Sterling Store Inventory Management: Implementation Guide

Fix Pack 9.1.0.1

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This edition applies to the 9.1 Version of IBM® Sterling Store Inventory Management and to all subsequent releases and modifications until otherwise indicated in new editions.

Before using this information and the product it supports, read the information in “Notices” on page 127.

Contents

9 Counts

11 Managing Locations

12 Shipping

Preface

This manual explains the IBM® Sterling Store Inventory Management and the reference implementation provided with it. This manual also contains information about the various solutions offered by the Sterling Store Inventory Management.

Intended Audience

This manual is intended to provide assistance to individuals who are responsible for implementing and using the Sterling Store Inventory Management reference implementation.

Structure

This document contains the following chapters:

Chapter 1, "Introduction"

This chapter introduces the Sterling Store Inventory Management, and explains the solution provided to fulfill the business requirements and needs of a store.

Chapter 2, "Navigating in the Configurator"

This chapter discusses the layout of the Sterling Store Inventory Management Configurator, actions you can perform throughout the application, and important concepts you need to understand before using the application.

Chapter 3, "Configuring the IBM Sterling Store Inventory Management"

This chapter explains the common configurations that are needed to set up a store. The audience for this chapter includes both Hub and Enterprise administrators who are responsible for configuring and maintaining the Sterling Store Inventory Management.

Chapter 4, "Managing Users"

This chapter explains how to manage users of the Sterling Store Inventory Management.

Chapter 5, "Inventory Adjustments"

This chapter explains how to adjust inventory maintained by the Sterling Store Inventory Management.

Chapter 6, "Inventory Searches"

This chapter explains how you can search for inventory using the Sterling Store Inventory Management.

Chapter 7, "Inventory Moves"

This chapter explains how to move inventory from one location to another using the Sterling Store Inventory Management.

Chapter 8, "Inventory Audits"

This chapter explains the inventory audits maintained by the Sterling Store Inventory Management.

Chapter 9, "Counts"

A count system allows you to execute counts in a planned or ad hoc manner. Counts are typically done to eliminate mismatches between the system and the actual inventory. This chapter explains the count processes and solution offered by the Sterling Store Inventory Management.

Chapter 10, "Receiving"

This chapter explains the receiving process performed using the Sterling Store Inventory Management.

Chapter 11, "Managing Locations"

This chapter explains how to manage locations in a store using the Sterling Store Inventory Management.

Chapter 12, "Shipping"

This chapter explains the outbound execution process performed using the Sterling Store Inventory Management.

Chapter 13, "Alert Console"

This chapter explains how to resolve alerts using the Sterling Store Inventory Management.

Chapter 14, "Summary of Components"

This chapter describes the new software components introduced by the Sterling Store Inventory Management.

Chapter 15, "Reference Implementation"

This chapter explains how to run the factory setup, load, and customize the reference implementation data provided as a part of the Sterling Store Inventory Management. This chapter also explains how to customize your store, use your test environment for production, and move data from your test environment into production.

Documentation

For more information about the Sterling Store Inventory Management components, see the following manuals:

- *Sterling Store Inventory Management: Release Notes*
- *Sterling Selling and Fulfillment Suite: Applications Installation Guide*
- *Sterling Store Inventory Management: Deployment Guide*
- *Sterling Selling and Fulfillment Suite: Applications Reference Implementation Guide*
- *Sterling Store Inventory Management: Concepts*
- *Sterling Store Inventory Management: Implementation Guide*
- *Sterling Store Inventory Management: User Guide*
- *Sterling Store Inventory Management: Localization Guide*

- *Sterling Store Inventory Management: Javadocs*

For more information about the IBM® Sterling Selling and Fulfillment Foundation components, see the following manuals:

- *Sterling Selling and Fulfillment Foundation: Release Notes*
- *Sterling Selling and Fulfillment Foundation: Installation Guide*
- *Sterling Selling and Fulfillment Foundation: Upgrade Guide*
- *Sterling Selling and Fulfillment Foundation: Configuration Deployment Tool Guide*
- *Sterling Selling and Fulfillment Foundation: Performance Management Guide*
- *Sterling Selling and Fulfillment Foundation: High Availability Guide*
- *Sterling Selling and Fulfillment Foundation: System Management Guide*
- *Sterling Selling and Fulfillment Foundation: Localization Guide*
- *Sterling Selling and Fulfillment Foundation: Customization Basics Guide*
- *Sterling Selling and Fulfillment Foundation: Customizing APIs Guide*
- *Sterling Selling and Fulfillment Foundation: Customizing Console JSP Interface for End User Guide*
- *Sterling Selling and Fulfillment Foundation: Customizing the RCP Interface Guide*
- *Sterling Selling and Fulfillment Foundation: Customizing User Interfaces for Mobile Devices Guide*
- *Sterling Selling and Fulfillment Foundation: Customizing Web UI Framework Guide*
- *Sterling Selling and Fulfillment Foundation: Customizing Swing Interface Guide*
- *Sterling Selling and Fulfillment Foundation: Extending the Condition Builder Guide*
- *Sterling Selling and Fulfillment Foundation: Extending the Database Guide*

- *Sterling Selling and Fulfillment Foundation: Extending Transactions Guide*
- *Sterling Selling and Fulfillment Foundation: Using Sterling RCP Extensibility Tool Guide*
- *Sterling Selling and Fulfillment Foundation: Integration Guide*
- *Sterling Selling and Fulfillment Foundation: Product Concepts Guide*
- *Sterling Warehouse Management System: Concepts Guide*
- *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*
- *Sterling Distributed Order Management: Configuration Guide*
- *Sterling Supply Collaboration: Configuration Guide*
- *Sterling Global Inventory Visibility: Configuration Guide*
- *Catalog Management: Configuration Guide*
- *Sterling Logistics Management: Configuration Guide*
- *Sterling Reverse Logistics: Configuration Guide*
- *Sterling Warehouse Management System: Configuration Guide*
- *Sterling Selling and Fulfillment Foundation: Application Platform User Guide*
- *Sterling Distributed Order Management: User Guide*
- *Sterling Supply Collaboration: User Guide*
- *Sterling Global Inventory Visibility: User Guide*
- *Sterling Logistics Management: User Guide*
- *Sterling Reverse Logistics: User Guide*
- *Sterling Warehouse Management System: User Guide*
- *Sterling Selling and Fulfillment Foundation: Mobile Application User Guide*
- *Sterling Selling and Fulfillment Foundation: Business Intelligence Operational Reports Guide*
- *Sterling Selling and Fulfillment Foundation: Javadocs*
- *Sterling Selling and Fulfillment Suite: Glossary*

- *Parcel Carrier: Adapter Guide*
- *Sterling Selling and Fulfillment Foundation: Multitenant Enterprise Guide*
- *Sterling Selling and Fulfillment Foundation: Password Policy Management Guide*
- *Sterling Selling and Fulfillment Foundation: Properties Guide*
- *Catalog Management: Concepts Guide*
- *Sterling Selling and Fulfillment Foundation: Pricing Concepts Guide*
- *Sterling Selling and Fulfillment Foundation: Setting Up Quotes in Distributed Order Management*
- *Sterling Sensitive Data Capture Server, Release 1.0: Configuration Guide*
- *Sterling Sensitive Data Capture Server, Release 1.0: PA-DSS Implementation Guide*
- *Sterling Selling and Fulfillment Foundation: Secure Deployment Guide*
- *Sterling Business Center: Item Administration Guide*
- *Sterling Business Center: Pricing Administration Guide*
- *Sterling Business Center: Customization Guide*
- *Sterling Business Center: Localization Guide*
- *Sterling Field Sales: Deployment Guide*
- *Sterling Field Sales: Implementation Guide*
- *Sterling Field Sales: Localization Guide*
- *Sterling Field Sales: User Guide*
- *Sterling Field Sales: Customization Guide*
- *Visual Modeler: Administration Guide*
- *Visual Modeler: Best Practices Guide*
- *Visual Modeler: Implementation Guide*
- *Visual Modeler: Installation Guide*
- *Visual Modeler: Tutorial Guide*

For a description of the various documents in the Sterling Store Inventory Management documentation set, see the Sterling Store Inventory Management documentation home page at:

`<YFS_HOME>/documentation/SOP_doc_home.html`

where `<YFS_HOME>` is the `/Runtime` directory under the folder where this application and Sterling Selling and Fulfillment Foundation are installed.

