLL_IND – the master collection indicator.
- ORIG_IND – the indicator for the origin (Domestic or Import).
- WEIGHT – the weight.
- COLOR_CNT – the number of colors per style.

- SIZE_GRP_DESC – the description of the size group.
- LINE_PCT – the line percent.
- OOS_DATE – the season out-of-stock date.
- VENDOR_STYLE – the vendor style number.
- ALLOC_FLAG – the allocate flag (RAP)
- FIRST_EFF_DT – the date when the merchandise is first in effect. Prior to this date, the merchandise will behave as if it is excluded. This date must be earlier than LAST_EFF_DT.
- LAST_EFF_DT – the last date when the merchandise is in effect. After this date, the merchandise will behave as if it is excluded. This date must be later than FIRST_EFF_DT.
- BRAND_TYPE – not used.
- PROMO_EXCLUSION – used to indicate that a record is excluded (Y) or not (N). Excluded records still appear in the UI, both in the MH browser tree and the in the Promotion Offer SKU view. The records in the SKU view will be flagged as excluded and will not be forecasted or used in metrics.
- MERCHANDISE_SUBTYPE – the season code.
- SIZE_RANGE_KEY – the ID of the size range.
- SIZE_KEY – the size ID.
- MERCHANDISE_FLOOR_SET – the subset of a season that defines when an item is introduced to the floor.
- COLOR_FAMILY – the color family.

## Merchandise Hierarchy Rename Standard Interface Description

The merchandise hierarchy rename interface facilitates moving merchandise within the merchandise hierarchy. Pieces of the merchandise hierarchy can be moved while renaming the client_load_ids of nodes (with the exception of SKUs) within the same level. For example, a subclass can be moved from class A to class B and the client_load_id of that subclass is changed. Any node in the hierarchy can be renamed by supplying the old node name, the new node name, and the level in the hierarchy. This cannot be done through the Merchandise Hierarchy Standard Interface. This change must be part of the Merchandise Hierarchy load as well. Note that the MH Rename load must be completed before the MH load for the change to occur.

This interface is used to change the external_name, which is the client load ID that is used as the primary key (not the label or description). By providing the MH Rename data feed before the actual merchandise hierarchy load, the system can notify the application that the node has received a new primary key, but all the aggregates remain the same.

### Technical Notes

Note that this information pertains to both the Merchandise Hierarchy Rename Standard Interface and the Location Hierarchy Rename Standard Interface.

The application database associates other information with a node in the merchandise (or location) hierarchy through an internally generated key. Each node of the hierarchy has one of these internal keys in addition to the key that is sent by a client. Information like historical sales records, analytical parameters, and business rules is stored

according to these internal keys. The relation between the internal keys and the client keys must be preserved when hierarchies are changed.

The rename interface is used to update the association between the client key and an internal key after a re-class occurs. The association between the client key and the internal key is updated by specifying the old key, the new key, and the level. The rename interface always needs to be combined with a merchandise hierarchy reflecting the changes that have been made. In the most general case, both of these files are required to fully specify a hierarchy change.

It is recommended that the keys at each level of the hierarchy should be unique without depending on parent levels so that hierarchy changes can be made without sending a rename file. In that case, when a node is moved, the changed hierarchy is sent. Since the keys for the nodes that move are unchanged, the internal keys will retain the correct association and nothing else needs to happen. The new parent-child relationships are simply defined by the latest hierarchy.

It may not be practical to provide keys at all levels that are independent of the keys at the parent level. For example, the CLASS key concatenates the DEPT and CO keys above it. This implies that the rename interface is needed for certain types of hierarchy changes, as discussed below.

Another important concept is that the rename interface can be used for a "move" in the merchandise hierarchy, but does not directly describe a "merge". So, for example, there is no direct way to specify (assuming Dept 42 already exists):

"Move Department 44 to Department 42"

However, the desired result can be accomplished by:

"Move all classes in Department 44 into Department 42"

The types of moves specified below fall into the following categories:

- Move all departments in one division into another division.
- Move all classes in one department to another department.
- Move some classes from one department to another department.

The way to accomplish these moves depends on how the keys, at and below the levels in question, will be affected.

**Case 1** When departments are moved to another division, the keys at and below department will not change, since division is not incorporated in the key. (The exception would be if a division were moved into another company.) Since the keys do not change at department or below, this move can be accomplished by sending the new merchandise hierarchy, with departments that were in the old division having the new division as their parent.

**Cases 2 and 3** When classes are moved to another department, the keys at and below class for the affected nodes will all change (since class keys and below are all constructed by concatenating the class into the key). In these cases, a rename file must be sent in addition to the updated merchandise hierarchy. This file will contain a record for the affected class and for each of its descendents.

For example, in order to move CLASS 0263 from DEP 0059 to DEP 0086 (the class has STYLEs 0001 and 0002, each with HALF-SIZEs 0 and 1, each with COLORs 0001 and 0002), the following records in the rename file must be sent:

```
TOOOO590263|TOOO0860263|CLASS
TOOOO5902630001|TOOO08602630001|STYLE
```

```
TOO005902630002|TOO008602630002|STYLE
TOO0059026300010|TOO0086026300010|HALF-SIZE
TOO0059026300011|TOO0086026300011|HALF-SIZE
TOO0059026300020|TOO0086026300020|HALF-SIZE
TOO0059026300021|TOO0086026300021|HALF-SIZE
TOO00590263000100001|TOO00860263000100001|COLOR
TOO00590263000110001|TOO00860263000110001|COLOR
TOO00590263000200001|TOO00860263000200001|COLOR
TOO00590263000210001|TOO00860263000210001|COLOR
TOO00590263000100002|TOO00860263000100002|COLOR
TOO00590263000110002|TOO00860263000110002|COLOR
TOO00590263000200002|TOO00860263000200002|COLOR
TOO00590263000210002|TOO00860263000210002|COLOR
```

These records tell the application how to associate the internal keys at each node with the new keys. (The new merchandise hierarchy file should also reflect the result of the moves.)

## Merchandise Thresholds Standard Interface Description

This interface defines thresholds for merchandise hierarchy levels. The threshold number represent the minimum percent that is required to meet that threshold. Green must have a higher value than Yellow. Yellow must have a higher value than Red. In addition, any merchandise level that should have a different threshold should also be provided. This interface is created during the Implementation phase and during the analytical refresh. It is used for the fine-grained specification of the expected forecast confidence presentation.

### Data Fields

Five fields describe each record:

- MERCH_CLIENT_LOAD_ID – the client ID.
- MERCH_LEVEL_DESC – the description provided can be at any level that is equal to or higher than the PROMOTE_MIN_LCD configuration.
- GREEN_THRESHOLD – high confidence in the accuracy of the forecast.
- YELLOW_THRESHOLD – medium confidence in the accuracy of the forecast.
- RED_THRESHOLD – low confidence in the accuracy of the forecast.

### An Example

The following is an example of the data for merchandise thresholds.

***Table 1–10 Merchandise Threshold Example***

| Merch Client Load ID | Merch Level Desc | Green Threshold | Yellow Threshold | Red Threshold |
|---|---|---|---|---|
| 1 | CHAIN | 70 | 30 | 0 |
| 2 | DEPARTMENT | 60 | 40 | 0 |

## Model Accuracy Metric Standard Interface Description – Internal

The model accuracy metric interface is used to load data to help assess the accuracy of the prediction models for historical promotions.

Seven fields describe each record:

- PROMO_ID – the internal promotion ID.
- MERCHANDISE_ID – the internal merchandise ID.
- LOCATION_ID –the internal location ID.
- AD_ROSALE – the actual rate of sale during the ad.
- AD_ITEM_ROSALE_PREDICTED – the predicted rate of sale during the ad.
- RUNID – the execution ID.
- MODELID – the model ID of the model used for the prediction.

## Offers Standard Interface Description

The offers interface contains the master data that describes a client's specific promotion (for example, a 2 for 1 promotion).

### Data Fields

Nine fields describe each offer:

- NAME – the display name for the offer.
- INACTIVE – activity flag. A value of 0 indicates the offer is active; a value of 1 indicates the offer is inactive.
- EXTERNAL_NAME – the ID for the offer that is meaningful to the client. It is unique across all offers.
- DESCRIPTION – an optional description of the offer.
- BUSINESS_RULE_CLASS_NAME – the instance of what class to use in the validation.
- TYPE_EXTERNAL_NAME – the name of the user-defined type.
- MODEL_CODE – the bit identifier of the offer. The value must be a power of 2 and is unique across the universe of all offers (for example, 0, 1, 2, 4, 8...).
- FORMAT – the output format for the offer (for example to put $in front of the number).
- TYPE_ENUM – 0 = integer; 1 = user-defined; 2 = decimal; 6 = none.

### An Example

The following is an example of the data for an offers record.

***Table 1–11 Offers Example Data***

| Name | Inactive | External Name | Descrip-tion | Business Rule Class Name | Type External Name | Model Code | Format | Type Enum |
|---|---|---|---|---|---|---|---|---|
| % Off | 0 | offer.per cent_off | % Off | com.profit logic.prom ote.bean. rule.Per centOff OfferRule | ude.per cent.off | 1 | {0} | 0 |

## Period Attributes Standard Interface Description

The period attributes interface is used to indicate whether or not there are active promotions for given periods.

Four fields describe each record:

- BEGIN_CALENDAR_DT – beginning of the period.
- END_CALENDAR_DT – end of the period.
- DARKPERIOD_FLAG – defines whether or not there are active promotions during the specified dates.
- DARKPERIOD_DESC – provides an optional description of the dark period.

## Predicted Baseline Standard Interface Description – Internal

The predicted baseline interface provides predicted baseline sales data for specific periods, merchandise, and locations. The merchandise and locations are at the same organizational level as defined for PROMOTE_ANALYSIS in ASH_CP_TBL.

Twenty-six fields describe each record:

- PERIOD_BEGIN – the fiscal week that the prediction is for.
- MERCHANDISE_ID – the internal merchandise ID.
- LOCATION_ID – the internal location ID.
- BL_ITEM_ROSALE – the baseline item rate of sales.
- BL_ITEM_SALES – the baseline item total sales.
- BL_ITEM_GM – the baseline item gross margin.
- BL_ITEM_PRICE – the baseline item price.
- BP _SUBST_MERCHANDISE_ID – the internal merchandise ID whose baseline sales data has been used for this prediction.
- BP_SUBST_LOCATION_ID – the internal location ID whose baseline sales data has been used for this prediction.
- BP_SUBST_CODE – the code that indicates whether a substitute item or location has been used for this prediction. The value of 0 = own items historical data used. The value of 1 = substitute location used. The value of 2 = substitute merchandise used. A value of 3 = substitute location and merchandise used. The values of 11 - 30 indicate that the prediction was calculated using the results from a level of the hierarchy's baseline data. The value of 11 = hierarchy level 1 used. The value of 12 = hierarchy level 2 used. And so on. The values of 31 - 50 indicate that the prediction was calculated by averaging the prediction results from a level of the hierarchy. The value of 31 = level 1 used. The value of 32 = level 2 used. And so on.
- DAY1_WT – the daily weight for which sales are predicted to occur on day 1 of the period.
- DAY2_WT – the daily weight for which sales are predicted to occur on day 2 of the period.
- DAY3_WT – the daily weight for which sales are predicted to occur on day 3 of the period.
- DAY4_WT – the daily weight for which sales are predicted to occur on day 4 of the period.

- DAY5_WT – the daily weight for which sales are predicted to occur on day 5 of the period.
- DAY6_WT – the daily weight for which sales are predicted to occur on day 6 of the period.
- DAY7_WT – the daily weight for which sales are predicted to occur on day 7 of the period.
- ROS_LIFT_MEAN – the rate of sale lift mean.
- SEAS_INDX – the seasonal index.
- STORE_COVERAGE – the percent of stores that are anticipated to use this prediction.
- RUN_ID – the execution ID.
- UNIT_NORMAL_PRICE – the normal unit sale price.
- EFFECTIVE_PRICE_RATIO – the sales price ratio at which most items will be sold.
- TTL_GOOD_PERIODS – the number of good historical periods that were used to calculate this prediction.
- TTL_GOOD_WINDOWS – the number of good historical windows that were used to calculate this prediction.
- CREATED_DATE – the date this prediction was executed/created.

## Promotion Allocation Standard Interface Description

The promotion allocation interface provides a way to import historical space allocation usage. This applies only to promotions managed external to the application. This data is historical data.

### Data Fields

Four fields describe each record:

- PROMO_EXTERNAL_NAME – the ID for the promotion that is meaningful to the client.
- MERCH_CLIENT_LOAD_ID – the client-specific category ID.
- LEVEL_DESC – the client-specific merchandise hierarchy level description.
- SPACE_ALLOCATION – the allocation for the given category.

### An Example

The following is an example of the data for a promotion allocation.

***Table 1–12 Promotion Allocation Example Data***

| Promo External Name | Merch Client Load ID | Level Desc | Space Allocation |
|---|---|---|---|
| 1-003-1-999000002 | 236 | DEPARTMENT | 0.1 |

## Promotion Campaign Standard Interface Description

The promotion campaign interface describes a client's promotional data. This data feed provides the application with promotional calendar information from other systems. It is also used to import historical data into the system for ad effectiveness analysis. This data is historical data.

### Data Fields

Six fields describe each record:

- NAME – a display name for the campaign.
- DESCRIPTION – an optional description of the campaign.
- EXTERNAL_NAME – the ID for the campaign that is meaningful to the client. It is unique across all campaigns.
- BEGIN_DATE – the start date for the campaign.
- END_DATE – the end date for the campaign.
- INACTIVE – activity flag. A value of 0 indicates the campaign is active; a value of 1 indicates the campaign is inactive.

### An Example

The following is an example of the data for a promotion campaign.

***Table 1–13 Promotion Campaign Example Data***

| Name | Description | External Name | Begin Date | End Date | Inactive |
|---|---|---|---|---|---|
| campaign0001 | BTS Campaign | Campaign for Back-to-School | 2003-10-10 | 2003-10-17 | 1 |

## Promotion Forecaster Standard Interface Description

The promotion forecaster interface is used for to allow an external source to specify the tasks that must be done by the promotion forecaster agent. This agent reads the target table in order to get the required tasks and runs them in the sequence specified (if provided). This allows an external system to define the priorities as to what should be forecasted and when.

Note that all of the columns in the interface are technically nullable; FORECAST, FORCE and REFRESH are best not left Nullable. The loader has validation rules to ensure that at least one column has been provided. Either a PromoExternalName or both PromoExternalName & OfferExternalName or EventExternalName must be provided. If an EventExternalName is provided, then the loader will expand this out so that all promotions are processed.

### Data Fields

Seven fields describe each record:

- PROMO_EXTERNAL_NAME – the ID for the promotion that is meaningful to the client.
- OFFER_EXTERNAL_NAME – the ID for the offer that is meaningful to the client. It is unique across all offers.
- ORDER_ID – Order ID.

- EVENT_EXTERNAL_NAME – the name of the event used for the promotion.
- FORECAST – Flag that indicates whether or not to forecast a given promo/offer. 1 = forecast. 0 = skip. Although this attribute is technically nullable, it is recommended that it not be left nullable.
- FORCE – Flag that indicates whether or not to force the forecast of a given promo/offer. 1 = force. 0 = skip. Although this attribute is technically nullable, it is recommended that it not be left nullable.
- REFRESH –Flag that indicates whether or not to refresh a given offer's criteria. 1 = refresh. 0 = skip. Although this attribute is technically nullable, it is recommended that it not be left nullable.

## Promotion Offer Standard Interface Description

The promotion offer interface describes all the offers in a promotion. This data is historical data.

### Data Fields

Seventy fields describe each record:

- INACTIVE – the status of a promotion offer. A value of 0 indicates that the promotion offer is active. A value of 1 indicates that the promotion offer has been deleted. The default is active.
- NAME – the display name for the offer.
- EXTERNAL_NAME – the ID for the promotion offer that is meaningful to the client.
- DESCRIPTION – an optional description of the offer.
- BEGIN_DATE – the start date for the offer.
- END_DATE – the end date for the offer.
- PROMO_EXTERNAL_NAME – the ID for the promotion offer that is meaningful to the client.
- OFFER_EXTERNAL_NAME – the ID for the offer that is meaningful to the client. It is unique across all offers.
- EVENT_EXTERNAL_NAME – an identifier that associates an offer with other offers in the same event.
- UDV_EXTERNAL_NAME – the actual user-defined type value.
- VALUE_INT – the integer value of the offer (either UDV_EXTERNAL_ NAME,VALUE_INT, or VALUE_DEC should be set).
- VALUE_DEC – the decimal value for the actual offer.
- PAGE_NUM – the page of the offer.
- POS_NUM – the position of the offer.
- FOR_EXCLUDE – flag. 0 (default) = include in forecast. 1 = exclude from forecast.
- VENDOR_DEAL_AMOUNT – the value of the vendor deal for the amount.
- USR_HIGH_RETAIL – used to override the computed retail price from the MH feed.

