# Oracle® Demantra In-Memory Consumption-Driven Planning

User's Guide

Release 12.2

Part No. E52281-02

August 2016



Oracle Demantra In-Memory Consumption-Driven Planning User's Guide, Release 12.2

Part No. E52281-02

Copyright © 1999, 2016, Oracle and/or its affiliates. All rights reserved.

Primary Author: Greg Watkins

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

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

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

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

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

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

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

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

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

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

# **Contents**

## **Send Us Your Comments**

## **Preface**

ı	Consumption-Driven Planning Overview	
	Introduction	1-1
	The Consumption-Driven Planning Process	1-3
	CDP Business Process.	
2	Forecasting and Consumption-Driven Planning	
	Introduction	2-1
	Forecasting Profiles	2-1
3	Worksheets	
	CDP Worksheets	3-1
	CDP Launch Management Worksheets	3-16
	CDP Business Logic Engine Worksheets	3-35
	CDP Alert Worksheets	3-36
	Methods	3-36
4	Workflows	
	CDP Workflows	4-1
5	Integration	
	Integration Overview	5-1

	Data Requirements	5-3
	Integration Interfaces	5-3
	Loading Shipment vs. Consumption Accounts	5-11
6	BLE Enhancements for Consumption-Driven Planning	
	Business Logic Engine	6-1
	General Levels	6-8
	Rolling Data Profiles	6-9
	Launch Management	6-10
Α	Levels and Series	
	CDP Levels	A-1
	CDP Series	A-2

# Index

# **Send Us Your Comments**

# Oracle Demantra In-Memory Consumption-Driven Planning User's Guide, Release 12.2 Part No. E52281-02

Oracle welcomes customers' comments and suggestions on the quality and usefulness of this document. Your feedback is important, and helps us to best meet your needs as a user of our products. For example:

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

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

Note: Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the new Oracle E-Business Suite Release Online Documentation CD available on My Oracle Support and www.oracle.com. It contains the most current Documentation Library plus all documents revised or released recently.

Send your comments to us using the electronic mail address: appsdoc\_us@oracle.com

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

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

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

# **Preface**

## **Intended Audience**

Welcome to Release 12.2 of the *Oracle Demantra In-Memory Consumption-Driven Planning User's Guide.* 

See Related Information Sources on page viii for more Oracle E-Business Suite product information.

## **Documentation Accessibility**

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

## **Access to Oracle Support**

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

## **Structure**

#### 1 Consumption-Driven Planning Overview

**Important:** The Demantra Local Application replaces Collaborator Workbench. You may see both names in this text.

#### 2 Forecasting and Consumption-Driven Planning

**Important:** The Demantra Local Application replaces Collaborator

Workbench. You may see both names in this text.

#### 3 Worksheets

**Important:** The Demantra Local Application replaces Collaborator Workbench. You may see both names in this text.

#### 4 Workflows

**Important:** The Demantra Local Application replaces Collaborator Workbench. You may see both names in this text.

#### 5 Integration

**Important:** The Demantra Local Application replaces Collaborator Workbench. You may see both names in this text.

#### 6 BLE Enhancements for Consumption-Driven Planning

**Important:** The Demantra Local Application replaces Collaborator Workbench. You may see both names in this text.

#### A Levels and Series

**Important:** The Demantra Local Application replaces Collaborator Workbench. You may see both names in this text.

## **Related Information Sources**

#### **Related Guides**

You should have the following related books on hand. Depending on the requirements of your particular installation, you may also need additional manuals or guides.

• Oracle Demantra Installation Guide

This guide describes the information you need to install Oracle Demantra products.

• Oracle Demantra System Requirements Guide

This guide describes the system requirements information you need to install Oracle Demantra products.

• Oracle Demantra Implementation Guide

This guide describes the information you need to implement Oracle Demantra products.

Oracle Demantra Analytical Engine Guide
 This guide describes the Analytical Engine used by Oracle Demantra.

Oracle Demantra Demand Management User's Guide
 This guide describes the information you need to understand and use Oracle Demantra Demand Management.

Oracle Advanced Supply Chain Planning Implementation and User's Guide
 This guide describes Oracle Advanced Supply Chain Planning and provides information about supply chain planning. Oracle Rapid Planning and Oracle Advanced Supply Chain Planning share many features.

Oracle Inventory Optimization User's Guide

This guide describes the comprehensive Internet-based inventory planning solution that enables you to determine when and where to hold your inventories across the supply chain to achieve the desired customer service levels.

## **Integration Repository**

The Oracle Integration Repository is a compilation of information about the service endpoints exposed by the Oracle E-Business Suite of applications. It provides a complete catalog of Oracle E-Business Suite's business service interfaces. The tool lets users easily discover and deploy the appropriate business service interface for integration with any system, application, or business partner.

The Oracle Integration Repository is shipped as part of the Oracle E-Business Suite. As your instance is patched, the repository is automatically updated with content appropriate for the precise revisions of interfaces in your environment.

## Do Not Use Database Tools to Modify Oracle E-Business Suite Data

Oracle STRONGLY RECOMMENDS that you never use SQL\*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle E-Business Suite data unless otherwise instructed.

Oracle provides powerful tools you can use to create, store, change, retrieve, and maintain information in an Oracle database. But if you use Oracle tools such as SQL\*Plus to modify Oracle E-Business Suite data, you risk destroying the integrity of your data and you lose the ability to audit changes to your data.

Because Oracle E-Business Suite tables are interrelated, any change you make using an Oracle E-Business Suite form can update many tables at once. But when you modify Oracle E-Business Suite data using anything other than Oracle E-Business Suite, you may change a row in one table without making corresponding changes in related tables. If your tables get out of synchronization with each other, you risk retrieving erroneous

information and you risk unpredictable results throughout Oracle E-Business Suite.

When you use Oracle E-Business Suite to modify your data, Oracle E-Business Suite automatically checks that your changes are valid. Oracle E-Business Suite also keeps track of who changes information. If you enter information into database tables using database tools, you may store invalid information. You also lose the ability to track who has changed your information because SQL\*Plus and other database tools do not keep a record of changes.

# **Consumption-Driven Planning Overview**

Important: The Demantra Local Application replaces Collaborator Workbench. You may see both names in this text.

This chapter covers the following topics:

- Introduction
- The Consumption-Driven Planning Process
- **CDP** Business Process

## Introduction

The traditional Demand Planning process focuses on projecting demand at manufacturing plants or manufacturer's depots (this data is typically derived at the store level). This demand is represented as shipments sent or orders received, but it lacks a direct connection to true consumer demand at points of consumption. As this data becomes available, it can be used to support a consumption-driven planning process.

Oracle In-Memory Consumption-Driven Planning (CDP) leverages detailed daily consumption data to produce a consumption-driven forecast which is then leveraged to provide a basis for a shipment forecast as well as a basis for generating store-level safety stock levels and replenishment orders.

**Note:** Oracle In-Memory Consumption-Driven Planning is a distinct and separately licensed and installed Demantra module.

Important: Due to the large volume of consumption data required to generate a forecast and plan at a very granular level, the CDP module must be installed with and run on the Oracle Exadata database

machine. For optimal performance, Oracle also strongly recommends implementing the Oracle Exalogic server.

Consumption data analysis provides the following benefits:

- Better visibility to true consumer demand.
- Visibility into granular store-level data.
- Better identifies consumer promotions as part of the demand being analyzed.

The following table provides definitions for key terms used in the consumption-driven planning process.

Term	Definition
Store	Final end point of the supply chain. This is where consumers acquire the product.
Site	Customer warehouse being serviced from a manufacturer's plant or warehouse. Stores are typically supplied with products from the site.
Organization	Manufacturer's warehouse or plant, typically providing product to sites or stores.
Sell through	Demand being consumed at a point in the supply chain, typically consumer demand at a store.
Sell in	Demand received at a point in the supply chain, typically shipments to a store or site.

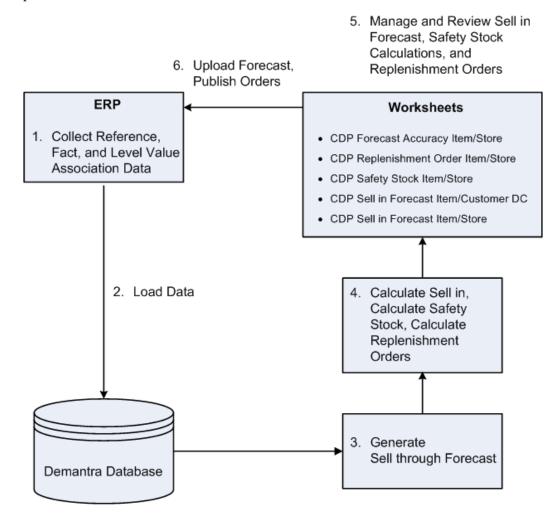
**Note:** Demantra provides the following predefined CDP users.

Username/Password

- cdp (component owner) / cdp
- cdpanalyst1 / c
- cdpanalyst2 / c

## **The Consumption-Driven Planning Process**

The diagram below provides a high-level view of the Consumption-Driven Planning process.



The process includes the following:

- Collect the appropriate data from an ERP or other system of record. For more information about CDP integration and import interfaces, refer to Integration, page 5-3 in this guide.
- Load the appropriate data to the Demantra database. 2.
- Generate a forecast.
- Calculate the sell in, safety stock, and replenishment orders.

Generating a forecasting and performing calculations involve running the CDP workflows and Business Logic Engine (BLE) to calculate sell-in forecast, safety stock, standard error, replenishment orders, and exceptions.

For more information, refer to the following:

- CDP Business Logic Engine Worksheets, page 3-35
- CDP Workflows, page 4-1
- Business Logic Engine, page 6-1
- 5. Use the CDP worksheets to manage and review your sell in, safety stock and replenishment orders.

For more information, refer to CDP Worksheet, page 3-1.

6. Upload your forecast and then publish orders.

When you are satisfied with the forecasts and replenishment order values, run the provided CDP workflows to export the forecast(s) and replenishment order quantities to your supply planning system.

For more information about CDP integration and export interfaces, refer to Integration, page 5-3 in this guide.

CDP also allows you to perform new product and new store launches. The new product launch process links a new product (target) with a store, store group, or account based on an existing source product. The new store launch process links a new store (target) based on an existing similar store (source).

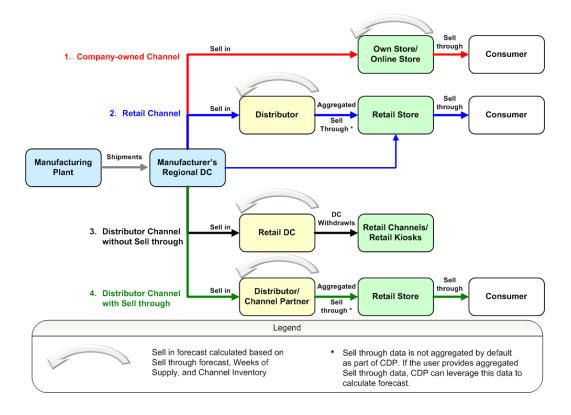
For more information, refer to CDP Product Launch Management Worksheets, page 3-16.

## **CDP Business Process**

Use CDP to generate forecasts at different levels, calculate safety stock and replenishment order calculations, and generate various kinds of exceptions.

### **Business Scenarios**

The following diagram illustrates a supply chain with four business channels.



In this example, the following processes appear:

- For channels where store-level information is available, it is collected and modeled. Store-level consumer demand is referred to as Sell through.
- Sell-through history is used to generate a sell forecast which is then converted into a Shipment forecast to the stores. This forecast is known as the Sell through forecast.
- 3. For sales channels where store-level data is not available, shipment history is used to generate a shipment forecast. This forecast is known as the Sell in forecast.
- The sell-in forecast from the various channels can be combined and aggregated, serving as the basis for the Demand Planning Process.

## **Supporting Your Business Process**

CDP supports your business process by allowing you to:

- Generate consumption forecast for stores.
  - View daily store-level data for stores.
  - View store and site-level in different time buckets. For example, store-level data display could be in daily time buckets and site-level data could be in weekly

time buckets.

- View statistical forecast generated at the store level for each product.
- View up to a year of history and 90 days of future forecast. There is no restriction on the duration of future forecast and the 90 day value, the default setting, can be adjusted if needed using the "lead" parameter.
  - For more information on the "lead" parameter, refer to Forecast in the "Engine Details" chapter of the Oracle Demantra Integration Guide.
- Modify historical data and execute a simulation.
- Override forecast values and view your override results.
- Generate sell-in forecast for stores.
  - Generate store sell-in forecast using store sell-through forecast.
  - View calculated target inventory for stores based on target days of supply.
  - View available beginning inventory for current period for each store/item.
  - Based on beginning inventory, target inventory, and forecast, view the calculated inventory amount that needs to be received at the store.
  - Using store lead times and required receipt, view generated sell-in projection.
  - Review the sell-in forecast and override it as needed.
  - Combine sell-in forecast from several channels to drive the Demand Planning process.
- Generate sell-in forecast for sites.
  - Generate sell-through forecast using site-level sell-through data.
  - View calculated targeted inventory for site based on target weeks of supply for
  - View available beginning inventory for current period for each site/item.
  - Based on beginning inventory, target inventory, and forecast, view the calculated inventory amount that needs to be received at the site.
  - Using site lead times and required receipts, view generated sell-in projection.
  - Review sell-in forecast and override values as needed.