Conventions

The following conventions may be used in this manual:

Convention	Meaning
. . .	An ellipsis represents information that has been omitted.
< >	Angle brackets indicate user-supplied input.
`mono-spaced text`	Mono-spaced text indicates a file name, directory path, attribute name, or an inline code example or command.
/ or \	Slashes and backslashes are file separators for Windows, UNIX and LINUX operating systems. The file separator for the Windows operating system is "\" and the file separator for Unix and Linux systems is "/". The Unix convention is used unless otherwise mentioned.
<INSTALL_DIR>	User-supplied location of the Sterling Multi-Channel Fulfillment Solution installation directory and Sterling Store Inventory Management installation directory. This is only applicable for Release 9.1

1

Introduction

The Sterling Store Inventory Management presents solutions to the challenges found in typical store management business scenarios.

An in-store pick-up system allows customers to place orders on the web site and pick up orders at their nearest store. The added value for customers stems from savings on shipping costs, immediate gratification, and the opportunity to view and buy additional items once they are inside the store. Retailers expect to increase the frequency of customer visits to the store by creating this stronger integration between channels, thereby, boosting revenues and profits. This also serves as a differentiating factor by providing additional service and increasing their customers' convenience.

One of the keys to success with in-store pickup is effective coordination between a retailer's online and offline operations. Given the competitive pressures and customer benefits associated with this service, in-store pick-up will soon no longer be an order winner for retailers, but rather an order qualifier, a requirement for any successful multi-channel retailer.

The inventory management for in-store pickup operations includes the use of mobile devices for managing certain operations in the store.

The Sterling Store Inventory Management also provides a pre-configured reference implementation. The reference implementation provides standard configurations and processes followed in a typical store. Additionally, it may also include certain transactional data necessary to demonstrate its ability.

Installing the Sterling Store Inventory Management reference implementation is optional. Also, there are other options when installing the reference implementation:

- Installing the IBM Sterling Store Inventory Management with Your Own Master Data
- Installing the IBM Sterling Store Inventory Management with Your Own Configuration Data
- Installing the IBM Sterling Store Inventory Management with Your Own Transaction Data

For more information about installing the reference implementation, see the *Sterling Selling and Fulfillment Suite: Applications Reference Implementation Guide*.

1.1 Installing the IBM Sterling Store Inventory Management with Your Own Master Data

The default installation of the Sterling Store Inventory Management reference implementation is done with the configuration data and master data.

To use your own master data, do not choose the default installation. To load the master data, you can use the Rapid Deployment Tools (RDT). For more information about RDT, see the *Selling and Fulfillment Foundation: Integration Guide*.

You can use RDT for creating locations and items.

1. Before you run RDT, create `External/RDTConfigData/LoadStore` folder under `<INSTALL_DIR>` directory.
2. Under `<INSTALL_DIR>/External/RDTConfigData/LoadStore` create Input, Error, Working, and Complete directories.
3. Create a `csv` file and include all stores that you want to configure in this file. The `csv` file should have all columns specified in the `RDTStoreConfigData.xls`.
4. In the `RDTStoreConfigData.csv` file, delete the first row (header) and ensure that the file has only 38 columns.
5. Run the integration server using the `<INSTALL_DIR>/bin/startIntegrationServer` script with the server name `SOP_Store_Loader` as the parameter.

   The server retrieves all files located in the Input directory, copies them into the Working directory, and loads the store. Any errors that

occur are copied to the `Error` directory. The loaded records are copied to the Complete directory.

Once the stores are loaded you can configure each store as a seller using the Sterling Store Inventory Management Configurator. If a store is modelled as a seller you can define the inventory and catalog organization code for the store. However, for the store inventory operations, the store uses inventory and catalog organization code of the enterprise with which you logged into the application.

After configuring the stores as sellers, you can onboard the store one by one using the Sterling Store Inventory Management Configurator. For more information about onboarding a store, see Section 3.11.1, "Onboarding a Store".

1.2 Installing the IBM Sterling Store Inventory Management with Your Own Configuration Data

If you choose to install the reference implementation with your own configuration data, it is assumed that you understand the various concepts and configurations involved. For more information about the various concepts and configurations, see the *Sterling Store Inventory Management: Concepts Guide* and the *Sterling Store Inventory Management: Implementation Guide*.

1.3 Installing the IBM Sterling Store Inventory Management with Your Own Transaction Data

You can use the transaction data provided with the Sterling Store Inventory Management to understand and modify its processes. However, if you use your own transaction data, ensure that the data is complete and in sync with the configuration and master data provided by the Sterling Store Inventory Management.

2

Navigating in the Configurator

This chapter discusses the layout of the Sterling Store Inventory Management Configurator, the various actions you can perform throughout the application, and the important concepts you must understand before using the application.

2.1 Starting the IBM Sterling Store Inventory Management Configurator

To access the Sterling Store Inventory Management Configurator:

1. Point your browser to
   `http://<hostname>:<portnumber>/yantra/console/start.jsp`

   where,

   - hostname is the computer name or IP address of the computer where the IBM® Sterling Multi-Channel Fulfillment solution is installed.
   - portnumber is the listening port of the computer where the Sterling Multi-Channel Fulfillment solution are installed.

   The browser displays the Sign In window.
2. Enter your login ID and password, and click the Sign In button. The Application Console home page displays.
3. From the Application Console menu bar, select Configuration > Launch Sterling Store Inventory Management Configurator. The Sterling Store Inventory Management Configurator displays.

Note: Your User ID must belong to the SOP-ADMIN user group to launch the Sterling Store Inventory Management Configurator.

2.2 The IBM Sterling Store Inventory Management Configurator Layout

The Sterling Store Inventory Management Configurator is a graphical user interface, which you use to configure different aspects of the Sterling Multi-Channel Fulfillment solution. The different configurations are defined by logical groupings (applications) that can be accessed from the Sterling Store Inventory Management Configurator's main screen.

Each application focuses on a particular aspect of the Sterling Store Inventory Management and contains all rules, common codes, and settings necessary for the Sterling Store Inventory Management to work in a real-world business setting.

The Sterling Store Inventory Management Configurator displays all applications by way of an information tree. To expand each application, click on the plus sign located next to the application's name. When an application expands, each specific configuration associated with that application displays.

Next to each specific configuration there exists an icon which indicates the progress of the configuration. When you place the mouse over the icon, the current status of the configuration displays in a pop-up window.

Table 2–1 Task Icons

Task Icon	Description
	This icon indicates that the task is not complete.
	This icon indicates that the task is complete.
	This icon indicates that the task is currently locked.

When you select an application to configure, the Sterling Store Inventory Management Configurator tree expands to display all the available configuration rules for the selected application. Select a configuration that is not yet complete or still in progress. For certain configurations, you can fine tune some configuration tasks by clicking the Advanced Configuration hyperlink.

To change the configurations for a different organization, select the Load Rules for Organization hyperlink. If organization is not the owner of the configuration, a link displays next to the configuration name that enables you to override the ownership of that configuration.

2.2.1 Using the Online Help

To access the Sterling Store Inventory Management Configurator's online help, select Help > Online Help.

2.2.2 Troubleshooting Errors

You can view the description and cause of any error raised in the Sterling Store Inventory Management Configurator, as well as the action to perform to troubleshoot the error.

To view the Sterling Store Inventory Management Configurator system error descriptions:

1. From the menu bar, choose Help > Troubleshooting. The Error Search window appears.
2. Enter the applicable search criteria and choose  . A list of error codes and their descriptions displays.
3. Choose  to view the cause for the error and the action to perform to troubleshoot it.

2.2.3 Using Special Characters

In the Sterling Store Inventory Management Configurator, you may need to use special characters during data entry. Sterling Multi-Channel Fulfillment solution reserve keywords and special characters that may be used internally. For information about using and handling special characters in the Sterling Multi-Channel Fulfillment solution, see the *Sterling Selling and Fulfillment Foundation: Customizing APIs Guide*.

3

Configuring the IBM Sterling Store Inventory Management

This chapter explains the common configurations that are needed to set up a store. The audience for this chapter includes both Hub and Enterprise administrators who are responsible for configuring and maintaining the Sterling Store Inventory Management.

The Sterling Store Inventory Management Configurator is a collection of rules and configurations that are necessary to implement the Sterling Store Inventory Management.

Before any store is made operational on the Sterling Store Inventory Management, the node needs to be configured as a store. The store configuration uses a new approach called guided configuration. The guided configuration supplies many default values for your store configuration, and requires that you visit a minimal number of screens. It is a task-based configuration.