- USR_LOW_RETAIL – used to override the computed low retail price from the MH feed.
- USR_AVG_RETAIL – used to override the computed average retail price from the MH feed or forecast.
- USR_AVG_AD – used to override the computed average ad price...
- USR_AVG_COST – used to override the computed average cost from the MH feed or forecast.
- USR_AVG_UNITS – used to override the computed average units from the forecast.
- TEXT1 – optional user-configurable text field.
- ENUM1 – optional user-configurable enum field. Value is integer. Maps to the number configured in promoteResources.properties
- DATE1 – optional user-configurable date field.
- INTEGER1 – optional user-configurable integer field.
- DECIMAL1 – optional user-configurable decimal field.
- BOOLEAN1 – optional user-configurable boolean field.
- TEXT2 – optional user-configurable text field.
- ENUM2 – optional user-configurable enum field. Value is integer. Maps to the number configured in promoteResources.properties
- DATE2 – optional user-configurable date field.
- INTEGER2 – optional user-configurable integer field.
- DECIMAL2 – optional user-configurable decimal field.
- BOOLEAN2 – optional user-configurable boolean field.
- TEXT3 – optional user-configurable text field.
- ENUM3 – optional user-configurable enum field. Value is integer. Maps to the number configured in promoteResources.properties
- DATE3 – optional user-configurable date field.
- INTEGER3 – optional user-configurable integer field.
- DECIMAL3 – optional user-configurable decimal field.
- BOOLEAN3 – optional user-configurable boolean field.
- TEXT4 – optional user-configurable text field.
- ENUM4 – optional user-configurable enum field. Value is integer. Maps to the number configured in promoteResources.properties
- DATE4 – optional user-configurable date field.
- INTEGER4 – optional user-configurable integer field.
- DECIMAL4 – optional user-configurable decimal field.
- BOOLEAN4 – optional user-configurable boolean field.
- TEXT5 – optional user-configurable text field.
- ENUM5 – optional user-configurable enum field. Value is integer. Maps to the number configured in promoteResources.properties

- DATE5 – optional user-configurable date field.
- INTEGER5 – optional user-configurable integer field.
- DECIMAL5 – optional user-configurable decimal field.
- BOOLEAN5 – optional user-configurable boolean field.
- TEXT6 – optional user-configurable text field.
- ENUM6 – optional user-configurable enum field. Value is integer. Maps to the number configured in promoteResources.properties
- DATE6 – optional user-configurable date field.
- INTEGER6 – optional user-configurable integer field.
- DECIMAL6 – optional user-configurable decimal field.
- BOOLEAN6 – optional user-configurable boolean field.
- TEXT7 – optional user-configurable text field.
- ENUM7 – optional user-configurable enum field. Value is integer. Maps to the number configured in promoteResources.properties
- DATE7 – optional user-configurable date field.
- INTEGER7 – optional user-configurable integer field.
- DECIMAL7 – optional user-configurable decimal field.
- BOOLEAN7 – optional user-configurable boolean field.
- TEXT8 – optional user-configurable text field.
- ENUM8 – optional user-configurable enum field. Value is integer. Maps to the number configured in promoteResources.properties
- DATE8 – optional user-configurable date field.
- INTEGER8 – optional user-configurable integer field.
- DECIMAL8 – optional user-configurable decimal field.
- BOOLEAN8 – optional user-configurable boolean field.

## Promotion Offer Attributes Standard Interface Description

The promotion offer attributes interface describes the additional attributes for each offer (for example, page position: front, middle, and back).

### Data Fields

Six fields describe each record:

- PROMO_EXTERNAL_NAME – the ID for the promotion that is meaningful to the client.
- PROMO_OFFER_EXTERNAL_NAME – the ID for the promotion offer that is meaningful to the client. It is unique across all promotion offers.
- VEH_ATTR_EXTERNAL_NAME – the vehicle attribute name that is meaningful to the client.
- UDV_EXTERNAL_NAME – the actual user-defined type value. Either UDV_EXTERNAL_NAME, VALUE_INT, or VALUE_DEC must be supplied.

- VALUE_INT – the integer value of the offer. Either UDV_EXTERNAL_ NAME,VALUE_INT, or VALUE_DEC must be supplied.
- VALUE_DEC – the currency value for the actual offer. Either UDV_EXTERNAL_ NAME, VALUE_INT, or VALUE_DEC must be supplied.

### An Example

The following is an example of the data for a promotion offer attribute.

***Table 1–14 Promotion Offer Attribute Example Data***

| Promo External Name | Promo Offer External Name | Veh Attr External Name | UDV External Name | Value Int | Value Dec |
|---|---|---|---|---|---|
| 1-001-1-999000000 | LR-9990000000 T0000099958 | page_location | udev.page_location.front | | |

## Promotion Offer Criteria Standard Interface Description

The promotion offer criteria interface describes the definition of items set to be included or excluded from a promotion offer.

### Data Fields

Fifteen fields describe each record:

- INACTIVE – the activity flag. A value of 0 indicates that the SKU list is active. A value of 1 indicates that the SKU list has been deleted. The default is active.
- EXTERNAL_NAME – the ID of the SKU list. It is meaningful to the client and is unique across SKU lists.
- PROMO_EXTERNAL_NAME – an ID, which is meaningful to the client, for the promotion specific to this offer criterion.
- PROMO_OFFER_EXTERNAL_NAME – an ID, which is meaningful to the client, for the promotion offer specific to this offer criterion.
- CRITERION_TYPE – the type of offer criterion. A value of 0 indicates a type of SKU list (identified by SKU_LIST_EXTERNAL_NAME). A value of 1 indicates a type of merchandise category – for example, class or subclass – (identified by MERCH_CLIENT_LOAD_ID and LEVEL_DESC). A value of 2 indicates SKU (identified by MERCH_CLIENT_LOAD_ID).
- SKU_LIST_EXTERNAL_NAME – if CRITERION_TYPE = 0, then this is used to provide a meaningful identifier. Either SKU_LIST_EXTERNAL_NAME or MERCH_CLIENT_LOAD_ID and LEVEL_DESC must be supplied.
- MERCH_CLIENT_LOAD_ID – if CRITERION_TYPE = 1, then this is used to provide a meaningful identifier. Either SKU_LIST_EXTERNAL_NAME or MERCH_CLIENT_LOAD_ID and LEVEL_DESC must be supplied.
- LEVEL_DESC – the level of the category. Either SKU_LIST_EXTERNAL_NAME or MERCH_CLIENT_LOAD_ID and LEVEL_DESC must be supplied.
- ATTRIBUTE_NAME – this value restricts the criterion type. Supported values are RETAIL and VENDORNAME, which can be found in the Merchandise Hierarchy.
- ATTRIBUTE_VALUE – restricts the category (for CRITERION_TYPE 1) by this attribute value.

- ATTRIBUTE_NAME2 – this value restricts the criterion type. Supported values are RETAIL and VENDORNAME, which can be found in the Merchandise Hierarchy.
- ATTRIBUTE_VALUE2 – restricts the category (for CRITERION_TYPE 1) by this attribute value.
- LOGICAL_OPERATOR – indicates how the two category filters (ATTRIBUTE_NAME / ATTRIBUTE_VALUE and ATTRIBUTE_NAME2 / ATTRIBUTE_VALUE2) are combined. Values are 0 (= or) and the default value of 1 (= and).
- INCLUDE – a value of 1 indicates that the SKUs specified by this criterion are included. A value of 0 indicates that the SKUs are excluded.
- LIST_TYPE – Buy List = 0; Get List = 1.

### An Example

The following is an example of the data for a promotion offer criteria record, with some optional attributes omitted.

***Table 1–15 Promotion Offer Criteria Example Data***

| Inactive | External Name | Promo External Name | Promo Offer External Name | Criterion Type | SKU List External Name | Logical Operator | Include | List Type |
|---|---|---|---|---|---|---|---|---|
| 0 | All Flavors | Promo_1 | Promo Offer 1 | 0 | List_1 | 1 | 0 | 1 |

## Promotion Offer Merchandise Standard Interface Description

The promotion offer merchandise interface describes the SKUs associated with an offer.

### Data Fields

Seven fields describe each record:

- PROMO_EXTERNAL_NAME – the ID for the promotion that is meaningful to the client.
- PROMO_OFFER_EXTERNAL_NAME – the ID for the promotion offer that is meaningful to the client. It is unique across all promotion offers.
- MERCH_CLIENT_LOAD_ID – the client-specific category ID.
- LEVEL_DESC – the client-specific merchandise hierarchy level description.
- FULL_PRICE – the price of the item.
- PROMO_PRICE – the promotion price of the item.
- COST – the actual cost of the item.

### An Example

The following is an example of the data for a promotion offer merchandise record.

***Table 1–16 Promotion Offer Merchandise Example Data***

| Promo External Name | Promo Offer External Name | Merch Client Load ID | Level Desc | Full Price | Promo Price | Cost |
|---|---|---|---|---|---|---|
| 1-001-1-999000000 | LR-999000000-0 T0000099958 | T0000099958 | SKU | 24.50 | 18.37 | 12.25 |

## Promotion Offer Version Standard Interface Description

The promotion offer version interface describes the version of a promotion's offer.

### Data Fields

Nineteen fields describe each record:

- INACTIVE – activity flag. 0 = active. 1 = inactive.
- EXTERNAL_NAME – the ID of the promotion offer. It is meaningful to the client and is unique.
- PROMO_OFFER_EXTERNAL_NAME – the ID for the promotion offer that is meaningful to the client. It is unique across all promotion offers.
- PROMO_OFFER_EXTERNAL_NAME – an ID, which is meaningful to the client, for the promotion offer.
- STORE_SET_NAME – the store set name for the location. Must have STORE_SET_NAME and STORE_SUBSET_NAME or LOC_CLIENT_LOAD_ID and LEVEL_DESC.
- STORE_SUBSET_NAME – the store subset name for the location. Must have STORE_SET_NAME and STORE_SUBSET_NAME or LOC_CLIENT_LOAD_ID and LEVEL_DESC.
- LOC_CLIENT_LOAD_ID – the client-specific store hierarchy client ID. Must have STORE_SET_NAME and STORE_SUBSET_NAME or LOC_CLIENT_LOAD_ID and LEVEL_DESC.
- LEVEL_DESC – the client-specific hierarchy level description. Must have STORE_SET_NAME and STORE_SUBSET_NAME or LOC_CLIENT_LOAD_ID and LEVEL_DESC.
- ENABLED – flag indicating enabled or not enabled. Default value is 1.
- OFFER_EXTERNAL_NAME – the ID for the offer that is meaningful to the client.
- UDV_EXTERNAL_NAME – the actual user-defined type value. (Either UDV_EXTERNAL_NAME,VALUE_INT, or VALUE_DEC should be set.)
- VALUE_INT – the integer value of the offer. (Either UDV_EXTERNAL_NAME,VALUE_INT, or VALUE_DEC should be set.)
- VALUE_DEC – the currency value for the actual offer. (Either UDV_EXTERNAL_NAME,VALUE_INT, or VALUE_DEC should be set.)
- VENDOR_DEAL_AMOUNT – the value of the vendor deal for the offer.
- USR_HIGH_RETAIL – used to override the computed high retail price from the Price Zone feed.
- USR_LOW_RETAIL – used to override the low retail price from the Price Zone feed.
- USR_AVG_RETAIL – used to override the computed average price from the Price Zone field or forecast.
- USR_AVG_COST – used to override the computed average cost from the Price Zone feed or forecast.
- USR_AVG_UNITS – used to override the computed average units from the forecast.

## Promotion Store Standard Interface Description

The promotion store interface describes the stores on a promotion. This data is historical data.

### Data Fields

Three fields describe each record:

- PROMO_EXTERNAL_NAME – the ID for the promotion that is meaningful to the client.
- LOC_CLIENT_LOAD_ID – the client-specific store ID.
- LEVEL_DESC - the client-specific store hierarchy level description.

### An Example

The following is an example of the data for a promotion store record.

***Table 1–17 Promotion Store Example Data***

| Promo External Name | Loc Client Load ID | Level Desc |
|---|---|---|
| 1-001-1-999000000 | 6493 | STORE |

## Promotion Version Standard Interface Description

The promotion version interface describes the version of a promotion.

### Data Fields

Nine fields describe each record:

- INACTIVE – Activity flag. 0 = active. 1 = inactive.
- EXTERNAL_NAME – the ID of the promotion version. It is meaningful to the client and is unique.
- PROMO_EXTERNAL_NAME – the ID for the promotion version that is meaningful to the client.
- STORE_SET_NAME – the store set name for the location. Must have STORE_SET_NAME and STORE_SUBSET_NAME or LOC_CLIENT_LOAD_ID and LEVEL_DESC.
- STORE_SUBSET_NAME – the store subset name for the location. Must have STORE_SET_NAME and STORE_SUBSET_NAME or LOC_CLIENT_LOAD_ID and LEVEL_DESC.
- LOC_CLIENT_LOAD_ID – the client-specific store hierarchy ID. Must have STORE_SET_NAME and STORE_SUBSET_NAME or LOC_CLIENT_LOAD_ID and LEVEL_DESC.
- LEVEL_DESC – the client-specific hierarchy level description. Must have STORE_SET_NAME and STORE_SUBSET_NAME or LOC_CLIENT_LOAD_ID and LEVEL_DESC.
- ENABLED – flag indicating enabled or not enabled. Default value is 1.
- USER_LOCATION_COUNT – used to override the computed location count used in forecasting.

## Promotions Standard Interface Description

The promotions interface describes a client's promotions data. The data feed provides the application with promotional calendar information from other systems. It is also used to import historical data into the system that is used for ad effectiveness analysis.

### Data Fields

Twelve fields describe each record:

- TYPE – defines the promotion. A value of 4 indicates an historical promotion. A value of 5 indicates a pre-planned promotion.
- INACTIVE – the status of a promotion. A value of 0 indicates that the promotion is active. A value of 1 indicates that the promotion is inactive. The default is 0. This attribute is required as part of the data feed. If the value is inactive, then the record will not be displayed in the UI.
- NAME – the display name for the promotion.
- EXTERNAL_NAME – the ID for the promotion that is meaningful to the client. It is unique across all promotions.
- DESCRIPTION – an optional description of the promotion.
- BEGIN_DATE – the start date for the promotion.
- END_DATE – the end date for the promotion.
- TOTAL_COST – the total cost allocated to the promotion.
- VEHICLE_EXTERNAL_NAME – the vehicle that is used when promoting items.
- PAGES – the number of pages for the vehicle.
- EVENT_EXTERNAL_NAME – the name of the event used for the promotion.
- CAMPAIGN_EXTERNAL_NAME – the name of the campaign being used when promoting items.

### An Example

The following is an example of the data for a promotion record.

***Table 1–18 Promotion Example Data***

| Type | Inactive | Name | External Name | Description | Begin Date | End Date | Total Cost | Vehicle External Name | Pages | Event External Name | Campaign External Name |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 0 | Circular for Week 20 | promo 0001 | Standard Weekly Circular | 2003-10-10 | 2003-10-17 | 120000.00 | vehicle.circular | 4 | | Campaign for Back-to-School |

## Seasonal Trend Standard Interface Description

The seasonal trend interface describes the adjustment to the seasonal SKU based on a comparison between historical data and current data. This feed is used to override the PPO-calculated values.

### Data Fields

Five fields describe each record:

- BEGIN_CALENDAR_DT – the beginning date for the data being analyzed.
- END_CALENDAR_DT – the end date for the data being analyzed.
- LOC_CLIENT_LOAD_ID – the external ID for the location.
- LOC_LEVEL_DESC – the client-specific location level description
- USR_TREND – the value applied to the seasonal forecast.

## Seasonalities Standard Interface

The seasonalities standard interface describes the seasonality values (effects related to the time of year) provided by Analytical Services that are used by the application for calculations.

### Data Fields

Eight fields describe a seasonality map record:

- PRIORITY – the search priority for the seasonality.
- SEASONALITY_ID – the ID for the seasonality.
- MERCHANDISE_LEVEL – description of the level of the merchandise hierarchy.
- MERCHANDISE_KEY – key for the merchandise hierarchy level.
- LOCATION_LEVEL – description of the level of the location hierarchy.
- LOCATION_KEY – key for the location hierarchy level.
- ATTRIBUTE_VALUE_MASK – the search mask that specifies the season code and, optionally, the item attributes of the seasonality curves.
- AS_VERSION – the version number for the current run. Set by Analytical Parameter Calculator (APC) and used to track run versions.

Six fields describe each record:

- SEASONALITY_ID – the ID for the seasonality.
- CALENDAR_DT – the date for the seasonality.
- SEAS_INDX – the value for the seasonality for the date.
- SEAS_ERR – for future use. Set to 0.
- AS_PARAMETER_ID – a number that uniquely identifies the current record and that is used for tracking.
- AS_VERSION – the version number for the current run. Set by APC and used to track run versions.

## SKU List Standard Interface Description

The SKU list interface describes the list of SKUs for a promotion offer.

### Data Fields

Four fields describe each record:

- INACTIVE – the activity flag. A value of 0 indicates that the SKU list is active. A value of 1 indicates that the SKU list has been deleted. The default is active.
- NAME – the display name for the SKU list.
- EXTERNAL_NAME – the ID for the SKU list that is meaningful to the client. It is unique across all SKU lists.
- DESCRIPTION – an optional description of the SKU list.

### An Example

The following is an example of the data for a SKU list record.

***Table 1–19 SKU List Example Data***

| Inactive | Name | External Name | Description |
|---|---|---|---|
| 0 | Crafted Bouquet | 897 | Double Leaf and Long Leaf |

## SKU List Items Standard Interface Description

The SKU list items interface describes the items on a SKU list for a promotion offer.

### Data Fields

Two fields describe each record:

- SKU_LIST_EXTERNAL_NAME – the ID of the parent SKU list.
- MERCH_CLIENT_LOAD_ID – the customer's Like Merchandise ID.

### An Example

The following is an example of the data for a SKU list item record.

***Table 1–20 SKU List Item Example Data***

| SKU List External Name | Merch Client Load ID |
|---|---|
| 897 | T0000015167 |

## Store Set Price Standard Interface Description

The store set price interface is used for the versioning of a promotion. This interface permits the storing of zone level pricing data. This is made possible by having the client provide Store Sets and Store Subsets that define the different price zones used by the client. This can be handled via the existing Store Set, Subset and Assignment interfaces.