- Generate store-level safety stock.
  - Select safety stock policy for each Item/Store. A single safety stock policy is used per item/store, regardless of date. The safety stock policy can also be set or maintained for a group of items or stores.
  - View calculated safety stock based on selected safety stock policy and input parameters.
  - View the resulting safety stock associated with all policies and toggle between policies to see how it affects final safety stock.
  - Override safety stock values and view your override results.
- Generate and export replenishment orders.
  - Use sell-through forecast and safety stock to calculate an inventory objective.
  - Respect your maximum and minimum inventory constraints to constrain the inventory objective.
  - Reference On Order and In Transit quantities when determining additional required orders.
  - Generate future orders based on gaps between available quantities and target inventories.
  - Override order values as needed.
  - Use order execution systems, such as Oracle Order Management, to read data from exported orders table.

# **Forecasting and Consumption-Driven Planning**

**Important:** The Demantra Local Application replaces Collaborator Workbench. You may see both names in this text.

This chapter covers the following topics:

- Introduction
- Forecasting Profiles

## Introduction

CDP Forecasting focuses on generating detailed, consumer-centered forecasts. When store-level data is available, a forecast is generated for the consumer demands of each item at a store with daily granularity. When store information is not available, a forecast is based on shipments issued from the customer's distribution center. The output of the forecasts is then used to generate a sell-in shipment forecast as well as basic replenishment orders.

## **Forecasting Profiles**

Each engine profile is a combination of configurations and settings required as inputs for the Demantra Analytical Engine. Each profile is comprised of parameters, causal factors, forecasting models, and a forecast tree. Engine profiles are available to support the variety of analytical configurations needed to meet the different business processes in Demantra. The following engine profiles are available for CDP:

CDP Store Sell through Batch - Use this batch profile to generate the forecast shown in the Store Sell through Forecast Series. The profile is executed using the CDP Engine Store Consumption workflow. This Series appears in the CDP Sell-in Forecast Item/Store worksheet.

- CDP Store Sell through Simulation Use this simulation profile to generate the what-if forecast shown in Store Sell through Forecast Simulation Series. This profile is used to simulate at the store-level data. When accepting this simulation, values are incorporated into the Store Sell through Forecast Series
- CDP Site Sell through Batch Use this batch profile to generate the forecast shown in the Sell through Forecast Series. The profile is executed using the CDP Engine Org Site Consumption workflow. This Series appears in the CDP Sell-in Forecast Item/Customer DC worksheet.
- CDP Site Sell through Simulation Use this simulation profile to generate the what-if forecast shown in the Sell through Forecast Simulation Series. This Series appears in the CDP Sell-in Forecast Item/Customer DC worksheet. This profile generates a sell-through forecast at the site level and is not applicable at the store level. When accepting this simulation, values are incorporated into Sell through Forecast Series.

Refer to the "Engine Profiles" in the Oracle Demantra Implementation Guide for more information on available engine profiles and their uses.

## Sell-through at Site Level

The simulation and batch profiles that generate Sell-through forecasts at Site level are closely aligned with the Base engine profile. Differences are limited to the forecast tree, which is based on the Site and Account levels.

Level	Item Level	Location Level
1	Lowest Item Level	Lowest Location Level
2	Item	Site
3	Item	Account
4	Product Category	Account
5	Highest Fictive Level	Highest Fictive Level

In this forecast tree, the forecast is first attempted at the Item and Site level. Nodes not forecasted successfully go up to the Item and Account aggregation and finally to Product Category and Account.

The expression used for historical demand (QUANTITY\_FORM), shown below, is set to use sell-through data including any user overrides.

greatest(nvl(cdp\_sell\_thru\_hist\_ovr,nvl(cdp\_sell\_thru\_hist, 0)),0)

## Sell-through at Store Level

The requirements associated with the store-level forecast are dramatically different than a site-level forecast. The primary reason for this is the fact that the engine is generating a forecast on daily demand based on a completely different data table.

To accomplish this there are many differences between the forecasting profiles associated with store-level forecasting the with the Base engine profile. The difference includes the forecast tree, which is based on Store.

Level	Item Level	Location Level
1	Lowest Item Level	Lowest Location Level
2	Item	Store
3	Product Category	Store
4	Highest Fictive Level	Highest Fictive Level

In this forecast tree, the forecast is first attempted at the Item and Store level. Nodes not forecasted successfully go up to the Product Category and Store.

**Note:** The forecast tree currently does not go above the Store level.

During implementation it may be useful to review the forecast tree and consider including Store Group or Account.

Historical data and forecast generation are performed on the Consumption-Driven Planning data table and engine parameters have been set to support this.

The expression used for historical demand (QUANTITY FORM), shown below, is set to use sell-through data including any user overrides.

nvl(cdp st sell thru hist ovr,nvl(cdp st sell thru hist,0))

Additional parameters tied to number of periods have been set to reflect a daily demand stream and the requirements for this type of data. Causal factor definitions include both daily and monthly seasonality. The PARAMETERS table used by the store-level profiles is based on definitions more suited to daily data.

# **Worksheets**

Important: The Demantra Local Application replaces Collaborator Workbench. You may see both names in this text.

This chapter covers the following topics:

- **CDP Worksheets**
- CDP Launch Management Worksheets
- CDP Business Logic Engine Worksheets
- **CDP** Alert Worksheets
- Methods

## **CDP Worksheets**

Use the following seeded worksheets to analyze and modify your forecast and historical data:

- CDP Forecast Accuracy Item/Store
- CDP Replenishment Order Item/Store
- CDP Safety Stock Item/Store
- CDP Sell in Forecast Item/Customer DC
- CDP Sell in Forecast Item/Store

Like all Demantra worksheets, you can modify the worksheet display, Series, time, aggregation, filters, exceptions, and layout as needed from the Worksheet Designer.

## **CDP Forecast Accuracy Item/Store**

Use this worksheet to review forecast accuracy at the Item and Store level. It displays data at the weekly level by default.

Use this worksheet to identify and evaluate areas where forecast accuracy does not meet expectations. The seeded worksheet provides the basis for a bottom up approach where each Item/Store can be viewed and evaluated. You can add exceptions to the Standard Error, which will serve as a filter to provide a focused view on items and stores with poor performance. You can also create an aggregate worksheet based on this view which can be used to support top-down evaluation of areas with poor performance.

#### **About the Forecast Accuracy Table**

The Forecast Accuracy table compares sales and demand at your chosen aggregation level in weekly time buckets.

This table displays the following Series by default:

- Store Sell through Adjusted History
- Store Sell through Final Forecast
- Store Sell through Final Forecast Lag 1
- Store Sell through Final Forecast Lag 2
- Store Sell through Final Forecast Lag 3
- Store Sell through Final Forecast Lag 4
- Standard Error

#### About the Forecast Accuracy Graph

The Forecast Accuracy graph displays the following for the selected item and store:

- Store Sell through Adjusted History
- Store Sell through Final Forecast
- Store Sell through Final Forecast Lag 1
- Store Sell through Final Forecast Lag 2
- Store Sell through Final Forecast Lag 3
- Store Sell through Final Forecast Lag 4

#### **Business Data**

The following table provides information about the default Series displayed in the worksheet.

Series	Series Group	Description
Store Sell through Adjusted History	CDP Replenishment/CDP Safety Stock/CDP Store Sell In	Sell-through history at the store level including any end-user adjustments. Reflects the value specified in the CDP Sell in Forecast Item/ Store worksheet.
Store Sell through Final Forecast	CDP Replenishment/CDP Safety Stock/CDP Store Sell In	Final store sell-through forecast including any end-user adjustments. Also used when calculating safety stock.
Store Sell through Final Forecast Lag 1	CDP Safety Stock/CDP Store Sell In	Store sell-through forecast as of 1 week ago.
Store Sell through Final Forecast Lag 2	CDP Safety Stock/CDP Store Sell In	Store sell-through forecast as of 2 weeks ago.
Store Sell through Final Forecast Lag 3	CDP Safety Stock/CDP Store Sell In	Store sell-through forecast as of 3 weeks ago.
Store Sell through Final Forecast Lag 4	CDP Safety Stock/CDP Store Sell In	Store sell-through forecast as of 4 weeks ago.
Standard Error	CDP Safety Stock	Series containing the Standard Error between Store Sell through Final Forecast Lag 4 and Sell through History. Calculated by the workflow Standard Error Calculation Item Store.

## **CDP Replenishment Order Item/Store**

Use this worksheet to review the suggested replenishment order quantities at the Item, Organization, Customer DC, and Store levels.

This worksheet serves as the hub for evaluating inventory targets and driving replenishment orders. Based on selected safety stock policies and inventory constraints, a target inventory is calculated. This information is incorporated with on-hand and

incoming inventories and generates the replenishment orders needed to meet future inventory objectives. You can adjust inventory constraints in real time and see how the changes impact the required orders. You can also override replenishment orders when reacting to unexpected demand or incorporating additional business intelligence.

### About the CDP Replenishment Order Table

The Replenishment Order table displays store sell-through inputs and calculated receipts at your chosen aggregation level in daily time buckets.

This table displays the following Series by default:

- Store Sell through Adjusted History
- Store Sell through Forecast
- Store Sell through Forecast Override
- Store Sell through Final Forecast
- Inventory Objective
- **Inventory Minimum**
- **Inventory Maximum**
- Required Inventory
- In Transit
- On Order
- Available Inventory
- Store Receipts
- Store Lead Time
- Suggested Order Replenishment
- Replenishment Order Override
- Final Replenishment Order

#### About the CDP Replenishment Order Graph

The CDP Replenishment Order graph displays the following for the selected product/store:

Store Sell through Adjusted History

- Store Sell through Forecast
- Store Sell through Final Forecast
- Suggested Replenishment Order
- Final Replenishment Order

## **Business Data**

The following table provides information about the default Series displayed in the worksheet.

Series	Series Group	Description
Store Sell through Adjusted History	CDP Replenishment/CDP Safety Stock/CDP Store Sell In	Sell-through history at the store level including any end-user adjustments. Reflects the value specified in the CDP Sell in Forecast Item/Store worksheet.
Store Sell through Forecast	CDP Replenishment/CDP Store Sell In	Shipment forecast calculated based on the sell-through forecast at the store level.
Store Sell through Forecast Override	CDP Replenishment/ CDP Store Sell In/CDP Engine – Store Replenishment/CDP Engine – Store Sell In	Override Series used to adjust Store Sell through Forecast.
Store Sell through Final Forecast	CDP Replenishment/CDP Safety Stock/CDP Store Sell In	Final store sell-through forecast including any end-use adjustments. Also used when calculating safety stock.
Inventory Objective	CDP Replenishment	The expected on-hand inventory level. Sum of Final Safety Stock and Store Sell through Final Forecast.
Inventory Minimum	CDP Replenishment	The minimum suggested inventory level at the store (imported value).

Series	Series Group	Description
Inventory Maximum	CDP Replenishment	The maximum suggested inventory level at the store (imported value).
Required Inventory	CDP Replenishment	If Inventory objective is equal or below minimum, then this is set to minimum. If inventory objective is equal or above maximum, then this is set to maximum. Otherwise, it is set to the same value as the Inventory Objective Series.
In Transit	CDP Replenishment	Quantity that has been shipped but has yet to arrive at final destination (imported value).
On Order	CDP Replenishment	Quantity that has been ordered but has yet to arrive at final destination (imported value).
Available Inventory	CDP Replenishment	Available inventory based on in transit, on hand, and on order. For future buckets, this Series also considers inventory available after meeting the forecast requirements from the previous bucket.
Store Receipts	CDP Replenishment	The number of units based on Available Inventory to ensure Required Inventory is met.
Store Lead Time	CDP Replenishment/CDP Store Sell In	The lead time associated with shipments to the store (imported value).
Suggested Replenishment Order	CDP Replenishment	Orders based on Store Receipts lagged by Store Lead Time.

Series	Series Group	Description
Replenishment Order Override	CDP Replenishment	Override Series used to adjust Suggested Replenishment Order and generate Final Replenishment Order value.
Final Replenishment Order	CDP Replenishment	Final replenishment order including any end-user adjustments and suggested orders.

## **CDP Safety Stock Item/Store**

Use this worksheet to review safety stock at the Item, Organization, Site, and Store aggregation levels. In batch mode, Safety Stock is calculated and saved to the database using the workflow CDP BLE Cluster Replenishment Weekly.

Use this worksheet to review side-by-side the different safety stock options and the resulting safety stock. If safety stock policies or parameters change you can recalculate them in real time.

### About the CDP Safety Stock Graph

The Safety Stock table displays store sell-through inputs and calculated Safety stock at your chosen aggregation level in daily time buckets.

This table displays the following Series by default:

- Store Sell through Adjusted History
- Store Sell through Final Forecast
- Safety Stock Choice
- Service Level
- Standard Error
- Store Target Days of Supply Override
- Store Target Days of Supply Final
- Fixed Percent
- Store Lead Time

- Safety Stock Override
- Final Safety Stock

The CDP Safety Stock graph displays the following the selected product/store.

- Store Sell through Adjusted History
- Store Sell through Final Forecast
- Final Safety Stock

### **Business Data**

The following table provides information about the default Series displayed in the worksheet.

Series	Series Group	Description
Store Sell through Adjusted History	CDP Replenishment/CDP Safety Stock/CDP Store Sell In	Sell-through history at store including any end-user adjustments. Reflects values specified in the CDP Sell in Forecast Item/Store worksheet.
Store Sell through Final Forecast	CDP Replenishment/CDP Safety Stock/CDP Store Sell In	Final store sell-through forecast, including any end-user adjustments. Also used when calculating safety stock.