All tasks are represented in the form of a tree. A task can be a grouped task or leaf task. A grouped task is a task for which child tasks exist. A leaf task is a task for which no child task exists.

The status of any task can be complete, not complete, or locked. The status of a grouped task is dependant on the status of its child tasks. For example, if the child tasks are complete, the status of the grouped task is automatically set to complete.

Tasks that are locked are dependant on other tasks for completion. For example, if the Onboard A Store task is dependant on the Configure Enterprise Profile task, you can onboard a store only after completing the configuration of the enterprise profile. Until then, the Onboard A Store task is in locked status.

When a new store is created, it is either created according to an existing model store or as a new model store. A model store is a store from which processes are inherited to the follower stores. You must configure business processes and rules for a model store, which are inherited by other stores.

There are certain configurations that are specific to a store. Such configurations need to be configured at the store. For example, a store manager needs to ensure that users in the store have access to only the required information for carrying out their tasks.

3.1 Configuring Initial System Setup

You can use the Configure Initial System task to define the various configurations that are required during the initial installation of the system.

All configurations are owned by the Default organization.

3.1.1 Defining Quantity Units of Measure

You can define a master list of quantity units of measure that can be used when defining a unique item ID, unit of measure combinations, or alternate ordering units of measure.

For more information about defining quantity units of measure, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.1.2 Defining Service Quantity Units of Measure

You can define service quantity units of measure that can be used for service items.

For more information about defining service quantity units of measure, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.1.3 Defining Dimension Units of Measure

You can define standard units of measure for dimension to associate with your items. For example, for the centimeter unit of measure, you can define CM as your UOM code.

For more information about defining dimension units of measure, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.1.4 Defining Volume Units of Measure

You can define standard units of measure for volume to associate with your items. For example, for the gallon unit of measure, you can define the UOM code as GALLON and define the conversion factor.

For more information about defining Volume Units of Measure, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.1.5 Defining Weight Units of Measure

You can define standard units of measure for weight using this screen. For example, for the gram unit of measure, you can define the UOM code as GRAM, and also define the conversion factor.

For more information about defining Weight Units of Measure, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.1.6 Defining Time Units of Measure

You can define standard units of measure for Time to associate with your items. For example, for the day unit of measure, you can define the UOM code as DAY, and also define the conversion factor.

For more information about defining Time Units of Measure, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.1.7 Configuring Installation Rules

You can configure system level installation rules. You can set up the rules that need to be defined when the Hub installs the application.

For more information about defining installation rules, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.1.8 Defining Locales

You can set up locales, and associate them with multiple organizations and users within the Hub. Locales are only established by the Hub. A locale defines a set of standards that enable people within a geographic area to communicate and conduct business transactions in an unambiguous way.

For more information about defining locales, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.1.9 Defining Country or Region Codes

You can set up common codes for country or region codes used when setting up locales. This common code identifies the country or region in which the locale is located.

For more information about defining country or region codes, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.1.10 Defining Language Codes

You can set up common codes for language definitions used when setting up locales. This common code identifies the language used in the locale. You can create, modify, and delete language definitions.

For more information about defining language codes, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.1.11 Defining Date Formats

You can set up common code formats for date formats used when setting up locales. This common code format identifies how dates are entered at a locale. You can create, modify, and delete date formats.

For more information about defining date formats, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.1.12 Defining Time Formats

You can set up common code formats for time formats used when setting up locales. This common code format identifies how times are entered at a locale. You can create, modify, and delete time formats.

For more information about defining time formats, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.1.13 Defining Date and Time Formats

You can set up common code formats for date and time formats used when setting up locales. This common code format identifies how dates with time are entered at a locale. You can create, modify, and delete date and time formats.

For more information about defining date and time formats, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.1.14 Defining Currency

Currency Definitions define the symbols for each currency and indicate Euro currency membership and expiration date, if applicable. You can also set rules for an order's currency conversion and euro conversion.

The Euro currency is part of the plan to convert all of the European nations to one defined currency.

For more information about defining currency definitions, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.1.15 Defining Currency Conversions

Currency Conversion enables you to set up exchange rates from one currency to another.

Exchange rates are used to translate between currencies used by organizations as defined by their locale. The exchange rate is stored as part of the order document type when it is created. The stored exchange rate can be reassessed, based on fluctuating currency markets or any

time the price of an order changes, such as when you cancel a line, add quantity, or add a charge.

For more information about defining currency conversions, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.1.16 Configuring Freight Terms

You can define common codes used to associate a freight terms to a Carrier. A freight term identifies how transportation costs are calculated.

The following are Sterling Multi-Channel Fulfillment solution default freight terms:

- Collect (COLLECT) - The buyer is responsible for payment of the freight.
- Prepaid (PREPAID) - The seller is responsible for the payment of the freight.
- Third Party Collect (TP-COLLECT) - A third party organization is responsible for all or part of the payment processing, but the buyer is responsible for the actual payment.
- Third Party Prepaid (TP-PREPAID) - A third party organization is responsible for all or part of the payment processing, but the seller is still responsible for the actual payment.

For more information about defining freight terms, see the *Sterling Logistics Management: Configuration Guide*.

3.1.17 Defining User Roles

You can define user roles for your organization. User Roles are also known as user groups. A user group is a set of users who perform similar tasks.

For more information about defining user roles, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.1.18 Configuring Region Definitions

Region Definitions enable you to configure region levels, match region preferences, or define a region schema. The individual components

consisting of regions and region levels can be used to create the region schema. This can be used throughout the business models of the Sterling Multi-Channel Fulfillment solution.

3.1.18.1 Configuring Region Levels

You can define region levels such as Country or Region, State, County, City, and so forth, based on the levels at which you want to aggregate your regions, and define the address field to which a region level corresponds. Region levels also enables you to create a region hierarchy.

For more information about defining region levels, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.1.18.2 Defining Region Match Preferences

Region match preferences enables you to specify the level at which addresses should be matched to regions for each country or region.

For more information about defining region match preferences, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.1.18.3 Configuring a Region Schema

A region schema is the complete hierarchical set of regions that define a given geography. A region is configured as a specific territory. For example, you can create a region for a complete state, city, or town.

For more information about defining region schema, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.2 Configuring an Enterprise Profile

Each Participant is considered an organization with a defined role. For an organization to function as desired it must be given one or more roles. Each organization is assigned at least one role. A role is a well-defined set of activities that can be performed by an organization. Each organization performs at least one role such as hub, enterprise, and so forth.

Note: The organization code of the organization administering the enterprise and the organization code of the primary enterprise must be the same.

For more information about configuring participants, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.3 Managing the Supply Chain Network Model

You can view the details of the participants in the supply chain model. The usual participants are distribution centers, vendors, and delivery nodes.

3.3.1 Setting Up a Participant Model

You can configure locations in a node from where you can ship or deliver products.

For more information about configuring participants, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

Defining Parcel Carrier Preferences

You can identify the carriers a store uses and define the shipping account number for a store. The shipping account number needs to be defined to add a shipment to a manifest in a store.

For more information about defining parcel carrier preferences, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.4 Managing Products and Categories

You can define products and various attributes of the product items. You can also categorize the items to group them into logical sub sets.

3.4.1 Configuring Units of Measure

You can define quantity units of measure and pricing units of measure. These units of measure can be used when defining a unique item ID and unit of measure combinations and alternate ordering units of measure.

For more information about configuring units of measure, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.4.2 Managing Products

When managing products you create product items, define the general information about the product, and define various other attributes for an item.

For more information about defining product items, see the *Catalog Management: Configuration Guide*.

3.4.3 Defining Product Categories

You can categorize or group product items into logical sub sets. This enables you to search for an item based on the category to which it belongs.

For more information about defining a product category, see the *Catalog Management: Configuration Guide*.

3.4.4 Defining Types of Product Classification

Products can be classified into various groups which can be used for sourcing, determining shipping preferences, and so forth.

The Sterling Store Inventory Management enables you to create a classification and associate an item attribute with it.

For more information about defining product classification, see the *Catalog Management: Configuration Guide*.

3.4.5 Defining Classification Values

This configuration allows you to define various values for a given classification type. A classification is always associated with an attribute in the item master.

For more information about defining the product classification hierarchy, see the *Catalog Management: Configuration Guide*.

3.4.6 Defining Alternate Identifications for Item

There are different ways to identify an item. You can define common codes such as UPC and EAN for item alias types when configuring product items, provided services, and delivery services.

For more information about defining item alias types, see the *Catalog Management: Configuration Guide*.

