SAS® Inventory Optimization Workbench 5.3: Data Reference Guide, Second Edition

SAS® Inventory Optimization Workbench 5.3: Data Reference Guide, Second Edition

Contents

Using This Book

Audience

SAS Inventory Optimization Workbench is designed for the following users:

- Administrators responsible for setting up and maintaining the application environment.

- Administrators responsible for data management.

- Business users (including inventory analysts and buyers) responsible for analyzing the performance of the inventory, and for reviewing and promoting replenishment orders that are suggested by SAS Inventory Optimization Workbench.

This document focuses on explaining the data models of SAS Inventory Optimization Workbench and the detailed description of tables that are present in the Staging area. As a data administrator of SAS Inventory Optimization Workbench, the information mentioned in this document helps you load the data into the required format and set up the data mart for SAS Inventory Optimization Workbench.

Accessibility

Accessibility

For more information about the accessibility of SAS Inventory Optimization Workbench, see the *SAS Inventory Optimization Workbench: User's Guide*.

For more information about the accessibility of any of the other products mentioned in this book, see the documentation for that product.

1

Introduction

About the Data Reference Guide

This document is a companion to the *SAS Inventory Optimization Workbench: Administrator's Guide*. This document contains data model diagram and information about the Stage area tables.

The administrator's guide provides instructions for loading data into SAS Inventory Optimization Workbench. The data model diagram and data dictionary contain supplementary information that you might find helpful as you follow the instructions in the administrator's guide.

2

Data Model Diagram

Data Model Diagram

A data model diagram determines the structure of a database and the manner in which the data is stored, organized, and manipulated.

The following data model diagram provides a visual representation of the SAS Inventory Optimization Workbench data tables and how they are related.

To see the details of this image, view this document online and use the functions of your PDF reader to rotate and zoom in on the image.

SAS Inventory Optimization Workbench 5.3

Dimensions	Facts	Product Related	MIRP Related	Attributes	Cross Dimensional	Promotional
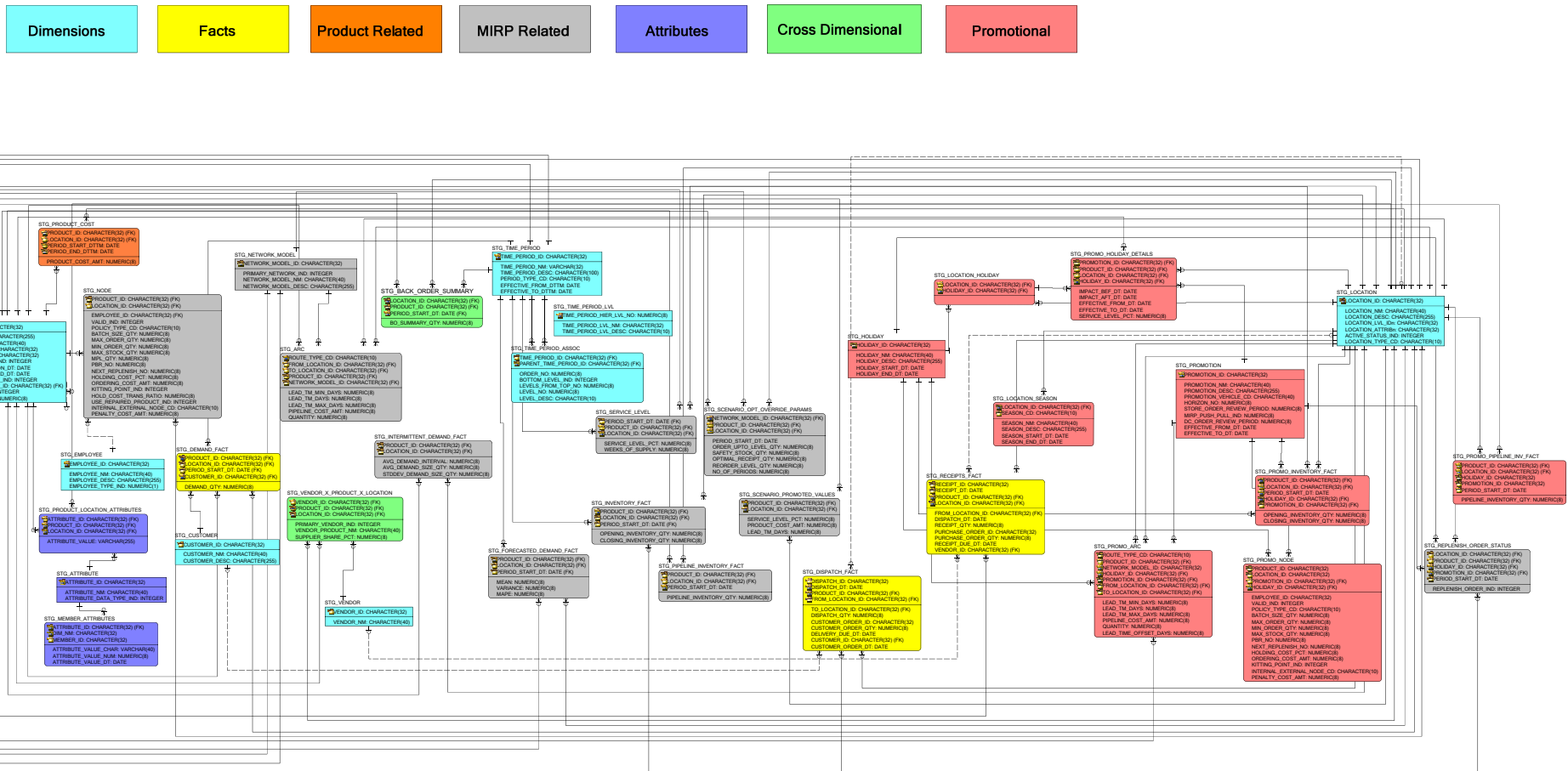
3

Data Dictionary

STG_ARC

This table contains network information of the product. The table stores the following information for each product:

- predecessor and successor of each facility

- lead time of the product across facilities

- network path of each product

Table 3.1   Details of the STG_ARC Table

Table type	Inventory optimization process-related
Data loading strategy	Refresh: Insert else update
Load type	New records are inserted. Old records are updated based on the primary keys.
Primary key	ROUTE_TYPE_CD
	PRODUCT_ID
	NETWORK_MODEL_ID
	FROM_LOCATION_ID
	TO_LOCATION_ID
Is the table optional?	No

The following table explains columns of the STG_ARC table.

Table 3.2 *Description of the STG_ARC Table*

Column Name	Description	Type (Length)	Null Option
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null
NETWORK_MODEL_ID	Unique business key for the network model.	Character (32)	Not null
FROM_LOCATION_ID	Unique business key of the predecessor facility.	Character (32)	Not null
TO_LOCATION_ID	Unique business key for the successor facility.	Character (32)	Not null
ROUTE_TYPE_CD	Type of route that is used for transporting a product from the predecessor to the successor facility (for example, `Road`, `Air`, and `Rail`).	Character (10)	Not null
PIPELINE_COST_AMT	Transportation cost of a product (per unit per base period) in transit from the predecessor facility to the successor facility.	Numeric (8)	Null
LEAD_TM_MIN_DAYS	The minimum lead time in days.	Numeric (8)	Null
LEAD_TM_DAYS	Lead time in days.	Numeric (8)	Not null
LEAD_TM_MAX_DAYS	The maximum lead time in days.	Numeric (8)	Null
QUANTITY	Identifies the variable that contains the bill of material (BOM) quantity between the predecessor and the successor of each arc. This quantity is the number of units of the predecessor required to produce one unit of the successor.	Numeric (8)	Null

STG_ATTRIBUTE

This table contains information about attributes of the dimensions.

Table 3.3 *Details of the STG_ATTRIBUTE Table*

Table Type	Dimension
Data Loading Strategy	Refresh: Insert else update
Load Type	New records are inserted. The old records are updated based on the primary keys.
Primary Key	ATTRIBUTE_ID
Is the table optional?	Yes

The following table explains columns of the STG_ATTRIBUTE table.