Series	Series Group	Description
Safety Stock Choice	CDP Safety Stock/CDP Engine – Safety Stock/CDP Engine – Store Replenishment	Selected Safety Stock calculation method. The list displays the following options:
		• None
		• SS Days of Supply
		• SS Fixed Pct
		• SS Lead Time
		• SS Statistical
		Based on your selected calculation method, Demantra modifies the Final Safety Stock value.
Service Level	CDP Safety Stock/CDP Engine – Safety Stock/CDP Engine – Store Replenishment	Desired service level, displayed as a percentage. Also used when calculating safety stock.
Standard Error	CDP Safety Stock	Series containing the Standard Error between Store Sell through Final Forecast Lag 4 and Sell through History. Calculated by the workflow Standard Error Calculation Item Store.
Store Target Days of Supply Override	CDP Store Sell In/CDP Engine – Safety Stock/CDP Engine – Store Replenishment/CDP Engine – Store Sell in	Override Series used to adjust Store Target Days of Supply.
Store Target Days of Supply Final	CDP Store Sell In	Final target days of supply at store including any end-user adjustments and days of supply.

Series	Series Group	Description
Fixed Percent	CDP Safety Stock/CDP Engine – Safety Stock/CDP Engine – Store Replenishment	Percentage of the forecast which should be kept as safety stock.
Store Lead Time	CDP Replenishment/CDP Store Sell In	The lead time associated with shipments to the store (imported value).
Safety Stock Override	CDP Safety Stock	Override Series used to adjust Safety Stock.
Final Safety Stock	CDP Safety Stock	Final safety stock based on safety stock calculation method and any end-user adjustments.

### CDP Sell in Forecast Item/Customer DC

Use this worksheet to review the sell-through and resulting sell-in forecast. The worksheet is defined at the Item, Organization, Site, and Week levels. This worksheet is primarily used for customers and accounts where store level data is not available for sell-through information. Use this worksheet to evaluate and modify the DC level sell-through forecast and how that forecast is converted into a sell-in forecast.

#### About the Sell in Forecast Table

The Sell in Forecast table displays store sell-through inputs, inventory and sell-in forecasts at your chosen aggregation level in weekly time buckets.

This table displays the following Series by default:

- Sell through History
- Sell through History Override
- Sell through Adjusted History
- Sell through Forecast
- Sell through Forecast Simulation
- Sell through Forecast Override
- Sell through Final Forecast

- Target Weeks of Supply Override
- **Beginning Inventory**
- Receipt Requirement
- Lead Time
- Sell in Forecast
- Base Override
- Final Forecast

### About the Sell in Forecast Graph

The Sell in Forecast graph displays the following for the selected item, customer, and distribution center:

- Sell through Adjusted History
- Sell through Forecast
- Sell through Forecast Simulation
- Sell through Final Forecast
- Sell in Forecast
- Final Forecast

#### **Business Data**

The following table provides information about the default Series displayed in the worksheet.

Series	Series Group	Description
Sell through History	CDP Sell In	Consumption history or Point of Sale (POS) history or DC withdrawals.
Sell through History Override	CDP Sell In	Override Series used to adjust Sell through History.
Sell through Adjusted History	CDP Sell In	Sell-through history including any end-user adjustments.

Series	Series Group	Description
Sell through Forecast	CDP Sell In	Statistical forecast generated based on Sell through Adjusted History.
Sell through Forecast Simulation	CDP Sell In	Simulation Series for Sell through Forecast.
Sell through Forecast Override	CDP Sell In/CDP Engine – Site Sell In	Override Series used to adjust Sell through Forecast.
Sell through Final Forecast	CDP Sell In	Final sell-through forecast including any end-user adjustments.
Target Weeks of Supply Override	CDP Sell In/CDP Engine – Site Sell In	Override Series used to adjust Target Weeks of Supply.
Beginning Inventory	CDP Sell In	Beginning on-hand inventory at the selected location for the current period and target inventory days of supply.
Receipt Requirement	CDP Sell In	Shipments required at the store based on Sell through Forecast.
Lead Time	CDP Sell In	Lead time to ship from manufacturer's distribution center to retailer distribution center/store.
Sell in Forecast	CDP Sell In	Shipment forecast for the manufacturer by offsetting the Receipt Requirement based on lead time.
Base Override	CDP Sell In	Override Series used to adjust Sell in Forecast.

## **CDP Sell in Forecast Item/Store**

Use this worksheet to review the sell-through and resulting sell-in forecast. The worksheet is defined at Item, Organization, Store, and Day levels. This worksheet is used for customers and accounts where store-level data is available. Use the worksheet to evaluate and modify the store-level sell-through forecast and how that forecast is converted into a sell-in forecast. Due to the very granular nature of this worksheet, it provide the most detailed view of consumer demand. Based on business need, you can create copies of the worksheet at more aggregate levels. Due to the very high data volumes associated with this worksheet, it is recommended that a filter be applied to limit the amount of data being brought in and improve performance.

#### About the Sell in Forecast Table

The Sell in Forecast table displays store sell-through inputs, inventory and sell-in forecasts at your chosen aggregation level in daily time buckets.

This table displays the following Series by default:

- Store Sell through History
- Store Sell through History Override
- Store Sell through Adjusted History
- Store Sell through Forecast
- Store Sell through Forecast Simulation
- Store Sell through Forecast Override
- Store Sell through Final Forecast
- Store Target Days of Supply Override
- Store Target Days of Supply Final
- Store Target Inventory Days of Supply
- Store Beginning Inventory
- Store Receipt Requirement
- Store Lead Time
- Store Sell in Forecast
- Store Sell in Forecast Override
- Store Sell in Final Forecast

#### About the Store Sell in Forecast Graph

The Store Sell in Forecast graph displays the following for the selected item/organization/customer distribution center/store in daily time buckets:

- Store Sell through History
- Sell through Adjusted History
- Store Sell through Forecast
- Store Sell through Forecast Simulation
- Store Sell through Final Forecast
- Store Sell in Final Forecast

#### **Business Data**

The following table provides information about the default Series displayed in the worksheet.

Series	Series Group	Description
Store Sell through History	CDP Replenishment/CDP Store Sell in	Store consumption history (or) DC withdrawals.
Store Sell through History Override	CDP Replenishment/CDP Store Sell in	Override Series used to adjust Store Sell through History.
Store Sell through Adjusted History	CDP Replenishment/CDP Safety Stock/CDP Store Sell in	Sell-through history at the store level including any end-user adjustments. Reflects the value specified in the CDP Sell in Forecast Item/ Store worksheet.
Store Sell through Forecast	CDP Replenishment/CDP Store Sell in	Shipment forecast calculated based on the sell-through forecast at the store level.
Store Sell through Forecast Simulation	CDP Replenishment/CDP Store Sell in	Simulation Series for Store Sell through Forecast.
Store Sell through Forecast Override	CDP Replenishment/CDP Store Sell in/CDP Engine - Safety Stock/CDP Engine - Store Replenishment/CDP Engine - Store Sell in	Override Series used to adjust Store Sell through Forecast.

Series	Series Group	Description
Store Sell through Final Forecast	CDP Replenishment/CDP Safety Stock/CDP Store Sell in	Final store sell-through forecast including any end-user adjustments. Also used when calculating safety stock.
Store Target Days of Supply Override	CDP Store Sell in/CDP Engine - Safety Stock/CDP Engine - Store Replenishment/CDP Engine - Store Sell in	Override Series used to adjust Store Target Days of Supply.
Store Target Days of Supply Final	CDP Store Sell in	Final Store Target Days of Supply including overrides.
Store Target Inventory Days of Supply	CDP Store Sell in	Store Target Inventory based on days of supply.
Store Beginning Inventory	CDP Store Sell in	Beginning on-hand inventory at the store for the current period and target inventory days of supply.
Store Receipt Requirement	CDP Store Sell in	Store shipments required at the store based on Store Sell through Forecast.
Store Lead Time	CDP Replenishment/CDP Store Sell in	Store lead time to ship from manufacturer's distribution center to retailer distribution center/store.
Store Sell in Forecast	CDP Store Sell in	Store shipment forecast for the manufacturer by offsetting the Store Receipt Requirement based on lead time.
Store Sell in Forecast Override	CDP Store Sell in	Override Series used to adjust Store Sell in Forecast.
Store Sell in Final Forecast	CDP Store Sell in	Final Store Sell in Forecast including any end-user adjustments.

## **CDP Launch Management Worksheets**

CDP provides the following launch management worksheets:

- CDP New Product Launch Management
- CDP New Store Launch Management

Use the icons on the Launch Management toolbar to perform tasks in the CDP launch management worksheets.



#### **Cascade Filters Icon**

When defining the target or the source for either a new product launch or a new store launch, turning off cascade filters is recommended. After clicking the Cascade Filters icon, the user is prompted to reset filter definitions. Clicking No cancels the action and retains the selected levels and members. Clicking Yes removes all levels and members that were previously in selected filters for the worksheet. The user can then choose the levels and members they want to filter worksheet data.



## **CDP New Product Launch Management**

Use this worksheet to launch a new product at a store, store group or account. An existing product's data is used to define the new product. This worksheet is also used to view previous product launches. You can edit and cancel product launches that have not reached their product launch date, which is the date the product is expected to be available at the store.

#### About the CDP New Product Launch Management Worksheet

The New Product Launch Management worksheet displays product launch information and status.

This worksheet displays the following Series by default:

- Launch Type
- Launch Status

- Launch Status Detail
- Message

#### About the New Product Launch Attributes Table

This table displays the following information about the selected product launch:

- Request ID
- Request Date
- Copy Data
- Copy Percentage
- Copy Start Date History
- Copy End Date History
- Product Launch Date
- Launch Mode
- User Name

#### **Business Data**

The following table provides information about the default Series displayed in the worksheet.

Series	Series Group	Description
Copy Data	CDP Launch Management	Indicates whether historical data will be copied to the new product. The following options are available:
		<ul> <li>Yes - Use to have source historical data copied to the new product (the target). This is the default option.</li> </ul>
		For information about the columns copied from the source product to the target product, refer to Copy Data, page 3-28.
		• No - Use to prevent historical data from being copied to the new product. Only combinations specified from the source population will be copied to the new product (the target).
Copy Percentage	CDP Launch Management	Indicates the amount of historical data copied from the source item to the new product being introduced. The default value is 100 which means that all the historical data will be copied. If you only wanted to copy half of the historical data, you would enter 50 in this field.
Copy Start Date - History	CDP Launch Management	Indicates that the historical start date will be copied as a product attribute.
Copy End Date - Forecast	CDP Launch Management	Indicates that the forecast end date will be copied as a product attribute.

Series	Series Group	Description
Launch Mode	CDP Launch Management	Indicates when the new product request is processed. The following options can be displayed:
		<ul> <li>Now - Used to initiate the new product introduction once the request is defined and saved. The Launch Management Realtime workflow runs continuously in the background and processes the request immediately when Now is selected.</li> <li>Batch - Used to initiate the new product request when the next CDP Nightly Batch Process workflow runs.</li> </ul>
Launch Status	CDP Launch Management	Indicates the current status for the new product launch.  For more information, see
Launch Status Detail	CDP Launch Management	Launch Statuses, page 3-29.  Provides additional explanation of the launch state.
		For more information, see Launch Status Details, page 3- 30.

Series	Series Group	Description
Launch Type	CDP Launch Management	Indicates the type of launch requested. CDP supports two launch types, New Product Launch and New Store Launch. In the CDP New Product Launch Management worksheet, this Series displays New Product Launch since the worksheet is dedicated to managing new product launches.
Message	CDP Launch Management	Displays any validation or error messages for the launch request.
		For more information, refer to Launch Request Messages, page 3-32.
Product Launch Date	CDP Launch Management	Indicates the date the new product is expected to be available.
Request Date	CDP Launch Management	Indicates the date the new product request was created.
Request ID	CDP Launch Management	Indicates the internal processing ID assigned when the request was initiated.
User Name	CDP Launch Management	Indicates the user that initiated the product launch request.

#### To create a new product launch:

- 1. Click New Product Launch from the Launch Management toolbar, or right-click in the Members Browser and choose New Product Launch. The New Product Launch screen appears.
- **2.** In the Request Name field, enter a descriptive name for the product launch.
- 3. Click the Edit button from the Source region. The Edit Source screen appears.

4. Define the source item and site, site group, or account levels to be used as the basis for the new product.

> **Important:** New product introductions are supported *only* at the following levels:

- Item/Store (Site)
- Item/Store group (Site Group)
- Item/Account

One of these source-level combinations has to be selected for the new product introduction to be valid. Select the Item level. Only select a single item as a source member. Choose a Store, Store Group, or Account. You may assign one or more Store Groups or Accounts as Selected member, but only a single Store may be assigned as Selected member. If different levels or more than one Store is selected, then the process will not execute successfully and the launch profile will not be added.

1. Add Item to the Selected Filter Levels, and then add the source item to the Selected members.

Note: Only select a single item.

- Perform one of the following:
  - To add the new product to a store, add Site to the Selected Filter Levels and add the specific store to the Selected members region.
  - To add the new product to a store group, add Site Group to the Selected Filter Levels and add the store group to the Selected members.
  - To add the new product to an account, add Account to the Selected Filter Levels and add the account to Selected members.
- 3. Click Finish.
- Accept the default Dates for the source.
- Click the Edit button from the Target region to define the target item for the new product. The Edit Target screen appears.

**Note:** The target Item must already exist. CDP does not create the item. It must be available as a member of the Item level.

- 1. Add Item to the Selected Filter Levels, and then add the target item to the Selected members.
- **2.** Click Finish.
- 7. In the Product Launch Date field, enter the date the new product is expected to be available in the date format mm/dd/yyyy, or click the Product Launch Date list to select a date from the calendar.
- 8. From the Copy Data list, indicate whether the data from the source product should be copied to the new product.