3.5 Configuring Inbound Processes

You can configure inbound processes such as carriers, receiving preferences, and so forth.

3.5.1 Defining Carriers

By choosing the role of an organization as carrier, you can define the various attributes of the carrier. The various services provided by a carrier are truck load services, less than truck load services, and parcel services.

For more information about defining carriers, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.5.2 Defining Carrier Services

You can configure different codes to identify different carrier services used to ship orders.

For more information about defining carrier services, see the *Sterling Logistics Management: Configuration Guide*.

3.5.3 Defining Shipment Modes

You can define common codes used for a shipment mode. The shipment mode describes how a shipment is being shipped.

The following are the default shipment modes:

- TL - Truckload

- LTL - Less Than Truckload
- PARCEL

For more information about defining shipment modes, see the *Sterling Supply Collaboration: Configuration Guide*.

3.5.4 Configuring Purchase Order Related Tasks

You can configure all the purchase order related tasks.

3.5.4.1 Configuring Purchase Order Receipt

You can determine the pipeline used for the purchase order receipt repository using the pipeline determination rules.

You can also create a pipeline for the purchase order receipt repository. To create a pipeline you can use the applicable transactions and conditions in the work area.

For more information about pipeline configuration, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.5.4.2 Configuring Purchase Order Receiving Rules

Most order document types flow through a pipeline without requiring any intervention. However, there are times when modifications are required. You can configure receipt modification rules for a purchase order.

For more information about defining receipt modification rules, see the *Sterling Warehouse Management System: Configuration Guide*.

3.5.4.3 Configuring Purchase Order Receiving Dispositions

You can define common codes for receiving dispositions used when handling a receipt. This common code identifies what happens to items for the document type when they are received.

For more information about defining receiving dispositions, see the *Sterling Warehouse Management System: Configuration Guide*.

3.5.4.4 Configuring Purchase Order Receiving Discrepancy Reasons

You can define codes to specify reasons for any discrepancies that may occur during the receipt of a shipment.

For more information about defining receiving discrepancy reasons, see the *Sterling Supply Collaboration: Configuration Guide*.

3.5.4.5 Configuring Purchase Order Receiving Preferences

Receiving preferences can be created to enable over receipt of products in the system. Over receipt is the ability to receive more than the ordered quantity.

For more information about defining receiving preferences, see the *Sterling Supply Collaboration: Configuration Guide*.

3.5.5 Configuring Transfer Order Related Tasks

You can configure all of the following transfer order related tasks.

3.5.5.1 Configuring Transfer Order Receipt

You can determine the pipeline for the transfer order receipt repository using pipeline determination. When you expand the Pipeline Determination branch, the components that are displayed depends on what role you have logged in as. If you are logged in as a Hub role, the Hub Rule is displayed. If you are logged in as an Enterprise role, both the Hub Rule and My Rule components are displayed. Drag conditions and pipelines into the work area to construct the pipeline determination rules.

For more information about pipeline configuration, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.5.5.2 Configuring Transfer Order Receiving Rules

A transfer consists of a replenishment order from a regional distribution center or a transfer of items from another distribution center. You can configure receipt modification rules for a transfer order.

For more information about defining receipt modification rules, see the *Sterling Warehouse Management System: Configuration Guide*.

3.5.5.3 Configuring Transfer Order Receiving Dispositions

You can define common codes for receiving dispositions used when handling a receipt. This common code identifies what happens to items for the document type when they are received.

For more information about defining receiving disposition, see the *Sterling Warehouse Management System: Configuration Guide*.

3.5.5.4 Configuring Transfer Order Receiving Discrepancy Reasons

You can define codes to specify reasons for any discrepancies that may occur during a receipt of a shipment. You can create receiving discrepancy reasons.

For more information about defining receiving discrepancy reasons, see the *Sterling Supply Collaboration: Configuration Guide*.

3.5.5.5 Configuring Transfer Order Receiving Preferences

Receipt preferences can be created to enable over receipt of products in the system. Over receipt is the ability to receive more than an ordered quantity.

For more information about defining receipt preferences, see the *Sterling Supply Collaboration: Configuration Guide*.

3.5.6 Configuring Transactions and Events for Inventory, Item, and User Interfaces

Every process type has a set of base transactions defined for it. A transaction is a logical unit of work that is necessary for performing an activity. Base transactions are predefined transactions that contain information about how the transaction behaves, such as how many copies of a transaction can be kept in a process type and whether or not it can have configurable base pick and drop statuses. Base transactions can be used to create new transactions.

For more information about configuring transactions and events for inventory, item, and UI, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.6 Configuring Outbound Processes

Outbound Process Modeling defines the business process of a store for outbound shipment.

3.6.1 Configuring Order Fulfillment Process

The process of order fulfillment is modeled through a pipeline. You can determine a pipeline for the order fulfillment process using pipeline determination.

For more information about Configuring an Order Document's Fulfillment Specific Components, see the *Sterling Distributed Order Management: Configuration Guide*.

3.6.2 Configuring Outbound Constraints

Outbound constraints are used to define conditions for shipping. You can also define the economic shipping parameters like the weight and volume threshold, the routing guides, and so forth.

For more information about defining outbound constraints, see the *Sterling Distributed Order Management: Configuration Guide*.

3.6.3 Configuring Shipment Modification Rules

Most orders follow the pipeline without requiring any modifications. However, there are times when modifications are required, such as changing the date or deleting a shipment.

Shipment Modification Rules apply to the following document types:

- Sales Order
- Transfer Order

For more information about defining modification rules, see the *Sterling Distributed Order Management: Configuration Guide*.

3.6.4 Configuring Load Modification Rules

Most load document types flow through a pipeline without requiring any intervention. However, there are times when modifications are required.

For more information about configuring load modification rules, see the *Sterling Warehouse Management System: Configuration Guide*.

3.6.5 Configuring Container Rules

Most orders follow the fulfillment pipeline without requiring any modifications. However, there are times when modifications are required such as changing container information. It is critical for you to decide which modifications are allowed for each modification type, modification level, and status combination.

For more information about defining pack modification rules, see the *Sterling Warehouse Management System: Configuration Guide*.

3.7 Managing Inventory

You can configure rules to track and monitor movement of inventory. This ensures the availability of product for shipment, whenever there is a requirement.

3.7.1 Configuring Inventory Related Rules

Inventory business rules are used to set up rules and common codes used for product item availability calculations and inventory handling.

For more information about configuring inventory rules, see the *Sterling Global Inventory Visibility: Configuration Guide*.

3.7.2 Setting up Count Program

This allows you to set up the count program.

For more information about defining count program, see the *Sterling Global Inventory Visibility: Configuration Guide*.

3.7.3 Configuring Count Process

You can configure count as per business requirements. To create a pipeline you can use the applicable transactions and conditions in the work area.

For more information about document type configuration, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.7.4 Configuring Count Rules

You can define count modification rules. It is critical for you to decide which modifications are allowed for each modification type, modification level, and status combination.

For more information about configuring count rules, see the *Sterling Warehouse Management System: Configuration Guide*.

3.7.5 Configuring Supply and Demand Types

You can identify the supply and demand type associations used to determine inventory availability for a specific demand type.

For more information about defining supply types, demands type, and considerations, see the *Sterling Global Inventory Visibility: Configuration Guide*.

3.7.6 Configuring Availability Safety Factors

You can define available safety factors that indicate what percentage of current or future inventory should be excluded during order promising.

You can apply availability safety factor and safety factor percentage to the current and future inventory.

For more information about configuring availability safety factors, see the *Sterling Global Inventory Visibility: Configuration Guide*.

3.7.7 Configuring How Supply and Demand are Changed with Order Status

You can define how and when inventory is updated for sellers and buyers tracking inventory, on a status-by-status basis. The Status Inventory Types table is used to associate statuses with specific supply and demand types according to organization. When an order passes through various statuses of fulfillment, the values corresponding to the Buyer supply type and Seller demand type associated with the original status

are decreased, and the values for the status the order is moving into are increased.

For more information about defining status inventory types, see the *Sterling Distributed Order Management: Configuration Guide*.

3.7.8 Configuring Inventory Node Type Rules

You can create inventory rules based on node types. These rules are applied to nodes belonging to the node type on the rule.

For more information about configuring inventory node type rules, see the *Sterling Global Inventory Visibility: Configuration Guide*.

3.8 Configuring Alert Management

You can define alerts and alert queues.