### Data Fields

Six fields describe each record:

- MERCH_CLIENT_LOAD_ID – the customer's ID.
- MERCH_LEVEL_DESC – description of the merchandise level.
- STORE_SET_NAME – the name for the store set.
- STORE_SUBSET_NAME – the name for store subset.
- PRICE - the price for the version of the promotion.
- COST – the associated cost.

## Store Sets Standard Interface Description

The store sets interface describes a client's store set configuration. This standard interface provides fields that can be used to change the name of the store set and to assign a name to the remaining subset. Note that OLD_STORE_SET_NAME and REMAIN_SUBSET_NAME are optional.

### Data Fields

Eight fields describe each record:

- NEW_STORE_SET_NAME – the new name for the store set, which is assigned if a value is provided for the old store set name attribute.
- OLD_STORE_SET_NAME – the existing name for the store set. This attribute is optional. If a value is provided, then the existing name for the store set is replaced by the new name that is provided in NEW_STORE_SET_NAME.
- STORE_SET_DESC – the description of the store set.
- INACTIVE – a flag to indicate the status of the store set. 1 = active; 0 = inactive.
- STORE_SET_TYPE – 0
- FIRST_EFF_DT – the date when the store set becomes active.
- LAST_MODIFIED_DATE – the date when the record was last modified.
- REMAIN_SUBSET_NAME – the name for the remaining subset for the associated store set. This value is optional. The naming occurs only if a value is provided for this attribute. (A remaining store subset is a special type of subset. Only one is allowed, and it contains all unassigned subsets.)

### An Example

The following is an example of the data for a store set record.

***Table 1–21 Store Sets Example Data***

| New Store Set Name | Old Store Set Name | Store Set Description | Inactive | Store Set Type | First Effective Date | Last Modified Date | Remaining Subset Name |
|---|---|---|---|---|---|---|---|
| New Name | Existing Name | Default system store set | 1 | 0 | 2006-02-14 | 2006-02-14 | Subset Remain Name |

## Store Subsets Standard Interface Description

The store subsets interface describes a client's store subset configuration. This standard interface provides fields that can be used to change the name of the store subset. Note that OLD_STORE_SUBSET_NAME is optional.

### Data Fields

Six fields describe each record:

- NEW_STORE_SUBSET_NAME – the new name for the store subset, which is assigned if a value is provided for the old store subset name attribute.
- OLD_STORE_SUBSET_NAME – the existing name for the store subset. This attribute is optional. If a value is provided, then the existing name for the store subset is replaced by the new name that is provided in NEW_STORE_SUBSET_NAME.
- STORE_SUBSET_DESC – the description of the store subset.
- STORE_SET_NAME – the name of the store set related to this store subset.
- INACTIVE – a flag to indicate the status of the store subset. 1 = active; 0 = inactive.
- ORDER_SEQ – the position of the subset.

### An Example

The following is an example of the data for a store subset record.

*Table 1–22 Store Subset Example Data*

| New Store Subset Name | Old Store Subset Name | Store Subset Description | Store Set Name | Inactive | Order Sequence |
|---|---|---|---|---|---|
| New Name | Northeast | Northeast subset | Default | 1 | 0 |

## Store Subset Assignments Standard Interface Description

The store subset assignments interface describes a client's store subset assignments.

### Data Fields

Four fields describe each record:

- LOC_CLIENT_LOAD_ID – the external ID for the location.
- LEVEL_DESC – the external ID for the location level.
- STORE_SUBSET_NAME – the name of the store subset for the location.
- STORE_SET_NAME – the store set name for the location.

### An Example

The following is an example of the data for a store subset assignment record.

*Table 1–23 Store Subset Assignment Example Data*

| Location Client Load ID | Level Description | Store Subset Name | Store Set Name |
|---|---|---|---|
| 5169 | Store | Central | Default |

## TAE Temp Metric Standard Interface Description – Internal

The TAE temp metric interface describes the data loaded into a temporary table for use in reporting and comparison.

### Data Fields

Forty-four fields describe each record:

- RUN_ID – the execution ID.
- PROMO_ID – the internal promotion ID.
- AD_DATE – the date of the promotion.
- PI_ID – the merchandise ID.
- LOCATION_ID – the internal location ID.
- AD_ITEM_PRICE – TAE-generated metric.
- AD_ITEM_ROSALE – TAE-generated metric.
- AD_ITEM_VISIT_RATE – TAE-generated metric.
- AD_ITEM_SALES – TAE-generated metric.
- AD_ITEM_GM – TAE-generated metric.
- TTL_AD_DAYS – TAE-generated metric.
- AD_ITEM_AC_SALES – TAE-generated metric.
- AD_ITEM_AC_GM – TAE-generated metric.
- AD_ITEM_PR_SALES – TAE-generated metric.
- AD_ITEM_PR_GM – TAE-generated metric.
- AD_NONAD_SALES – TAE-generated metric.
- AD_NONAD_GM – TAE-generated metric.
- BL_SUBST_CODE – TAE-generated metric.
- BL_SUBST_ITEM – TAE-generated metric.
- TTL_BASE_PERIODS – TAE-generated metric.
- BL_ITEM_ROSALE – TAE-generated metric.
- BL_ITEM_SALES – TAE-generated metric.
- BL_ITEM_VISIT_RATE – TAE-generated metric.
- BL_ITEM_GM – TAE-generated metric.
- BL_ITEM_PRICE – TAE-generated metric.
- BL_ITEM_AC_SALES – TAE-generated metric.
- BL_ITEM_AC_GM – TAE-generated metric.
- BL_ITEM_PR_SALES – TAE-generated metric.
- BL_ITEM_PR_GM – TAE-generated metric.
- BL_NONAD_SALES – TAE-generated metric.
- BL_NONAD_GM – TAE-generated metric.
- AD_MB_ITEM_ONLY – TAE-generated metric.

- AD_MB_ITEM_AD – TAE-generated metric.
- AD_MB_ITEM_NONAD – TAE-generated metric.
- AD_MB_ITEM_ADNONAD – TAE-generated metric.
- AD_ITEM_OTHAD_ROS – TAE-generated metric.
- STORE_BASE – TAE-generated metric.
- AD_ITEM_NORMAL_PRICE – TAE-generated metric.
- AD_ITEM_AC_UNITS – TAE-generated metric.
- AD_ITEM_PR_UNITS – TAE-generated metric.
- AD_NONAD_UNITS – TAE-generated metric.
- BL_ITEM_AC_UNITS – TAE-generated metric.
- BL_ITEM_PR_UNITS – TAE-generated metric.
- BL_NONAD_UNITS – TAE-generated metric.

## Transaction Log Standard Interface Description

The transaction log interface describes a client's basic transactional information (i.e., point-of-sale data). This data is actual transaction data, not daily store aggregates. Alternative configurations are available when leveraging a client's existing data warehouse.

### Data Fields

Eleven fields describe each record:

- TXN_ID – the unique identifier for the transaction.
- TXN_DATE – the transaction date.
- LOC_CLIENT_LOAD_ID – the ID for the location of the transaction.
- MERCH_CLIENT_LOAD_ID – the ID of the product being sold.
- UNIT_COST – the per-unit cost of the sold product.
- UNIT_NORMAL_PRICE – the per-unit non-promotional price of the sold product.
- UNITS_SOLD – the number of a given item that were purchased in the market basket.
- EXT_RETAIL_AMT – the at-register price for the product being sold.
- EXT_MARGIN_AMT – the amount that the price has been reduced if the item is on promotion for this kind of item in the market basket.
- AD_IND – discount flag. 0 = none; 1 = on Ad (item was promoted); 2 = clearance.
- PROMO_TXN_CODE – an optional field used to capture an offer code, coupon code, or other extended information.

### An Example

The following is an example of the data for a transaction log record.

*Table 1–24 Values Example Data*

| Txn ID | Txn | Loc Client Load ID | Merch Client Load ID | Unit Cost | Unit Normal Price | Units Sold | Ext Retail Amt | Ext Margin Amt | Ad Ind | Promo Txn Code |
|---|---|---|---|---|---|---|---|---|---|---|
| 100175 | 2006-02-28 | 459901 | T8946094 | 6.0 | 8.99 | 2 | 17.98 | 6.0 | 1 | C-333 |

### Technical Notes

Transaction log data is partitioned by week in the database. When data for an already-processed week arrives, it is merged into the existing partition. If a substantial (greater than 10 percent) reload is being processed, it may be faster to drop the corresponding partition and re-process the entire week again.

## User Defined Type Standard Interface Description

The user defined type interface describes a client-defined type (for example, percent off and page units). This is the meta-data created during the Implementation phase.

### Data Fields

Four fields describe each record:

- TYPE_NAME – the display name for the type.
- INACTIVE – activity flag. A value of 0 indicates the offer is active; a value of 1 indicates the offer is inactive.
- EXTERNAL_NAME – the ID for the type that is meaningful to the client. It is unique across all types.
- DESCRIPTION – an optional description of the type.

### An Example

The following is an example of the data for a type record.

*Table 1–25 Type Example Data*

| Type Name | Inactive | External Name | Description |
|---|---|---|---|
| % Off | 0 | ude.percent_off | Percent Off |

## User Defined Value Standard Interface Description

The user defined value interface describes a value for a client-defined type (for example, 5% for a Percent Off user-defined type). This is meta-data created during the Implementation phase.

### Data Fields

Seven fields describe each record:

- VALUE_NAME – the display name for the value.
- INACTIVE – activity flag. A value of 0 indicates the offer is active; a value of 1 indicates the offer is inactive.

- EXTERNAL_NAME – the ID for the type that is meaningful to the client. It is unique across all types.
- TYPE_EXTERNAL_NAME – the name of the user-defined type.
- DESCRIPTION – an optional description of the type.
- ORDER_ID – the position of the element in an ordered list.
- EXTERNAL_CODE – the element's ID in the external system.

### An Example

The following is an example of the data for a values record.

*Table 1–26 Values Example Data*

| Value Name | Inactive | External Name | Type External Name | Description | Order ID | External Code |
|---|---|---|---|---|---|---|
| 10% | 0 | ude.percent_off.10 | ude.percent_off | 10% Off | 2 | 1 |

## Vehicle Standard Interface Description

The vehicle interface describes a client's promotion vehicle (for example, circular or TV ad). The data feed typically provides the application with vehicles information from other systems. It is also used to import historical data into the system for ad effectiveness analysis. This is created during the Implementation phase.

### Data Fields

Six fields describe each record:

- VEHICLE_NAME – the display name for the vehicle.
- INACTIVE – activity flag. A value of 0 indicates the offer is active; a value of 1 indicates the offer is inactive.
- EXTERNAL_NAME – the ID for the vehicle that is meaningful to the client. It is unique across all vehicles.
- DESCRIPTION – An optional description of the vehicle.
- BUSINESS_RULE_CLASS_NAME – the instance of what class to use in the validation.
- MODEL_CODE – the bit identifier of the offer. The value must be a power of 2 and unique across the universe of all offers (for example, 0, 1, 2, 4, 8...).

### An Example

The following is an example of the data for an vehicles record.

*Table 1–27 Vehicles Example Data*

| Name | Inactive | External Name | Description | Business Rule Class Name | Model Code |
|---|---|---|---|---|---|
| Circular | 0 | vehicle.circular | Circular | com.profitlogic.promote.bean.rule.CircularVehicleRule | 1 |

## Vehicle Attributes Standard Interface Description

The vehicle attributes interface describes the attributes of a client's vehicle (for example, pages and space allocation). The data feed typically provides the application with vehicle attributes information from other systems. It is also used to import historical data into the system for ad effectiveness analysis. This is created during the Implementation phase.

### Data Fields

Twelve fields describe each record:

- VEHICLE_ATTR_NAME – the display name for the vehicle attribute.
- INACTIVE – activity flag. A value of 0 indicates the offer is active; a value of 1 indicates the offer is inactive.
- EXTERNAL_NAME – the ID for the vehicle attribute that is meaningful to the client. It is unique across all vehicle attributes.
- DESCRIPTION – an optional description of the vehicle attribute.
- ATTRIBUTE_LEVEL – the level at which to show the attribute. A value of 1 indicates vehicle; a value of 1 indicates item.
- VEHICLE_EXTERNAL_NAME – the ID for the parent vehicle that is meaningful to the client. It is unique across all vehicles.
- TYPE_EXTERNAL_NAME – the name of the user-defined type.
- MODEL – indicates if the attribute is to be sent to the analysis engine. A value of 0 indicates do not send; a value of 1 indicates send.
- VISIBLE – visibility flag. A value of 0 indicates invisible; a value of 1 indicates visible.
- ORDER_ID – not used.
- FORMAT – the output format for the vehicle attribute (for example, to put Page label in front of the number).
- TYPE_ENUM – the type of vehicle attribute. Values include:
  - 0 for integer
  - 1 for User Defined (specified by TYPE_EXTERNAL_NAME)
  - 2 for decimal
  - 3 for text
  - 4 for boolean
  - 5 for date
  - 6 for none

### An Example

The following is an example of the data for a vehicle attribute record.

***Table 1–28 Vehicle Attributes Example Data***

| Vehicle Attribute Name | Inactive | External Name | Description | Attribute Level | Vehicle External Name | Type External Name | Model | Visible | Order ID | Format | Type Enum |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Page Location | 0 | page_location | Page Location | 1 | vehicle.circular | ude.page_location | 1 | 0 | | {0} | 0 |

# 2

# Standard Interface Specifications

This chapter contains the following:

# Introduction

An important part of getting the application up and running in a production environment is the gathering and loading of enterprise data. The application requires historical and weekly data to be loaded into the database. The data must be provided in a standard format, as specified in the standard interface specification. The data can then be loaded according to the standard load procedure.

This chapter contains the standard interface specifications for the data that is loaded into the application. The application requires that customer data be provided in flat files containing pipe-delimited data organized so that the data can be loaded into database tables that follow the formats specified here and in Chapter 1, "Standard Interface Descriptions".

The following special characters are not allowed: colon, semi-colon, comma, forward slash, backward slash, any type of quote, any type of apostrophe, <, or >.

Four interfaces (Merchandise Hierarchy Levels, Location Hierarchy Levels, Calendar, and Cross Product Information) that are required by the application are only loaded once. The information contained in these four files is collected during discussions with specific clients; however, the files themselves are not provided by clients but are created and loaded as part of the initial configuration. More information on these three interfaces is provided in *PPO & PI Operations Guide*.

Certain of the interfaces are for internal use only. The column "Internal Data Feed Yes/No" in Table 2–1, " Standard Interfaces" indicates whether or not a specific feed is internal. In addition, interface specifications that are internal are labelled as such for each specific interface specification.

*Table 2–1 Standard Interfaces*

| Interface Name | Required/ Optional | Timing | Required Specifically for PPO but not for PI Yes/No | Required for PI Only Implementation Yes/No | Internal Data Feed Yes/No |
|---|---|---|---|---|---|
| APE Price Elasticity (created during Implementation phase and during the analytical refresh) | Optional | On Demand | Yes | No | No |
| APE Promotion Elasticity (created during Implementation phase and during the analytical refresh) | Optional | On Demand | Yes | No | No |
| ARM Constant | N/A | N/A | | | Yes |
| ARM Items | N/A | N/A | | | Yes |
| ARM Pull Constant | N/A | N/A | | | Yes |
| ARM Pull Items | N/A | N/A | | | Yes |
| ARM Pull Rules | N/A | N/A | | | Yes |
| ARM Pull Rules LHS | N/A | N/A | | | Yes |
| ARM Pull Rules RHS | N/A | N/A | | | Yes |
| ARM Pull Set Summary | N/A | N/A | | | Yes |
| ARM Rules | N/A | N/A | | | Yes |
| ARM Rules LHS | N/A | N/A | | | Yes |
| ARM Rules RHS | N/A | N/A | | | Yes |
| ARM Set Summary | N/A | N/A | | | Yes |
| Baseline | N/A | N/A | | | Yes |
| Calendar | Required | One Time | No | No | No |
| Cross Products Information – described in Chapter 4, "Standard Load." | Required | One Time | No | Yes | No |
| Demand Parameters (created during Implementation phase and during the analytical refresh) | Required | On Demand | Yes | No | No |
| Future Price Cost | Optional | Weekly | Yes | No | No |
| Images | Optional | Weekly | Yes | No | No |
| Inventory | Required | Weekly | No | Yes | No |
| Item Predicted Affinity | N/A | N/A | | | Yes |
| Item Predicted Baseline | N/A | N/A | | | Yes |
| Like Location | Optional | Weekly | Yes | No | No |
| Like Merchandise | Optional | Weekly | Yes | No | No |
| Location Hierarchy | Required | Weekly | No | Yes | No |
| Location Hierarchy Attributes | Required | Weekly | No | No | No |

*Table 2–1 (Cont.) Standard Interfaces*

| Interface Name | Required/ Optional | Timing | Required Specifically for PPO but not for PI Yes/No | Required for PI Only Implementation Yes/No | Internal Data Feed Yes/No |
|---|---|---|---|---|---|
| Location Hierarchy Levels – described in Chapter 4, "Standard Load." | Required | One Time | No | Yes | No |
| Location Hierarchy Rename | Optional | Weekly | No | Yes | No |
| Merchandise Hierarchy | Required | Weekly | No | Yes | No |
| Merchandise Hierarchy Attributes | Required | Weekly | No | Yes | No |
| Merchandise Hierarchy Levels – described in Chapter 4, "Standard Load." | Required | One Time | No | Yes | No |
| Merchandise Hierarchy Rename | Optional | Weekly | No | Yes | No |
| Merchandise Thresholds (created during Implementation phase and during the analytical refresh) | Optional | On Demand | Yes | No | No |
| Model Accuracy Metric | N/A | N/A | | | Yes |
| Predicted Baseline | N/A | N/A | | | Yes |
| Offers | Required | On Demand | No | Yes | No |
| Period Attributes | Required | On Demand | No | Yes | No |
| Promotion Allocation | Optional | Weekly | No | Yes | No |
| Promotion Campaign | Optional | Weekly | No | No | No |
| Promotion Forecaster | Optional | Daily | Yes | No | No |
| Promotion Offer | Required | Weekly | No | Yes | No |
| Promotion Offer Attributes | Required | Weekly | No | Yes | No |
| Promotion Offer Criteria | Optional | Daily | Yes | No | No |
| Promotion Offer Merchandise | Required | Weekly | No | Yes | No |
| Promotion Offer Version | Optional | Daily | Yes | No | No |
| Promotion Store | Required | Weekly | No | Yes | No |
| Promotion Version | Optional | Daily | Yes | No | No |
| Promotions | Required | Weekly | No | Yes | No |
| Seasonal Trend | Optional | On Demand | Yes | No | No |
| Seasonalities | Required | On Demand | Yes | No | No |
| SKU List | Required | Daily | Yes | No | No |
| SKU List Items | Required | Daily | Yes | No | No |
| Store Sets | Required | Weekly | Yes | No | No |
| Store Set Prices | Required | Weekly | Yes | No | No |
| Store Subsets | Required | Weekly | Yes | No | No |

*Table 2–1 (Cont.) Standard Interfaces*

| Interface Name | Required/ Optional | Timing | Required Specifically for PPO but not for PI Yes/No | Required for PI Only Implementation Yes/No | Internal Data Feed Yes/No |
|---|---|---|---|---|---|
| Store Subset Assignments | Required | Weekly | Yes | No | No |
| TAE Metrics | N/A | N/A | | | Yes |
| TAE Temp Metrics | N/A | N/A | | | Yes |
| Transaction Log | Required | Weekly | No | Yes | No |
| UDE Type (created during Implementation phase) | Required | On Demand | No | Yes | No |
| UDE Value (created during Implementation phase) | Required | On Demand | No | Yes | No |
| Vehicle (created during Implementation phase) | Required | On Demand | No | No | No |
| Vehicle Attributes (created during Implementation phase) | Required | On Demand | No | No | No |

# Standard Interface Specifications

The following tables provide ordered lists of the contents of each of the standard interface specifications. The specifications are organized into alphabetical order. Internal data feeds are labelled as such.