Two values are available:

- Yes Used to copy source historical data to the new product.
- No Do not copy historical data to the new product. Only combinations specified from the source population will be copied to the new product (the target). The historical data from the combinations that were specified in the source section will not be copied to the target/new product, but the product will be available at any of the locations that were specified as the source. The product will not have pseudo history on which to generate a forecast, but a forecast may be entered manually or imported from an external source.
- 9. In the Copy Percentage field, enter the percentage of the source item's historical data to be copied to the target item.
  - This value will be used to scale the information from the source item. If 200% is entered, then source item's historical demand is doubled when copied to the new item.
- **10**. In the Copy Start Date History field, enter the date to start copying historical data. This date must be earlier than the selected Product Launch Date. The system will copy historical data from this date forward to the new product. The field defaults to 01/01/2010.
- 11. In the Copy End Date Forecast, enter the last forecast date to be copied to the new product. This date must be later than the selected Product Launch Date. The system will copy forecast series data until this date to the new product. If not defined, the system defaults the value to the current "MaxForecastSalesDate" parameter during the copy process.
- **12**. From the Launch Mode list, select one of the following options:
  - Now Used to initiate the new product introduction once the request is defined and saved. The Launch Management Realtime workflow runs continuously in the background and processes the request immediately when Now is selected.

**Note:** If a product is added to a large number of stores, this process may take some time to complete.

- Batch Used to initiate the new product request when the next CDP Nightly Batch Process workflow runs.
- **13**. Click Submit. When prompted to create the population, click OK.

After clicking Submit, you can review details of the launch request in the CDP New Store Launch Management worksheet.

### **CDP New Store Launch Management**

Use this worksheet to copy all items from a similar store to a new store. An existing store's data is used to define the new store. This worksheet is also used to view previous store launches. You can edit and cancel store launches that have not reached their store launch date, which is the first date that the store is expected to be open.

#### About the CDP New Store Launch Management Worksheet

The CDP New Store Launch Management worksheet displays store launch information and status.

This worksheet displays the following Series by default:

- Launch Type
- Launch Status
- Launch Status Detail
- Message

#### About the CDP New Store Launch Attributes Table

This table displays the following information about the selected store launch:

- Request ID
- Request Date
- Copy Data
- Copy Percentage
- Store Launch Date
- Launch Mode

#### User Name

#### **Business Data**

The following table provides information about the default Series displayed in the worksheet.

Series	Series Group	Description
Copy Data	CDP Launch Management	Indicates whether historical data will be copied to the new store. The following options are available:
		<ul> <li>Yes - Use to have source historical data copied to the new store (the target). This is the default option.</li> </ul>
		For information about the columns copied from the source store to the target store, refer to Copy Data, page 3-28.
		<ul> <li>No - Use to prevent historical data from being copied to the new store.</li> <li>Only combinations specified from the source population will be copied to the new store (the target).</li> </ul>
Copy Percentage	CDP Launch Management	Indicates the amount of historical data copied from the source store to the new store being introduced. The default value is 100 which means that all historical data will be copied. If you only wanted to copy half of the historical data, you would enter 50 in this field.

Series	Series Group	Description
Launch Mode	CDP Launch Management	Indicates when the new store request is processed. The following options can be displayed:
		<ul> <li>Now - Used to initiate the new store introduction once the request is defined and saved. The Launch Management Realtime workflow runs continuously in the background and processes the request immediately when Now is selected.</li> <li>Batch - Used to initiate the new store request when the next CDP Nightly Batch Process workflow runs.</li> </ul>
Launch Status	CDP Launch Management	Indicates the current status
Laurier Status	CDI Lauficii Mariagemeni	for the new store launch.
		For more information, see Launch Statuses, page 3-29.
Launch Status Detail	CDP Launch Management	Provides additional explanation of the launch state.
		For more information, see Launch Status Details, page 3- 30.

Series	Series Group	Description
Launch Type	CDP Launch Management	Indicates the type of launch requested. CDP supports two launch types, New Product Launch and New Store Launch. In the CDP New Store Launch Management worksheet, this Series displays New Store Launch since the worksheet is dedicated to managing new store launches.
Message	CDP Launch Management	Displays any validation or error messages for the launch request.
		For more information, refer to Launch Request Messages, page 3-32.
Store Launch Date	CDP Launch Management	Indicates the date the new store is expected to open.
Request Date	CDP Launch Management	Indicates the date the new store request was created.
Request ID	CDP Launch Management	Indicates the internal processing ID assigned when the request was initiated.
User Name	CDP Launch Management	Indicates the user that initiated the store launch request.

#### To create a new store launch:

- 1. Click New Store Launch from the Launch Management toolbar, or right-click in the Members Browser and choose New Store Launch. The New Store Launch screen appears.
- **2.** In the Request Name field, enter a descriptive name for the store launch.
- 3. Click the Edit button from the Source region. The Edit Source screen appears.
- **4**. Define the source store to be used as the basis for the new store.

- 1. Turn off cascade filter in the filter window. (For details about cascade filters, see Cascade Filter Icon, page 3-16.).
- 2. Add the Site Type level and choose Store.
- 3. Add Site to Selected Filter Levels.
- **4.** Add relevant Store to Selected members region (select only one store).
- 5. Click Finish.
- **5**. Accept the default Dates for the source.
- 6. Click the Edit button from the Target region to define the target store for the new launch. The Edit Target screen appears.

**Note:** The target store must already exist. CDP does not create the store. It must be available as a member of the Site level.

- 1. Turn off cascade filter in the filter window. (For details about cascade filters, see Cascade Filter Icon, page 3-16.).
- **2**. Click Edit to choose the Target store.
- 3. Add the Site Type level and choose Store.
- 4. Add Site level and then select Store.

**Note:** The store must exist in Demantra and must be a member of the Site level.

- 5. Click Finish.
- 7. In the Store Launch Date field, enter the date the new store is expected to be open in the date format mm/dd/yyyy, or click the Store Launch Date list to select a date from the calendar.
- **8.** From the Copy Data list, indicate whether the data from the source store should be copied to the new store.

Two values are available:

- Yes Used to copy source historical data to the new product.
- No Do not copy historical data to the new store. Only combinations specified from the source population will be copied to the new store (the target).

- **9**. In the Copy Percentage field, enter the percentage of the source store's historical data to be copied to the target item.
- **10.** From the Launch Mode list, select one of the following options:
  - Now Used to initiate the new store introduction once the request is defined and saved. The Launch Management Realtime workflow runs continuously in the background and processes the request immediately when Now is selected.
  - Batch Used to initiate the new store request when the next CDP Nightly Batch Process workflow runs.
    - This option is recommended if you are creating multiple store launches or a store includes many products.
- 11. Click Submit. When prompted to create the population, click OK.

After clicking Submit, you can review details of the launch request in the CDP New Store Launch Management worksheet.

## **Copy Data**

The Copy Data field indicates if historical data for the product or store launch is copied. The table below identifies the columns copied from the source product or store to the target product or store.

Source Series	Source Column/Expres sion	Target Column	Target Series	Table
Store Sell through Adjusted History	nvl(cdp_st_sell_t hru_hist_ovr, nvl(cdp_st_sell_t hru_hist,0))	cdp_st_sell_thru _hist_ovr	Store Sell through History Override	T_EP_CDP_DAT A
Inventory Minimum	cdp_st_inv_min	cdp_st_inv_min	Inventory Minimum	T_EP_CDP_Matr ix
Inventory Maximum	cdp_st_inv_max	cdp_st_inv_max	Inventory Maximum	T_EP_CDP_Matr ix
Store Lead Time	cdp_st_lead_tim e	cdp_st_lead_tim e	Store Lead Time	T_EP_CDP_Matr ix
Service Level	cdp_service_leve l	cdp_service_leve l	Service Level	T_EP_CDP_Matr ix

Source Series	Source Column/Expres sion	Target Column	Target Series	Table
Store Target Day of Supply Load	cdp_st_target_do	cdp_st_target_do	Store Target Day of Supply Load	T_EP_CDP_Matr ix

## **Launch Statuses**

The Launch Status field indicates the status for the launch request. The table below provides a description of the launch statuses that can be displayed for a request. The Launch Status Detail field displays additional information about the status. For more information, refer to Launch Status Details, page 3-30.

Launch Status	Description
New	The default status displayed for a new request.
Valid	The selected source and target population attributes are valid.
Invalid	The selected source and target population attributes are invalid.
Processing	The launch request is currently being processed.
Processed	The launch request was successfully processed.
Processed with Errors	The launch request was processed, but errors were encountered during CDP member or copy data load process.
Incomplete	The launch request processing could not be completed due to technical issues.

Launch Status	Description
On Going	The launch request, which has the Copy Data set to "Yes", is being processed on a regularly scheduled basis until the request reaches its launch date. As additional data is added to the source, it will continue to be copied to the target until the launch date is reached.
Completed	The launch request successfully completed. The request has reached its launch date, and all data was successfully copied from the selected source to target.
Failed	The launch request failed due to technical issues.
Cancelled	The launch request was cancelled and will not be processed.

## **Launch Status Details**

The Launch Status Detail field provides additional information about the launch status for the request. The table below provides a description of the launch statuses that can be displayed for a request.

Launch Status Detail	Description
Prepare Data Started	The data preparation step for the launch request has been initiated. During the data preparation step, data from the selected source population is copied to the Integration Interface staging tables for the new launch request.
Prepare Data Completed	The Integration Interface staging tables for the launch request have been successfully populated.
Prepare Data Failed	Technical issues occurred during the data preparation step.

Launch Status Detail	Description
CDP Members Load Completed	All the required CDP members were successfully loaded through the Integration Interface .
CDP Members Load Completed with Errors	Data validation errors occurred during the execution of CDP Level Member load.
CDP Members Load Incomplete	Technical issues occurred during the execution of the CDP Level Member Integration Interface.
Copy Consumption Data Completed	The consumption history data for the launch request was successfully loaded through the Integration Interface.
Copy Consumption Data Completed with Errors	The consumption history was copied for the request was completed, but validation errors occurred during the execution of Consumption History copy Integration Interface.
Copy Consumption Data Incomplete	Technical issues occurred during the execution of Consumption History copy Integration Interface.
Store Parameters Load Completed	The Item and Store parameters data series for the launch request were successfully loaded through the Integration Interface.
Store Parameters Load Completed with Errors	The Item and Store parameters data series for the launch request were loaded, but validation errors occurred during the execution of Item and Store parameters series copy through the Integration Interface.
Store Parameters Load Incomplete	Technical issues occurred during the execution of Item and Store parameters series copy through the Integration Interface.

Launch Status Detail	Description
Ongoing Copy Started	The Ongoing Consumption History data copy process has started. The Ongoing Consumption History data copy process is scheduled as part of CDP Daily Batch and CDP Weekly Batch processes.
Ongoing Copy Completed	The consumption history was successfully loaded to the new product or store through the Integration Interface for a launch request with a Launch Status of "Processed" or "Ongoing". The Ongoing Consumption History data copy process is scheduled as part of CDP Daily Batch and CDP Weekly Batch processes.
Ongoing Copy Completed with Errors	Data validation errors occurred during the execution of Consumption History data copy Integration Interface for a launch request with a Launch Status of "Processed" or "Ongoing".
Ongoing Copy Incomplete	Technical issues occurred during the execution of Consumption History data copy Integration Interface for a launch request with a Launch Status of "Processed" or "Ongoing".
Ongoing Copy Failed	Technical issues occurred during the execution of the Ongoing Consumption History data copy process.

## **Launch Request Messages**

The Messages field displays any validation or error messages for the launch request. The table below provides a description of the launch messages that can be displayed for a request. If the message indicates your launch request was unable to be processed, modify the launch parameters as necessary, and then resubmit the request.

Launch Message	Description	
(Empty)	If the Message field is empty, then no errors occurred while processing the launch request.	

Launch Message	Description
Validation Success	The source and target population selections were successfully validated.
Multiple Source Item Selection is Not Allowed	During a new product launch request, multiple level members were selected for the " Item" level in the source population attribute.
Multiple Target Item Selection is Not Allowed	During a new product launch request, multiple level members selected for the "Item" level in the target population attribute.
Same Item Cannot be selected for both Source and Target	During a new product launch request, the same level member was selected for the "Item Level" in both the source and target population attribute.
Source/Target Item Selection is Missing	During a new product launch request, a level member was not selected for the "Item" level in the source or target population attribute.
Source Account Type Must be Consumption	During a new product launch request, a non-consumption account was selected for the request.
Selected Source Account Does Not have Stores	During a new product launch request, the selected level member for the Account level does not have stores.
Multiple Source Account Selection is Not Allowed	During a new product launch request, multiple level members were selected for the " Account" level in the source population attribute.
Selected Source Site is Not a Store	During a new product or store launch request, the selected Site (Site of "Store" Site Type) for the source population attribute is not a store.
Multiple Source Store Selection is Not Allowed	During a new product or store launch request, multiple level members (Sites of "Store" Site Type) were selected for the "Site" level in the source population attribute.

Launch Message	Description
Source selection Does Not Include Store or Store Group or Account levels. No Stores Available for the Selected Source	During a new product launch request, a Store (Site of "Store" Site Type), Store Group (Site Group for Store Sites), or Account level was not selected in the source population attribute.
Only Item level should be selected in the Target	During a new product launch request, a non-Item level was selected in the target population attribute.
Same Store Cannot be Selected for both Source and Target	During a new store launch request, the same store (Site of "Store" Site Type) was selected in the source population and target population.
Source/Target Store Selection is Missing	During a new store launch request, the store (Site of "Store" Site Type) was not selected in the source or target population attribute.
Selected Target Site is Not a Store	During a new store launch request, the selected site (Site of "Store" Site Type) for the target population attribute is not a store.
Multiple Target Store Selection is Not Allowed	During a new store launch request, multiple level members (Sites of "Store" Site Type) were selected for the "Site" level in the target population attribute.
System Error, Please Contact Demantra Application Administrator	Technical issues occurred while processing the launch request.
Warning: Selected Source Combination Does Not Exist	The launch request was submitted with Copy Data attribute set to "Yes", but the selected source population attribute does not have combinations in the CDP General level.
Warning: Selected Source Combination Does Not Exist/Target Combination Already Exists in the System	The launch request was submitted with Copy Data attribute set to "No" but either the selected source population attribute does not have combinations in the CDP General level or the selected target population attributes have all the required CDP members in the CDP General Level.