3.8.1 Defining Alert Types

An alert is a message directed to a user or an alert queue about a transaction that needs manual intervention. Alerts are sent to different queues depending on the notification definitions you have configured.

For more information about defining alert types, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.8.2 Defining Alert Queues

You can define alert queues to apply rules and methods for alert notifications.

For more information about configuring alert queues, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.9 Configuring User Security

User Security enables a store manager to ensure that users have access to information that is appropriate for carrying out their tasks.

3.9.1 Defining Users

A user is an individual who can perform certain tasks such as Hub Administrator or Store Manager, depending on what role the user plays in the organization. Each organization has its own users.

For more information about configuring user security, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.9.2 Configuring Data Security

You can define data security groups to which users can be assigned. Data security limits the access of data to only those who are authorized to view or modify that data.

For more information about defining data security groups, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.10 Configuring System Administration

You can configure system level information such as purge criteria, health monitor rules, and so forth.

You can use System Administration for:

- Defining Initial Context Factory Codes
- Viewing Servers
- Configuring Health Monitor Rules
- Defining Count Purge Criteria
- Defining System Purge Criteria
- Defining Sales Order Purge Criteria
- Defining Agent Criteria Groups

For more information about configuring system administration components, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.11 Configuring Store Processes

Before operating a store, a store needs to be configured according to the Sterling Store Inventory Management configurations.

3.11.1 Onboarding a Store

Onboarding a store is the configuration that needs to be done to set up a store.

A store can be modeled as one of the following:

- Store with no location - This is applicable for a store which does not track any inventory. No inventory operations can be performed in this store using the Sterling Multi-Channel Fulfillment solution.
- Store with one location - Here, the entire store is modelled as one location. All inventory operations such as inventory adjustment, receiving, and cycle count can be performed. Store associates cannot perform inventory moves as the store comprises of only one location.

> **Note:** For single location stores, the location identifier is defined in the `sopbundle.properties` file and the bundle key provided is SOP_Single_Location_Store_Location_ID.

- Store with three locations - Here, the store is modelled with three locations. One location is designated as the customer service area, one for dock, and one for backroom.
- Store with multiple locations - Here, the store is modeled with multiple locations. In addition to the three locations set as part of the configuration, the store associate can create additional locations.

Once the store has been configured, it can be designated as a model store or a follower store. If a store is a model store, then other stores can follow the business processes and layout of this store.

If you designate a store to be a follower store, then you must select a model store for this store.

To onboard a store:

1. Log in to the Sterling Multi-Channel Fulfillment solution as the Enterprise user.

2. From the Application Console menu bar, select Configuration > Launch Sterling Store Inventory Management Configurator. The Sterling Store Inventory Management Configurator displays.
3. From the Configuration Setup screen, select Configure Store Processes > Onboard A Store. The Onboard a Store screen displays.
4. Select a store from the drop-down list and click Next.

   The Store Address and Contact Information displays.
5. Click Next to designate a store as a model store or a regular store.
   - If you want to designate a store as a model store, choose This is a Model Store. Click Next. For more information about configuring a model store, see Section 3.11.1.1, "Configuring a Model Store".
   - If you want to designate a store as a regular store, choose This follows Model Store # and select the model store from the drop-down list.
6. Click Finish.

3.11.1.1 Configuring a Model Store

To configure a model store:

1. Select the current locale from the drop-down list.
2. You may or may not want to model store locations on Sterling Multi-Channel Fulfillment solution.
   - To model a store as a single location store, choose Entire store is modeled as one location. Click Next. You can specify the reason codes and threshold amount. For more information about specifying the reason code and threshold value, see Section 3.11.1.2, "Specifying Reason Codes and Threshold Value".
   - To model a store with three locations, choose Limited Locations: Storefront, Backroom and Dock.
   - To model a store with many locations, choose Store has many locations.
   - To model a store where inventory is not managed on Sterling Multi-Channel Fulfillment solution, choose No Store Inventory Management on Sterling Multi-Channel Fulfillment solution.

3. If you want to use Sterling Multi-Channel Fulfillment solution to fulfill orders in a store, check the Use Sterling Multi-Channel Fulfillment solution to fulfill orders within the store box. Click Next. You can define your shipping options. For more information about defining shipping for a store, see Section 3.11.1.3, "Fulfilling Orders on IBM Sterling Selling and Fulfillment Foundation".

3.11.1.2 Specifying Reason Codes and Threshold Value

You can specify the assigned codes for modification reason and threshold value for inventory adjustments.

1. Specify reason codes for the following tasks:
   - In the Physical Count Reason Code field, enter the reason code for physical count.
   - In the Cycle Count reason Code field, enter the reason code for cycle count.
   - In the Inventory Moves Reason Code field, enter the reason code for inventory moves.
2. You can specify the threshold value for inventory adjustment.
   - In the Adjustment Threshold Value field, enter the threshold amount.
3. Click Next.
4. Click Finish.

3.11.1.3 Fulfilling Orders on IBM Sterling Selling and Fulfillment Foundation

To fulfill orders within a store:

1. To record backroom pick for each order before the shipment is shipped or picked by the customer, check the Recording of backroom pick is mandatory for each shipment box. The Sterling Store Inventory Management enables you to perform a backroom pick in scan or select mode.
   - To perform backroom pick in select mode, choose Entering ItemID and Quantity.

- To perform backroom pick in scan mode, choose Scanning Item UPC Code.

2. To ship products using TL/LTL carriers, check the Enable TL/LTL shipping at store box.
3. The Sterling Store Inventory Management enables you to perform a customer pick in scan or select mode.
   - To perform customer pick in select mode, choose Entering ItemID and Quantity.
   - To perform customer pick on scan mode, choose Scanning Item UPC Code.
4. Click Next.

   Depending on the locations specified for the model store, one of the following screens displays.

   If the entire store is modelled as a single location, the Specify Reason Code and Threshold Value screen displays. For more information about specifying the reason code and threshold value, see Section 3.11.1.2, "Specifying Reason Codes and Threshold Value".

   If the store is modeled with limited locations or with multiple locations, the Specifying Identifiers screen displays. For more information about specifying location identifiers, see Section 3.11.1.4, "Specifying the Identifiers".

   If the store is modeled as a store where no inventory is managed on Sterling Multi-Channel Fulfillment solution, click Finish.

3.11.1.4 Specifying the Identifiers

You need to specify the location identifiers for the locations that the system can use.

1. In the Receiving Dock Location ID field, enter the identifier for the location where inventory is received.
2. In the Storefront Location ID, enter the identifier for the location where the customer pick is done.
3. In the Backroom Location ID, enter the identifier for the backroom location.

You cannot specify the identifier for backroom locations for a store with multiple locations.

4. Click Next. You can specify the reason codes and threshold amount. For more information about specifying the reason code and threshold value, see Section 3.11.1.2, "Specifying Reason Codes and Threshold Value".

3.11.2 Modifying Model Store Processes

You can use this wizard to modify business processes within a model store.

To modify a model store:

1. Log in to the Sterling Multi-Channel Fulfillment solution as the Enterprise user.
2. From the Application Console menu bar, select Configuration > Launch Sterling Store Inventory Management Configurator. The Sterling Store Inventory Management Configurator displays.
3. From the Configuration Setup screen, select Configure Store Processes > Modify Model Store Processes. The Change Model Store Processes screen displays.
4. Select a model store from the drop-down list and click Next.

   The Store Address and Contact Information displays. Repeat Step 5 through Step 6.

3.11.3 Modifying Follower Store Processes

You can use this wizard to modify a follower store.

To modify a follower store:

1. Log in to the Sterling Multi-Channel Fulfillment solution as the Enterprise user.
2. From the Application Console menu bar, select Configuration > Launch Sterling Store Inventory Management Configurator. The Sterling Store Inventory Management Configurator displays.
3. From the Configuration Setup screen, select Configure Store Processes > Modify Follower Store Processes. The Change Follower Store Processes screen displays.

4. Select the follower store from the drop-down list and click Next.

   The Store Address and Contact Information displays. Repeat Step 5 through Step 6.

   When a user onboards a follower store with a "Single Location Store" as a model store, the follower store inherits the location identifier of the model store.

3.11.4 Configuring Store Adjustment Reasons

You can use this wizard to configure adjustment reasons for a model store. The Inventory Adjustment Reason allows tracking and reporting of all adjustments at a reason code level. The Sterling Store Inventory Management uses pre-defined reason codes like 'Re-Classify', 'Scrap', 'Found-New', or 'Missing' for certain operations.