## APE Price Elasticity Specification (BEE_APE_PRICE_ELASTICITY)

*Table 2–2 APE Price Elasticity Standard Interface Specification[1]*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| DRIVER_APE_MERCH_NODE_EXT_ID | The external ID for the Driver Merchandise node. | String | 200 | Y |
| TARGET_APE_MERCH_NODE_EXT_ID | The external ID for the Target Merchandise node. | String | 200 | Y |
| LOC_LEVEL_DESC | The external ID for the external location level. | String | 50 | Y |
| LOC_CLIENT_LOAD_ID | The external ID for the location. | String | 50 | Y |
| ELASTICITY | The APE-calculated elasticity value. | Decimal | 15,4 | Y |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## APE Promotion Elasticity Specification (BEE_APE_PROMO_ELASTICITY)

***Table 2–3 APE Promotion Elasticity Standard Interface Specification[1]***

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| DRIVER_APE_MERCH_NODE_EXT_ID | The external ID for the Driver Merchandise node. | String | 200 | Y |
| TARGET_APE_MERCH_NODE_EXT_ID | The external ID for the Target Merchandise node. | String | 200 | Y |
| LOC_LEVEL_DESC | The external ID for the external location level. | String | 50 | Y |
| LOC_CLIENT_LOAD_ID | The external ID for the location. | String | 50 | Y |
| PROMOTION_EXTERNAL_ATTR | A value generated by concatenating the source column name and its corresponding value. | String | 200 | Y |
| ELASTICITY | The APE-calculated elasticity value. | Decimal | 15,4 | Y |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## ARM Constant Specification (BEE_ARM_CONST) – Internal

***Table 2–4 ARM Constant Standard Interface Specification[1]***

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| RUN_ID | The execution ID. | Integer | 32 | N/A |
| TID_COUNT | The number of transactions in this run and partition. | Integer | 32 | N/A |
| MAXSETSIZE | The maximum frequent set size looked for. | Integer | 9 | N/A |
| MINSUPPORT | The minimum number of transaction a set must be found in to be considered frequent. | Integer | 9 | N/A |
| MINCONFIDENCE | The minimum confidence of a rule. | Decimal | 15,4 | N/A |
| MINRCONFIDENCE | The desired minimum reverse confidence. | Decimal | 15,4 | N/A |
| LOCATION_ID | The location identifier. | Integer | 32 | N/A |

*Table 2–4 (Cont.) ARM Constant Standard Interface Specification[1]*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| BEGIN_CALENDAR_DT | The earliest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| END_CALENDAR_DT | The latest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| MAXRULES | The desired maximum number of rules. | Integer | 9 | N/A |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## ARM Items Specification (BEE_ARM_ITEMS) – Internal

*Table 2–5 ARM Items Standard Interface Specification[1]*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| RUN_ID | The execution ID. | Integer | 32 | N/A |
| SET_ID | The set identifier. | Integer | 9 | N/A |
| SET_ITEM_COUNT | The cardinality of the frequent set. | Integer | 4 | N/A |
| ITEM_ID | The item identifier, which may be duplicated within each set if the -adindicator option is used. | Integer | 9 | N/A |
| MB_COUNT | The number of transactions containing this set. | Integer | 32 | N/A |
| LOCATION_ID | The location identifier. | Integer | 32 | N/A |
| BEGIN_CALENDAR_DT | The earliest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| END_CALENDAR_DT | The latest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| INTERNAL_ITEM_ID | The internal item identifier | Integer | 32 | N/A |
| AD_INT | Ad indicator. | Integer | 1 | N/A |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## ARM Pull Constant Specification (BEE_ARM_PULL_CONST) – Internal

***Table 2–6 ARM Pull Constant Standard Interface Specification[1]***

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| RUN_ID | The execution ID. | Integer | 32 | N/A |
| TID_COUNT | The number of transactions in this run and partition. | Integer | 32 | N/A |
| MAXSETSIZE | The maximum frequent set size looked for. | Integer | 9 | N/A |
| MINSUPPORT | The minimum number of transaction a set must be found in to be considered frequent. | Integer | 9 | N/A |
| MINCONFIDENCE | The minimum confidence of a rule. | Decimal | 15,4 | N/A |
| MINRCONFIDENCE | The desired minimum reverse confidence. | Decimal | 15,4 | N/A |
| LOCATION_ID | The location identifier. | Integer | 32 | N/A |
| BEGIN_CALENDAR_DT | The earliest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| END_CALENDAR_DT | The latest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| MAXRULES | The desired maximum number of rules. | Integer | 9 | N/A |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## ARM Pull Items Specification (BEE_ARM_PULL_ITEMS) – Internal

***Table 2–7 ARM Pull Items Standard Interface Specification[1]***

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| RUN_ID | The execution ID. | Integer | 32 | N/A |
| SET_ID | The set identifier. The value is unique within this run and partition. | Integer | 9 | N/A |
| SET_ITEM_COUNT | The cardinality of the frequent set. | Integer | 4 | N/A |

*Table 2–7 (Cont.) ARM Pull Items Standard Interface Specification[1]*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| ITEM_ID | The item identifier, which may be duplicated within each set if the -adindicator is used. | Integer | 9 | N/A |
| MB_COUNT | The number of transactions containing this set. | Integer | 32 | N/A |
| LOCATION_ID | The location ID processed. | Integer | 32 | N/A |
| BEGIN_CALENDAR_DT | The earliest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| END_CALENDAR_DT | The latest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| INTERNAL_ITEM_ID | The internal item identifier (internal synthetic key, which is distinct for every item_id, ad_idn combination.) | Integer | 32 | N/A |
| AD_INT | The ad indicator. | Integer | 1 | N/A |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## ARM Pull Rules Specification (BEE_ARM_PULL_RULES) – Internal

*Table 2–8 ARM Pull Rules Standard Interface Specification[1]*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| RUN_ID | The execution ID. | Integer | 32 | N/A |
| RULEID | The rule identifier, which is unique for this run and partition. | Integer | 9 | N/A |
| CONFIDENCE | The rule confidence. | Decimal | 15,4 | N/A |
| REVERSECONFIDENCE | The rule reverse confidence. | Decimal | 15,4 | N/A |
| LIFT | An increase in the sales for an item as a result of a promotion or a holiday sale. | Decimal | 15,4 | N/A |
| SET_ID_L | The set identifier for combined antecedent and consequent sets. | Integer | 9 | N/A |

*Table 2–8 (Cont.) ARM Pull Rules Standard Interface Specification[1]*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| SUPPORT_L | The number of transactions in which combined antecedent/consequent sets have occurred. | Integer | 32 | N/A |
| SET_ID_A | The set identifier for the antecedent set. | Integer | 9 | N/A |
| ITEM_SET_A | the item_set for the antecedent set. | String | 255 | N/A |
| SUPPORT_A | The number of transactions in which the antecedent set has occurred. | Integer | 32 | N/A |
| SET_ID_C | The set identifier for the consequent set. | Integer | 9 | N/A |
| ITEM_SET_C | The item_set for the consequent set. | String | 255 | N/A |
| SUPPORT_C | The number of transactions in which the consequent set has occurred. | Integer | 32 | N/A |
| RULE_FAMILY | The item_set family for the combined antecedent and consequent sets. | String | 255 | N/A |
| SET_ITEM_COUNT | The cardinality of the frequent set corresponding to the combined set of antecedent and consequent sets. | Integer | 4 | N/A |
| MB_COUNT | The number of transactions in which combined antecedent and consequent sets occurred. | Integer | 32 | N/A |
| FREQUENCY | The frequency of combined antecedent/consequent sets. | Decimal | 15,4 | N/A |
| MB_AVGQTY | The transaction average quantity. | Decimal | 15,4 | N/A |
| MB_AVGDI | The transaction average distinct items. | Decimal | 15,4 | N/A |
| MGAVGQSI | The transaction average QSI. | Decimal | 15,4 | N/A |

*Table 2–8 (Cont.) ARM Pull Rules Standard Interface Specification[1]*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| MB_AVGREV | The transaction average revenue. | Decimal | 15,4 | N/A |
| MB_AVGGM | The transaction average gross margin. | Decimal | 15,4 | N/A |
| SET_AVGQTY | The combined antecedent and consequent set average quantity. | Decimal | 15,4 | N/A |
| SET_AVGREV | The combined antecedent and consequent set average revenue. | Decimal | 15,4 | N/A |
| SET_AVGGM | The combined antecedent and consequent set average gross margin. | Decimal | 15,4 | N/A |
| LOCATION_ID | The location identifier. | Integer | 32 | N/A |
| BEGIN_CALENDAR_DT | The earliest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| END_CALENDAR_DT | The latest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| MB_AVGNM | The transaction average net margin. | Decimal | 15,4 | N/A |
| SET_AVGNM | The combined antecedent and consequent set average net margin. | Decimal | 15,4 | N/A |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## ARM Pull Rules LHS Specification (BEE_ARM_PULL_LHS) – Internal

*Table 2–9 ARM Pull Rules LHS Standard Interface Specification*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| RUNID | The execution ID. | Integer | 32 | N/A |
| RULEID | The rule identifier. | Integer | 9 | N/A |
| SET_ID | The set identifier for the LHS. | Integer | 9 | N/A |
| SET_ITEM_COUNT | The cardinality of the set. | Integer | 4 | N/A |
| ITEM_ID | The item identifier. | Integer | 9 | N/A |

*Table 2–9 (Cont.) ARM Pull Rules LHS Standard Interface Specification*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| LOCATION_ID | The location identifier. | Integer | 32 | N/A |
| BEGIN_CALENDAR_DT | The earliest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| END_CALENDAR_DT | The latest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| AD_IND | The ad indicator. | Integer | 1 | N/A |

## ARM Pull Rules RHS Specification (BEE_ARM_PULL_RHS) – Internal

*Table 2–10 ARM Pull Rules RHS Standard Interface Specification*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| RUNID | The execution ID. | Integer | 32 | N/A |
| RULEID | The rule identifier. | Integer | 9 | N/A |
| SET_ID | The set identifier for the RHS. | Integer | 9 | N/A |
| SET_ITEM_COUNT | The cardinality of the set. | Integer | 4 | N/A |
| ITEM_ID | The item identifier. | Integer | 9 | N/A |
| LOCATION_ID | The location identifier. | Integer | 32 | N/A |
| BEGIN_CALENDAR_DT | The earliest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| END_CALENDAR_DT | The latest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| AD_IND | The ad indicator. | Integer | 1 | N/A |

## ARM Pull Set Summary Specification (BEE_ARM_PULL_SET_SUMMARY) – Internal

*Table 2–11 ARM Pull Set Summary Standard Interface Specification[1]*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| RUNID | The run identifier. | Integer | 32 | N/A |
| SET_ID | The set identifier. | Integer | 9 | N/A |
| ITEM_SET_FAMILY | The delimited string of concatenated item IDs. The contents of the frequent set. | String | 255 | N/A |

***Table 2–11 (Cont.) ARM Pull Set Summary Standard Interface Specification[1]***

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| ITEM_SET | The delimited string of concatenated item IDs. The contents of the frequent set. | String | 255 | N/A |
| SET_ITEM_COUNT | The cardinality of the frequent set. | Integer | 4 | N/A |
| MB_COUNT | The number of transactions containing this set. | Integer | 9 | N/A |
| FREQUENCY | The frequency of occurrence of this frequent set. | Decimal | 15,4 | N/A |
| MB_AVGQTY | The transaction average quantity. | Decimal | 15,4 | N/A |
| MB_AVGDI | The transaction average distinct items. | Decimal | 15,4 | N/A |
| MB_AVGQSI | The transaction average QSI. | Decimal | 15,4 | N/A |
| MB_AVGREV | The transaction average revenue. | Decimal | 15,4 | N/A |
| MB_AVGGM | The transaction average gross margin. | Decimal | 15,4 | N/A |
| SET_AVGQTY | The set average quantity. | Decimal | 15,4 | N/A |
| SET_AVGREV | The set average revenue. | Decimal | 15,4 | N/A |
| SET_AVGGM | The set average gross margin. | Decimal | 15,4 | N/A |
| LOCATION_ID | The location identifier. | Integer | 32 | N/A |
| BEGIN_CALENDAR_DT | The earliest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| END_CALENDAR_DT | The latest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| MB_AVGNM | The transaction average net margin. | Decimal | 15,4 | N/A |
| SET_AVGNM | The set average net margin. | Decimal | 15,4 | N/A |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## ARM Rules Specification (BEE_ARM_RULES) – Internal

***Table 2–12 ARM Rules Standard Interface Specification[1]***

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| RUN_ID | The execution ID. | Integer | 32 | N/A |
| RULEID | The rule identifier, which is unique within this run and partition. | Integer | 9 | N/A |
| CONFIDENCE | The rule confidence. | Decimal | 15,4 | N/A |
| REVERSECONFIDENCE | The rule reverse confidence. | Decimal | 15,4 | N/A |
| LIFT | An increase in the sales for an item as a result of a promotion or a holiday sale. | Decimal | 15,4 | N/A |
| SET_ID_L | The set identifier for combined antecedent and consequent sets. | Integer | 9 | N/A |
| SUPPORT_L | The number of transaction in which combined antecedent/consequent sets occurred. | Integer | 32 | N/A |
| SET_ID_A | The set identifier for the antecedent set. | Integer | 9 | N/A |
| ITEM_SET_A | The item_set for the antecedent set. | String | 255 | N/A |
| SUPPORT_A | The number of transactions in which the antecedent set occurred. | Integer | 32 | N/A |
| SET_ID_C | The set identifier for the consequent set. | Integer | 9 | N/A |
| ITEM_SET_C | The item_set for the consequent set. | String | 255 | N/A |
| SUPPORT_C | The number of transactions in which the consequent set occurred. | Integer | 32 | N/A |
| RULE_FAMILY | The item_set family for the combined antecedent and consequent set. | String | 255 | N/A |

***Table 2–12 (Cont.) ARM Rules Standard Interface Specification[1]***

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| SET_ITEM_COUNT | The cardinality of the frequent set corresponding to the combined set of antecedent and consequent sets. | Integer | 4 | N/A |
| MB_COUNT | The number of transactions in which combined antecedent/consequent sets occurred. | Integer | 32 | N/A |
| FREQUENCY | The frequency of the combined antecedent/consequent sets. | Decimal | 15,4 | N/A |
| MB_AVGQTY | The transaction average quantity. | Decimal | 15,4 | N/A |
| MB_AVGDI | The transaction average distinct items. | Decimal | 15,4 | N/A |
| MGAVGQSI | The transaction average QSI. | Decimal | 15,4 | N/A |
| MB_AVGREV | The transaction average revenue. | Decimal | 15,4 | N/A |
| MB_AVGGM | The transaction average gross margin. | Decimal | 15,4 | N/A |
| SET_AVGQTY | The combined antecedent and consequent set average quantity. | Decimal | 15,4 | N/A |
| SET_AVGREV | The combined antecedent and consequent set average revenue. | Decimal | 15,4 | N/A |
| SET_AVGGM | The combined antecedent and consequent set average gross margin. | Decimal | 15,4 | N/A |
| LOCATION_ID | The location identifier. | Integer | 32 | N/A |
| BEGIN_CALENDAR_DT | The earliest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |

*Table 2–12 (Cont.) ARM Rules Standard Interface Specification*[1]

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| END_CALENDAR_DT | The latest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| MB_AVGNM | The transaction average net margin. | Decimal | 15,4 | N/A |
| SET_AVGNM | The combined antecedent and consequent set average net margin. | Decimal | 15,4 | N/A |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## ARM Rules LHS Specification (BEE_ARM_RULES_LHS) – Internal