Launch Message	Description
Request in Status Processing/Completed or Valid with Run Mode Now Cannot be Cancelled	A request was submitted to cancel a launch which has already been processed or validated. You cannot cancel a launch request with Launch Mode set to Now and a current Launch Status of Processing, Completed, or Valid.
Request in Status Processing/Completed or Valid with Run Mode Now Cannot be Edited	A request was submitted to edit a launch which has already been processed or validated. You cannot edit a launch request with Launch Mode set to Now and a current Launch Status of Processing, Completed, or Valid.

## **CDP Business Logic Engine Worksheets**

The CDP BLE worksheets contain calculated values and are used in the CDP BLE workflows.

**Note:** After data is loaded in the environment, the administrator should add "Account type = Consumption" as a filter to all the CDP BLE worksheets.

**Warning:** The BLE worksheets are used for internal calculations only. Only a system administrator should modify these worksheets. Only the filter and time range should be adjusted.

CDP provides the following Business Logic Engine (BLE) worksheets:

CDP BLE Replenishment Order Item/Store - This worksheet is used in the BLE Workflow Step. It provides the replenishment order calculations at the Item, Organization, Site, and Store levels.

> **Note:** After data is loaded in the environment, the administrator should add "Account type = Consumption" as a filter to this worksheet.

CDP BLE Safety Stock Item/Store - This worksheet is used in the BLE Workflow Step. It provides Safety Stock calculations at the Item, Organization, Customer DC, and Store aggregation levels.

- CDP BLE Safety Stock Replenishment Order Item/Store This worksheet is used in the Update Data Workflow BLE Step to calculate Safety Stock and Suggested Replenishment Orders.
- CDP BLE Sell in Integration Item/Org/Customer DC This worksheet is used in the BLE Workflow Step - Sell in Forecast Integration from Store to Org/Customer DC.

**Note:** After data is loaded in the environment, the system administrator should add any additional accounts where the data needs to be synchronized to the Customer DC level.

- CDP BLE Sell in Item/Store This worksheet is used in the BLE Workflow Step. It provides the Store Sell in Forecast calculations at the Item, Organization, Customer DC, and Store levels.
- CDP BLE Sell in Item/Customer DC This worksheet is used in the BLE Workflow Step - Sell in Forecast Calculations at the Item, Org, and Customer DC levels.

For more information, refer to Business Logic Engine, page 6-1. For more information about Demantra and BLE, refer to the Oracle Demantra Implementation Guide.

### **CDP Alert Worksheets**

CDP provides the following alert worksheets, which system administrators can modify to generate alerts for the threshold levels used:

- CDP Alert Final Forecast This worksheet provides the Final Forecast Threshold Alert at the Item and Organization aggregation levels.
- CDP Alert High Store Inventory This worksheet provides the High Store Inventory Alert at the Item and Store aggregation levels.
- CDP Alert MAPE Item/Org This worksheet provides the MAPE Alert at the Item and Organization aggregation levels.
- CDP Alert Out of Stock This worksheet provides the Store Out of Stock Alert at the Item, Account, and Store aggregation levels.
- CDP Alert Replenishment Order This worksheets provides the Replenishment Order Alert at the Item, Account, and Store aggregation levels.

## **Methods**

Demantra provides several predefined Methods that users can invoke to recalculate data in CDP worksheets on an as-needed basis. These methods are enabled on the Item level. If the Item level is part of a worksheet, then these methods can be run using the Item toolbar icons (shown below), or by right-clicking on the Item level and selecting from the Methods menu option.



The following CDP methods are available.

- Sell in Forecast Recalculation Select this method to recalculate the sell-in forecast at the Item/Org,/Site level for the selected item. This method is primarily used in the CDP Sell in Forecast Item/Customer DC worksheet to recalculate the sell-in forecast values.
- Store Sell in Forecast Recalculation Select this method to recalculate the sell-in forecast at the Item/Org/Site/Store level for the selected item. This method is primarily used in the CDP Sell in Forecast Item/Store worksheet to recalculate the store sell-in forecast values.
- Store Replenishment Order Recalculation Select this method to recalculate the safety stock and replenishment order at the Item/Org/Site/Store level for the selected item.

**Note:** Running these methods manually may not be required if the BLE step is configured in the update mechanism to perform recalculations on user updates. For more information, refer to Configuring BLE as Part of the Update Mechanism, page 6-7.

# **Workflows**

Important: The Demantra Local Application replaces Collaborator Workbench. You may see both names in this text.

This chapter covers the following topics:

• CDP Workflows

# **CDP Workflows**

CDP provides the following workflows:

Workflow Name	Purpose	Description
CDP All Engine Runs	Engine Run	Master workflow to run all 3 CDP engine workflows.
CDP Archive DM Consensus Forecast	Forecast Archival	Archives the last four versions of the Consensus Forecast Series.
CDP Archive Store Sell through Forecast	Forecast Archival	Archives Store Sell through Forecast and Store Sell through Final Forecast Lag Series defined on CDP GL Data table.
		Executes the Execute_Profiles stored procedure, with parameter = CDP.

Workflow Name	Purpose	Description
CDP BLE Cluster Site Sell in Weekly	BLE Calculations	Runs the BLE profile (CDP BLE Cluster Site Sell in Weekly) on Sales Data as part of the weekly process. For more information on these profiles, refer to Business Logic Engine, page 6-1.
CDP BLE Cluster Store Sell in Weekly	BLE Calculations	Runs the BLE profile (CDP BLE Cluster Store Sell in Weekly) on CDP GL as part of the weekly process. For more information on these profiles, refer to Business Logic Engine, page 6-1.
CDP BLE Cluster Replenishment Weekly	BLE Calculations	Runs the BLE profile (CDP BLE Cluster Replenishment Weekly) on CDP GL as part of the weekly process.
CDP BLE Cluster Store To Site Sync Weekly	BLE Calculations	Runs the BLE profile (CDP BLE Cluster Store To Site Sync Weekly) on Sales Data as part of the weekly process.
CDP BLE Cluster Site Sell in Nightly	BLE Calculations	Runs the BLE profile (CDP BLE Cluster Site Sell in Nightly) on Sales Data as part of the nightly process.
CDP BLE Cluster Store Sell in Nightly	BLE Calculations	Runs the BLE profile (CDP BLE Cluster Store Sell in Nightly) on CDP GL as part of the nightly process.
CDP BLE Cluster Replenishment Nightly	BLE Calculations	Runs the BLE profile (CDP BLE Cluster Replenishment Nightly) on CDP GL as part of the nightly process.

Workflow Name	Purpose	Description
CDP BLE Cluster Store To Site Sync Nightly	BLE Calculations	Runs the BLE profile (CDP BLE Cluster Store To Site Sync Nightly) on Sales Data as part of the nightly process.
CDP BLE On Demand	BLE Calculations	Executes BLE process in Save Data Mode. This workflow is called from Update Data workflow.
CDP Cancel Product Launch	Launch Management	Used in the CDP New Product Launch Management worksheet to run the Cancel Launch Request method, which cancels a new product or new store launch request.
		Launch requests that have a Status of Processing or Completed, cannot be cancelled. Also, Launch requests that have a Status of Valid and Launch Mode of Now cannot be cancelled.
CDP Edit Product Launch	Launch Management	Used in the CDP New Product Launch Management worksheet to run the Edit Product Launch method, which updates a product launch request.
CDP Edit Store Launch	Launch Management	Used in the CDP New Store Launch Management worksheet to run the Edit Product Launch method, which updates a store launch request.
CDP Engine Org Site Consumption	Engine Run	Runs the Proport procedure and the Analytical Engine on Consumption Engine Profile defined to the SALES_DATA table.

Workflow Name	Purpose	Description
CDP Engine Shipment	Engine Run	Runs the Proport procedure and Analytical Engine on the Shipment Engine Profile defined to the SALES_DATA table.
CDP Engine Store Consumption	Engine Run	Runs the Proport and the Engine to the CDP GL (Store Level Consumption).
CDP Export Forecast Account	Export Forecast	Export to Legacy Item/Acct.
		Levels exported: Item/Account
		Series exported: Final Forecast
CDP Export Forecast Local	Export Forecast	Export to ASCP/Legacy Item/Org
		Levels exported: Item/Org
		Series exported:
		<ul> <li>Demand Priority</li> </ul>
		• Final Forecast
		Item Destination Key
		<ul> <li>Organization Destination Key</li> </ul>
		• Mean Absolute Pct Err
CDP Export Forecast Store	Export Forecast	Export to Legacy Item/Store.
		Levels exported: Item/Store
		Series exported: Store Sell-in Final Forecast
CDP Import All Site Data	Data Load	Master workflow to execute all Site Level Data Load workflows.

Workflow Name	Purpose	Description
CDP Import All Store Data	Data Load	Master workflow to execute all Store Level Data Load workflows.
CDP Import CDP Level	Data Load	Loads the CDP General Level.
CDP Import Site Consumption	Data Load	Loads the Site Level Consumption Data to the SALES_DATA table.
CDP Import Site Inventory	Data Load	Loads the Site Level Beginning On Hand Inventory Data to the SALES_DATA table.
CDP Import Site WOS Lead	Data Load	Loads the Weeks of Supply, Lead Time data at Site Level.
CDP Import Store Consumption	Date Load	Loads the Store Level Consumption Data to the CDP GL data table.
CDP Import Store Consumption - Item/Store/Org/Site	Data load.	Loads store-level consumption data into the T_EP_CDP_DATA data table.
CDP Import Store Inventory In Transit On Order	Data Load	Loads Store Level On Hand Inventory, In Transit, and On Order data to the CDP GL data table.
CDP Import Store Replenishment Parameters	Data Load	Loads the Store Level Replenishment Parameters (Inv Minimum, Inv Maximum, Lead Time, Days of Supply, and so on) to the CDP GL Matrix table.
CDP Launch Management Batch	Launch Management	Executed by the CDP Nightly Batch Process workflow to process launch requests with Status of Valid and Launch Mode of Batch.

Workflow Name	Purpose	Description	
CDP Launch Management Ongoing	Launch Management	Executed by the CDP Weekly Batch Process workflow to process product and store launch requests with Status of Processed and Ongoing. If the new product or store launch date is greater than or equal to "max_sales_date" system parameter, then the it sets the Launch Status to Completed.	
CDP Launch Management Realtime	Launch Management	Runs continuously in background for to process launch requests with Status of Valid and Launch Mode of Now. This workflow is scheduled to Launch on Startup. It runs whenever the Demantra Web application is restarted.	
CDP Method BLE - Site Sell in Forecast	BLE Calculations	Invoked by the Sell in Forecast Recalculation method.	
CDP Method BLE - Store Sell in Forecast	BLE Calculations	Invoked by the Store Sell in Forecast Recalculation method.	
CDP Method BLE - Store Safety Stock Replenishment Order	BLE Calculations	Invoked by the Store Sell in Forecast Recalculation method.	
CDP New Product Launch	Launch Management	Used in the CDP New Product Launch Management worksheet to initiate a new product launch request.	
CDP New Store Launch	Launch Management	Used in the CDP New Store Launch Management worksheet to run the New Store Launch method, which initiates a new store launch request.	

Workflow Name	Purpose	Description	
CDP Nightly Batch Process	Batch	Master workflow calls all relevant workflows which need to be run as part of Nightly Batch process.	
CDP Order Export	Export Orders	Exports the CDP Order Export data.	
CDP Standard Error Calculation Item/Org	Error Calculations	Computes Standard Error defined on SALES_DATA.	
CDP Standard Error Calculation Item/Store	Error Calculations	Computes the Standard Error defined to the CDP GL Matrix table.	
CDP Start Simulation Engine	Engine Run	Starts the Engine in Simulation Mode.	
CDP Stop Simulation Engine	Engine Run	Stops the Simulation Engine.	
CDP Weekly Batch Process	Batch	Master workflow calls all relevant workflows which need to be run as part of the Weekly Batch process.	
CDP Weekly Data Tables Maintenance	System Performance	Runs the table reorganization procedure TABLE_REORG.REORG to improve system performance. By default running this workflow will reorganize the T_EP_CDP_DATA and SALES_DATA tables. This workflow is called as part of the CDP Weekly Batch Process master workflow. For more information about the table reorganization procedure, see "Database Health Check" in the Oracle Demantra Implementation Guide.	

Workflow Name	Purpose	Description
Create Launch Management Views	Launch Management	This workflow validates the NPI_SERIES_DATA definitions and should be run when the NPI_SERIES_DATA table is modified. If all definitions in this table are valid, then the workflow modifies and refreshes the launch management integration interfaces. The Status column in NPI_SERIES_DATA will be set to either Valid or Invalid. If the status is set to Invalid, then the ERROR_MESSAGE column will be populated with the appropriate error message.

## **Running the CDP Workflows**

Perform the following to run or schedule a CDP workflow:

- 1. Log in to the Workflow Manager.
- 2. Select one of the following options from the View according to Schema Groups list:
  - CDP Displays all CDP workflows, except the CDP Launch Management workflows.
  - CDP Sites Displays only CDP site-related workflows.
  - CDP Store Displays only CDP store-related workflows.
  - CDP Launch Management Displays only CDP workflows associated with CDP launch management process.
- To edit a CDP workflow, click the schema name or click Edit, and then click OK. Make the necessary updates to the Edit Schema page, and then validate and save your changes.

**Note:** You must be logged into Workflow Manager as the component owner (cdp) to modify any of these workflows.

- **4**. Click Start to run the workflow, or click Schedule to display the Schema Scheduler and define workflow run time.
- 5. When done, click Logout to exit the Workflow Manager.