After onboarding a store, configure the adjustment 'Pack' reason code. The 'PACK' reason code is used whenever you add products to an outbound container either during picking or packing process. The inventory being packed is moved into a virtual location called as the Accounting Bin. This location association is mandatory for this reason code. During the shipping process, inventory is decremented from this bin location.

To configure adjustment reasons for a model store:

1. Log in to the Sterling Multi-Channel Fulfillment solution as the Enterprise user.
2. From the Application Console menu bar, select Configuration > Launch Sterling Store Inventory Management Configurator. The Sterling Store Inventory Management Configurator displays.
3. From the Configuration Setup screen, select Configure Store Processes > Configure Store Adjustment Reasons. The Load Model Store Configuration pop-up window displays. Select a model store from the drop-down list and Click Ok.

   The Inventory Adjustment Reasons screen displays. For more information about defining inventory adjustment reasons, see the *Sterling Warehouse Management System: Configuration Guide*.

3.11.5 Synchronize Followers Of A Model Store

You can use this wizard to synchronize processes of all the followers of a model store.

To synchronize followers of a model store:

1. Log in to the Sterling Multi-Channel Fulfillment solution as the Enterprise user.
2. From the Application Console menu bar, select Configuration > Launch Sterling Store Inventory Management Configurator. The Sterling Store Inventory Management Configurator displays.
3. From the Configuration Setup screen, select Configure Store Processes > Synchronize Followers Of A Model Store. The Synchronize Model Store screen displays.
4. Select a model store from the drop-down list and click Synchronize. The processes of all the follower stores under the selected model store are synchronized.

3.12 Configuring Store Specific Tasks

You can configure the tasks for a store belonging to a particular enterprise.

3.12.1 Defining Store Users

You can define the user of a store belonging to the enterprise. A user is a single person assigned with a certain task, such as, Hub Administrator or store manager, depending on what role the user plays in the organization.

For more information about defining users, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.12.2 Configuring Store Devices

You can configure store devices such as printers, weighing scale, and so forth.

For more information about defining a device type, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.12.3 Configuring Store Print Documents

You can configure the print documents pertaining to a store such as receiving worksheet, cycle count worksheet, and so forth.

For more information about defining print documents, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.12.4 Configuring Store Count Strategy

This configuration allows you to configure the count strategy for a store. Count strategy is a method defined to perform the count task.

For more information about defining count strategy, see the *Sterling Warehouse Management System: Configuration Guide*.

3.12.5 Configuring Transfer Order Receiving Disposition Codes

You can define disposition codes for a transfer order when receiving items.

For more information about defining disposition codes, see the *Sterling Warehouse Management System: Configuration Guide*.

3.12.6 Configuring Purchase Order Receiving Disposition Codes

You can define disposition codes for a purchase order when receiving items.

For more information about defining disposition codes, see the *Sterling Warehouse Management System: Configuration Guide*.

3.12.7 Configuring Transfer Order Receiving Preferences

You can configure the receiving preferences of a transfer order for an inbound shipment to a store.

For more information about defining receiving preferences, see the *Sterling Warehouse Management System: Configuration Guide*.

3.12.8 Configuring Purchase Order Receiving Preferences

You can configure the receiving preferences of a purchase order for an inbound shipment to a store.

For more information about defining receiving preferences, see the *Sterling Warehouse Management System: Configuration Guide*.

3.12.9 Configuring Data Security

Data security groups are used to control access to data by the users. If a user is not associated with a data security group, the user is considered to have default access.

For more information about defining data security groups, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.12.10 Configuring Barcodes

Bar codes are machine-readable symbols comprising black-and-white patterns of bars and stripes, or in some cases checkerboard-like grids. Bits of information are encoded within bar codes. This data is read by bar code scanners, and often used in conjunction with databases.

For more information about defining bar codes, see the *Sterling Warehouse Management System: Configuration Guide*.

3.13 Template Based Configuration

During onboarding of a store, the store and enterprise configurations need to be copied for a store to run successfully. This is termed as template based copying.

The templates are located in the `<INSTALL_DIR>\template\com.yantra.sop\StoreConfigurator` directory.

The following tables need to be copied:

- Inventory Status
- Inventory Status Transition
- Node Disposition Code

- Node Receiving Preferences
- Count Strategy
- Count Task Type
- Count Request
- Count Cancellation Reasons
- Adjustment Reason Codes
- Adjustment Host Reason Codes
- Barcode Translation
- Rules
- Common Codes

Once the store is brought onboard, the onboardStore servlet is invoked. The store and store's enterprise are obtained from the model store. The templates for onboarding are obtained from `<INSTALL_DIR>\template\com.yantra.sop\StoreConfigurator` file.

The templates should be converted into an entity loadable format. The entity xmls should then be loaded using an entity loader.

3.14 Extending and Customizing the Application

You can customize the Sterling Store Inventory Management to meet your specific business needs. The Sterling Store Inventory Management provides tools to help you make these customizations.

To customize the Sterling Store Inventory Management, in the beginning of the script, set the CLASSPATH to include the following jar files:

- `ysopui.jar`
- `ysopbe.jar`
- `ysopbridge.jar`
- `ysopshared.jar`
- `ysoptools.jar`
- `ysopicons.jar`
- `yscpbe.jar`

Important: Ensure that the `ysopshared.jar` file is included before the `yantrashared.jar` file.

After setting up the CLASSPATH, run the Sterling Store Inventory Management in development mode.

3.14.1 User Exit Management

You can configure user exits to enable business logic extensions to transactions. Within transactions, a code exists that invokes user exit so that you can plug in custom logic. For these pre-defined user exits, you can configure appropriate implementations. For more information about defining a user exit, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.14.2 Customizing the Application Menus

You can define menus that a user sees upon logging in to the application. For more information about modifying the application menus, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.14.3 Defining Themes

You can define new color themes to use in the Application Console. For more information about defining themes, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.14.4 Defining Custom Common Code Types

You can configure custom common code types for your application. Common codes are values that enable a user to choose from the options provided rather than entering the data manually. For more information about defining custom common code types, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.14.5 Defining Custom Common Codes

For any application, you can configure common code values for the custom common code type. For more information about defining custom

common codes, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.14.6 Defining Custom Error Codes

You can define custom error codes and the descriptions to use along with the default error codes. For more information about defining custom error codes, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.14.7 Defining Extended Application Resources

You can define new resources and use them to extend components that are permission controlled. When you create a resource, you can grant or revoke permission to this resource through the user role configuration. For more information about defining application resources, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

The reference implementation provided by the Sterling Store Inventory Management provides transactional and configurational data to demonstrate the functionality of all features that are introduced in this release. Additionally, you can use the data provided in the reference implementation as a starting point for your implementation of the Sterling Store Inventory Management. Although the data provided needs to be used exactly as it is given, it helps you to understand how to configure the Sterling Store Inventory Management to fit your business needs.

3.14.8 Defining Custom Alerts

The Sterling Store Inventory Management enables you to extend existing alerts and define new alert exception types.

This section explains how to create new exception types, and configure and raise the custom alerts.

3.14.8.1 Creating Custom Alert Types

The Sterling Store Inventory Management enables you to specify exception type details for custom alert types. You can create new exception types and activate them for a particular organization.

The Sterling Store Inventory Management also enables you to specify a list of exception types and a role such as BUYER or NODE that the application supports.

For more information about creating an exception type and creating an exception type role, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.14.8.2 Configuring Custom Alerts

The Sterling Store Inventory Management enables you to configure custom alerts. You can define some additional configurations for an exception type by specifying the configurable form.

To configure an alert, create a new exception type. For more information about creating an exception type, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

- If the exception type is routed to the SOP_GENERAL queue, you do not need to enter the identifier for the resolution form.
- If the exception type is routed to the SOP_INFOALERTS queue, you need to enter the identifier for the form to be launched to resolve this type of exception. You can configure the context sensitive resolution screen for an exception type by specifying the resolution form.

3.14.8.3 Raising Custom Alerts

The Sterling Store Inventory Management enables you to raise custom alerts. You can raise custom alerts using monitoring rules. These monitoring rules call a service in the service call alert flow component, which raises the alert. For information about monitoring rules, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

3.15 Changing the Number of Records that Display in the Search Screens

When you enter the search criteria and click the Search button, by default, the Sterling Store Inventory Management displays only 30 records. To view the remaining records, you must click the More Results button.

To fetch the desired number of records, in the `yfs.properties` file, add the yfs.rcp.ui.pagesize property after the yfs.ui.maxrecords property.