*Table 2–13 ARM Rules LHS Standard Interface Specification*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| RUNID | The execution ID. | Integer | 32 | N/A |
| RULEID | The rule identifier. | Integer | 9 | N/A |
| SET_ID | The set identifier for the LHS. | Integer | 9 | N/A |
| SET_ITEM_COUNT | The cardinality of the set. | Integer | 4 | N/A |
| ITEM_ID | The item identifier. | Integer | 9 | N/A |
| LOCATION_ID | The location identifier. | Integer | 32 | N/A |
| BEGIN_CALENDAR_DT | The earliest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| END_CALENDAR_DT | The latest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| AD_IND | The ad indicator. | Integer | 1 | N/A |

## ARM Rules RHS Specification (BEE_ARM_RULES_RHS) – Internal

*Table 2–14 ARM Rules RHS Standard Interface Specification*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| RUNID | The execution ID. | Integer | 32 | N/A |
| RULEID | The rule identifier. | Integer | 9 | N/A |
| SET_ID | The set identifier for the RHS. | Integer | 9 | N/A |
| SET_ITEM_COUNT | The cardinality of the set. | Integer | 4 | N/A |

*Table 2–14 (Cont.) ARM Rules RHS Standard Interface Specification*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| ITEM_ID | The item identifier. | Integer | 9 | N/A |
| LOCATION_ID | The location identifier. | Integer | 32 | N/A |
| BEGIN_CALENDAR_DT | The earliest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| END_CALENDAR_DT | The latest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| AD_IND | The ad indicator. | Integer | 1 | N/A |

## ARM Set Summary Specification (BEE_ARM_SET_SUMMARY) – Internal

*Table 2–15 ARM Set Summary Standard Interface Specification[1]*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| RUNID | The run identifier. | Integer | 32 | N/A |
| SET_ID | The set identifier. | Integer | 9 | N/A |
| ITEM_SET_FAMILY | The delimited string of concatenated item IDs. The contents of the frequent set. | String | 255 | N/A |
| ITEM_SET | The delimited string of concatenated item IDs. The contents of the frequent set. | String | 255 | N/A |
| SET_ITEM_COUNT | The cardinality of the frequent set. | Integer | 4 | N/A |
| MB_COUNT | The number of transactions containing this set. | Integer | 9 | N/A |
| FREQUENCY | The frequency of occurrence of this frequent set. | Decimal | 15,4 | N/A |
| MB_AVGQTY | The transaction average quantity. | Decimal | 15,4 | N/A |
| MB_AVGDI | The transaction average distinct items. | Decimal | 15,4 | N/A |
| MB_AVGQSI | The transaction average QSI. | Decimal | 15,4 | N/A |
| MB_AVGREV | The transaction average revenue. | Decimal | 15,4 | N/A |
| MB_AVGGM | The transaction average gross margin. | Decimal | 15,4 | N/A |

*Table 2–15 (Cont.) ARM Set Summary Standard Interface Specification[1]*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| SET_AVGQTY | The set average quantity. | Decimal | 15,4 | N/A |
| SET_AVGREV | The set average revenue. | Decimal | 15,4 | N/A |
| SET_AVGGM | The set average gross margin. | Decimal | 15,4 | N/A |
| LOCATION_ID | The location identifier. | Integer | 32 | N/A |
| BEGIN_CALENDAR_DT | The earliest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| END_CALENDAR_DT | The latest date within this run. | Date in format YYYY-MM-DD | 10 | N/A |
| MB_AVGNM | The transaction average net margin. | Decimal | 15,4 | N/A |
| SET_AVGNM | The set average net margin. | Decimal | 15,4 | N/A |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## Baseline Specification (BEE_BASELINE) – Internal

*Table 2–16 Baseline Standard Interface Specification[1]*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| RUN_ID | The execution ID. | Integer | 32 | N/A |
| LOCATION_ID | The internal location identifier. | Integer | 32 | N/A |
| MERCHANDISE_ID | The internal merchandise identifier. | Integer | 32 | N/A |
| PERIOD_ID | The period/date. | Date in format YYYY-MM-DD | 10 | N/A |
| PERIOD_DAYS | The number of days within the period that historic data was available for processing. | Integer | 32 | N/A |
| PERIOD_BD_RATE | The base demand rate of sale during the period. | Decimal | 38,20 | N/A |
| PERIOD_BDVR_RATE | The base demand visit rate for the item during the period. | Decimal | 38,20 | N/A |

***Table 2–16 (Cont.) Baseline Standard Interface Specification[1]***

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| PERIOD_NORMAL_PRICE | The average non-promoted price of the item during the period. | Decimal | 38,20 | N/A |
| PERIOD_AVG_DISCOUNT | The average percent of the normal price the item was sold for. | Decimal | 38,20 | N/A |
| PERIOD_COST | The average cost of the item during the period. | Decimal | 38,20 | N/A |
| PERIOD_STORE_COVERAGE | The percent of stores with base demand during the period. | Decimal | 38,20 | N/A |
| DAY1_WT | The daily weight for which sales occurred on the day 1 of the period. | Decimal | 38,20 | N/A |
| DAY2_WT | The daily weight for which sales occurred on the day 2 of the period. | Decimal | 38,20 | N/A |
| DAY3_WT | The daily weight for which sales occurred on the day 3 of the period. | Decimal | 38,20 | N/A |
| DAY4_WT | The daily weight for which sales occurred on the day 4 of the period. | Decimal | 38,20 | N/A |
| DAY5_WT | The daily weight for which sales occurred on the day 5 of the period. | Decimal | 38,20 | N/A |
| DAY6_WT | The daily weight for which sales occurred on the day 6 of the period. | Decimal | 38,20 | N/A |
| DAY7_WT | The daily weight for which sales occurred on the day 7 of the period. | Decimal | 38,20 | N/A |
| PROMO_PERIOD | The indicator that signifies that the item was promoted during the period. A value of 1 = yes. | Integer | 9 | N/A |

*Table 2–16 (Cont.) Baseline Standard Interface Specification[1]*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| CLEARANCE_PERIOD | The indicator that signifies that the item was on clearance during the period. A value of 1 = yes. | Integer | 9 | N/A |
| DARK_PERIOD | The indicator that signifies whether the period was a dark (i.e., non-promoted_ period. A value of 1 = yes. | Integer | 9 | N/A |
| BAD_RATIO_PERIOD | The indicator that signifies that the period has a bad sales period. | Integer | 9 | N/A |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## Calendar Specification (ASH_CAL_TBL)

*Table 2–17 Calendar Standard Interface Specification*

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| EOP_CALENDAR_DT | Ending calendar date of the fiscal week (which is usually a Saturday). | Date in format YYYY-MM-DD | 10 | N |
| FISCAL_YR | Number of the fiscal year. | Integer | 4 | N |
| FISCAL_QTR | Number of fiscal quarter. | Integer | 1 | N |
| FISCAL_MO | Number of the fiscal month. | Integer | 2 | N |
| FISCAL_WK | Number of the fiscal week. | Integer | 2 | N |
| CALENDAR_WK | An alternative number for the calendar week (optional). | Integer | 2 | Y |
| SEASON | Season number associated with the week. | Integer | 2 | N |

## Demand Parameters Specification (ASH_PARAMETER_VALUES_TBL)

***Table 2–18 Demand Parameters Standard Interface Specification***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| MERCHANDISE_LEVEL | The external merchandise level. | String | 50 | N |
| MERCHANDISE_KEY | In combination with the location key, identifies the item being marked down. | String | 25 | N |
| LOCATION_LEVEL | The external location level. | String | 50 | N |
| LOCATION_KEY | In combination with the merchandise key, identifies the item being marked down. | String | 25 | N |
| ITEM_ATTRIBUTE | The item attribute for the parameter (set to % by default). | String | 100 | N |
| PARAMETER_NAME | The name of the parameter. The names can be DEFAULT_ GAMMA, DEFAULT_ ALPHA, CRITICAL_ INVENTORY, or ZERO_INVENTORY. | String | 50 | N |
| PARAMETER_VALUE | The value assigned to the parameter. | String | 25 | Y |
| AS_PARAMETER_ID | A number that uniquely identifies the record across all output tables and can be used to trace issues. It is not an analytical value. | Integer | 32 | Y |
| AS_VERSION_NUMBER | The version number for the current run of the output, which is set by APC and can be used to track versions. | String | 20 | Y |

## Future Price and Cost Specification (BEE_FUTURE_PRICE_COST)

***Table 2–19 Future Price and Cost Standard Interface Specification[1]***

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| MERCH_CLIENT_LOAD_ID | Customer's merchandise ID. | String | 50 | N |
| MERCH_LEVEL_DESC | Merchandise level description. | String | 50 | N |
| LOC_CLIENT_LOAD_ID | Customer's location ID. | String | 50 | N |
| LOC_LEVEL_DESC | Location level description. | String | 50 | N |

*Table 2–19 (Cont.) Future Price and Cost Standard Interface Specification*[1]

| Attribute | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| EFFECTIVE_DT | The date of the change. | Date in format YYYY-MM-DD | 10 | N |
| PRICE | The changed price. | Decimal | 15,4 | N |
| COST | The changed cost. | Decimal | 15,4 | N |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## Images Specification (BEE_IMAGE)

*Table 2–20 Images Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| NAME | Display name for image. | String | 40 | N |
| EXTERNAL_NAME | The ID for the image that is meaningful to the client. Unique across the images. | String | 120 | N |
| DESCRIPTION | An optional description of the image. | String | 1000 | Y |
| FILE_NAME | The filename of the image. | String | 250 | N |
| KEYWORDS | Keywords placeholder. | String | 1000 | Y |
| FILE_SIZE | The size of the image file. | Integer | 10 | Y |
| WIDTH | The image width. | Integer | 10 | Y |
| HEIGHT | The image height. | Integer | 10 | Y |
| RESOLUTION | The on-screen resolution of the image. | Integer | 10 | Y |
| DEPTH | The depth of the image. | Integer | 10 | Y |
| FILE_TYPE_ENUM | The image file type. Must be JPEG (0). | Integer | 10 | Y |
| MERCH_CLIENT_LOAD_ID | The client-specific category ID. | String | 50 | Y |
| LEVEL_DESC | The client-specific merchandise hierarchy level description. | String | 50 | Y |

## Inventory Specification (WK_HIST_SALES_INV_TBL)

***Table 2–21 Inventory Standard Interface Specification [1]***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| MERCHANDISE_KEY | The key from the merchandise hierarchy for the item. | String | 25 | N |
| LOCATION_KEY | The key from the location hierarchy for the item. | String | 25 | N |
| FISCAL_YR | The fiscal year of the sales record. | Integer | 4 | N |
| FISCAL_WK | The fiscal week of the sales record. | Integer | 2 | N |
| END_OH_QTY | The number of units of on-hand inventory at the end of the period. | Integer | 12 | N |
| END_OO_QTY | The number of inventory units in transit to the location at the end of the period. | Integer | 12 | Y |
| UNIT_RTL | The item's ticketed price at the end of the period. | Decimal | 7,2 | Y |
| UNIT_CST | The item's unit cost at the end of the period. | Decimal | 7,2 | Y |
| INIT_RTL | The item's ticketed price at the start of the season. | Decimal | 7,2 | Y |
| RECEIPT_QTY | The total store receipts (in units) from the distribution centers and from transfers. | Integer | 12 | Y |
| GRSS_SLS_QTY | The gross number of new units sold for the item at the location. This excludes returns. | Integer | 12 | Y |
| GRSS_SLS_AMT | The gross dollar amount of new sales for the item at the location during the period. This excludes returns. | Decimal | 16,2 | Y |
| NET_SLS_QTY | The net number of units sold of the item at the location. This includes returns. | Integer | 12 | Y |
| NET_SLS_AMT | The net dollar amount of sales for the item at the location during the period. This includes returns. | Decimal | 16,2 | Y |

*Table 2–21 (Cont.) Inventory Standard Interface Specification [1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| TOT_DSC_AMT | The total discount amount. | Decimal | 16,2 | Y |
| PROMO_MKDN_DSC_AMT | The total promotional markdown discount amount. | Decimal | 16,2 | Y |
| SELLIT_MKDN_DSC_AMT | The total sell-it discount amount. | Decimal | 16,2 | Y |
| CLR_DSC_AMT | The total clearance discount amount. | Decimal | 16,2 | Y |
| FREIGHT | The freight cost. | Decimal | 16,2 | Y |
| GRSS_PROFIT_AMT | The total gross margin (profit). | Decimal | 16,2 | Y |
| DUMMY | A dummy field. | | | |
| POS_SLS_QTY | The number of new units sold of the item at the location during the period. | Integer | 12 | Y |
| POS_SLS_AMT | The dollar amount of the new sales for the item at the location during the period. | Decimal | 16,2 | Y |
| MD_SALES_QTY | The units sold while on markdown. | Integer | 12 | Y |
| MD_SALES_AMT | The sales dollars of the units sold while on markdown. | Decimal | 16,2 | Y |
| POS_MD_AMT | The total difference in weekly sales dollars between the promotional sales price and the inventory price. | Decimal | 16,2 | Y |
| PERM_MD_AMT | Includes distribution center, on hand, in transit, and store on hand. | Decimal | 16,2 | Y |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## Item Predicted Affinity Specification (BEE_ITEM_PREDICTED_AFF) – Internal

*Table 2–22 Item Predicted Affinity Standard Interface Specification[1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| RUN_ID | The execution ID. | Integer | 32 | N/A |
| PROMO_ID | The internal promotion ID. | Integer | 20 | N/A |
| OFFER_ID | The internal offer ID. | Integer | 32 | N/A |

***Table 2–22 (Cont.) Item Predicted Affinity Standard Interface Specification[1]***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| PROMO_OFFER_ITEM_ID | The internal promotion, offer, item ID. | Integer | 20 | N/A |
| PROMO_VEH_PG_POS_ID | The internal promotion, vehicle, page, position ID. | Integer | 20 | N/A |
| MERCHANDISE_ID | The internal merchandise identifier. | Integer | 20 | N/A |
| LOCATION_ID | The internal location identifier. | Integer | 20 | N/A |
| APE_NODE_ID | The internal ID of the APE node. | Integer | 8 | N/A |
| APE_NODE_DESC | The description of the APE node. | String | 120 | N/A |
| APE_NODE_DEPTH | The depth of the APE node on the APE tree. | Integer | 8 | N/A |
| BASE_ROS | The total baseline rate of sale. | Decimal | 15,4 | N/A |
| BASE_AVG | The baseline average sales. | Decimal | 15,4 | N/A |
| BASE_SALES | The baseline total sales. | Decimal | 15,4 | N/A |
| BASE_GM | The baseline total gross margin. | Decimal | 15,4 | N/A |
| PROMO_ROS | The total promotion rate of sale. | Decimal | 15,4 | N/A |
| PROMO_AVG | The average promotion sales. | Decimal | 15,4 | N/A |
| PROMO_SALES | The total promotion sales. | Decimal | 15,4 | N/A |
| PROMO_GM | The total promotion gross margin. | Decimal | 15,4 | N/A |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## Item Predicted Baseline Specification (BEE_ITEM_PREDICTED_BL) – Internal

***Table 2–23 Item Predicted Baseline Standard Interface Specification[1]***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| RUN_ID | The execution ID. | Integer | 32 | N/A |
| PROMO_ID | The internal promotion ID. | Integer | 20 | N/A |
| PROMO_OFFER_ID | The internal offer ID. | Integer | 20 | N/A |
| PROMO_OFFER_ITEM_ID | The internal promotion offer item ID. | Integer | 20 | N/A |
| PROMO_VEH_PG_POS_ID | The internal promotion vehicle page position ID. | Integer | 20 | N/A |
| MERCHANDISE_ID | The internal merchandise ID. | Integer | 20 | N/A |
| LOCATION_ID | The internal location ID. | Integer | 20 | N/A |
| STATUS | The status of the record. | Integer | 20 | N/A |
| CONFIDENCE | The confidence in the prediction results, expressed as a percentage. | Decimal | 38,20 | N/A |
| NORMAL_PRICE | The normal sales price for an item. | Decimal | 38,20 | N/A |
| NORMAL_SALES | The normal sales total for the item. | Decimal | 38,20 | N/A |
| EFF_PRICE | The effective sales price for the item. | Decimal | 38,20 | N/A |
| EFF_SALES | The effective sales total for the item. | Decimal | 38,20 | N/A |
| EFF_DISCOUNT | The effective discount amount per item/transaction. | Decimal | 38,20 | N/A |
| EFF_DISCOUNT_AMT | The effective discount total for the item. | Decimal | 38,20 | N/A |
| EFF_COST | The effective cost of the item. | Decimal | 38,20 | N/A |
| AD_PRICE | The advertised/promotion price for this item during this promotion. | Decimal | 38,20 | N/A |