Table 3.4 *Description of the STG_ATTRIBUTE Table*

Column Name	Description	Type (Length)	Null Option
ATTRIBUTE_ID	Unique business key for an attribute.	Character (32)	Not null
ATTRIBUTE_NM	Name of the attribute.	Character (40)	Not null
ATTRIBUTE_DATA_TYPE_IND	Data type of the attribute indicator. The value 0 indicates char, value 1 indicates integer, value 2 indicates double, and value 3 indicates date. If the value 3 is entered, the date must be provided in the DDMMMYYYY format.	Numeric	Not null

STG_BACK_ORDER_SUMMARY

This table contains summarized back orders at the facility and product level. For example, if the base period is week, then the back order summary table should contain information about orders that were present on the last day of that week.

Table 3.5 *Details of the STG_BACK_ORDER_SUMMARY Table*

Table type	Fact
Data loading strategy	Append
Load type	Base period. Load the data according to the base period.

Primary key	PERIOD_START_DT
	PRODUCT_ID
	LOCATION_ID
Is the table optional?	No

The following table explains the columns of the STG_BACK_ORDER_SUMMARY table.

Table 3.6   Description of the STG_BACK_ORDER_SUMMARY Table

Name	Description	Type (Length)	Null Option
PERIOD_START_DT	Date of the back order summary.	Numeric (8)	Not null
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null
BO_SUMMARY_QTY	Back order summary quantity.	Numeric (8)	Null

STG_BOM

This table contains the bill of material (BOM) information, that is, the details of the child products that are used to build a parent product. For example, if the parent product is motor bike, the child products can be engine, piston, and tires.

Table 3.7   Details of the STG_BOM Table

Table type	Dimension
Data loading strategy	Refresh: Insert else update
Load type	New records are inserted. Old records are updated based on keys.
Primary key	PARENT_PRODUCT_ID
	CHILD_PRODUCT_ID
Is the table optional?	Yes

The following table explains the columns of the STG_BOM table.

Table 3.8   Description of the STG_BOM Table

Name	Description	Type (Length)	Null Option
PARENT_PRODUCT_ID	Unique business key for parent product of bill of material (BOM).	Character (32)	Not null
CHILD_PRODUCT_ID	Quantity of child products that are attached to a BOM.	Character (32)	Not null
BOM_LEVEL_NO	A number that indicates the bill of material (BOM) level in the BOM parent-child hierarchy.	Numeric (8)	Null
PRODUCT_QTY	Quantity of parent products that are attached to a particular BOM. By default, the quantity that is stored is 1.	Numeric (10)	Not null
CHILD_PRODUCT_QTY	Quantity of child products that are attached to a BOM.	Numeric (10)	Not null

STG_CUSTOMER

This table contains information about individual customers or corporate customers.

Table 3.9   Details of the STG_CUSTOMER Table

Table type	Dimension
Data loading strategy	Refresh: Insert else update
Primary key	CUSTOMER_ID
Is the table optional?	No

The following table explains columns of the STG_CUSTOMER table.

Table 3.10   Description of the STG_CUSTOMER Table

Name	Description	Type (Length)	Null Option
CUSTOMER_ID	Unique business key for the customer.	Character (32)	Not null

Name	Description	Type (Length)	Null Option
CUSTOMER_NM	Name of the customer.	Character (40)	Not null
CUSTOMER_DESC	Long description for a customer.	Character (255)	Null

STG_DEMAND_FACT

This table contains summarized demand for a facility and product combination pair.

Table 3.11   Details of the STG_DEMAND_FACT Table

Table type	Fact
Data loading strategy	Append
Load type	Day. Load the day-level data even if the base period is a longer time period.
Primary key	PRODUCT_ID PERIOD_START_DT CUSTOMER_ID LOCATION_ID
Is the table optional?	No

The following table explains the columns of the STG_DEMAND_FACT table.

Table 3.12   Description of the STG_DEMAND_FACT Table

Name	Description	Type (Length)	Null Option
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null
PERIOD_START_DT	Date associated with the demand quantity.	Numeric (8)	Not null
CUSTOMER_ID	Unique business key for the customer. If the demand is generated from a facility, a zero is populated from stage to solution data layer (SDL) code.	Character (32)	Not null
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null

Name	Description	Type (Length)	Null Option
DEMAND_QTY	Quantity of demand.	Numeric (8)	Null

STG_DISPATCH_FACT

This table contains details of the products that are dispatched for a customer order.

Table 3.13   Details of the STG_DISPATCH_FACT Table

Table type	Fact
Data loading strategy	Append
Load type	Day. Load day-level data even if the base period is a longer time period.
Primary key	DISPATCH_DT DISPATCH_ID PRODUCT_ID FROM_LOCATION_ID
Is the table optional?	No

The following table explains columns of the STG_DISPATCH_FACT table.

Table 3.14   Description of the STG_DISPATCH_FACT Table

Name	Description	Type (Length)	Null Option
DISPATCH_DT	Date of dispatch.	Numeric (8)	Not null
DISPATCH_ID	Unique business key for the dispatch.	Character (32)	Not null
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null
FROM_LOCATION_ID	Unique business key of the predecessor facility.	Character (32)	Not null
DISPATCH_QTY	Dispatch quantity.	Numeric (8)	Null
CUSTOMER_ORDER_ID	Unique business key for the customer order memo.	Character (32)	Not null

Name	Description	Type (Length)	Null Option
CUSTOMER_ORDER_QTY	Quantity of order.	Numeric (8)	Null
DELIVERY_DUE_DT	Due date for the delivery.	Numeric (8)	Null
CUSTOMER_ID	Unique business key for the customer. If the demand is generated from facility, a zero is populated from the stage to the solution data layer (SDL).	Character (32)	Null
CUSTOMER_ORDER_DT	The date on which the customer placed the order.	Numeric (8)	Null
TO_LOCATION_ID	Unique business key for the successor facility.	Character (32)	Null

STG_EMPLOYEE

This table contains information about employees or about groups of employees, depending on your business requirements. If the GL_GROUP_DATA_ACCESS_IMPLEMENTATION parameter in SAS Management Console is set to `True`, this table must contain information about groups. For more information about the GL_GROUP_DATA_ACCESS_IMPLEMENTATION parameter, see the chapter about performing post-installation tasks in *SAS Inventory Optimization Workbench 5.3: Administrator's Guide*.

An employee is a person who controls materials requirement planning. The STG_EMPLOYEE table contains details about each employee or group of employees, along with whether the employee or group members are buyers or analysts. After this table is loaded, ensure that for each employee or group that is present in this table, a user or group is created and that the correct role is assigned to that user or group in SAS Management Console. For more information about creating users and groups in SAS Management Console, see *SAS 9.4 Management Console: Guide to Users and Permissions* at http://support.sas.com/documentation/cdl/en/mcsecug/64770/PDF/default/mcsecug.pdf.

Table 3.15   *Details of the STG_EMPLOYEE Table*

Table type	Dimension
Data loading strategy	Refresh: Insert else update
Load type	New records are inserted. The old records are updated based on the keys.

Primary key	EMPLOYEE_ID
Is the table optional?	No

The following table explains columns of the STG_EMPLOYEE table.

Table 3.16 *Description of the STG_EMPLOYEE Table*

Name	Description	Type (Length)	Null Option
EMPLOYEE_ID	Unique business key for an employee or for a group.	Character (32)	Not null
EMPLOYEE_NM	Name of the employee or the group. If this name is a group name, the name must match the group name that is used in SAS Management Console.	Character (40)	Not null
EMPLOYEE_DESC	Long description for the employee or for the group.	Character (255)	Null
EMPLOYEE_TYPE_IND	Indicates the type of the employee or type of the group. The value 0 indicates analyst while the value 1 indicates buyer.	Character (32)	Not null

STG_FORECASTED_DEMAND_FACT

This table contains aggregated forecasted demand for each facility and product combination pair. The time granularity of this table must be the same as that of inventory replenishment.

Table 3.17 *Details of the STG_FORECASTED_DEMAND_FACT Table*

Table type	Fact
Data loading strategy	Truncate and load
Load type	Base period. Load data as per the base period.