# Integration

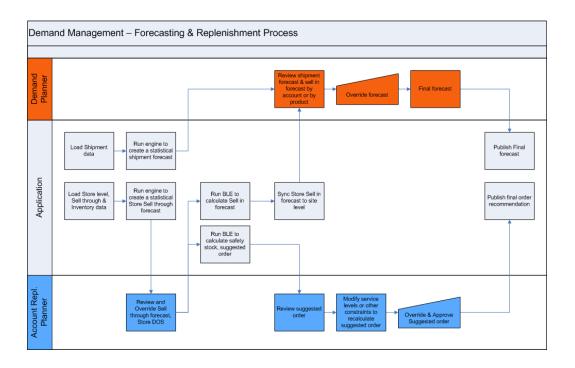
Important: The Demantra Local Application replaces Collaborator Workbench. You may see both names in this text.

This chapter covers the following topics:

- Integration Overview
- Data Requirements
- **Integration Interfaces**
- Loading Shipment vs. Consumption Accounts

# **Integration Overview**

The diagram below illustrates how Consumption-Driven Planning fits into a Demand Management process. Currently, CDP input and output data is read from and written to Demantra staging tables. Linking this data to other systems requires implementation effort.



In general, there are three scenarios when performing data integration:

- Integrating Demantra Demand Management and CDP without other Value Chain Planning (VCP) products.
  - Store-level data is received from a legacy system or from a staging table. Orders are sent out to a staging table and may be taken up by Oracle Order Management or another similar system.
- Integrating Demantra Demand Management and CDP in a Value Chain Planning environment with other VCP products.
  - Stores are modeled in VCP. In this scenario, you can build your integration to collect store-level data into the Demantra staging tables. Where Oracle Inventory Optimization (IO) or Advanced Supply Chain Planning (ASCP) are available, these applications can be used to generate safety stock and orders. In this case, stores are modeled as organization, store information is received from E-Business Suite (EBS), and the store-level forecast is sent out to Oracle Order Management.
- Integrating Demantra Demand Management and CDP with other VCP products but the stores are not modeled as organizations. In this scenario, the data loaded into CDP will be imported from a legacy system. The replenishment orders being generated by CDP should be exported at the Site level and loaded into Oracle Order Management.

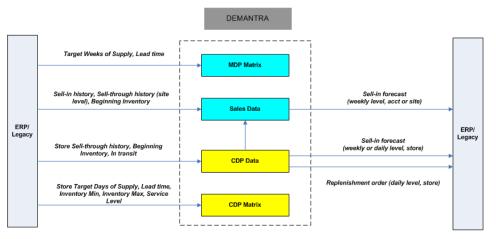
# **Data Requirements**

The CDP business process requires data to be imported from other Oracle or legacy applications for the forecast and recommended order generation calculations. After generating a CDP forecast, data is typically exported back to other supply planning applications, such as Oracle Advanced Supply Chain Planning (ASCP). CDP generated replenishment orders are typically exported to an order execution system.

This topic discusses the following:

- Integration required to import site and store-level data and definitions.
- Integration required to export forecast.
- Integration required to export orders.

The following diagram provides a high-level overview of the CDP data requirements.



Oracle Advanced Supply Chain Planning Oracle Order Management

# **Integration Interfaces**

CDP provides the following integration interfaces:

- Import integration
- **Export integration**

## Import Integration

The table below lists the import integration interfaces that support the CDP process.

Workflow	Integration Data Profile	Description
CDP Import Site Consumption	CDP Import Site Consumption	Imports site-level consumption data to the SALES_DATA table.
CDP Import CDP Level	CDP Import CDP Level	Loads the CDP General Level.
CDP Import All Store Data	NA	Master workflow, runs the following workflows" CDP Import CDP Level, CDP Import Store Consumption, CDP Import Store Inventory In Transit On Order, and CDP Import Store Replenishment Parameters.
CDP Import All Site Data	NA	Master workflow, runs the following workflows: CDP Import Site Consumption, CDP Import Site Inventory, and CDP Import Site WOS Lead.
CDP Import Store Consumption - Item/Store/Org /Site	Import Store Consumption History Item/Store/Org/Site	Imports store consumption history data at the item/store/org/site levels.
CDP Import Site Inventory	Import Site Inventory	This integration interface imports the Beginning Inventory Load Series at the Item/Site/Date level.
		When the workflow is run, the data stored in the BIIO_IMPORT_SITE_INVEN TORY staging table is imported to the SALES_DATA table. This workflow should be run daily. Run the workflow manually, or you can schedule it to run at a specific time.

Workflow	Integration Data Profile	Description
CDP Import Site WOS Lead	Import Site WOS Lead	This integration interface imports the following Series data at the Item/Site level:
		<ul> <li>Target Weeks of Supply Load</li> </ul>
		• Lead time
		When the workflow is run, the data stored in the BIIO_IMPORT_SITE_WOS_L EAD staging table is imported to the MDP_MATRIX table. This workflow should be run as needed. Run the workflow manually, or you can schedule it to run at a specific time.
CDP Import Store Consumption	Import Store Consumption	This integration interface imports the following Series data at the Item/Store/Date level:  Store Sell through History
		When the workflow is run, the data stored in the BIIO_IMPORT_STORE_CON S staging table is imported to the T_EP_CDP_DATA table for Store Sell through History and imported to the T_EP_CDP_MATRIX table for CDP Prop Changes. This workflow should be run daily. Run the workflow manually, or you can schedule it to run at a specific time.

Workflow	Integration Data Profile	Description
CDP Import Store Consumption - Item/Store/Org/Site	Import Store Consumption History - Item/Store/Org/Site	Loads store-level consumption data from the BIIO_IMP_STOREORGSIT_C ONS staging table into the T_EP_CDP_DATA data table.
CDP Import Store Inventory In Transit On Order	Import Store Inventory In transit	This integration interface imports the following Series data at the Item/Site level:
		• In transit
		<ul> <li>Store Beginning Inventory Load</li> </ul>
		• On order
		When the workflow is run, the data stored in the BIIO_IMPORT_STORE_INV_INTR staging table is imported to the T_EP_CDP_DATA table. This workflow should be run daily. Run the workflow manually, or you can schedule it to run at a specific time.

Workflow	Integration Data Profile	Description
CDP Import Store Replenishment Parameters	Import Store Replenishment Parameters	This integration interface imports the following Series data at the Item/Store level:
		<ul> <li>Store Target Days of Supply Load</li> </ul>
		• Store Lead time
		<ul><li>Inventory Min</li><li>Inventory Max</li></ul>
		• Service level
		When the workflow is run, the data stored in the BIIO_IMPORT_STORE_REPL _PAR staging table is imported to the T_EP_CDP_MATRIX table. This workflow should be run as needed. Run the workflow, or you can schedule it to run at a specific time.

The existing Ep\_load\_sales integration interface has been updated to support CDP. It has been enhanced to import the following Series data at the Item/Org/Site/Date level:

Sell through History

When the workflow is run, the data stored in the T\_SCR\_SALES\_TMPL staging table is imported to the SALES\_DATA table. Run the workflow manually, or you can schedule it to run at a specific time.

#### **CDP Launch Management Interfaces**

The table below lists the import integration interfaces that support the CDP launch management process.

For information about the columns copied from the source product or store to the target product or store, refer to Copy Data, page 3-28.

**Note:** Oracle recommends that you do *not* change the Launch Management interfaces definitions.

Workflow	Integration Data Profile	Description
CDP Launch Management Realtime	Used by the following launch management profiles:  Launch Import CDP Level  Launch Import Store Consumption  Launch Import Store Parameters	Runs continuously in background for to process launch requests with Status of Valid and Launch Mode of Now. This workflow is scheduled to Launch on Startup. It runs whenever the Demantra Web application is restarted.
CDP Launch Management Batch	Used by the following launch management profiles:  Launch Import CDP Level Batch  Launch Import Store Consumption Batch  Launch Import Store Parameters Batch	Executed by the CDP Nightly Batch Process workflow to process launch requests with Status of Valid and Launch Mode of Batch.
CDP Launch Management Ongoing	Launch Import Store Consumption Batch	Executed by the CDP Weekly Batch Process workflow to process product and store launch requests with Status of Processed and Ongoing. If the new product or store launch date is greater than or equal to "max_sales_date" system parameter, then the it sets the Launch Status to Completed.

#### **Improving Data Load Performance**

If the initial CDP data import process runs slowly, Oracle recommends running the " gather statistics" procedure to improve import performance.

**Note:** This task should be run by a database administrator (DBA).

After running the 'CDP Import CDP Level' workflow (which is run by the 'CDP Weekly Batch Process' workflow), run this procedure using the following syntax and settings:

# **BEGIN** dbms\_stats.gather\_table\_stats ( ownname => USER, tabname => 'T\_EP\_CDP\_MATRIX', estimate\_percent => DBMS\_STATS.AUTO\_SAMPLE\_SIZE, method\_opt => 'FOR ALL COLUMNS SIZE AUTO', degree => DBMS\_STATS.DEFAULT\_DEGREE, granularity => 'ALL', cascade => TRUE, force => TRUE);

The procedure in the example above runs on the table T\_EP\_CDP\_MATRIX. Run the procedure for each of the following tables by modifying the 'tabname' parameter to the name of the corresponding table:

T\_EP\_CDP

END;

- T\_EP\_CDP\_DATA
- T\_EP\_CDP\_DATES
- T\_EP\_CDP\_LEVELS
- T\_EP\_CDP\_MATRIX
- T\_EP\_CDP\_MEMBERS

## **Export Integration**

The table below lists the export integration interfaces that support the CDP process.

Workflow	Interface Name	Description
CDP Export Forecast Account	Export Forecast Account	Levels exported: Item/Account
		Series exported: Final Forecast
		The CDP Export Forecast Account workflow exports to the BIEO_EXPORT_FORECAST_ ACCT table.
CDP Export Forecast Local	Export Forecast Local	Levels exported: Item/Org
		Series exported:
		<ul> <li>Demand Priority</li> </ul>
		• Final Forecast
		• Item Destination Key
		<ul> <li>Organization Destination Key</li> </ul>
		• Mean Absolute Pct Err
		The CDP Export Forecast Local workflow exports to the BIEO_EXPORT_FORECAST_ LOCAL table.
CDP Export Forecast Store	Export Forecast Store	Levels exported: Item/Store
		Series exported: Store Sell-in Final Forecast
		The CDP Export Forecast Store workflow exports to the BIEO_EXPORT_FORECAST_ STORE table.

Workflow	Interface Name	Description
CDP Order Export	CDP Order Export	Levels exported: Item/Org/Account/Site/Store
		Series exported: Final Replenishment Order
		The workflow refreshes the CDP_ORDER_EXPORT table with the recommended orders.

# **Loading Shipment vs. Consumption Accounts**

Use the Account Type level to differentiate between an shipment account or a consumption account. The Account Type level has 2 members, Shipment and Consumption. During the data load process, make sure the parent level Account Type is populated for every account. If an account is marked as a consumption account, then the Final Forecast Series uses the Sell in Forecast calculated with any overrides in Base Override. If an account is marked as the shipment account, then the Final Forecast Series uses the Baseline Forecast calculated with any overrides in Base Override.

# **BLE Enhancements for Consumption-Driven Planning**

**Important:** The Demantra Local Application replaces Collaborator Workbench. You may see both names in this text.

This chapter covers the following topics:

- **Business Logic Engine**
- General Levels
- Rolling Data Profiles
- Launch Management

# **Business Logic Engine**

This section describes the Business Logic Engine (BLE) enhancements to support the consumption-driven planning process. These enhancements are only available in Consumption-Driven Planning.

When you run a worksheet, Demantra re-evaluates all of the client expressions in the worksheet and saves the changes to the database. If data in the worksheet has been modified at an aggregated level, then Demantra splits the resulting data to the lowest level and saves it to the database.

Many of the calculations used to support inventory and order replenishment must reference values that are calculated at the worksheet (client) level and must be saved to the database. CDP worksheets view and calculate values at a very low level (for example, item or site), so unless the BLE is run, the results of these calculations would not be saved to the database simply by re-running the worksheet. For this reason, enhancements were made to enable better BLE support for CDP. Enhancements include the ability to trigger BLE calculation when a worksheet is saved or to invoke it as user-driven method.

#### Other BLE enhancements include:

BLE execution in cluster

Eight separate engine profiles for BLE cluster are available for worksheet execution:

- CDP BLE Cluster Store Sell in Weekly- This profile does not execute the engine (it has a parameter to skip the engine run process), but it runs the CDP BLE Sell in Item/Store worksheet. This profile is run as part of the weekly process.
- CDP BLE Cluster Replenishment Weekly This profile does not execute the engine (it has a parameter to skip the engine run process), but it runs the CDP BLE Safety Stock replenishment Order Item/Store worksheet. This profile is run as part of the weekly process.
- CDP BLE Cluster Site Sell in Weekly This profile does not execute the engine (it has a parameter to skip the engine run process), but it runs the CDP BLE Sell in Item/Customer DC worksheet. This profile is run as part of the weekly process.
- CDP BLE Cluster Store To Site Sync Weekly This profile does not execute the engine (it has a parameter to skip the engine run process), but it runs the CDP BLE Sell in Integration Item/Org/Customer DC worksheet. This profile is run as part of the weekly process.
- CDP BLE Cluster Store Sell in Nightly- This profile does not execute the engine (it has a parameter to skip the engine run process), but it runs the CDP BLE Sell in Item/Store worksheet. This profile is run as part of the nightly process.
- CDP BLE Cluster Replenishment Nightly This profile does not execute the engine (it has a parameter to skip the engine run process), but it runs the CDP BLE Safety Stock Replenishment Order Item/Store worksheet. This profile is run as part of the nightly process.
- CDP BLE Cluster Site Sell in Nightly This profile does not execute the engine (it has a parameter to skip the engine run process), but it runs the CDP BLE Sell in Item/Customer DC worksheet. This profile is run as part of the nightly process.
- CDP BLE Cluster Store To Site Sync Nightly This profile does not execute the engine (it has a parameter to skip the engine run process), but it runs the CDP BLE Sell in Integration Item/Org/Customer DC worksheet. This profile is run as part of the nightly process.