***Table 2–23 (Cont.) Item Predicted Baseline Standard Interface Specification[1]***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| PROMO_COST | The total cost of the item for the total demand during the promotion. | Decimal | 38,20 | N/A |
| BASE_ROS | The baseline rate of sale. | Decimal | 38,20 | N/A |
| BASE_AVG | The baseline average sales. | Decimal | 38,20 | N/A |
| BASE_SALES | The baseline total sales. | Decimal | 38,20 | N/A |
| BASE_GM | The baseline gross margin. | Decimal | 38,20 | N/A |
| PROMO_ROS | The promotion rate of sales. | Decimal | 38,20 | N/A |
| PROMO_AVG | The promotion average sales. | Decimal | 38,20 | N/A |
| PROMO_SALES | The promotion total sales. | Decimal | 38,20 | N/A |
| PROMO_GM | The promotion gross margin. | Decimal | 38,20 | N/A |
| AFF_BASE_ROS | The affinity baseline rate of sale. | Decimal | 38,20 | N/A |
| AFF_BASE_AVG_ROS | The affinity baseline average rate of sale. | Decimal | 38,20 | N/A |
| AFF_BASE_SALES | The affinity baseline total sales. | Decimal | 38,20 | N/A |
| AFF_BASE_GM | The affinity baseline gross margin. | Decimal | 38,20 | N/A |
| AFF_PROMO_ROS | The affinity promotion average rate of sale. | Decimal | 38,20 | N/A |
| AFF_PROMO_AVG_ROS | The affinity promotion average rate of sale. | Decimal | 38,20 | N/A |
| AFF_PROMO_SALES | The affinity promotion total sales. | Decimal | 38,20 | N/A |
| AFF_PROMO_GM | The affinity promotion gross margin. | Decimal | 38,20 | N/A |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## Like Location Specification (BEE_PR_LIKE_LOCATION)

*Table 2–24 Like Location Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| LOC_CLIENT_LOAD_ID | Customer's location ID. | String | 50 | N |
| LOC_LEVEL_DESC | Location level description. | String | 50 | N |
| LIKE_LOC_CLIENT_LOAD_ID | Customer's like location ID. | String | 50 | N |
| LIKE_LOC_LEVEL_DESC | Like location level description. | String | 50 | N |

## Like Merchandise Specification (BEE_PR_LIKE_MERCHANDISE)

*Table 2–25 Like Merchandise Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| MERCH_CLIENT_LOAD_ID | Customer's merchandise ID. | String | 50 | N |
| MERCH_LEVEL_DESC | Merchandise level description. | String | 50 | N |
| LIKE_MERCH_CLIENT_LOAD_ID | Customer's like merchandise ID. | String | 50 | N |
| LIKE_MERCH_LEVEL_DESC | Like merchandise level description. | String | 50 | N |
| INACTIVE | Flag to indicate whether the data is to be added or removed. 0 = active; 1 = inactive. Data to be removed must be set to 1. | Integer | 1 | N |

## Location Hierarchy Specification (ASH_LH_TBL)

*Table 2–26 Location Hierarchy Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| HIERARCHY1_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY1_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY1_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY2_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY2_KEY | Key for this level of the hierarchy. | String | 25 | Y |

***Table 2–26 (Cont.) Location Hierarchy Standard Interface Specification***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| HIERARCHY2_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY3_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY3_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY3_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY4_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY4_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY4_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY5_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY5_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY5_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY6_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY6_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY6_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY7_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY7_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY7_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY8_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY8_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY8_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY9_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY9_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY9_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY10_ID | ID for this level of the hierarchy. | String | 25 | Y |

*Table 2–26 (Cont.) Location Hierarchy Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| HIERARCHY10_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY10_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY11_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY11_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY11_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY12_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY12_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY12_DESC | Description of this level of the hierarchy. | String | 50 | Y |

## Location Hierarchy Attributes Specification (ASH_LH_ATTRS)

*Table 2–27 Location Hierarchy Attributes Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| LOCATION_KEY | Unique identifier for location hierarchy. | String | 25 | N |
| LOCATION_LEVEL | Level within the location hierarchy. | String | 50 | N |
| MARKET_NAME | Market name. | String | 50 | Y |
| STORE_CITY | City. | String | 50 | Y |
| STORE_STATE | State. | String | 50 | Y |
| LOCATION_TYPE | Store class. | Integer | 2 | Y |
| STORE_NAME | Store name. | String | 20 | Y |
| STORE_POSTAL_CODE | Postal code. | String | 20 | Y |
| NSLS_SQFT | Net square footage. | Integer | 6 | Y |
| GRSS_SQFT | Gross square footage. | Integer | 6 | Y |
| OPEN_DT | Beginning of promotion. | Date in format YYYY-MM-DD | 10 | Y |
| CLOSE_DT | End of promotion. | Date in format YYYY-MM-DD | 10 | Y |
| CLIMATE | Climate code. | String | 25 | Y |
| STORE_FASHION_SEGMENT | Fashion segment code. | String | 25 | Y |
| STORE_AD_GROUP | Ad designation. | String | 2 | Y |
| STORE_SSC | Store service center (DC) number. | Integer | 4 | Y |

*Table 2–27 (Cont.) Location Hierarchy Attributes Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| STORE_CLSS_IND | Store class size. | String | 25 | Y |
| SSC_IND | Store service center indicator. | String | 1 | Y |
| STORE_CHST_1 | Store characteristic 1. | String | 20 | Y |
| STORE_CHST_2 | Store characteristic 2. | String | 20 | Y |
| STORE_CHST_3 | Store characteristic 3. | String | 20 | Y |
| PRICING_GROUP | Pricing group. | String | 20 | Y |
| COMBO_STORE | Combo stores. | String | 20 | Y |
| TAXABILITY | Taxability. | String | 20 | Y |
| STORE_ZIP | Zip code. | Integer | 9 | Y |
| VOLUME_GR | Gross volume. | String | 50 | Y |
| STORE_CLASS | Store class. | String | 50 | Y |
| GRS_ARE_SQFT | Gross square area. | Integer | 9 | Y |

## LH Rename Specification (ASH_LHRENAME_TBL)

*Table 2–28 Location Hierarchy Rename Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| OLD_LOCATION_KEY | Old unique identifier for location hierarchy. | String | 25 | N |
| NEW_LOCATION_KEY | New unique identifier for location hierarchy. | String | 25 | N |
| LOCATION_LEVEL | Level within the location hierarchy. | String | 50 | N |

## Merchandise Hierarchy Specification (ASH_MH_TBL)

*Table 2–29 Merchandise Hierarchy Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| HIERARCHY1_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY1_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY1_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY2_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY2_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY2_DESC | Description of this level of the hierarchy. | String | 50 | Y |

*Table 2–29 (Cont.) Merchandise Hierarchy Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| HIERARCHY3_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY3_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY3_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY4_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY4_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY4_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY5_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY5_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY5_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY6_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY6_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY6_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY7_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY7_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY7_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY8_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY8_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY8_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY9_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY9_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY9_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY10_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY10_KEY | Key for this level of the hierarchy. | String | 25 | Y |

*Table 2–29 (Cont.) Merchandise Hierarchy Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| HIERARCHY10_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY11_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY11_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY11_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY12_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY12_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY12_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY13_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY13_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY13_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY14_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY14_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY14_DESC | Description of this level of the hierarchy. | String | 50 | Y |
| HIERARCHY15_ID | ID for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY15_KEY | Key for this level of the hierarchy. | String | 25 | Y |
| HIERARCHY15_DESC | Description of this level of the hierarchy. | String | 50 | Y |

## Merchandise Hierarchy Attributes Specification (STAGE_MH_ATTRS_TBL)

*Table 2–30 Merchandise Hierarchy Attributes Standard Interface Specification[1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| MERCHANDISE_KEY | Unique identifier for merchandise hierarchy. | String | 25 | Y |
| MERCHANDISE_LEVEL | Level within the merchandise hierarchy. | String | 50 | Y |
| BRAND | ID of the brand. | String | 50 | Y |
| BRAND_DESC | Description of the brand. | String | 50 | Y |

***Table 2–30 (Cont.) Merchandise Hierarchy Attributes Standard Interface Specification[1]***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| VENDOR | Number of the supplier. Contains the manufacturer number when the supplier is set as a warehouse. | String | 50 | Y |
| VENDOR_DESC | Description of the supplier. | String | 50 | Y |
| ITEM_SIZE | Physical size. | String | 50 | Y |
| CATEGORY | Category. | String | 50 | Y |
| CATEGORY_DESC | Category description. | String | 50 | Y |
| REPORT_CLIENT_ID | Client ID associated with report. | String | 50 | Y |
| START_DT | Beginning of plan. | Date in format YYYY-MM-DD | 10 | Y |
| FIRST_CREATE_DT | Date merchandise first introduced. | Date in format YYYY-MM-DD | 10 | Y |
| LAST_MODIFIED_DT | Time stamp of last modification. | Date in format YYYY-MM-DD | 10 | Y |
| PROD_LEVEL | Product level. | Integer | 32 | Y |
| COST | Wholesale cost. | Decimal | 22,2 | Y |
| RETAIL | Retail price. | Decimal | 22,2 | Y |
| PACK_SIZE | Pack size (inner). | Integer | 22 | Y |
| SIZE_RANGE_DESC | Description of size range. | String | 50 | Y |
| DISP_CODE | Disposition code. | String | 2 | Y |
| PURCH_TYPE | Basic (B); Fashion (F); Key (K). | String | 1 | Y |
| GRP_IN | Group indicator. | String | 1 | Y |
| PROD_TYPE | Product type. | String | 30 | Y |
| BRAND_NAME | Brand name. | String | 50 | Y |
| CNTL_RKL | Control RKL. | String | 2 | Y |
| COLL_ID | ID of collection. | Integer | 6 | Y |
| COLL_NAME | Name of collection. | String | 30 | Y |
| MSTR_COLL_IND | Master collection indicator. | String | 1 | Y |
| ORIG_IND | Origin indicator (Domestic/Import). | String | 1 | Y |
| WEIGHT | Weight. | Decimal | 7,2 | Y |
| COLOR_CNT | Number of colors per style. | Integer | 2 | Y |
| SIZE_GRP_DESC | Description of size group. | String | 5 | Y |
| LINE_PCT | Line percent. | Integer | 3 | Y |

*Table 2–30 (Cont.) Merchandise Hierarchy Attributes Standard Interface Specification[1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| OOS_DATE | Season out-of-stock date. | Date in format YYYY-MM-DD | 10 | Y |
| VENDOR_STYLE | Vendor style number. | String | 30 | Y |
| ALLOC_FLAG | Allocate flag (RAP). | String | 1 | Y |
| FIRST_EFF_DT | The date on which the merchandise is first in effect. | Date in format YYYY-MM-DD | 10 | Y |
| LAST_EFF_DT | The date on which the merchandise is last in effect. | Date in format YYYY-MM-DD | 10 | Y |
| BRAND_TYPE | Not used. | String | 1 | Y |
| PROMO_EXCLUSION | Used to flag a record as excluded (Y) or not (N). | String | 1 | Y |
| MERCHANDISE_SUBTYPE | Season code. | String | 20 | Y |
| SIZE_RANGE_KEY | ID of size range. | String | 25 | Y |
| SIZE_KEY | ID of size. | String | 25 | Y |
| MERCHANDISE_FLOOR_SET | Subset of a season used to describe when an item is introduced to the floor. | String | 20 | Y |
| COLOR_FAMILY | Color family. | String | 50 | Y |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## MH Rename Specification (ASH_MHRENAME_TBL)

*Table 2–31 Merchandise Hierarchy Rename Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| OLD_MERCHANDISE_KEY | Old unique identifier for merchandise hierarchy. | String | 25 | N |
| NEW_MERCHANDISE_KEY | New unique identifier for merchandise hierarchy. | String | 25 | N |
| MERCHANDISE_LEVEL | Level within the merchandise hierarchy. | String | 50 | N |

## Merchandise Thresholds Specification (BEE_MERCHANDISE_THRESHOLDS_TBL)

***Table 2–32 Merchandise Thresholds Standard Interface Specification***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| MERCH_CLIENT_LOAD_ID | ID. | String | 50 | N |
| MERCH_LEVEL_DESC | Level equal to or higher than PROMOTE_MIN_LCD. | String | 50 | N |
| GREEN_THRESHOLD | Value for high confidence. | Integer | 10 | N |
| YELLOW_THRESHOLD | Value for medium confidence. | Integer | 10 | N |
| RED_THRESHOLD | Value for low confidence. | Integer | 10 | N |

## Model Accuracy Metric Specification (BEE_MODEL_ACCURACY_MTRC) – Internal

***Table 2–33 Model Accuracy Metric Standard Interface Specification[1]***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| PROMO_ID | The internal promotion ID. | Integer | 32 | N/A |
| MERCHANDISE_ID | The internal merchandise ID. | Integer | 32 | N/A |
| LOCATION_ID | The internal location ID. | Integer | 32 | N/A |
| AD_ITEM_ROSALE | The actual rate of sale during the ad. | Integer | 32 | N/A |
| AD_ITEM_ROSALE_PREDICTED | The predicted rate of sale during the ad. | Decimal | 15,4 | N/A |
| RUNID | The execution ID. | String | 80 | N/A |
| MODELID | The model ID of the model used for the prediction. | String | 80 | N/A |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## Offer Specification (BEE_OFFER)

*Table 2–34 Offer Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| NAME | Display name for the offer. | String | 40 | N |
| INACTIVE | Activity flag. 0 = active; 1 = inactive. | Integer | 1 | N |
| EXTERNAL_NAME | The ID for the offer that is meaningful to the client. Unique across all offers. | String | 120 | N |
| DESCRIPTION | An optional description of the offer. | String | 1000 | Y |
| BUSINESS_RULE_CLASS_NAME | Instance of what class to use in validation. | String | 250 | Y |
| TYPE_EXTERNAL_NAME | Name of user-defined type. | String | 120 | N |
| MODEL_CODE | Bit identifier for offer. Must be power of 2 (e.g., 0, 1, 2, 4, 8...) | Integer | 10 | N |
| FORMAT | Output format for offer (e.g., to put $ in form of number). | String | 40 | N |
| TYPE_ENUM | 0 = integer; 1 = user-defined; 2 = decimal; 6 = none. | Integer | 10 | N |

## Period Attributes Specification (BEE_PERIODS_ATTR_TBL)

*Table 2–35 Periods Attributes Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| BEGIN_CALENDAR_DT | Beginning of the period. | Date in format YYYY-MM-DD | 10 | N |
| END_CALENDAR_DT | End of the period. | Date in format YYYY-MM-DD | 10 | N |
| DARKPERIOD_FLAG | Defines whether or not there are active promotions during specified dates. 1 = Yes; 0 = No. | String | 1 | N |
| DARKPERIOD_DESC | Optional description of dark period. | String | 50 | Y |

## Predicted Baseline Specification (BEE_PREDICT_BASELINE) – Internal

***Table 2–36 Predicted Baseline Standard Interface Specification[1]***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| PERIOD_BEGIN | The fiscal week that the prediction is for. | Date in format YYYY-MM-DD | 10 | N/A |
| MERCHANDISE_ID | The internal merchandise ID. | Integer | 32 | N/A |
| LOCATION_ID | The internal location ID. | Integer | 32 | N/A |
| BL_ITEM_ROSALE | The baseline item rate of sales. | Decimal | 38,20 | N/A |
| BL_ITEM_SALES | The baseline item total sales. | Decimal | 38,20 | N/A |
| BL_ITEM_GM | The baseline item gross margin. | Decimal | 38,20 | N/A |
| BL_ITEM_PRICE | The baseline item price. | Decimal | 38,20 | N/A |
| BP_SUBST_MERCHANDISE_ID | The internal merchandise ID whose baseline sales data has been used for this prediction. | Integer | 32 | N/A |
| BP_SUBST_LOCATION_ID | The internal location ID whose baseline sales data has been used for this prediction. | Integer | 32 | N/A |
| BP_SUBST_CODE | The code that indicates whether a substitute item or location has been used for this prediction. | Integer | 9 | N/A |
| DAY1_WT | The daily weight for which sales are predicted to occur on day 1 of the period. | Decimal | 38,20 | N/A |
| DAY2_WT | The daily weight for which sales are predicted to occur on day 2 of the period. | Decimal | 38,20 | N/A |
| DAY3_WT | The daily weight for which sales are predicted to occur on day 3 of the period. | Decimal | 38,20 | N/A |

***Table 2–36 (Cont.) Predicted Baseline Standard Interface Specification[1]***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| DAY4_WT | The daily weight for which sales are predicted to occur on day 4 of the period. | Decimal | 38,20 | N/A |
| DAY5_WT | The daily weight for which sales are predicted to occur on day 5 of the period. | Decimal | 38,20 | N/A |
| DAY6_WT | The daily weight for which sales are predicted to occur on day 6 of the period. | Decimal | 38,20 | N/A |
| DAY7_WT | The daily weight for which sales are predicted to occur on day 7 of the period. | Decimal | 38,20 | N/A |
| ROS_LIFT_MEAN | The rate of sale lift mean. | Decimal | 38,20 | N/A |
| SEAS_INDX | The seasonal index. | Decimal | 38,20 | N/A |
| STORE_COVERAGE | The percent of stores that are anticipated to use this prediction. | Decimal | 38,20 | N/A |
| RUN_ID | The execution ID. | Integer | 32 | N/A |
| UNIT_NORMAL_PRICE | The normal unit sale price. | Decimal | 38,20 | N/A |
| EEFECTIVE_PRICE_RATIO | The sales price ratio at which most items will be sold. | Decimal | 38,20 | N/A |
| TTL_GOOD_PERIODS | The number of good historical periods that were used to calculate this prediction. | Integer | 32 | N/A |
| TTL_GOOD_WINDOWS | The number of good historical windows that were used to calculate this prediction. | Integer | 32 | N/A |
| CREATED_DATE | The date this prediction was executed/created. | Date in format YYYY-MM-DD | 10 | N/A |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## Promotion Allocation Specification (BEE_PROMO_ALLOC)

***Table 2–37 Promotion Allocation Standard Interface Specification [1]***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| PROMO_EXTERNAL_NAME | The ID for the promotion that is meaningful to the client. | String | 120 | N |
| MERCH_CLIENT_LOAD_ID | The client-specific category ID. | String | 50 | N |
| LEVEL_DESC | The client-specific merchandise hierarchy level description. | String | 50 | N |
| SPACE_ALLOCATION | The allocation for a given category. | Decimal | 15,4 | Y |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## Promotion Campaign Specification (BEE_PROMO_CAMPAIGN)