Primary key	PERIOD_START_DT
	PRODUCT_ID
	LOCATION_ID
Is the table optional?	No

The following table explains the columns of the STG_FORECASTED_DEMAND_FACT table.

Table 3.18 *Description of the STG_FORECASTED_DEMAND_FACT Table*

Name	Description	Type (Length)	Null Option
PERIOD_START_DT	Start date of the selected base period.	Numeric (8)	Not null
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null
MEAN	Mean of the demand for each product and facility combination pair.	Numeric (8)	Not null
VARIANCE	Variance of the demand for each product and facility combination pair.	Numeric (8)	Null
MAPE	Mean absolute percent error.	Numeric (8)	Null

STG_HOLIDAY

This table contains the list of holidays.

Table 3.19 *Details of the STG_HOLIDAY Table*

Table type	Dimension
Data loading strategy	Refresh: Insert else update
Load type	New records are inserted. The old records are updated based on the keys.
Primary key	HOLIDAY_ID
Is the table optional?	Yes

The following table explains columns of the STG_HOLIDAY table.

Table 3.20 Description of the STG_HOLIDAY Table

Name	Description	Type (Length)	Null Option
HOLIDAY_ID	Unique identification key for the holiday. Enter a value *0* as this column is not used in the current release.	Character (32)	Not null
HOLIDAY_END_DT	End date for the holiday period.	Numeric (8)	Not null
HOLIDAY_START_DT	Start date for the holiday period.	Numeric (8)	Not null
HOLIDAY_NM	Name of the holiday.	Character (40)	Not null
HOLIDAY_DESC	Long description for the holiday.	Character (255)	Null

STG_INTERMITTENT_DEMAND_FACT

This table contains details of the intermittent demand for each facility and product combination pair. The time granularity of this table must be the same as that of inventory replenishment.

Table 3.21 Details of the STG_INTERMITTENT_DEMAND_FACT Table

Table type	Fact
Data loading strategy	Truncate and load
Load type	Base period. Load data according to the base period.
Primary key	PRODUCT_ID LOCATION_ID
Is the table optional?	Yes

The following table explains the STG_INTERMITTENT_DEMAND_FACT table.

Table 3.22   *Description of the STG_INTERMITTENT_DEMAND_FACT Table*

Name	Description	Type (Length)	Null Option
PRODUCT_ID	Unique identification key for a product.	Character (32)	Not null
LOCATION_ID	Unique identification key for a facility.	Character (32)	Not null
AVG_DEMAND_INTERVAL	Average demand interval.	Numeric (8)	Not null
AVG_DEMAND_SIZE_QTY	Average demand size.	Numeric (8)	Not null
STDDEV_DEMAND_SIZE_QTY	Standard deviation for demand size.	Numeric (8)	Not null

STG_INVENTORY_FACT

This table contains information about the stock of finished and unfinished products for the base period.

Table 3.23   *Details of the STG_INVENTORY_FACT Table*

Table type	Fact
Data loading strategy	Append
Load type	Day. Load day-level data even if the base period is a longer time period.
Primary key	PERIOD_START_DT PRODUCT_ID LOCATION_ID
Is the table optional?	No

The following table explains the columns of the STG_INVENTORY_FACT table.

Table 3.24   *Description of the STG_INVENTORY_FACT Table*

Name	Description	Type (Length)	Null Option
PERIOD_START_DT	Date of the inventory.	Numeric (8)	Not null
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null

Name	Description	Type (Length)	Null Option
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null
OPENING_INVENTORY _QTY	Opening quantity of the inventory.	Numeric (8)	Null
CLOSING_INVENTORY _QTY	Closing inventory quantity.	Numeric (8)	Null

STG_LOCATION

This table contains information about a facility, distribution center, or warehouse.

Table 3.25 Details of the STG_LOCATION Table

Table type	Dimension
Data loading strategy	Refresh: Insert else update
Load type	New records are inserted. The old records are updated based on the keys.
Primary key	LOCATION_ID
Is the table optional?	No

The following table describes the columns of the STG_LOCATION table.

Table 3.26 Description of the STG_LOCATION Table

Name	Description	Type (Length)	Null Option
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null
LOCATION_NM	Name of the facility.	Character (40)	Not null
LOCATION_DESC	Long description for the facility.	Character (255)	Null

Name	Description	Type (Length)	Null Option
LOCATION_LVL_IDn	Unique business key for the hierarchy level. The number of hierarchy levels for the dimension can be customized. The columns are added according to the number present in the configuration table as DIMENSION_LVL_ID (1 to [n-1]).	Character (32)	Null
LOCATION_LVL_NMn	Name for the hierarchy level. Data administrator can customize the number of hierarchy levels for the dimension. The columns are added according to the number present in the configuration table as DIMENSION_LVL_NM (1 to [n-1]).	Char (40)	Null
LOCATION_ATTRIBn	Attribute of the dimension. Data administrator can customize the number of attributes for the dimension. The columns are added in accordance with the number present in the configuration table as DIMENSION_ATTRIB (1 to n).	Character (32)	Null
LOCATION_TYPE_CD	Code type for the facility. Enter the type code based on size of the store (for example, Large, Medium, or Small).	Character (10)	Null
ACTIVE_STATUS_IND	Facility active status indicator. The value 0 indicates inactive facility while the value 1 indicates that the facility is active.	Integer	Not null

STG_LOCATION_HOLIDAY

This table contains the list of location-specific holidays.

Table 3.27 Details of the STG_LOCATION_HOLIDAY Table

Table type	Fact
Data loading strategy	Refresh: Insert else update
Load type	This table should be loaded as per the actual at source data. You should load this table in advance.
Primary key	LOCATION_ID HOLIDAY_ID
Is the table optional?	Yes

The following table explains columns of the STG_LOCATION_HOLIDAY table.

Table 3.28 Description of the STG_LOCATION_HOLIDAY Table

Name	Description	Type (Length)	Null Option
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null
HOLIDAY_ID	Unique business key for the holiday. Enter a value *0* as this column is not used in the current release.	Character (32)	Not null

STG_LOCATION_SEASON

This table contains the list of location-specific seasons (for example, Winter 2013 at Las Vegas).

Table 3.29 Details of the STG_LOCATION_SEASON Table

Table type	Fact
Data loading strategy	Append: The history is maintained based on the global parameters configured.
Load type	Snapshot data. The table is loaded as per the actual at source data. Expected to load in advance.
Primary key	SEASON_CD LOCATION_ID

Is the table optional?   Yes

The following table explains columns of the STG_LOCATION_SEASON table.

Table 3.30   Description of the STG_LOCATION_SEASON Table

Name	Description	Type (Length)	Null Option
SEASON_CD	Season code (for example, SPRING2012, SUMMER2012, and so on).	Character (10)	Not null
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null
SEASON_END_DT	End date for the season.	Numeric (8)	Not null
SEASON_START_DT	Start date for the season.	Numeric (8)	Not null
SEASON_NM	Name of the season.	Character (40)	Not null
SEASON_DESC	Long description for the season code.	Character (255)	Null

STG_MEMBER_ATTRIBUTES

This table contains information about the attributes for all dimensions hierarchy members. This table is associated with the STG_ATTRIBUTES table.

Table 3.31   Details of the STG_MEMBER_ATTRIBUTES Table

Table type	Dimension
Data loading strategy	Refresh: Insert Else Update
Load type	New records are inserted. The old records are updated based on the keys.
Primary keys	ATTRIBUTE_ID DIM_NM MEMBER_ID
Is the table optional?	Yes

The following table explains columns of the STG_MEMBER_ATTRIBUTES table.

Table 3.32   Description of STG_MEMBER_ATTRIBUTES Table

Name	Description	Type (Length)	Null Option
ATTRIBUTE_ID	Unique business key for an attribute.	Character (32)	Not null
DIM_NM	Name of the dimension that is required for the solution.	Character (40)	Not null
MEMBER_ID	Dimension member ID.	Character (32)	Not null
ATTRIBUTE_VALUE_CHAR	If the value of the attribute is a character, enter it in this column.	VARCHAR (40)	Null
ATTRIBUTE_VALUE_NUM	If the value of the attribute is a number, enter it in this column.	Number (8)	Null
ATTRIBUTE_VALUE_DT	If the value of the attribute is a date, enter it in this column.	Number (8)	Null

STG_NETWORK_MODEL

This table contains information about the supply chain network of the products.