CDP also provides eight workflows to run the profiles above, CDP BLE Cluster Site Sell in Weekly, CDP BLE Cluster Store Sell in Weekly, CDP BLE Cluster Replenishment Weekly, CDP BLE Cluster Store To Site Sync Weekly, CDP BLE Cluster Site Sell in Nightly, CDP BLE Cluster Store Sell in Nightly, CDP BLE Cluster Replenishment Nightly, CDP BLE Cluster Store To Site Sync Nightly.

For more information, refer to Deploying the Business Logic Engine Cluster, page 6-3.

Net change functionality to ensure that the BLE is run only when necessary

CDP also provides CDP BLE worksheets which contain calculated values and are used in the CDP BLE workflows. For more information, refer to CDP Business Logic Engine Worksheets, page 3-35.

### Deploying the Business Logic Engine Cluster

Business Logic Engine (BLE) Cluster refers to running a BLE worksheet in a multiprocess multithreaded manner and not through the BLE step, which is a single instance server with no clustering capability. BLE Cluster allows mass parallelization of a BLE process, enabling more efficient use of available system resources and dramatically reducing run times.

#### **Assumptions**

It is assumed that the Analytical Engine is deployed in your environment with the proper directory structure on Linux or UNIX. The details of the Analytical Engine are not discussed in this guide. For information on the Analytical Engine, refer to the Oracle Demantra Analytical Engine Guide.

BLE clustering requires robust database capabilities and is only available when the database is deployed on Oracle Exadata.

BLE clustering is currently available with the following Oracle Demantra modules:

- Oracle In-Memory Consumption-Driven Planning (CDP)
- Oracle Advanced Forecasting and Demand Modeling (AFDM)

#### **BLE Cluster Design**

BLE Cluster uses the Analytical Engine's distributed infrastructure when executing. BLE Cluster runs when the Analytical Engine runs. After each engine is finished with forecast calculation, it can start a BLE process filtered to the same data subset that engine was processing (engine task). One BLE Java process runs for each engine task that is running.

Each engine profile can execute multiple BLE worksheets (see Configuration below for more information).

#### **BLE Cluster Deployment**

The BLE Cluster must be deployed in the root directory /Engine where the /lib and /bin subdirectories of the Analytical Engine are located. Refer to the sections below for details.

#### Files and Directories

The file ble.sh is located in the Windows installation folder, in the following archive file:

Oracle\_Demantra\_Unix\_Web.tar.gz

In order to use the file in Linux, you must unpack the file from the following path inside the archive file:

Integration/ble.sh

Next. perform the following steps:

- Copy the file Integration/ble.sh to the Engine/lib directory on the Exalogic or SuperCluster machine.
- 2. Copy the Integration directory (from the Windows installation set) into the /Engine directory on the Exadata or SuperCluster machine.

**Note:** If you will be running the Analytical Engine on more than one Virtual Machine (VM), this step must be performed on each VM.

3. Run dos2unix ble.sh. This file is located in the /lib folder. (The dos2unix program converts plain text files from DOS/MAC format to UNIX format.)

> **Note:** If you want to allocate more memory to each BLE Cluster process, you can alter the -Xmx-Xms JVM parameters inside the file ble.sh.

4. Add the environment variable JARS and add all JAR files under Engine/Integration/lib to the JARS variable.

Copy the following command into the bash\_profile file:

for X in \$ENGINE\_ROOT/Integration/lib/\*.jar

do

JARS=\$JARS:\$X

done

**EXPORT JARS** 

**Note:** Make sure all JARS are copied in Binary mode and not text mode. Also, if running this command on the UNIX operating system, the word "EXPORT" must be in all uppercase. If running it on the Solaris operating system, it should be in lowercase.

5. Copy the files Integration/conf/DataSource.properties and Integration/conf/logconf.lcf into the Engine/lib/conf directory. If necessary, create the "conf" directory under /Engine/lib first. Set the appropriate values inside each of these files.

Refer to the Oracle Demantra Installation Guide for information about the DataSource.properties file. Refer to the Oracle Demantra Implementation Guide for details about the logconf.lcf file.

- 6. Provide the appropriate permissions to the Engine folder (for example, using the "chmod" command).
- 7. Define the BLE Cluster configuration parameters. These are described in the next section.

#### **BLE Cluster Configuration Parameters**

In the INIT\_PARAMS\_XXX table, set the VALUE\_STRING column for the "EngPostProcessScript" parameter that corresponds to the engine profile that you will be running.

The template for the VALUE\_STRING column for the "EngPostProcessScript" parameter is:

./ble.sh #BRANCH\_ID# #TABLE1# #COLUMN1# #TABLE2# #COLUMN2# #SERVICE\_NAME# #SKIP\_ENG# BLEWsApp\_ID1, BLEWsApp\_ID2 BLEIncremental\_shift Absolute\_path\_to\_logs\_Folder

The following parameters listed below can be configured.

**Important:** The other parameters (those not listed below) should NOT be modified.

- #SKIP\_ENG# This parameter controls whether the Analytical Engine generates a statistical forecast. By default, this parameter exists and the BLE Cluster will run but the Analytical Engine will not generate a statistical forecast.
- BLEWsApp\_ID1, BLEWsApp\_ID2
  - BLEWsApp\_ID1 and BLEWsApp\_ID2 These parameters represent the Application IDs for the BLE worksheets that will be executed during BLE Cluster execution. You can enter as many worksheet App\_IDs as necessary, as long as they are separated by a comma. Do not include a space between worksheet application IDs. Note that all worksheets are executed sequentially.
- BLEIncremental\_shift If BLEIncremental\_shift is 0, then no incremental BLE calculation will be performed.
  - If BLEIncremental shift is 0, then no incremental BLE calculation will be performed.

Absolute\_path\_to\_logs\_Folder - Directory path to the folder where log files will be created.

Example of the "EngPostProcessScript" parameter:

./ble.sh #BRANCH ID# #TABLE1# #COLUMN1# #TABLE2# #COLUMN2# #SERVICE\_NAME#

#SKIP\_ENG# QUERY:13267,QUERY:13320 0

/u01/demantra/7.3.1.5/EngineManager/Engine/lib

Do not modify the first section of the "EngPostProcessScript" parameter, which is shown below:

./ble.sh#BRANCH ID# #TABLE1# #COLUMN1# #TABLE2# #COLUMN2#

If you will be running the Analytical Engine on more than one Virtual Machine (VM), the Absolute\_path\_to\_logs\_Folder should be the path of the Virtual Machines where the Analytical Engine is run. It should not be the engine path in the main VM where the application server is located.

### The BLE Workflow Step

This section describes the BLE enhancements to the BLE steps in the workflow.

The field Select Filter Context can be set to None, Save Data, and Method. When None is selected, the field Select Relative Time Period is available to support Net-change BLE execution. If Relative Time Period is greater than zero, then BLE only executes on combinations which have been changed within that range thereby minimizing unnecessary processing. For environments where BLE is run weekly, Oracle recommends setting this parameter to 7 days.

When Select Filter Context is set to Saved Data, the field Select series group becomes available. The series group defined here is used to evaluate whether BLE needs to be executed when data is saved in a worksheet. As data is saved, the system update workflow is run. If BLE step set to Save Data is included in the update workflow, it evaluates whether a Series in the selected series group has been modified as part of the update. For any combination where at least one of the Series in the group has been modified, then the BLE step is executed. Using Save Data is only appropriate when the workflow is called as part of an update data process, including it in any other workflow will not have any effect.

If method option is chosen, then the workflow calling the BLE is meant to be called ad-hoc. When the method is called, the full context of the member from which the call is made is used as a filter on the BLE worksheet and only combinations falling in this filter are processed.

#### Configuring BLE as Part of the Update Mechanism

The Update Data workflow runs the BLE as part of the update mechanism. To enable the BLE to run when the end user saves data in a worksheet, update the system parameter "ble\_enable\_worksheet\_calculations" to 1 (default is 0) from the System tab in Business Modeler. This workflow includes the following steps:

- BLE Condition
- BLE Launcher
- Wait Until Step

When the ble\_enable\_worksheet\_calculations parameter is set to 1, the Update Data workflow moves from the BLE Condition to the BLE Launcher step. The BLE Launcher step invokes the CDP BLE On Demand workflow.

The CDP BLE On Demand workflow is set up to call the CDP BLE calculations.

Each BLE step in this workflow is configured to run in the Save Data context with a relevant series group that triggers the execution of this BLE step.

BLE steps are called under the CDP BLE On Demand workflow. Each BLE step in this workflow is configured to run in the Save Data context with a relevant series group that triggers the execution of this BLE step. The steps and the trigger series group are as follows:

- CDP Store Safety Stock Replenishment Order Calculations CDP Engine Safety Stock Replenishment
- CDP Site Sell in Forecast Calculation CDP Engine Site Sell in
- CDP Store Sell in Forecast Calculations CDP Engine Store Sell in

If an update to a series in the series group occurs and Save Data is selected, then the appropriate BLE step in the list above is invoked. The BLE step receives the combination detail where the update was made and runs the BLE calculation on these combinations.

## Filtering the BLE Workflow

The BLE workflow step can now be configured with a filter. The filter allows the same BLE worksheet to be called in different contexts based on business requirements. For example, if two business units need replenishment calculated at a different time of day, the same BLE worksheet can be used, with a different filter when called for each business unit.

Configuration of BLE filter is performed as follows:

Navigate to the Parameters tab of the workflow step.

- 2. Add a parameter with the name extra\_filters.
- **3.** For values, populate pairs of level ID with member ID. The level and member values are separated by a comma, and the pairs are separated by semicolon.

**Example:** 425,3;425,4 will filter the BLE worksheet to the level with internal ID=425 and members = 3 or 4.

#### **General Levels**

Detailed consumption data can be viewed at very low levels in Demantra worksheets, such as at the store level and in daily time buckets.

#### **CDP**

The following General Levels are provided to support CDP:

- CDP
  - Store
  - Store Group

The CDP level itself is primarily an internal construct used to bring Item and Store together. You should primarily use levels Store and Store Group when viewing consumption data. The CDP level, like all General Levels that have a Population Type set to Searchable, includes a Base Time Resolution setting. This setting, which is visible when creating or modifying a Level in Business Modeler, enables Demantra end users to view data in a worksheet at a time level that may be lower and more granular than the system time resolution. (The system time resolution is typically set to either Month or Week.)

The default Base Time Resolution setting for the CDP level is "Day," which means that CDP users can view data at the daily level in a worksheet, even if the system time resolution is set to Week.

The following system parameters have been added to control the history and forecast periods when viewing the daily CDP worksheets.

- MaxSalesDateLowestPeriod
- MinForeDateLowestPeriod

If the worksheet "time resolution" selection is "lowest period", then these date parameters are used by the worksheet to determine the history and forecast periods. (Valid options for these parameters are sysdate, sysdate+1, sysdate-1, 04-08-2013 00:00:00). If the worksheet "time resolution" selection is not set to "lowest period", then the max\_sales\_date and min\_forecast\_date are used to determine the history and forecast periods.

The default setting for these parameters are as follows:

- MaxSalesDateLowestPeriod = sysdate
- MinForeDateLowestPeriod =sysdate+1

If CDP is configured as weekly, then you should change MinForeDateLowestPeriod to sysdate+6. You can also set these parameters manually to a specific date. The dates are not changed automatically.

For more information about the Time Resolution setting, refer to "Adding a Population Attribute to a General Level" in the Oracle Demantra Implementation Guide.

### **Launch Management Level**

The Launch Management general level supports the new product and new store introduction processes. The hierarchy includes the following levels:

- Launch Copy Data
- Launch Mode
- Launch Status
- Launch Type

# **Rolling Data Profiles**

The following Rolling Data Profiles populate the Store Sell through Final Forecast Lag and Store Sell through Forecast Lag Series:

- Archive 1 Week Store Sell through Final Forecast
- Archive 2 Week Store Sell through Final Forecast
- Archive 3 Week Store Sell through Final Forecast
- Archive 4 Week Store Sell through Final Forecast
- Archive 1 Week Store Sell through Forecast
- Archive 2 Week Store Sell through Forecast
- Archive 3 Week Store Sell through Forecast
- Archive 4 Week Store Sell through Forecast

By default, these Series are all included in the predefined Rolling Profile Group called Store Sell Through.

Run the workflow Sell Through Forecast Archival to archive the Series above. For more information on the workflows available in CDP, see CDP Workflows, page 4-1.

# **Launch Management**

This section provides information about the launch management functionality that supports CDP:

- New Product Introduction (NPI)
- New Store Introduction (NSI)

## **Using New Product Introduction**

Use the CDP New Product Launch Management worksheet to perform new product introduction (NPI). This process links a new product (target) with an existing similar product (source) at a store, store group, or account. Additional historical information can also be copied from the source product and used as pseudo-history for the new target product. When selecting pseudo history for an item one or more data streams are copied from the source product. The pseudo history is used for predicting future sales and demand.

For information about the CDP New Product Launch Management worksheet and how to create a new product introduction launch, refer to CDP New Product Launch Management worksheet, page 3-16.

## **Using New Store Introduction**

Use the CDP New Store Launch Management worksheet to perform new store introduction (NSI). This process links a new store (target) based on an existing similar store (source). Once the new store introduction launch is defined and requested, you can view, edit, or delete the store launch from the worksheet. Editing and deleting the new store launch request is only available if the Store Launch Date has not be reached.