4

Managing Users

User Security enables you to ensure that users access only the required information for carrying out their tasks. This requires you to set up user groups and associate users to the user groups. The Sterling Store Inventory Management Configurator allows you to create users and user groups and assign permissions.

4.1 Solution

A user has the privilege to change the password or change the user group of another user.

Changing a Password

A user can change password in the Change Password screen. The modifyUserHierarchy API is invoked to change the password. Table 4–1 describes the various validations that the system performs before changing the password.

Table 4–1 Change Password Validations

Validation	Result
If the old password and new password match	An error message displays.
If the new password and confirmed password do not match	An error message displays.

Table 4–1 Change Password Validations

Validation	Result
If the old password is incorrect	An error message displays.
If the old password field is blank	An error message displays.

Managing Users

A store manager can assign a user to a user group in the Manage Users screen. The getUserList API provides a list of all users, and the getUserGroupList API provides a list of all user groups to which the user can be assigned. After selecting the user and the appropriate user group to which the user needs to be assigned, click the Confirm button. The modifyUserHierarchy API is invoked, which modifies the user group.

If the store manager wants to transfer a store associate from one store to another store, the getOrganizationHierarchy API validates the store that you have entered before transferring the store associate. However, the store manager cannot choose to move their own user identifier to another store. Only another user who has permission to transfer the store manager can perform this operation.

4.2 End-User Impact

None.

4.3 Implementation

None.

4.4 Reference Implementation

None.

5

Inventory Adjustments

Inventory adjustments are made when item quantities at a location do not match with the system quantity. Before performing inventory adjustments, the Sterling Store Inventory Management validates the item and location details.

5.1 Inventory Adjustment Reasons

Inventory adjustments are associated with a reason code and reason text. These codes are used as tracking mechanisms for the exceptions that require an adjustment. The inventory adjustment reason enables tracking and reporting of adjustments at a reason code level.

5.1.1 Default Adjustment Reason Codes

The adjustment reason codes configured as part of the Sterling Store Inventory Management are:

- Re-Classify — This reason code is used to adjust inventory that is incorrectly classified. This reason code increases or decreases the inventory quantity.
- Scrap — This reason code is used to scrap inventory. This reason code always decreases the inventory quantity.
- Found-New — This reason code is used when a new item is found in the location. This reason code always increases the inventory quantity.
- Missing — This reason code is used when inventory is missing for an item. This reason code always decreases the inventory quantity.

5.2 Solution

When adjusting inventory, the system validates the item and item UOM by calling the getItemDetails and getItemUOMList APIs. After entering the location, the item quantity in that location is validated by calling the getNodeInventory API.

Confirmation of the inventory adjustment is done by calling the adjustLocationInventory API.

The configuration rules that need to be set up for inventory adjustments are:

- Inventory adjustment reason codes.
- Inventory transition rules for a store.

Table 5–1 lists all validations done during an inventory adjustment.

Table 5–1 Inventory Adjustment Validations

Validation	Result
If the user enters a wrong item ID	An error message displays.
If the user enters a wrong location	An error message displays.
If the user does not enter the item quantity correctly	An error message displays.
If the quantity entered for negative adjustment is lesser than zero	An error message displays.
If the item entered is tag-controlled	An error message displays.

5.3 End-User Impact

The Sterling Store Inventory Management supports only one product class and inventory UOM.

5.4 Implementation

This section explains how to configure inventory adjustment rules.

To configure inventory adjustment rules:

1. Log in to the Sterling Multi-Channel Fulfillment solution as the Enterprise user.
2. From the Application Console menu bar, select Configuration > Launch Sterling Store Inventory Management Configurator. The Sterling Store Inventory Management Configurator displays.
3. From the Configuration Setup screen, select Configure Store Processes > Configure Store Adjustment Reasons. The Load Model Store Configuration pop-up window displays.
4. Select a store from the drop-down list.
5. In the Inventory Adjustment Reasons field, the default reason codes display.

   If you want to create a new adjustment reason code, click  . For more information about defining inventory adjustment reasons, see the *Sterling Warehouse Management System: Configuration Guide*.

5.5 Reference Implementation

This section explains the reference implementation provided by the Sterling Store Inventory Management for Inventory Adjustments.

5.5.1 Inventory Adjustment Reasons

The Inventory Adjustment Reasons configured in the Sterling Store Inventory Management are described in Table 5–2.

Table 5–2 Inventory Adjustment Reasons

Reason Code	Description	Operation
Re-Classify	Used by a store associate to adjust inventory that was incorrectly classified	Increases and decreases inventory
Found-New	Used by a store associate when inventory is found in the location, but not recorded in the system	Increases inventory
Missing	Indicates that the inventory is missing	Decreases inventory
Scrap	Indicates that the inventory has been damaged and is scrapped	Decreases inventory

5.5.2 Inventory Transitions

Table 5–3 lists the default configuration for inventory status transitions provided in the Sterling Store Inventory Management.

Table 5–3 Inventory Status Transitions

Zone	Transition
For all zones	Blank to Normal

For more information about defining inventory transition rules, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

6

Inventory Searches

A store associate may want to search for an item based on certain search criteria. Along with the list of items that match the search criteria, the store associate may also want to view item details such as availability, price, promotions, and specifications.

6.1 Solution

The Sterling Store Inventory Management provides search screens for searching items. Additionally, a mechanism to view small and large icons that represent each item in your catalog is also provided.

This section explains the complete Item Inquiry process.

Searching for Items

The getOrganizationList API is used to retrieve a list of organization codes. The getItemAttributeGroupsForCategory, getClassificationPurposeList, and getCategoryList APIs are called to populate the item-specific attributes. The getClassificationPurposeList and getCategoryList APIs are called to populate type of item. Depending on the type of item selected, the other search criteria display.

Retrieving Item Details

The getItemListForOrdering API retrieves a list of items based on the search criteria. This list also provides additional information such as pricing, availability, and so forth.

6.2 End-User Impact

You can configure item classifications and classification hierarchies that can be used as search criteria. A classification hierarchy contains all of the valid values a given classification can accept in a hierarchical format. You can define specification groups for a classification value. Based on the selected item type, the specification attributes display.

For more information about defining classifications, see the *Catalog Management: Configuration Guide*.

6.3 Implementation

In the Sterling Store Inventory Management, whenever an item is selected, item images display along with the item details. The items are associated with large or small images. These images reside on different servers and can be retrieved when needed. To configure the server from which you fetch images, you must define entries such as name, protocol, base URL, and so forth in the `locations.ycfg` file stored in the `com.yantra.yfc.rcp_1.0.0` plug-in folder. You can create more than one URL to display different types of images.

For more information about configuring connection settings for fetching images from the server, see the *Sterling Selling and Fulfillment Foundation: Installation Guide*.

Note: You must create the IMAGE URL to display images from the server. You can configure the IMAGE URL to get images in gif and jpeg formats.

Note: The screens within the Sterling Store Inventory Management application have been designed for small item images of 32 X 32 pixels in size and large items of 180 X 180 pixels in size. It is recommended that your images conform to these sizes for ideal display within the screens.

6.4 Reference Implementation

When checking for the availability of an item in a store, by default, the system displays all items available for the next 5 days from the current date.

7

Inventory Moves

Inventory move operations are performed in a store when receiving items or during space consolidation. The Sterling Store Inventory Management application does not allow a store associate to move more than the existing quantity of items from one location to another location. Before moving inventory, the Sterling Store Inventory Management validates the item and location details.

7.1 Solution

Before moving inventory, the system validates item and item UOM by calling the getItemDetails and getItemUOMList APIs.

After you enter the location, the system validates the quantity of inventory in that location by calling the getNodeInventory API.

The inventory move is confirmed by calling the moveLocationInventory API.

Table 7–1 lists all validations performed during inventory moves.

Table 7–1 Inventory Move Validations

Validation	Result
In the From Location and To Location fields, if the user enters invalid locations	An error message displays.
In the Item ID field, if the user enters an invalid item identifier	An error message displays.

Table 7–1 Inventory Move Validations

Validation	Result
In the Move Qty field, if the user enters a quantity that is more than the current quantity that displays in the Current Qty field	An error message displays.
In the Item ID field, if the user does not enter the item that needs to be moved	An error message displays.

Inventory moves are applicable only to stores that track multiple locations or limited locations.

7.2 End-User Impact

The Sterling Store Inventory Management supports only one product class and inventory UOM.

7.3 Implementation

The getNodeInventory API returns the available quantity, Item ID, UOM, and product class.