Table 3.33   Details of the STG_NETWORK_MODEL Table

Table type	Inventory optimization process-related
Data loading strategy	Refresh: Insert else update
Load type	New records are inserted. The old records are updated based on the keys.
Primary key	NETWORK_MODEL_ID
Is the table optional?	No

Table 3.34   Description of the STG_NETWORK_MODEL Table

Name	Description	Type (Length)	Null Option
NETWORK_MODEL_ID	Unique identification key for the network model.	Character (32)	Not null

Name	Description	Type (Length)	Null Option
NETWORK_MODEL_NM	Name of the network model.	Character (40)	Null
PRIMARY_NETWORK_IND	Indicates whether the network is a primary network or a pooling network. The value 1 indicates a primary network while the value 0 indicates non-primary.	Integer	Not null
NETWORK_MODEL_DESC	Long description for the network model.	Character (255)	Null

STG_NODE

This table contains information about a facility and product pair in the network that is required for the inventory optimization process. The table contains the information, such as maximum and minimum order quantity, holding stock percentage, batch size quantity, and so on.

Table 3.35 *Details of the STG_NODE Table*

Table type	Inventory optimization process-related
Data loading strategy	Refresh: Insert else update
Load type	New records are inserted. The old records are updated based on keys.
Primary key	PRODUCT_ID LOCATION_ID
Is the table optional?	No

The following table explains columns of the STG_NODE table.

Table 3.36 *Description of the STG_NODE Table*

Name	Description	Type (Length)	Null Option
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null

Name	Description	Type (Length)	Null Option
POLICY_TYPE_CD	Policy type code for the product and facility combination pair (for example, SS indicates min- max, and BS indicates Base stock).	Character (10)	Null
BATCH_SIZE_QTY	Batch size quantity for the facility and product combination pair. The orders are placed in multiples of batch size.	Numeric (8)	Null
MAX_ORDER_QTY	The maximum quantity in an order to be placed for each product and facility combination pair.	Numeric (8)	Null
MIN_ORDER_QTY	The minimum quantity in an order to be placed for each product and facility combination pair.	Numeric (8)	Null
MAX_STOCK_QTY	Maximum number of products that a facility can stock.	Numeric (8)	Null
MPL_QTY	Minimal presentation level for the product and facility combination.	Numeric (8)	Null
PBR_NO	Number of periods between two replenishment orders.	Numeric (8)	Null
NEXT_REPLENISH_NO	Specifies when the first replenishment order can be made for each facility-product combination pair.	Numeric (8)	Null
HOLDING_COST_PCT	Percentage of product cost incurred annually for holding one unit at a facility and product combination pair.	Numeric (8)	Not null
ORDERING_COST_AMT	Specifies the fixed ordering cost that is charged when a replenishment order is placed. This cost is charged for a product-facility combination pair.	Numeric (8)	Null
KITTING_POINT_IND	A flag that indicates whether the product is bundled at the specified facility. Enter 0 always in this column.	Integer	Not null

Name	Description	Type (Length)	Null Option
HOLD_COST_TRANS_RATIO	Holding cost during transition ratio. The ratio must be ranging between o to 1. The value 1 indicates that the holding cost is from the supply location. The default value is 0.5.	Numeric (8)	Null
VALID_IND	The validity of product-facility combination. The value 1 indicates valid and the value 0 indicates invalid. Only valid combinations are considered for optimization process.	Integer	Not null
EMPLOYEE_ID	Unique business key for the employee ID.	Character (32)	Not null
USE_REPAIRED_PRODUCT_IND	Indicator for use of repaired product for inventory aggregations.	Integer	Not null
INTERNAL_EXTERNAL_NODE_CD	Type of facility. The value of this column must be in accordance with the GL_IOW_SHORT_BOTH, GL_IOW_SHORT_INTERNAL, and GL_IOW_SHORT_EXTERNAL parameters. For more information about these parameters, see *SAS Inventory Optimization Workbench: Administrator's Guide*.	Character (10)	Not null
PENALTY_COST_AMT	Cost incurred because of inability to meet the demand for product at the facility.	Numeric (8)	Null

STG_PIPELINE_INVENTORY_FACT

This table contains information about the stock of the finished and unfinished products for the base period that will be arrived in the future.

Table 3.37   *Details of the STG_PIPELINE_INVENTORY_FACT Table*

Table type	Fact

Data loading strategy	Truncate and load
Load type	Day. Load day-level data if the base period is on a longer time period.
Primary key	PERIOD_START_DT PRODUCT_ID LOCATION_ID
Is the table optional?	No

The following table explains columns of the STG_PIPELINE_INVENTORY_FACT table.

Table 3.38   Description of STG_PIPELINE_INVENTORY_FACT Table

Name	Description	Type (Length)	Null Option
PERIOD_START_DT	Start date.	Numeric (8)	Not null
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null
PIPELINE_INVENTORY _QTY	Pipeline or on order inventory quantity.	Numeric (8)	Null

STG_PRODUCT

This table contains information about all products that include finished goods, assemblies, subassemblies, and parts.

Table 3.39   Details of the STG_PRODUCT Table

Table type	Dimension
Data loading strategy	Refresh: Insert else update
Load type	New records are inserted. The old records are updated based on the keys.
Primary key	PRODUCT_ID
Is the table optional?	No

The following table explains columns of the STG_PRODUCT table.

Table 3.40   *Description of the STG_PRODUCT Table*

Name	Description	Type (Length)	Null Option
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null
PRODUCT_DESC	Long name to describe the product.	Character (255)	Null
PRODUCT_LVL_IDn	Unique business key for the hierarchy level. The number of hierarchy levels for the dimension can be customized. The columns are added according to the number present in the configuration table as DIMENSION_LVL_ID (1 to [n-1]).	Character (32)	Null
PRODUCT_LVL_NMn	Name for the hierarchy level. Data administrator can customize the number of hierarchy levels for the dimension. The columns are added according to the number present in the configuration table as DIMENSION_LVL_NM (1 to [n-1]).	Character (40)	Null
PRODUCT_STATUS_IND	Code that indicates the current status of the product. The value 1 indicates new product, value 2 indicates phase-in product, value 3 indicates regular product, value 4 indicates phase-out product, and value 5 indicates obsolete product.	Integer	Not null
SALES_INTRODUCTION_DT	Date on which the product sale was introduced. If the product sale was never introduced, the value is null.	Numeric (8)	Null
SALES_DISCONTINUED_DT	Date on which the product sale was discontinued. If the product sale was never discontinued, the value is null.	Numeric (8)	Null
PRODUCT_NM	Name of the product.	Character (40)	Not null

Name	Description	Type (Length)	Null Option
PRODUCT_ATTRIBn	Attribute of the dimension. Data administrator can customize the number of attributes for the dimension. The columns are added in accordance with the number present in the configuration table as DIMENSION_ATTRIB (1 to n).	Character (32)	Null
REPAIRED_PRODUCT_IND	Repaired product indicator. The value 0 indicates non-repaired product while the value 1 indicates repaired product.	Integer	Not null
REPAIRED_PRODUCT_ID	Unique business key for a repaired product. If repaired product indicator is 1, you must provide repaired product ID.	Character (32)	Null
KIT_PRODUCT_IND	Indicates whether the product is bundled. The value 0 indicates the product is not bundled while the value 1 indicates that the product is bundled.	Integer	Not null
KIT_ASSEMBLY_TM	The time that is required for an assembly if the product is a bundled product.	Numeric (8)	Null

STG_PRODUCT_COST

This table contains information about the manufacturing cost for a product.

Table 3.41   Details of the STG_PRODUCT_COST Table

Table type	Fact
Data loading strategy	Append
Load type	Day. Load day-level data even if the base period is a longer time period.

Primary key	PRODUCT_ID
	LOCATION_ID
	PERIOD_END_DTTM
	PERIOD_START_DTTM
Is the table optional?	No

The following table explains the columns of the STG_PRODUCT_COST table.