For information about the CDP New Store Launch Management worksheet and how to create a new store introduction launch, refer to CDP New Store Launch Management worksheet, page 3-23.

# **Levels and Series**

Important: The Demantra Local Application replaces Collaborator Workbench. You may see both names in this text.

This appendix covers the following topics:

- CDP Levels
- **CDP** Series

## **CDP Levels**

The following table displays the Levels used by the Consumption-Driven Planning module:

Category	Level	Parent Level	CDP Only
Product	Item	Item Description	No
Product	Item	Product Category	No
Product	Item	Product Family	No
Location	Site	Account	No
Location	Site	Site Type	Yes
Location	Account	Customer	No
Location	Account	Account Type	Yes

Category	Level	Parent Level	CDP Only
Location	Organization	-	No
Location	Site	Site Group	Yes
Time	Date	Week	No
Time	Date	Month	No
Time	Date	Year	No
General Level	CDP (Item - Org_DC Site_Store Site)	Store	Yes
General Level	CDP (Item - Org_DC Site_Store Site)	Store Group	Yes
General Level	Launch Management	Launch Mode	Yes
General Level	Launch Management	Launch Copy Data	Yes
General Level	Launch Management	Launch Status	Yes
General Level	Launch Management	Launch Type	Yes

# **CDP Series**

The following table displays the Series used by the Consumption-Driven Planning module:

Series Name	Description
Account Type	Account Type (Shipment/Consumption).
Adjusted History	Final Historical Shipment data including adjustments. Traditionally the Series used to drive the Demand Management process.

Series Name	Description
Available Inventory	Available inventory based on in transit, on hand, and on order. For future buckets, this Series also considers inventory available after meeting the forecast requirements from the previous bucket.
Avg Item Site ID	Used in Receipt Requirement, Sell in Forecast, Projected Weeks of Supply, and Target Inventory Weeks of Supply Series. Client expression to prevent system evaluating client expression at aggregation other than the Item, Site, Org and Week. This is an internal Series that supports calculations.
Avg Item Store ID	Used in Store Receipt Requirement, Store Target Inventory Days of Supply, Store Sell in Forecast, Final Safety Stock, Store Receipts, and Suggested Replenishment Order Series. Client expression to prevent system evaluating client expression at level other than the Item, Store, and Day level. This is an internal Series that supports calculations.
Base Override	Override Series used to adjust Sell in Forecast.
Beginning Inventory	Beginning on-hand inventory at the selected location for the current period and target inventory days of supply.
Beginning Inventory Load	Current inventory at the location.
Consensus Forecast	One-number forecast derived from Demand Review (history and forecast), representing the aggregate of items multiplied by unit prices. This Series is read-only.
Date Count	Used in Receipt Requirement, Sell in Forecast, Projected Weeks of Supply, and Target Inventory Weeks of Supply Series. Client expression to prevent system evaluating client expression at aggregation other than the Item, Site, Org and Week. This is an internal Series that supports calculations.
Ending Inventory	Ending on-hand inventory at the location.
Final Forecast	Final Demantra Forecast.
Final Replenishment Order	Final replenishment order including any end-user adjustments and suggested orders.

Series Name	Description
Final Safety Stock	Final safety stock based on safety stock calculation method and any end-user adjustments.
Final Safety Stock BLE	Safety stock calculated based on the selected Safety Stock method option and the Safety Stock Override. Used in the BLE Worksheet. Has same Update Field as "Final Safety Stock" Series.
Fixed Percent	Fixed Percent.
GL Date Count	Used in Store Receipt Requirement, Store Target Inventory Days of Supply, Store Sell in Forecast, Final Safety Stock, Store Receipts, and Suggested Replenishment Order Series. Client expression to prevent system evaluating client expression at level other than the Item, Store, and Day level. This is an internal Series that supports calculations.
History	Shipment History.
In Transit	Quantity that has been shipped but has yet to arrive at final destination (imported value).
Inventory Max	The maximum suggested inventory level at the store (imported value).
Inventory Min	The minimum suggested inventory level at the store (imported value).
Inventory Objective	The expected on-hand inventory level. Sum of Final Safety Stock and Store Sell through Final Forecast.
Lead Time	Lead time to ship from manufacturer's distribution center to retailer distribution center/store.
List Price	Price list loaded from EBS. Uses Unit of Measure (UOM).
Mean Absolute Pct Err	Engine MAPE.

Series Name	Description
Min GL Item ID	Used in Store Receipt Requirement, Store Target Inventory Days of Supply, Store Sell in Forecast, Final Safety Stock, Store Receipts, and Suggested Replenishment Order Series. Client expression to prevent system evaluating client expression at level other than the Item, Store, and Day level. This is an internal Series that supports calculations.
Min Item ID	Used in Receipt Requirement, Sell in Forecast, Projected Weeks of Supply, and Target Inventory Weeks of Supply Series. Client expression to prevent system evaluating client expression at aggregation other than the Item, Site, Org, and Week. This is an internal Series that supports calculations.
Min Site ID	Used in Receipt Requirement, Sell in Forecast, Projected Weeks of Supply, and Target Inventory Weeks of Supply Series. Client expression to prevent system evaluating client expression at aggregation other than the Item, Site, Org, and Week. This is an internal Series that supports calculations.
Min Stored ID	Used in Store Receipt Requirement, Store Target Inventory Days of Supply, Store Sell in Forecast, Final Safety Stock, Store Receipts, and Suggested Replenishment Order Series. Client expression to prevent system evaluating client expression at level other than the Item, Store, and Day level. This is an internal Series that supports calculations.
On Order	Quantity that has been ordered but has yet to arrive at final destination (imported value).
Order Approval	Approval flag to approve the order.
Projected Inventory Beginning On Hand	Beginning Inventory + Receipt Requirement.
Projected Weeks of Supply	Projected Weeks of Supply calculated based on Projected Inventory Beginning On Hand and Sell in Forecast.
Receipt Requirement	Shipments required at the store based on Sell through Forecast.
Replenishment Order Override	Override Series used to adjust Replenishment Order.

Series Name	Description
Required Inventory	If Inventory objective is equal or below minimum, then this is set to minimum. If inventory objective is equal or above maximum, then this is set to maximum. Otherwise, it is set to the same value as the Inventory Objective Series.
Returns	Returns to the manufacturer.
Safety Stock Choice	Safety stock method used to calculate safety stock. The following options are available: Statistical/By Lead Time/Time Periods/Fixed Percentage.
Safety Stock Override	Override Series used to adjust Safety Stock.
Sell in Final Forecast	Final Sell in Forecast including end-user adjustments.
Sell in Final Forecast Value	Sell in Forecast value.
Sell in Forecast	Shipment forecast for the manufacturer by offsetting the Receipt Requirement based on Lead Time. Used in the BLE Worksheet. Has same update field as "Sell in Forecast" Series.
Sell in Forecast BLE	Shipment forecast for the manufacturer by offsetting the Receipt Requirement based on lead time. Used in the BLE Worksheet. Has same update field as "Sell in Forecast" Series.
Sell through Adjusted History	Sell through History including any end-user adjustments.
Sell through Final Forecast	Final Sell-through forecast including any end-user adjustments.
Sell through Forecast	Statistical Forecast generated based on Sell through Adjusted History.
Sell through Forecast Override	Override Series used to adjust Sell through Forecast.
Sell through Forecast Simulation	Simulation Series for Sell through Forecast.
Sell through History	Consumption history (or) DC withdrawals.
Sell through History Override	Override Series used to adjust Sell through History.

Series Name	Description
Service Level	Desired service level, displayed as a percentage. Also used when calculating safety stock.
SS Days of Supply	Safety Stock Days of Supply. One of the available methods used to calculate Safety Stock.
SS Fixed Percent	Safety Stock Fixed Percent. One of the available methods used to calculate Safety Stock.
SS Statistical	Safety Stock Statistical. One of the available methods used to calculate Safety Stock.
Standard Error	Series containing the Standard Error between Store Sell through Final Forecast Lag 4 and Sell through History. Calculated by the workflow Standard Error Calculation Item Store.
Standard Error Item Org	Calculated Standard Error at the Item/Org level.
Store Beginning Inventory	Store Beginning on-hand inventory at the location for the current period and target inventory days of supply.
Store Beginning Inventory Load	Current Inventory at the location.
Store Ending Inventory	Store Ending on-hand inventory at the selected location.
Store Inventory Exception	Store High Inventory Exception. Exception generated when Store Inventory is greater than Inventory Maximum Constraint.
Store Lead Time	The lead time associated with shipments to the store (imported value).
Store Receipt Requirement	Store Shipments required at the store based on Sell through Forecast.
Store Receipts	Order calculated based on difference between Projected Inventory and Available Inventory. Has the same update field as "Suggested Replenishment Order" Series.

Series Name	Description
Store Sell in Final Forecast	Final Store Sell in Forecast including any end-user adjustments.
Store Sell in Forecast	Store shipment forecast for the manufacturer by offsetting the Store Receipt Requirement based on lead time.
Store Sell in Forecast Override	Override Series used to adjust Store Sell in Forecast.
Store Sell in Forecast Total	Store shipment forecast for the manufacturer by offsetting the Store Receipt Requirement based on lead time
Store Sell through Adjusted History	Sell-through history at store level including any end-user adjustments. Reflects the value specified in the CDP Sell in Forecast Item/Store worksheet.
Store Sell through Final Forecast	Final store sell-through forecast including any end-user adjustments. Also used when calculating safety stock.
Store Sell through Final Forecast Lag 1	Store sell-through forecast as of 1 week ago.
Store Sell through Final Forecast Lag 2	Store sell-through forecast as of 2 weeks ago.
Store Sell through Final Forecast Lag 3	Store sell-through forecast as of 3 weeks ago.
Store Sell through Final Forecast Lag 4	Store sell-through forecast as of 4 weeks ago.
Store Sell through Forecast	Shipment forecast calculated based on the sell-through forecast at the store level.
Store Sell through Forecast Lag 1	Lag Sell through Forecast as of 1 week ago.
Store Sell through Forecast Lag 2	Lag Sell through Forecast as of 2 weeks ago.
Store Sell through Forecast Lag 3	Lag Sell through Forecast as of 3 weeks ago.

Series Name	Description
Store Sell through Forecast Lag	Lag Sell through Forecast as of 4 weeks ago.
Store Sell through Forecast Override	Override Series used to adjust Store Sell through Forecast.
Store Sell through Forecast Simulation	Simulated Store Sell through Forecast.
Store Sell through History	Store consumption history (or) Distribution Center withdrawals.
Store Sell through History Override	Override Series used to adjust Store Sell through History.
Store Target Days of Supply Final	Final target days of supply at store including any end-user adjustments and days of supply.
Store Target Days of Supply Load	Store Target days of supply loaded value.
Store Target Days of Supply Override	Override Series used to adjust Store Target Days of Supply.
Store Target Inventory Days of Supply	Store Target inventory value based on days of supply.
Suggested Replenishment Order	Store receipts offset by lead time.
Suggested Replenishment Order BLE	Order calculated based on difference between Projected Inventory and Available Inventory. Used in the BLE Worksheet. Has same update field as "Suggested Replenishment Order" Series.
Target Inventory Weeks of Supply	Target inventory value based on weeks of supply
Target Weeks of Supply Final	Target Weeks of Supply including end-user adjustments.
Target Weeks of Supply Load	Target Weeks of Supply loaded from external system.

Series Name	Description
Target Weeks of Supply Override	Override Series used to adjust Target Weeks of Supply.

# Index

<u>A</u>	Demantra	
accounts loading shipment vs consumption accounts, 5- 11	enhancements for Consumption-Driven Planning, 6-1	
11	<u>E</u>	
В	enhancements for Consumption-Driven	
BLE  CDP specific enhancements to existing Demantra functionality, 6-1 configuring BLE as part of the update mechanism, 6-7 deploying BLE cluster, 6-3 ble_enable_worksheet_calculations, 6-7 Business Logic Engine (BLE) CDP specific enhancements to existing	Planning, 6-1 export interfaces, 5-3  F forecasting profiles, 2-1  G general levels CDP specific enhancements to existing	
Demantra functionality, 6-1 Business Logic Engine (BLE) cluster deploying, 6-3 business process, 1-4	Demantra functionality, 6-8 launch management, 6-9	
business scenarios, 1-4	invantintantana E 2	
CDP New Product Launch Management, 3-16 CDP New Store Launch Management, 3-23 consumption accounts loading, 5-11 Consumption-Driven Planning overview, 1-1	import interfaces, 5-3 integration cdp workflows, 4-1 data requirements, 5-3 interfaces, 5-3 overview, 5-1 introduction, 1-1 introduction of Consumption-Driven Planning, 1-1	
		D

data requirements, 5-3

launch management, 6-10 general levels, 6-9 launch status, 3-29 launch status detail, 3-30 messages, 3-32 product, 3-16 worksheets, 3-16 launch status launch management request, 3-29 launch status detail launch management request, 3-30 levels, A-1 loading shipment vs consumption accounts, 5-11 message launch management request, 3-32 methods, 3-36 Ν new product introduction (NPI), 6-10 new store introduction, 6-10 P profiles forecasting, 2-1 rolling data profiles CDP specific enhancements to existing Demantra functionality, 6-9 S series, A-2 shipment accounts loading, 5-11 system parameter ble\_enable\_worksheet\_calculations, 6-7 U update mechanism, 6-7

update data workflow, 6-7
workflows
CDP, 4-1
worksheet
CDP New Product Launch Management, 3-16
CDP New Store Launch Management, 3-23
methods, 3-36
worksheets
CDP, 3-1
CDP Alert, 3-36
CDP Business Logic Engine (BLE), 3-35
CDP New Product Launch Management, 3-16
CDP New Store Launch Management, 3-16

workflow

W