***Table 2–38 Promotion Campaign Standard Interface Specification***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| NAME | A display name for the campaign. | String | 40 | N |
| DESCRIPTION | An optional description of the campaign. | String | 1000 | Y |
| EXTERNAL_NAME | The ID for the campaign that is meaningful to the client. It is unique across all campaigns. | String | 120 | N |
| BEGIN_DATE | The start date of the campaign. | Date in format YYYY-MM-DD | 10 | N |
| END_DATE | The end date of the campaign. | Date in format YYYY-MM-DD | 10 | N |
| INACTIVE | Activity flag. 0 = active (default). 1 = inactive. | Boolean (0,1) | 1 | Y |

## Promotion Forecaster Specification (BEE_PROMO_FRCSTR)

***Table 2–39 Promotion Forecaster Standard Interface Specification***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| PROMO_EXTERNAL_NAME | Promo ID. | String | 120 | N |
| OFFER_EXTERNAL_NAME | Offer ID. | String | 120 | N |
| ORDER_ID | Order ID. | Integer | 10 | Y |
| EVENT_EXTERNAL_NAME | Event name. | String | 120 | N |

*Table 2–39 (Cont.) Promotion Forecaster Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| FORECAST | 1 = Force the forecast promo/offer. 0 = skip. Although this attribute is technically nullable, it is recommended that it not be left nullable. Default is 0. | Integer | 1 | Y |
| FORCE | 1 = Force the forecast promo/offer. 0 = skip. Although this attribute is technically nullable, it is recommended that it not be left nullable. Default is 0. | Integer | 1 | Y |
| REFRESH | 1 = refresh offer's criteria. 0 = skip. Although this attribute is technically nullable, it is recommended that it not be left nullable. Default is 0. | Integer | 1 | Y |

## Promotion Offer Specification (BEE_PROMO_OFFER)

*Table 2–40 Promotion Offer Standard Interface Specification [1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| INACTIVE | Activity flag. 0 = active (default). 1 = inactive. | Integer | 1 | Y |
| NAME | The display name for the offer. | String | 40 | N |
| EXTERNAL_NAME | ID of promotion offer. | String | 120 | N |
| DESCRIPTION | An optional description of the offer. | String | 1000 | Y |
| BEGIN_DATE | The start date for the offer. | Date in format YYYY-MM-DD | 10 | N |
| END_DATE | The end date for the offer. | Date in format YYYY-MM-DD | 10 | N |
| PROMO_EXTERNAL_NAME | ID of promotion. | String | 120 | N |
| OFFER_EXTERNAL_NAME | The ID for the offer that is meaningful to the client. | String | 120 | N |
| EVENT_EXTERNAL_NAME | Associates an offer with other offers in the same event. | String | 120 | Y |
| UDV_EXTERNAL_NAME | The actual user-defined type value. Only one of UDV_EXTERNAL_ NAME, VALUE_INT, or VALUE_DEC required. | String | 120 | Y |

*Table 2–40 (Cont.) Promotion Offer Standard Interface Specification [1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| VALUE_INT | The integer value of the offer. Only one of UDV_EXTERNAL_ NAME, VALUE_INT, or VALUE_DEC required. | Integer | 8 | Y |
| VALUE_DEC | The currency value for the actual offer. Only one of UDV_ EXTERNAL_NAME, VALUE_INT, or VALUE_DEC required. | Decimal | 15,4 | Y |
| PAGE_NUM | The page of the offer. | Integer | 8 | Y |
| POS_NUM | The position of the offer. | Integer | 4 | Y |
| FOR_EXCLUDE | The default value of 0 = include from forecast. 1 = exclude from forecast. | Integer | 1 | Y |
| VENDOR_DEAL_AMOUNT | The value of the vendor deal for the offer. | Decimal | 38,8 | Y |
| USR_HIGH_RETAIL | Used to override the computed high retail price from the MH feed. | Decimal | 38,8 | Y |
| USR_LOW_RETAIL | Used to override the computed low retail price from the MH feed. | Decimal | 38,8 | Y |
| USR_AVG_RETAIL | Used to override the computed average retail price from the MH feed or forecast. | Decimal | 38,8 | Y |
| USR_AVG_AD | used to override the computed Avg Ad Price for the offer. | Decimal | 38,8 | Y |
| USR_AVG_COST | Used to override the computed average cost from the MH feed or forecast. | Decimal | 38,8 | Y |
| USR_AVG_UNITS | Used to override the computed average units from the forecast. | Decimal | 38,4 | Y |
| TEXT1 | Optional user-configurable text field. | String | 50 | Y |

***Table 2–40 (Cont.) Promotion Offer Standard Interface Specification [1]***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| ENUM1 | Optional user-configurable enum field. Value is integer. Maps to the number configured in promoteResources.properties. | Integer | 2 | Y |
| DATE1 | Optional user-configurable date field. | Date in format YYYY-MM-DD | 10 | Y |
| INTEGER1 | Optional user-configurable integer field. | Integer | 10 | Y |
| DECIMAL1 | Optional user-configurable decimal field. | Decimal | 38,6 | |
| BOOLEAN1 | Optional user-configurable boolean field. | Integer | 1 | Y |
| TEXT2 | Optional user-configurable text field. | String | 50 | Y |
| ENUM2 | Optional user-configurable enum field. Value is integer. Maps to the number configured in promoteResources.properties. | Integer | 2 | Y |
| DATE2 | Optional user-configurable date field. | Date in format YYYY-MM-DD | 10 | Y |
| INTEGER2 | Optional user-configurable integer field. | Integer | 10 | Y |
| DECIMAL2 | Optional user-configurable decimal field. | Decimal | 38,6 | Y |
| BOOLEAN2 | Optional user-configurable boolean field. | Integer | 1 | Y |
| TEXT3 | Optional user-configurable text field. | String | 50 | Y |
| ENUM3 | Optional user-configurable enum field. Value is integer. Maps to the number configured in promoteResources.properties. | Integer | 2 | Y |

*Table 2–40 (Cont.) Promotion Offer Standard Interface Specification [1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| DATE3 | Optional user-configurable date field. | Date in format YYYY-MM-DD | 10 | Y |
| INTEGER3 | Optional user-configurable integer field. | Integer | 10 | Y |
| DECIMAL3 | Optional user-configurable decimal field. | Decimal | 38,6 | Y |
| BOOLEAN3 | Optional user-configurable boolean field. | Integer | 1 | Y |
| TEXT4 | Optional user-configurable text field. | String | 50 | Y |
| ENUM4 | Optional user-configurable enum field. Value is integer. Maps to the number configured in promoteResources. properties. | Integer | 2 | Y |
| DATE4 | Optional user-configurable date field. | Date in format YYYY-MM-DD | 10 | Y |
| INTEGER4 | Optional user-configurable integer field. | Integer | 10 | Y |
| DECIMAL4 | Optional user-configurable decimal field. | Decimal | 38,6 | Y |
| BOOLEAN4 | Optional user-configurable boolean field. | Integer | 1 | Y |
| TEXT5 | Optional user-configurable text field. | String | 50 | Y |
| ENUM5 | Optional user-configurable enum field. Value is integer. Maps to the number configured in promoteResources. properties. | Integer | 2 | Y |
| DATE5 | Optional user-configurable date field. | Date in format YYYY-MM-DD | 10 | Y |
| INTEGER5 | Optional user-configurable integer field. | Integer | 10 | Y |

***Table 2–40 (Cont.) Promotion Offer Standard Interface Specification [1]***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| DECIMAL5 | Optional user-configurable decimal field. | Decimal | 38,6 | Y |
| BOOLEAN5 | Optional user-configurable boolean field. | Integer | 1 | Y |
| TEXT6 | Optional user-configurable text field. | String | 50 | Y |
| ENUM6 | Optional user-configurable enum field. Value is integer. Maps to the number configured in promoteResources. properties. | Integer | 2 | Y |
| DATE6 | Optional user-configurable date field. | Date in format YYYY-MM-DD | 10 | Y |
| INTEGER6 | Optional user-configurable integer field. | Integer | 10 | Y |
| DECIMAL6 | Optional user-configurable decimal field. | Decimal | 38,6 | Y |
| BOOLEAN6 | Optional user-configurable boolean field. | Integer | 1 | Y |
| TEXT7 | Optional user-configurable text field. | String | 50 | Y |
| ENUM7 | Optional user-configurable enum field. Value is integer. Maps to the number configured in promoteResources. properties. | Integer | 2 | Y |
| DATE7 | Optional user-configurable date field. | Date in format YYYY-MM-DD | 10 | Y |
| INTEGER7 | Optional user-configurable integer field. | Integer | 10 | Y |
| DECIMAL7 | Optional user-configurable decimal field. | Decimal | 38,6 | Y |
| BOOLEAN7 | Optional user-configurable boolean field. | Integer | 1 | Y |

*Table 2–40 (Cont.) Promotion Offer Standard Interface Specification [1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| TEXT8 | Optional user-configurable text field. | String | 50 | Y |
| ENUM8 | Optional user-configurable enum field. Value is integer. Maps to the number configured in promoteResources. properties. | Integer | 2 | Y |
| DATE8 | Optional user-configurable date field. | Date in format YYYY-MM-DD | 10 | Y |
| INTEGER8 | Optional user-configurable integer field. | Integer | 10 | Y |
| DECIMAL8 | Optional user-configurable decimal field. | Decimal | 38,6 | Y |
| BOOLEAN8 | Optional user-configurable boolean field. | Integer | 1 | Y |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## Promotion Offer Attribute Specification (BEE_PROMO_OFFER_ATTR)

*Table 2–41 Promotion Offer Attribute Standard Interface Specification [1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| PROMO_EXTERNAL_NAME | The ID for the promotion that is meaningful to the client. | String | 120 | N |
| PROMO_OFFER_EXTERNAL_NAME | The ID for the promotion offer that is meaningful to the client. | String | 120 | N |
| VEH_ATTR_EXTERNAL_NAME | The vehicle attribute name that is meaningful to the client. | String | 120 | N |

*Table 2–41 (Cont.) Promotion Offer Attribute Standard Interface Specification [1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| UDV_EXTERNAL_NAME | The actual user-defined type value. Either UDV_EXTERNAL_ NAME, VALUE_INT, or VALUE_DEC must be supplied. | String | 120 | Y |
| VALUE_INT | The integer value of the offer. Either UDV_ EXTERNAL_NAME, VALUE_INT, or VALUE_DEC must be supplied. | Integer | 8 | Y |
| VALUE_DEC | The currency value for the actual offer. Either UDV_EXTERNAL_ NAME, VALUE_INT, or VALUE_DEC must be supplied. | Decimal | 15,4 | Y |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## Promotion Offer Criteria Specification (BEE_PROMO_OFFER_CRITERIA)

*Table 2–42 Promotion Offer Criteria Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| INACTIVE | Activity flag. 0 = active (default). 1 = deleted. | Integer | 1 | Y |
| EXTERNAL_NAME | ID of SKU list. | String | 120 | N |
| PROMO_EXTERNAL_NAME | ID of promotion for this criterion. | String | 120 | N |
| PROMO_OFFER_EXTERNAL_ NAME | ID fro promotion offer for this criterion. | String | 120 | N |
| CRITERION_TYPE | Offer criterion type. 0 = sku list. 1 = merchandise category. 2 = SKU. | Integer | 4 | N |
| SKU_LIST_EXTERNAL_NAME | If CRITERION_TYPE = 0, a meaningful ID. Either SKU_LIST_ EXTERNAL_NAME or MERCH_CLIENT_ LOAD_ID and LEVEL_ DESC must be supplied. | String | 120 | Y |

*Table 2–42 (Cont.) Promotion Offer Criteria Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| MERCH_CLIENT_LOAD_ID | If CRITERION_TYPE = 1, a meaningful ID. Either SKU_LIST_ EXTERNAL_NAME or MERCH_CLIENT_ LOAD_ID and LEVEL_ DESC must be supplied. | String | 50 | Y |
| LEVEL_DESC | Level of the category. Either SKU_LIST_ EXTERNAL_NAME or MERCH_CLIENT_ LOAD_ID and LEVEL_ DESC must be supplied. | String | 50 | Y |
| ATTRIBUTE_NAME | Restricts the criterion type. Values are RETAIL or VENDORNAME. | String | 30 | Y |
| ATTRIBUTE_VALUE | Restricts the category (for CRITERION_TYPE 1) by this attribute value. | String | 50 | Y |
| ATTRIBUTE_NAME2 | Restricts the criterion type. Values are RETAIL or VENDORNAME. | String | 30 | Y |
| ATTRIBUTE_VALUE2 | Restricts the category (for CRITERION_TYPE 1) by this attribute value. | String | 50 | Y |
| LOGICAL_OPERATOR | 0 = or. 1 = and. Indicates how the two attribute values are combined. | Integer | 4 | Y |
| INCLUDE | 1 = include specified SKU. 0 = exclude specified SKU (default). | Integer | 1 | Y |
| LIST_TYPE | Buy List = 0; Get List = 1. Default is 0. | Integer | 1 | Y |

## Promotion Offer Merchandise Specification (BEE_PROMO_OFFER_MERCH)

***Table 2–43 Promotion Offer Merchandise Standard Interface Specification [1]***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| PROMO_EXTERNAL_NAME | The ID for the promotion that is meaningful to the client. | String | 120 | N |
| PROMO_OFFER_EXTERNAL_NAME | The ID for the promotion offer that is meaningful to the client. | String | 120 | N |
| MERCH_CLIENT_LOAD_ID | The client-specific category ID. | String | 50 | N |
| LEVEL_DESC | The client-specific merchandise hierarchy level description. | String | 50 | N |
| FULL_PRICE | The price of the item. | Decimal | 15,4 | Y |
| PROMO_PRICE | The promotion price of the item. | Decimal | 15,4 | Y |
| COST | The actual cost of the item. | Decimal | 15,4 | Y |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## Promotion Offer Version Specification (BEE_PROMO_OFFER_VER)

***Table 2–44 Promotion Offer Version Standard Interface Specification [1]***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| INACTIVE | Activity flag. 0 = active (default). 1 = inactive. | Integer | 1 | Y |
| EXTERNAL_NAME | ID of promotion offer version. | String | 120 | N |
| PROMO_EXTERNAL_NAME | ID of promotion. | String | 120 | N |
| PROMO_OFFER_EXTERNAL_NAME | ID for promotion offer. | String | 120 | N |
| STORE_SET_NAME | Name of store set. Must have STORE_SET_NAME and STORE_SUBSET_NAME or LOC_CLIENT_LOAD_ID and LEVEL_DESC. | String | 50 | Y |
| STORE_SUBSET_NAME | Name of store subset. Must have STORE_SET_NAME and STORE_SUBSET_NAME or LOC_CLIENT_LOAD_ID and LEVEL_DESC. | String | 50 | Y |

*Table 2–44 (Cont.) Promotion Offer Version Standard Interface Specification [1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| LOC_CLIENT_LOAD_ID | The client-specific store hierarchy level description. Must have STORE_SET_NAME and STORE_SUBSET_ NAME or LOC_ CLIENT_LOAD_ID and LEVEL_DESC. | String | 50 | Y |
| LEVEL_DESC | The client-specific hierarchy client ID. Must have STORE_ SET_NAME and STORE_SUBSET_ NAME or LOC_ CLIENT_LOAD_ID and LEVEL_DESC. | String | 50 | Y |
| ENABLED | 0 = not enabled. 1 = enabled (default). | Integer | 1 | Y |
| OFFER_EXTERNAL_NAME | The ID for the offer that is meaningful to the client. | String | 120 | Y |
| UDV_EXTERNAL_NAME | The actual user-defined type value. Only one of UDV_EXTERNAL_ NAME, VALUE_INT, or VALUE_DEC is required. | String | 120 | Y |
| VALUE_INT | The integer value of the offer. Only one of UDV_EXTERNAL_ NAME, VALUE_INT, or VALUE_DEC is required. | Integer | 8 | Y |
| VALUE_DEC | The currency value for the actual offer. Only one of UDV_ EXTERNAL_NAME, VALUE_INT, or VALUE_DEC is required. | Decimal | 15,4 | Y |
| VENDOR_DEAL_AMOUNT | The value of the vendor deal for the offer. | Decimal | 38,8 | Y |
| USR_HIGH_RETAIL | Used to override the computed high retail price from the Price Zone feed. | Decimal | 38,8 | Y |
| USR_LOW_RETAIL | Used to override the computed low retail price from the Price Zone feed. | Decimal | 38,8 | Y |

*Table 2–44 (Cont.) Promotion Offer Version Standard Interface Specification [1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| USR_AVG_RETAIL | Used to override the computed average retail price from the Price Zone feed or forecast. | Decimal | 38,8 | Y |
| USR_AVG_AD | Used to override the computed Avg Ad Price for the offer version. | Decimal | 38,8 | Y |
| USR_AVG_COST | Used to override the computed average cost from the Price Zone feed or forecast. | Decimal | 38,8 | Y |
| USR_AVG_UNITS | Used to override the computed average units from the forecast. | Decimal | 38,4 | Y |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## Promotion Store Specification (BEE_PROMO_STORE)

*Table 2–45 Promotion Store Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| PROMO_EXTERNAL_NAME | The ID for the promotion that is meaningful to the client. | String | 120 | N |
| LOC_CLIENT_LOAD_ID | The client-specific store hierarchy level description. | String | 50 | N |
| LEVEL_DESC | The client-specific hierarchy level description. | String | 50 | N |