Table 3.42   Description of STG_PRODUCT_COST Table

Name	Description	Type (Length)	Null Option
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null
PERIOD_END_DTTM	End date and time of the selected base period.	Numeric (8)	Not null
PERIOD_START_DTTM	Start date and time of the selected base period.	Numeric (8)	Not null
PRODUCT_COST_AMT	Manufacturing cost of the product.	Numeric (8)	Not null

STG_PRODUCT_LOCATION_ATTRIBUTES

This table contains information about attributes that are related to the product and facility.

Table 3.43   Details of the STG_PRODUCT_LOCATION_ATTRIBUTES Table

Table type	Dimension
Data loading strategy	Refresh: Insert Else Update
Load type	New records are inserted. Old records are updated based on the primary keys.
Is the table optional?	Yes

The following table describes the columns of the STG_PRODUCT_LOCATION_ATTRIBUTES table.

Table 3.44 Description of the STG_PRODUCT_LOCATION_ATTRIBUTES Table

Name	Description	Type (Length)	Null Option
ATTRIBUTE_VALUE	Value of the attribute. If the attribute value is numeric or date, do not perform pseudo transformation. You must enter the value as it is.	Char (40)	Null
ATTRIBUTE_ID	Unique business key of the attribute.	Char (32)	Not null
PRODUCT_ID	Unique business key of the product.	Char (32)	Not null
LOCATION_ID	Unique business key of the facility.	Char (32)	Not null

STG_PRODUCT_PRICE

This table contains information about the selling price of a product.

Table 3.45 Details of the STG_PRODUCT_PRICE Table

Table type	Fact
Data loading strategy	Append
Load type	Day. Load day-level data even if the base period is a longer time period.
Primary key	PRODUCT_ID PRICE_TYPE_CD PERIOD_END_DT LOCATION_ID PERIOD_START_DT
Is the table optional?	Yes

The following table explains the columns of the STG_PRODUCT_PRICE table.

Table 3.46 Description of the STG_PRODUCT_PRICE Table

Name	Description	Type (Length)	Null Option
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null

Name	Description	Type (Length)	Null Option
PRICE_TYPE_CD	Type code for the price (for example, Regular, Promotional, or Markdown).	Character (10)	Not null
PERIOD_END_DTTM	End date and time of the selected base period.	Numeric (8)	Not null
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null
PERIOD_START_DTTM	Start date and time for the selected base period.	Numeric (8)	Not null
PRODUCT_PRICE_AMT	Price of the product.	Numeric (8)	Null

STG_PRODUCT_SUBSTITUTE

This table contains information about the product that is substituted for a particular product. The substitute product can be different for different networks. A product can be substituted if the substitute product has the same attributes as the original product. The following are some of the prerequisites for a product to be substituted:

- unavailability of the product in the stock
- product demand is greater than the production

Table 3.47   Details of the STG_PRODUCT_SUBSTITUTE Table

Table type	Dimension
Data loading strategy	Refresh: Insert else update
Load type	New records are inserted. The old records are updated based on the keys.
Primary key	PRODUCT_ID PRODUCT_SUB_ID NETWORK_MODEL_ID
Is the table optional?	Yes

The following table explains the STG_PRODUCT_SUBSTITUTE table.

Table 3.48   Description of the STG_PRODUCT_SUBSTITUTE Table

Name	Description	Type (Length)	Null Option
PRODUCT_ID	Unique identification key for a product.	Character (32)	Not null
PRODUCT_SUB_ID	Unique identification key for a product substitute.	Character (32)	Not null
NETWORK_MODEL_ID	Unique business key for the network model.	Character (32)	Not null
PRIORITY_LEVEL_NO	Priority level number.	Numeric (8)	Null
EFFECTIVE_FROM_DTTM	Effective from datetime.	Numeric (8)	Null
EFFECTIVE_TO_DTTM	Effective to datetime.	Numeric (8)	Null

STG_PRODUCT_SUCCESSION

This table contains information about the product that is succeeded for a particular product. The succeeding product can be different for different networks. The properties of the succeeding product must contain all the properties of the original product.

Note: Use only one successor for each predecessor product.

Table 3.49   Details of the STG_PRODUCT_SUCCESSION Table

Table type	Dimension
Data loading strategy	Refresh: Insert else update
Primary key	PRODUCT_ID PRODUCT_SUC_ID NETWORK_MODEL_ID
Is the table optional?	Yes

The following table explains columns of the STG_PRODUCT_SUCCESSION table.

Table 3.50   Description of the STG_PRODUCT_SUCCESSION Table

Name	Description	Type (Length)	Null Option
PRODUCT_ID	Unique identification key for a product.	Character (32)	Not null

Name	Description	Type (Length)	Null Option
PRODUCT_SUC_ID	Unique identification key for the successor product.	Character (32)	Not null
NETWORK_MODEL_ID	Unique business key for the network model	Character (32)	Not null
INVENTORY_EXISTS_IND	Inventory exists indicator.	Integer	Null
EFFECTIVE_FROM_DTTM	Effective from datetime.	Numeric (8)	Null
EFFECTIVE_TO_DTTM	Effective to datetime.	Numeric (8)	Null

STG_PROMO_ARC

This table contains network information of the product that is under promotion. This information is required for the inventory optimization process. The table stores the following information for each promotion

- predecessor and successor of each facility
- lead time of the product across facilities
- network paths for each product

Table 3.51   Details of the STG_PROMO_ARC Table

Table type	Inventory optimization process-related
Data loading strategy	Refresh: Insert else update
Load type	New records are inserted. The old records are updated based on the keys.
Primary key	ROUTE_TYPE_CD
	PRODUCT_ID
	NETWORK_MODEL_ID
	HOLIDAY_ID
	PROMOTION_ID
	FROM_LOCATION_ID
	TO_LOCATION_ID
Is the table optional?	Yes

The following table explains columns of the STG_PROMO_ARC table.

Table 3.52   *Description of STG_PROMO_ARC Table*

Name	Description	Type (Length)	Null Option
ROUTE_TYPE_CD	Type of route that is used for transporting product from predecessor to successor location (for example, `Road`, `Air`, and `Rail`).	Character (10)	Not null
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null
NETWORK_MODEL_ID	Unique business key for the network model.	Character (32)	Not null
HOLIDAY_ID	Unique business key for the holiday. Enter a value *0* as this column is not used in the current release.	Character (32)	Not null
PROMOTION_ID	Unique business key for the promotion.	Character (32)	Not null
FROM_LOCATION_ID	Unique business key of the predecessor facility.	Character (32)	Not null
TO_LOCATION_ID	Unique business key for the successor facility.	Character (32)	Not null
PIPELINE_COST_AMT	Transportation cost of a product (per unit per base period) in transit from the predecessor facility to the successor facility.	Numeric (8)	Null
LEAD_TM_MIN_DAYS	The minimum lead time in days.	Numeric (8)	
LEAD_TM_DAYS	Lead time in days.	Numeric (8)	Not null
LEAD_TM_MAX_DAYS	The maximum lead time in days.	Numeric (8)	Null
QUANTITY	Identifies the variable that contains the bill of material (BOM) quantity between the predecessor and the successor of each arc. It is the number of units at the predecessor required to produce one unit at the successor.	Numeric (8)	Null

Name	Description	Type (Length)	Null Option
LEAD_TIME_OFFSET_D AYS	Additional time to the lead time that is required for performing miscellaneous tasks (such as packaging, bundling, and so on).	Numeric (8)	Null

STG_PROMO_HOLIDAY_DETAILS

This table contains the demand during the holiday and promotions.

Table 3.53   Details of the STG_PROMO_HOLIDAY_DETAILS Table

Table type	Fact
Data loading strategy	Refresh: Insert else update
Primary key	PROMOTION_ID PLANNING_PRODUCT_ID LOCATION_ID HOLIDAY_ID
Is the table optional?	Yes

The following table explains columns of the STG_PROMO_HOLIDAY_DETAILS table.

Table 3.54   Description of the STG_PROMO_HOLIDAY_DETAILS Table

Name	Description	Type (Length)	Null Option
PROMOTION_ID	Unique business key for the promotion. If promotion is not applicable for a holiday, populate 0 in this column.	Character (32)	Not null
PRODUCT_ID	Unique business key of the product.	Character (32)	Not null
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null

Name	Description	Type (Length)	Null Option
HOLIDAY_ID	Unique business key for the holiday. If holiday is not applicable for a promotion, populate `0` in this column. Enter a value *0* as this column is not used in the current release.	Character (32)	Not null
IMPACT_BEF_DT	Start date of the impact on demand due to upcoming promotion.	Numeric (8)	Not null
IMPACT_AFT_DT	End date of the impact on demand due to the latest promotion.	Numeric (8)	Not null
EFFECTIVE_TO_DT	Ending date of the promotion.	Numeric (8)	Not null
EFFECTIVE_FROM_DT	Start date of the promotion.	Numeric (8)	Not null
SERVICE_LEVEL_PCT	Percentage of service level. Enter `99.999` for all combinations of products and facilities always.	Numeric (8)	Not null

STG_PROMO_INVENTORY_FACT

This table contains information about the stock of finished and unfinished products for the base period for a promotion.

Table 3.55 Details of the STG_PROMO_INVENTORY_FACT Table

Table type	Fact
Data loading strategy	Append
Load type	Day. Load day-level data even if the base period is a longer time period.
Primary key	PERIOD_START_DT PRODUCT_ID LOCATION_ID HOLIDAY_ID PROMOTION_ID

Is the table optional?	Yes

The following table explains columns of the STG_PROMO_INVENTORY_FACT table.

Table 3.56   Description of STG_PROMO_INVENTORY_FACT Table

Name	Description	Type (Length)	Null Option
PERIOD_START_DT	Date corresponding to the inventory.	Numeric (8)	Not null
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null
HOLIDAY_ID	Unique business key for the holiday. Enter a value *0* as this column is not used in the current release.	Character (32)	Not null
PROMOTION_ID	Unique business key for the promotion.	Character (32)	Not null
OPENING_INVENTORY _QTY	Opening quantity of the inventory.	Numeric (8)	Null
CLOSING_INVENTORY _QTY	Closing inventory quantity.	Numeric (8)	Null

STG_PROMO_NODE

This table contains promotional information about a facility and product pair in the network that is required for the inventory optimization process. The table contains the following information:

- maximum and minimum order quantity
- holding stock percentage
- batch size quantity
- and so on

Table 3.57   Details of the STG_PROMO_NODE Table

Table type	Inventory optimization process-related
Data loading strategy	Refresh: Insert else update

Load type	New records are inserted. The old records are updated based on the keys.
Primary key	PRODUCT_ID LOCATION_ID PROMOTION_ID HOLIDAY_ID
Is the table optional?	Yes

The following table explains columns of the STG_PROMO_NODE table.

Table 3.58 *Description of STG_PROMO_NODE Table*

Name	Description	Type (Length)	Null Option
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null
PROMOTION_ID	Unique business key for the promotion.	Character (32)	Not null
HOLIDAY_ID	Unique business key for the holiday. Enter a value *0* as this column is not used in the current release.	Character (32)	Not null
POLICY_TYPE_CD	Policy type code for the product and facility combination pair (for example, ss indicates min- max, and BS indicates Base stock). Use BS policy code in order to use the promotional orders.	Character (10)	Null
BATCH_SIZE_QTY	Batch size quantity for the facility and product combination pair. The orders are placed in multiples of batch size.	Numeric (8)	Null
MAX_ORDER_QTY	The maximum quantity in an order to be placed for each product and facility combination pair.	Numeric (8)	Null

Name	Description	Type (Length)	Null Option
MIN_ORDER_QTY	The minimum quantity in an order to be placed for each product and facility combination pair during a promotion.	Numeric (8)	Null
MAX_STOCK_QTY	Maximum number of products that a facility can stock.	Numeric (8)	Null
PBR_NO	Number of periods between two replenishment orders.	Numeric (8)	Null
NEXT_REPLENISH_NO	Specifies when the first replenishment order can be made for each facility-product combination pair.	Numeric (8)	Null
HOLDING_COST_PCT	Percentage of product cost incurred annually for holding one unit at a facility and product combination pair.	Numeric (8)	Not null
ORDERING_COST_AMT	Specifies the fixed ordering cost that is charged when a replenishment order is placed. This cost is charged for a product-facility combination pair.	Numeric (8)	Null
KITTING_POINT_IND	A flag that indicates whether the product is bundled at the specified facility. Enter 0 always in this column.	Integer	Null
VALID_IND	The validity of product-facility-network combination. The value 1 indicates valid and value 0 indicates invalid. Only valid combinations are considered for optimization process.	Integer	Not null
EMPLOYEE_ID	Unique business key for the employee ID who manages the materials requirement planning for a facility-product pair.	Character (32)	Not null

Name	Description	Type (Length)	Null Option
INTERNAL_EXTERNAL_ NODE_CD	Type of facility. The value of this column must be in accordance with the GL_IOW_SHORT_BOTH , GL_IOW_SHORT_INTE RNAL, and GL_IOW_SHORT_EXTE RNAL parameters. For more information about these parameters, see *SAS Inventory Optimization Workbench: Administrator's Guide*.	Character (10)	Not null
PENALTY_COST_AMT	Cost incurred because of inability to meet the demand for product at the facility. If you are using constraints, this column must not be null.	Numeric (8)	Null

STG_PROMO_PIPELINE_INV_FACT

This table contains information about the promotional stock of finished and unfinished products for the base period that will be arrived in the future.

Table 3.59   Details of the STG_PROMO_PIPELINE_INV_FACT Table

Table type	Fact
Data loading strategy	Truncate and load
Load type	Day. Load day-level data even if the base period is a longer time period.
Primary key	PERIOD_START_DT PRODUCT_ID LOCATION_ID HOLIDAY_ID PROMOTION_ID
Is the table optional?	Yes

The following table explains columns of the STG_PROMO_PIPELINE_INV_FACT table.

Table 3.60   *Description of STG_PROMO_PIPELINE_INV_FACT Table*

Name	Description	Type (Length)	Null Option
PERIOD_START_DT	Start date.	Numeric (8)	Not null
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null
HOLIDAY_ID	Unique business key for the holiday. Enter a value *0* as this column is not used in the current release.	Character (32)	Not null
PROMOTION_ID	Unique business key for the promotion.	Character (32)	Not null
PIPELINE_INVENTORY _QTY	Pipeline or on order inventory quantity.	Numeric (8)	Null

STG_PROMOTION

This table contains information about the promotions of the organization (for example, thanks-giving promotions).

Table 3.61   *Details of the STG_Promotion Table*

Table type	Fact
Data loading strategy	Refresh: Insert else update
Load type	Snapshot data. This table is loaded as per the actual at source data. Expected to load in advance.
Primary key	PROMOTION_ID
Is the table optional?	Yes

The following table explains the columns of the STG_PROMOTION table.

Table 3.62 *Description of the STG_PROMOTION Table*

Name	Description	Type (Length)	Null Option
PROMOTION_ID	Unique business key for the promotion.	Character (32)	Not null
PROMOTION_NM	Name for the promotion.	Character (40)	Not null
PROMOTION_DESC	Long description for the promotion.	Character (255)	Null
PROMOTION_VEHICLE_CD	Type of promotion vehicle (for example, `TV Ad`, `Radio Ad`, `Banner`, and so on)	Character (40)	Null
DC_ORDER_REVIEW_PERIOD	Number of base periods within which the warehouse to vendor orders can be reviewed before finalizing them.	Numeric (8)	Not null
STORE_ORDER_REVIEW_PERIOD	Number of base periods within which the customer-facing facility orders can be reviewed before finalizing them.	Numeric (8)	Not null
MIRP_PUSH_PULL_IND	Indicates whether to use the push or pull option to generate the customer-facing facility orders.	Numeric (8)	Not null
HORIZON_NO	Planning horizon for the promotion.	Numeric (8)	Not null
EFFECTIVE_TO_DT	End date of the promotion.	Numeric (8)	Not null
EFFECTIVE_FROM_DT	Start date of the promotion.	Numeric (8)	Not null

STG_RECEIPTS_FACT

This table contains the receipt details for the purchase orders.