## Promotion Version Specification (BEE_PROMO_VER)

*Table 2–46 Promotion Version Standard Interface Specification [1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| INACTIVE | Activity flag. 0 = active (default). 1 = inactive. | Integer | 1 | Y |
| EXTERNAL_NAME | ID of promotion version. | String | 120 | N |
| PROMO_EXTERNAL_NAME | ID of promotion. | String | | N |

*Table 2–46 (Cont.) Promotion Version Standard Interface Specification [1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| STORE_SET_NAME | Name of store set. Must have STORE_SET_ NAME and STORE_ SUBSET_NAME or LOC_CLIENT_LOAD_ ID and LEVEL_DESC. | String | 50 | Y |
| STORE_SUBSET_NAME | Name of store subset. Must have STORE_ SET_NAME and STORE_SUBSET_ NAME or LOC_ CLIENT_LOAD_ID and LEVEL_DESC. | String | 50 | Y |
| LOC_CLIENT_LOAD_ID | The client-specific store hierarchy ID. Must have STORE_ SET_NAME and STORE_SUBSET_ NAME or LOC_ CLIENT_LOAD_ID and LEVEL_DESC. | String | 50 | Y |
| LEVEL_DESC | The client-specific hierarchy level description. Must have STORE_SET_NAME and STORE_SUBSET_ NAME or LOC_ CLIENT_LOAD_ID and LEVEL_DESC. | String | | Y |
| ENABLED | 0 = not enabled. 1 = enabled (default). | Integer | 1 | Y |
| USR_LOCATION_COUNT | Used to override the computed location count used in forecasting. | Decimal | 38,4 | Y |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## Promotions Specification (BEE_PROMOTION)

*Table 2–47 Promotions Standard Interface Specification [1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| TYPE | Promotion type. 4 = historical promotion. 5 = pre-planned promotion. | Integer | 4 | N |
| INACTIVE | The status of the promotion. 0 = active; 1 = inactive; default = 0. | Integer | 1 | Y |
| NAME | A display name for the promotion. | String | 40 | N |

*Table 2–47 (Cont.) Promotions Standard Interface Specification [1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| EXTERNAL_NAME | The ID for the promotion that is meaningful to the client. Unique across the promotion. | String | 120 | N |
| DESCRIPTION | An optional description of the promotion. | String | 1000 | Y |
| BEGIN_DATE | Start date of the promotion. | Date in format YYYY-MM-DD | 10 | N |
| END_DATE | End date of the promotion. | Date in format YYYY-MM-DD | 10 | N |
| TOTAL_COST | The total cost allocated to the promotion. | Decimal | 15,4 | Y |
| VEHICLE_EXTERNAL_NAME | The vehicle used when promoting items. | String | 120 | N |
| PAGES | The number of pages for the vehicle. | Integer | 8 | Y |
| EVENT_EXTERNAL_NAME | The name of the event used for the promotion. | String | 120 | Y |
| CAMPAIGN_EXTERNAL_NAME | The name of the campaign used for the promotion. | String | 120 | Y |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## Seasonal Trend (BEE_PBL_TREND)

*Table 2–48 Seasonal Trend Standard Interface Specification[1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| BEGIN_DALENDAR_DT | The beginning date for the data being analyzed. | Date in format YYYY-MM-DD | 10 | N |
| END_CALENDAR_DT | The end date for the data being analyzed. | Date in format YYYY-MM-DD | 10 | N |
| LOC_CLIENT_LOAD_ID | The external ID for the location. | String | 50 | N |
| LOC_LEVEL_DESC | The client-specific location level description. | String | 120 | N |
| USR_TREND | The value applied to the seasonal forecast. | Decimal | 38,20 | N |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## Seasonalities Specification (ASH_SEASONALITY_MAPS_TBL and ASH_SEASONALITY_VALUES_TBL)

The seasonalities interface populates two tables in the application.

***Table 2–49 Seasonalities (Maps) Standard Interface Specification***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| PRIORITY | The search priority for the seasonality. | Integer | | N |
| SEASONALITY_ID | The ID for the seasonality. | Integer | | N |
| MERCHANDISE_LEVEL | Description of this level of the merchandise hierarchy. | String | 50 | N |
| MERCHANDISE_KEY | Key for this level of the merchandise hierarchy. | String | 25 | N |
| LOCATION_LEVEL | Description of this level of the location hierarchy. | String | 50 | N |
| LOCATION_KEY | Key for this level of the location hierarchy. | String | 25 | N |
| ATTRIBUTE_VALUE_MASK | The search mask that specifies the season code and, optionally, the item attributes of the seasonality curves. | String | 50 | Y |
| AS_VERSION_NUMBER | The version number for the current run. Set by APC and used to track run versions. | String | 20 | Y |

***Table 2–50 Seasonalities (Values) Standard Interface Specification[1]***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| SEASONALITY_ID | The ID for the seasonality. | Integer | | N |
| CALENDAR_DT | The date for the seasonality | Date in format YYYY-MM-DD | 10 | N |
| SEAS_INDX | The value of the seasonality for the date. | Decimal | 11,4 | Y |
| SEAS_ERR | For future use. Set to 0. | Decimal | 11,4 | Y |
| AS_PARAMETER_ID | A number that uniquely identifies the current record and that is used for tracking. | Integer | | Y |
| AS_VERSION_NUMBER | The version number for the current run. Set by APC and used to track run versions. | String | 20 | Y |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## SKU List Specification (BEE_SKU_LIST)

***Table 2–51 SKU List Standard Interface Specification***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| INACTIVE | The activity flag. 0 = active. 1 = deleted. Default = 0. | Integer | 1 | Y |
| NAME | The SKU list display name. | String | 40 | N |
| EXTERNAL_NAME | Meaningful ID for SKU list. | String | 120 | N |
| DESCRIPTION | Optional SKU list description. | String | 1000 | Y |
| CHANGED | | Integer | 1 | |

## SKU List Items Specification (BEE_SKU_LIST_ITEMS)

***Table 2–52 SKU List Items Standard Interface Specification***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| SKU_LIST_EXTERNAL_NAME | The parent SKU list ID. | String | 120 | N |
| MERCH_CLIENT_LOAD_ID | The customer's Like Merchandise ID. | String | 50 | N |

## Store Set Price Specification (BEE_STORE_SET_PRICE_TBL)

***Table 2–53 Store Set Price Standard Interface Specification[1]***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| MERCH_CLIENT_LOAD_ID | Client ID. | String | 50 | N |
| MERCH_LEVEL_DESC | Description of merchandise level. | String | 50 | N |
| STORE_SET_NAME | Name of store set. | String | 50 | N |
| STORE_SUBSET_NAME | Name of store subset. | String | 50 | N |
| PRICE | Price for version of promotion. | Decimal | 15,4 | N |
| COST | Associated cost. | Decimal | 15,4 | N |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## Store Sets Specification (BEE_STORE_SETS)

***Table 2–54 Store Sets Standard Interface Specification***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| NEW_STORE_SET_NAME | New name for store set. Replaces old name. | String | 50 | N |
| OLD_STORE_SET_NAME | The existing name of the store set. Optional. | String | 50 | Y |
| STORE_SET_DESC | The description of the store set. | String | 50 | N |
| INACTIVE | Flag indicating activity status. 0 = inactive. 1 = active. | Integer | 1 | N |
| STORE_SET_TYPE | 0 | Integer | 32 | N |
| FIRST_EFF_DT | The date when the store set becomes active. | Date in format YYYY-MM-DD | 10 | N |
| LAST_MODIFIED_DATE | The date when the record is modified for the last time. | Date in format YYYY-MM-DD | 10 | Y |
| REMAIN_SUBSET_NAME | The name for the remaining subset for the associated store set. | String | 50 | Y |

## Store Subsets Specification (BEE_STORE_SUBSETS)

***Table 2–55 Store Subsets Standard Interface Specification***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| NEW_STORE_SUBSET_NAME | New name for the store subset. Replaces old name. | String | 50 | N |
| OLD_STORE_SUBSET_NAME | The existing name of the store subset. | String | 50 | Y |
| STORE_SUBSET_DESC | The description of the store subset. | String | 50 | N |
| STORE_SET_NAME | The name of the store set related to this store subset. | String | 50 | N |
| INACTIVE | Flag indicating activity status. 0 = inactive. 1 = active. | Integer | 1 | N |
| ORDER_SEQ | The position of the subset. | Integer | 32 | N |

## Store Subset Assignment Specification (BEE_STORE_SUBSET_ASSIGNMENT)

*Table 2–56 Store Subset Assignment Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| LOC_CLIENT_LOAD_ID | The external ID for the location. | String | 50 | N |
| LEVEL_DESC | The external ID for the location level. | String | 50 | N |
| STORE_SUBSET_NAME | The name of the store subset for the location. | String | 50 | N |
| STORE_SET_NAME | The name of the store set for the location. | String | 50 | N |

## TAE Temp Metric Specification (BEE_TAE_TEMP_METRIC)

*Table 2–57 TAE Temp Metric Standard Interface Specification[1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| RUN_ID | Execution ID. | Integer | 32 | Y |
| PROMO_ID | Internal promotion ID. | Integer | 32 | Y |
| AD_DATE | Promotion date. | Date in format YYYY-MM-DD | 10 | Y |
| PI_ID | Merchandise ID. | Integer | 32 | Y |
| LOCATION_ID | Location ID. | Integer | 32 | Y |
| AD_ITEM_PRICE | Metric. | Decimal | 15,4 | Y |
| AD_ITEM_ROSALE | Metric. | Integer | 20 | Y |
| AD_ITEM_VISIT_RATE | Metric. | Integer | 9 | Y |
| AD_ITEM_SALES | Metric. | Decimal | 15,4 | Y |
| AD_ITEM_GM | Metric. | Decimal | 15,4 | Y |
| TTL_AD_DAYS | Metric. | Integer | 9 | Y |
| AD_ITEM_AC_SALES | Metric. | Decimal | 15,4 | Y |
| AD_ITEM_AC_GM | Metric. | Decimal | 15,4 | Y |
| AD_ITEM_PR_SALES | Metric. | Decimal | 15.4 | Y |
| AD_ITEM_PR_GM | Metric. | Decimal | 15,4 | Y |
| AD_NONAD_SALES | Metric. | Decimal | 15,4 | Y |
| AD_NONAD_GM | Metric. | Decimal | 15,4 | Y |
| BL_SUBST_CODE | Metric. | Integer | 9 | Y |
| BL_SUBST_ITEM | Metric. | Integer | 32 | Y |
| TTL_BASE_PERIODS | Metric. | Integer | 9 | Y |
| BL_ITEM_ROSALE | Metric. | Decimal | 15,4 | Y |
| BL_ITEM_SALES | Metric. | Decimal | 15,4 | Y |
| BL_ITEM_VISIT_RATE | Metric. | Decimal | 15,4 | Y |

*Table 2–57 (Cont.) TAE Temp Metric Standard Interface Specification[1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| BL_ITEM_GM | Metric. | Decimal | 15,4 | Y |
| BL_ITEM_PRICE | Metric. | Decimal | 15,4 | Y |
| BL_ITEM_AC_SALES | Metric. | Decimal | 15,4 | Y |
| BL_ITEM_AC_GM | Metric. | Decimal | 15,4 | Y |
| BL_ITEM_PR_SALES | Metric. | Decimal | 15,4 | Y |
| BL_ITEM_PR_GM | Metric. | Decimal | 15,4 | Y |
| BL_NONAD_SALES | Metric. | Decimal | 15,4 | Y |
| BL_NONAD_GM | Metric. | Decimal | 15,4 | Y |
| AD_MB_ITEM_ONLY | Metric. | Integer | 20 | Y |
| AD_MB_ITEM_AD | Metric. | Integer | 20 | Y |
| AD_MB_ITEM_NONAD | Metric. | Integer | 20 | Y |
| AD_MB_ITEM_ADNONAD | Metric. | Integer | 20 | Y |
| AD_ITEM_OTHAD_ROS | Metric. | Integer | 20 | Y |
| STORE_BASE | Metric. | Decimal | 15,4 | Y |
| AD_ITEM_NORMAL_PRICE | Metric. | Decimal | 15,4 | Y |
| AD_ITEM_AC_UNITS | Metric. | Decimal | 15,4 | Y |
| _ITEM_PR_UNITS | Metric. | Decimal | 15,4 | Y |
| AD_NONAD_UNITS | Metric. | Decimal | 15,4 | Y |
| BL_ITEM_AC_UNITS | Metric. | Decimal | 15,4 | Y |
| BL_ITEM_PR_UNITS | Metric. | Decimal | 15,4 | Y |
| BL_NONAD_UNITS | Metric. | Decimal | 15,4 | Y |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## Transaction Log Specification (BEE_MB_DETAIL)

*Table 2–58 Transaction Log Standard Interface Specification [1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| TXN_ID | Unique identifier for transaction. | String | 50 | N |
| TXN_DATE | Transaction date. | Date in format YYYY-MM-DD | 10 | N |
| LOC_CLIENT_LOAD_ID | ID for location where transaction occurred. | String | 50 | N |
| MERCH_CLIENT_LOAD_ID | ID of sold product. | String | 50 | N |
| UNIT_COST | Per-unit cost of sold product. | Decimal | 15,4 | Y |

*Table 2–58 (Cont.) Transaction Log Standard Interface Specification [1]*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| UNIT_NORMAL_PRICE | Per-unit non-promotional price of sold product. | Decimal | 15,4 | Y |
| UNITS_SOLD | The number of a given item that were purchased in the market basket. | Integer | 9 | Y |
| EXT_RETAIL_AMT | At-register price of product sold. | Decimal | 15,4 | Y |
| EXT_MARGIN_AMT | The amount that the price has been reduced if the item is on promotion for this type of item in the market basket. | Decimal | 15,4 | Y |
| AD_IND | Discount flag. 0 = none. 1 = on Ad (item was promoted). 2 = clearance. | Integer | 9 | Y |
| PROMO_TXN_CODE | Optional field. Offer code, coupon code, or other extended information. | String | 100 | Y |

[1] For Decimal, the requirement is a number of a certain defined length and with a certain number of decimal places. For example, (22,2) is a number that can be up to 22 digits long and that can have two digits after the decimal point.

## User Defined Type Specification (BEE_USER_DEFINED_TYPE)

*Table 2–59 User Defined Type Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| TYPE_NAME | A display name for the type. | String | 40 | N |
| INACTIVE | Activity flag. 0 = active. 1 = inactive. | Integer | 1 | N |
| EXTERNAL_NAME | The ID for the type that is meaningful to the client. Unique across all types. | String | 120 | N |
| DESCRIPTION | An optional description of the offer. | String | 1000 | Y |

## User Defined Value Specification (BEE_USER_DEFINED_VALUE)

*Table 2–60 User Defined Value Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| VALUE_NAME | A display name for the user-defined value. | String | 40 | N |
| INACTIVE | Activity flag. 0 = active. 1 = inactive. | Integer | 1 | N |
| EXTERNAL_NAME | The ID for the type that is meaningful to the client. Unique across all types. | String | 120 | N |
| TYPE_EXTERNAL_NAME | A string name of the user-defined type. | String | 120 | N |
| DESCRIPTION | Optional description of user-defined type. | String | 1000 | Y |
| ORDER_ID | Position of the element in an ordered list. | Integer | 8 | Y |
| EXTERNAL_CODE | The element's ID in the external system. | Integer | 8 | Y |

## Vehicle Specification (BEE_VEHICLE)

*Table 2–61 Vehicle Standard Interface Specification*

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| VEHICLE_NAME | A display name for the vehicle. | String | 40 | N |
| INACTIVE | Activity flag. 0 = active. 1 = inactive. | Integer | 1 | N |
| EXTERNAL_NAME | The ID for the vehicle that is meaningful to the client. Unique across all vehicles. | String | 120 | N |
| DESCRIPTION | An optional description of the vehicle. | String | 1000 | Y |
| BUSINESS_RULE_CLASS_NAME | Instance of what class to use in validation. | String | 250 | Y |
| MODEL_CODE | Bit identifier for vehicle. Must be power of 2 (e.g., 0, 1, 2, 4, 8...). | Integer | 10 | N |

## Vehicle Attributes Specification (BEE_VEHICLE_ATTR)

***Table 2–62 Vehicle Attributes Standard Interface Specification***

| Attribute Name | Attribute Description | Data Type | Maximum Length | Nullable Y/N |
|---|---|---|---|---|
| VEHICLE_ATTR_NAME | A display name for the vehicle attribute. | String | 40 | N |
| INACTIVE | Activity flag. 0 = active. 1 = inactive. | Integer | 1 | N |
| EXTERNAL_NAME | The ID for the vehicle attribute that is meaningful to the client. Unique across all vehicle attributes. | String | 120 | N |
| DESCRIPTION | An optional description of the vehicle attribute. | String | 1000 | Y |
| ATTRIBUTE_LEVEL | The level at which to show the attribute. 0 = vehicle. 1 = item. | Integer | 1 | Y |
| VEHICLE_EXTERNAL_NAME | ID for the parent vehicle that is meaningful to the client. Unique across all vehicles. | String | 120 | N |
| TYPE_EXTERNAL_NAME | Name of user-defined type. | String | 120 | N |
| MODEL | Flag indicating if attribute should be sent to analysis engine. 0 = do not send; 1 = send. | Integer | 1 | N |
| VISIBLE | Visibility flag. 0 = invisible; 1 = visible. | Integer | 1 | Y |
| ORDER_ID | Not used. | Integer | 8 | Y |
| FORMAT | Output format for vehicle attribute (e.g., to put Page label before a number). | String | 40 | N |
| TYPE_ENUM | The type of vehicle attribute:<br>0 = integer<br>1 = user defined<br>2 = decimal<br>3 = text<br>4 = boolean<br>5 = date<br>6 = none | Integer | 10 | N |