Table 3.63 *Details of the STG_RECEIPTS_FACT Table*

Table type	Fact
Data loading strategy	Append

Load type	Day. Load day-level data even if the base period is a longer time period.
Primary key	RECEIPT_DT RECEIPT_ID PRODUCT_ID LOCATION_ID
Is the table optional?	No

The following table explains columns of the STG_RECEIPTS_FACT table.

Table 3.64   *Description of the STG_RECEIPTS_FACT Table*

Name	Description	Type (Length)	Null Option
RECEIPT_DT	Date of receipt.	Numeric (8)	Not null
RECEIPT_ID	Unique business key for receipt.	Character (32)	Not null
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null
RECEIPT_QTY	Received quantity.	Numeric (8)	Null
PURCHASE_ORDER_ID	Unique business key for the purchase order.	Character (32)	Not null
DISPATCH_DT	Date of dispatch.	Numeric (8)	Null
PURCHASE_ORDER_QTY	Purchase order quantity.	Numeric (8)	Null
RECEIPT_DUE_DT	Due date for the receipt.	Numeric (8)	Null
VENDOR_ID	Unique business key for the vendor.	Character (32)	Null
FROM_LOCATION_ID	Unique business key of the predecessor facility.	Character (32)	Not null

STG_REPLENISH_ORDER_STATUS

This table indicates whether an order can be placed for a product at the specified location for the selected period.

Table 3.65   Details of the STG_REPLENISH_ORDER_STATUS Table

Table type	Fact
Data loading strategy	Truncate and load
Load type	Base period. Load data as per the base period.
Primary key	LOCATION_ID PRODUCT_ID PERIOD_START_DT HOLIDAY_ID PROMOTION_ID
Is the table optional?	Yes

The following table explains the columns of the STG_REPLENISH_ORDER_STATUS table.

Table 3.66   Description of STG_REPLENISH_ORDER_STATUS Table

Name	Description	Type (Length)	Null Option
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null
PERIOD_START_DT	Start date of the selected base period.	Numeric (8)	Not null
HOLIDAY_ID	Unique business key for the holiday. Enter a value *0* as this column is not used in the current release.	Character (32)	Not null
PROMOTION_ID	Unique business key for the promotion.	Character (32)	Not null
REPLENISH_ORDER_IND	Indicator to describe whether the product is to be replenished at the specified facility. The value *0* indicates not to replenish while the value *1* indicates to replenish the product.	Integer	Not null

STG_SCENARIO_OPT_OVERRIDE_PARAMS

This table contains the promoted override values of the scenario for the policy parameters (order up-to level, re-order level, and safety stock). The values that are present in this table are used by inventory optimization process in the next run.

Table 3.67   *Details of the STG_SCENARIO_OPT_OVERRIDE_PARAMS Table*

Table type	Scenario
Data loading strategy	Truncate and load
Load type	New records are inserted. Old records are updated based on keys.
Primary key	
Is the table optional?	Yes

The following table describes the STG_SCENARIO_OPT_OVERRIDE_PARAMS table.

Table 3.68   *Description of the STG_SCENARIO_OPT_OVERRIDE_PARAMS Table*

Name	Description	Type (Length)	Null Option
NETWORK_MODEL_ID	Unique business key for the network.	Char (32)	Not null
PRODUCT_ID	Unique business key for the product.	Char (32)	Not null
LOCATION_ID	Unique business key for the facility.	Char (32)	Not null
ORDER_UPTO_LEVEL_QTY	Order up to level value that is promoted through an optimization override scenario. SAS Inventory Optimization Workbench uses this value in the next run of the inventory optimization process.	Numeric (8)	Null
SAFETY_STOCK_QTY	Safety stock value that is promoted through an optimization override scenario. SAS Inventory Optimization Workbench uses this value in the next run of the inventory optimization process.	Numeric (8)	Null

Name	Description	Type (Length)	Null Option
OPTIMAL_RECEIPT_QTY	Optimal receipt quantity that is promoted through an optimization override scenario. SAS Inventory Optimization Workbench uses this value in the next run of the inventory optimization process.	Numeric (8)	Null
REORDER_LEVEL_QTY	Re-order level quantity that is promoted through an optimization override scenario. SAS Inventory Optimization Workbench uses this value in the next run of the inventory optimization process.	Numeric (8)	Null
NO_OF_PERIODS	Number of periods to override.	Numeric (8)	Null
PERIOD_START_DT	Start date for the selected base period.	Numeric (8)	Not null

STG_SCENARIO_PROMOTED_VALUES

This table contains the promoted values of the scenario. The values that are present in this table are used by inventory optimization process in the next run.

Table 3.69   Details of the STG_SCENARIO_PROMOTED_VALUES Table

Table type	Inventory optimization process-related
Data loading strategy	Truncate and load
Load type	New records are inserted. Old records are updated based on keys.
Primary key	PRODUCT_ID LOCATION_ID
Is the table optional?	Yes

The following table explains columns of the STG_SCENARIO_PROMOTED_VALUES table.

Table 3.70   *Description of the STG_SCENARIO_PROMOTED_VALUES Table*

Name	Description	Type (Length)	Null Option
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null
SERVICE_LEVEL_PCT	Service level percent that is promoted through a scenario. SAS Inventory Optimization Workbench uses this value in the next run of the inventory optimization process.	Numeric (8)	Null
PRODUCT_COST_AMT	Product cost amount that is promoted through a scenario. SAS Inventory Optimization Workbench uses this value in the next run of the inventory optimization process.	Numeric (8)	Null
LEAD_TM_DAYS	Lead time in days that is promoted through a scenario. SAS Inventory Optimization Workbench uses this value in the next run of the inventory optimization process.	Numeric (8)	Null

STG_SERVICE_LEVEL

This table contains information about the customer service level (CSL) for the product and facility combination pair.

Table 3.71   *Details of the STG_SERVICE_LEVEL Table*

Table type	Inventory optimization process-related
Data loading strategy	Append
Load type	New records are inserted. The old records are updated based on the keys.
Primary key	PERIOD_START_DT PLANNING_PRODUCT_ID LOCATION_ID
Is the table optional?	No

The following table explains columns of the STG_SERVICE_LEVEL table.

Table 3.72   Description of the STG_SERVICE_LEVEL Table

Name	Description	Type (Length)	Null Option
PERIOD_START_DT	Start date of the selected base period.	Numeric (8)	Not null
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null
SERVICE_LEVEL_PCT	Percentage service level. This column must be not null if GL_IOW_USE_WOS_AS _SL_IND is set to 0.	Numeric (8)	Not null
WEEKS_OF_SUPPLY	Weeks of supply for a product and facility pair. This column must be not null if GL_IOW_USE_WOS_AS _SL_IND is set to 1.	Numeric (8)	Not null

STG_TIME_PERIOD

The STG_TIME_PERIOD table contains a list of time periods that are used to represent time in a hierarchy. The table includes information about the child and parent members that are used in the traditional hierarchy or dimension (for example, ALLYEARS, YR2002).

For more information about loading the time period data, see "Date Intervals, Formats, and Functions" in the *SAS/ETS: User's Guide*.

Table 3.73   Details of the STG_TIME_PERIOD Table

Table type	Dimension
Data loading strategy	Refresh: Insert
Load type	Entire refresh. The old records are deleted and new records are inserted.
Is the table optional?	For Gregorian calendar type, this table is optional.
Comments	For custom calendar type, this table is mandatory.

The following table describes columns of the STG_TIME_PERIOD table.

Table 3.74   Description of the STG_TIME_PERIOD Table

Name	Description	Type (Length)	Null Option
EFFECTIVE_FROM_DTTM	The datetime stamp details for the period from which this record is effective. The time value must be rounded to full seconds. Only one record is valid at any given time. If the value for the time is not available, set it to `00:00:00:00`.	Numeric (8)	Not null
EFFECTIVE_TO_DTTM	The datetime stamp details for the period up to which this record is effective. The time value is set to 1 second before the period at which the next record with the same key becomes effective. The time value must be rounded to full seconds. If the value for the time is not available, set it to `23:59:59:00`.	Numeric (8)	Not null
PERIOD_TYPE_CD	Period type (for example, hour of the day, day, week, fiscal year, fiscal quarter, reporting period) The values can be `YR`, `QTR`, `MO`, `ALL`, `HYR`, `MTH`, `WK`, and `DAY`.	Character (10)	Not null
TIME_PERIOD_ID	Unique business identifier for the time period.	Character (32)	Not null
TIME_PERIOD_DESC	Description of the time period.	Character (255)	Not null
TIME_PERIOD_NM	Name of the leaf-level node of the TIME_PERIOD dimension. The name must be unique across all names.	Character (40)	Not null

STG_TIME_PERIOD_ASSOC

This table contains the parent-child association of all time periods in the STG_TIME_PERIOD table. For example, Jan 2014 is child of Quarter 1 of 2014.

Table 3.75   Details of the STG_TIME_PERIOD_ASSOC Table

Table type	Dimension
Data loading strategy	Refresh: Insert
Load type	Entire refresh. The old records are deleted and new records are inserted.

Primary key	TIME_PERIOD_ID PARENT_TIME_PERIOD_ID
For custom calendar type, this table is mandatory.	Not applicable **Note:** For custom calendar type, this table is mandatory.

The following table describes columns of the STG_TIME_PERIOD_ASSOC table.

Table 3.76   Description of STG_TIME_PERIOD_ASSOC Table

Name	Description	Type (Length)	Null Option
TIME_PERIOD_ID	Identification for the time period (for example, `Date`, `Week`, `Month`, `Quarter`, and `Year`).	Character (32)	Not null
PARENT_TIME_PERIOD_ID	Parent of time period ID (for example, 2012 is parent for Jan 2012)	Character (32)	Not null
ORDER_NO	Order number of the time dimension hierarchy.	Numeric (8)	Not null
BOTTOM_LEVEL_IND	Leaf-level of the time dimension indicator.	Integer	Not null
LEVELS_FROM_TOP_NO	Time dimension level number from top of the hierarchy.	Numeric (8)	Not null
LEVEL_NO	Level number of the time dimension hierarchy.	Numeric (8)	Not null
LEVEL_DESC	Time dimension level description.	Character (255)	Not null

STG_TIME_PERIOD_LVL

This table contains information about the unique hierarchy levels for the time period (for example, Year, Quarter, Month, Week, Day).

Table 3.77   Details of the STG_TIME_PERIOD_LVL Table

Table type	Dimension
Data loading strategy	Refresh: Insert

Load type	Entire refresh. The old records are deleted and new records are inserted.
Primary key	TIME_PERIOD_HIER_LVL_NO
Is the table optional?	Not applicable **Note:** For custom calendar, this table is mandatory.

The following table explains columns of the STG_TIME_PERIOD_LVL table.

Table 3.78   Description of STG_TIME_PERIOD_LVL Table

Name	Description	Type (Length)	Null Option
TIME_PERIOD_HIER_LVL_NO	Time dimension hierarchy level number.	Numeric (8)	Not null
TIME_PERIOD_LVL_NM	Time dimension level name.	Character (40)	Not null
TIME_PERIOD_LVL_DESC	Time dimension level description.	Character (255)	Null

STG_VENDOR

This table contains information about vendors.

Table 3.79   Details of the STG_VENDOR Table

Table type	Dimension
Data loading strategy	Refresh: Insert else update
Load type	New records are inserted. The old records are updated based on keys.
Primary key	VENDOR_NM
Is the table optional?	No

Table 3.80   Description of the STG_VENDOR Table

Name	Description	Type (Length)	Null Option
VENDOR_ID	Unique business key for the vendor.	Character (32)	Not null

Name	Description	Type (Length)	Null Option
VENDOR_NM	Name of the vendor.	Character (40)	Not null

STG_VENDOR_X_PRODUCT_X_LOCATION

This table contains information about the vendor, facility, and product combination pair. For example, Vendor V1 is supplying product P1 at facilities F1 and F2.

Table 3.81   Details of the STG_VENDOR_X_PRODUCT_X_LOCATION Table

Table type	Dimension
Data loading strategy	Refresh: Insert else update
Load type	New records are inserted. The old records are updated based on keys.
Primary key	PRODUCT_ID VENDOR_ID LOCATION_ID
Is the table optional?	No

The following table explains columns of the STG_VENDOR_X_PRODUCT_X_LOCATION table.

Table 3.82   Description of the STG_VENDOR_X_PRODUCT_X_LOCATION Table

| Name	Description	Type (Length)	Null Option
PRODUCT_ID	Unique business key for a product.	Character (32)	Not null
VENDOR_ID	Unique business key for the vendor.	Character (32)	Not null
LOCATION_ID	Unique business key for a facility.	Character (32)	Not null
PRIMARY_VENDOR_IND	Indicates whether the vendor is a primary vendor. The value 1 indicates primary vendor while the value 0 indicates non-primary vendor.	Integer	Not null

Name	Description	Type (Length)	Null Option
VENDOR_PRODUCT_NM	Name of the product that is provided by the vendor.	Character (40)	Null
SUPPLIER_SHARE_PCT	Business supply share percentage for the product. Ensure that the total supplier share percentage for a combination of product and location is 100%.	Numeric (8)	Not null

Recommended Reading

- *SAS Inventory Optimization Workbench 5.3: User's Guide*

- *SAS Inventory Optimization Workbench 5.3: Administrator's Guide*

For a complete list of SAS publications, go to sas.com/store/books. If you have questions about which titles you need, please contact a SAS Representative:

SAS Books
SAS Campus Drive
Cary, NC 27513-2414
Phone: 1-800-727-0025
Fax: 1-919-677-4444
Email: sasbook@sas.com
Web address: sas.com/store/books
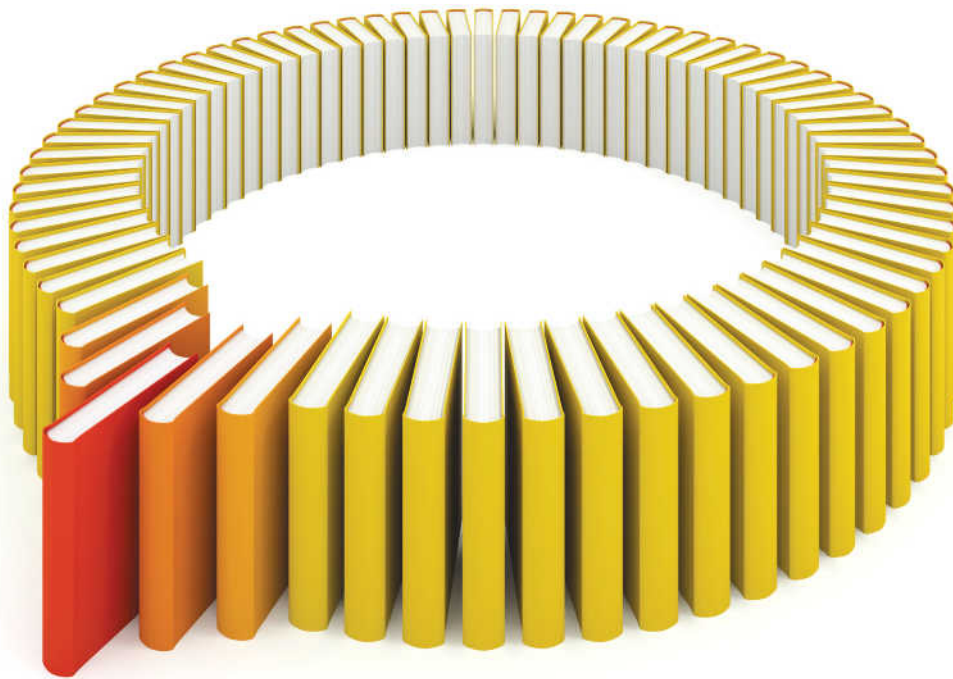
Gain Greater Insight into Your SAS® Software with SAS Books.

Discover all that you need on your journey to knowledge and empowerment.