Any additional configuration is not required for the Inventory Move task.

7.4 Reference Implementation

This section explains the reference implementation for Inventory Moves, provided as a part of the Sterling Store Inventory Management.

Table 7–2 lists the configuration for Inventory Moves.

Table 7–2 Inventory Moves

Reason Code	Description
STORE_MOVE	Defines the adjustment reason code for inventory update caused due to inventory move operation.

8

Inventory Audits

The Sterling Store Inventory Management provides the capability for a store associate to search and view all inventory transactions performed in a store. In addition, comprehensive visibility to inventory audits such as modification reason, modification type, and adjusted quantity are also provided.

8.1 Solution

A store associate can view details for a particular modification type, date range, reason, location, and modifications performed by any particular user. A user can also view the item details for a particular item. The option to search for inventory by location is applicable only for those stores that have one or more locations.

Audits are written in Sterling Selling and Fulfillment Foundation for each transaction along with appropriate reason codes. Based on the selected modification type, the Inventory Audit Details panel displays the audit information. For example, if the modification type is RECEIPT, details such as the BOL number, item description, receipt number, order number, shipment number, carrier and carrier service code displays. The default transaction type includes RETURN, RECEIPT, SHIPMENT, and ADJUSTMENT.

8.2 End-User Impact

None.

8.3 Implementation

Additional configuration is not required for Inventory Audit.

8.4 Reference Implementation

This section explains the reference implementation for Inventory Audits, provided as part of the Sterling Store Inventory Management.

Table 8–1 and Table 8–2 lists all configurations provided for Inventory Audits.

Table 8–1 System Adjustments

Reason Code	Description
STORE_MOVE	The reason code for inventory updates caused due to an inventory move operation.
STORE-PHYSICAL-COUNT	The reason code for inventory updates caused due to a physical count operation.
STORE-CYCLE-COUNT	The reason code for inventory updates caused due to a cycle count operation.
BLIND	The reason code for blind receiving.
SHIP	The reason code used when confirming a shipment.
RECEIPT	The reason code used while receiving inventory.

Table 8–2 Manual Adjustments

Reason Code	Description
RE-CLASSIFY	Used by a store associate to adjust inventory that was incorrectly classified.
FOUND-NEW	Used by a store associate when inventory is found in the location, but not recorded in the system.

Table 8–2 Manual Adjustments

Reason Code	Description
MISSING	Indicates that the inventory is missing.
SCRAP	Indicates if the inventory has been damaged and is scrapped.

9

Counts

A count system allows you to execute counts in a planned or ad hoc manner. Counts are typically done to eliminate mismatches between the system and the actual inventory. The types of count processes that may be followed are:

- Cycle Count
- Physical Counts

Cycle count ensures that a count is performed periodically in the system. Count tasks may be either generated for a cycle count program or an ad hoc request.

Physical Counts are performed to synchronize the physical and system inventory quantity. During the physical count process, no other activity is performed in the store. This process is usually followed as a year-end activity.

This chapter explains the count processes and solution offered by the Sterling Store Inventory Management.

9.1 Cycle Count

Cycle count is an inventory management procedure where a small subset of inventory is counted on a given day. Cycle Count is performed periodically to maintain inventory accuracy.

Count requests are generated on a periodic basis. Count tasks are generated for count requests that are created, and later executed through count sheets.

The procedures available for count include the ability to generate tasks based on the items.

The Cycle Count process is:

1. Count tasks are generated either ad hoc or through the system.
2. The store associate performs the count tasks.
3. If variances are found as a result of the count, the store associate can:
   - Accept the variance
   - Rectify the count entry

9.1.1 Cycle Count Process

A count program is set up to facilitate counting.

The Cycle Count process is:

1. The count program provides a list of items on a daily basis.
2. The store associate may select all or a subset of items from the list that needs to be counted for that day.
3. The store associate can also add items to the count sheet.
4. Count sheets are printed for the selected list of items.
5. Store associates count inventory in the locations.
6. The store associate enters the count sheet number and records the count in the system.
7. If the count does not match, the store associate recounts the inventory in that location.
8. Variances, if any, are inspected, corrected, and accepted.

9.1.2 Solution

Cycle Count in the Sterling Store Inventory Management involves the following processes:

- Printing Count Worksheets
- Requesting a Count By Item
- Recording the Count
- Cancelling a Count

- Viewing Count Archives
- Count Summary
- Variance

9.1.2.1 Printing Count Worksheets

A store associate can print count worksheets for a system-generated count request or reprint count sheets. You can also create count requests and then print count sheets for these requests.

To print a count sheet, the manageCountSheet API is called. This API is used:

- To create a new batch or update an existing batch with new count requests.
- To create count requests, tasks, and batch, if batch and count request do not exist.
- If batch exists, but there is no count request. The API creates count requests and tasks, and updates the batch.

Table 9–1 Printing Count Sheet Validation

Validation	Result
If you enter the incorrect count sheet number to reprint	When you click the Print button, an error message displays.
If the number of items to count is greater than the number of items pending count	When you click the Print button, an error message displays.
If you do not select any items from the list	When you click the Print button, an error message displays.

For more information about cycle count worksheets, see the *Sterling Store Inventory Management: User Guide*.

9.1.2.2 Requesting a Count By Item

The Sterling Store Inventory Management enables you to generate ad hoc count requests. When you enter the identifier of the item, the system checks to verify whether a count request is already open for that

item. When you leave the Item ID field, the getCountRequest API is invoked. A template to return the total number of records is set. If the total number of records is greater than zero, an error message displays.

Table 9–2 Requesting Count By Item Validations

Validation	Result
If you try to print a count sheet without selecting an item	An error message displays.
If you enter an incorrect item ID	When you press the tab key, an error message displays.
If the item that you entered is already put on count	When you press the tab key, an error message displays.

9.1.2.3 Recording the Count

The user needs to update the count details from the count worksheet in the system. After entering the count sheet number, the count sheet with all item details displays. The getNodeInventory API is invoked to get the item details. The recordCountSheet API is called to record the count results for existing tasks. It accepts the count result by accepting the variance. If new items are found at a location, the API creates count tasks and updates the batch.

Table 9–3 Recording Count Validation

Validation	Result
If numbers are not entered as the count quantity	An error message displays.
If you enter an incorrect item ID	When you press the tab key, an error message displays.
If the record is confirmed without entering the count quantity for some counts	A warning message displays. The count is assumed to be zero.

9.1.2.4 Cancelling a Count

There may be many reasons for which a store associate wants to cancel all pending counts. In such situations, upon invoking the getCountRequestList API, a list of all pending counts is provided. The cancelCountRequest API is called to cancel all counts. When the user clicks the Cancel button, permissions are set at the action level.

9.1.2.5 Viewing Count Archives

You can view count archive information present in one or multiple count sheets that are closed or cancelled. This may be useful when you want to analyze counts performed on a particular item or counts that are cancelled. When invoked, the getCountRequestList API provides a list of all counts that are closed or cancelled. A purge criteria can be set to view count archives. The user can view count sheets only up to the duration set in the purge criteria. For example, if the users set the purge criteria for 6 months, they can view the count archive only for the last 6 months.

9.1.2.6 Count Summary

A store associate can view a list of count details for all count tasks performed in a day.

- To get manual counts, invoke the getCountRequestList API by specifying the current date and countProgramName=" ".
- To get system assigned counts, invoke the getCountRequestList API by specifying the current date and countProgramName!=" ".
- To get pending counts, invoke the getCountRequestList API by specifying the date range until the previous day and status as "Open".
- To get the number of counts completed and count variance for the day, invoke the getCountResultList API by specifying the current date.

9.1.2.7 Variance

A store associate may want to view variances for the current day and request a recount. A recount involves putting items to count manually. The getCountRequestList API is called to get all items having a variance.

For more information about cycle count variances, see the *Sterling Store Inventory Management: User Guide*.

The following configuration rules are set up for cycle counts:

- Adjustment Reasons

  The adjustment reason code configured as part of the Sterling Store Inventory Management for cycle count is STORE-CYCLE-COUNT. This reason code is used to update inventory changes due to the cycle count.

- Cancellation Reasons

  Cancellation reason code is used when a store associate needs to cancel all pending counts. The count cancellation reason provided by the Sterling Store Inventory Management is STORE-INCOMPLETE-COUNTS.

- Task types

  The COUNT task type is provided for Cycle Count.

- Count Request types

  The DEFAULT count request type is provided for Cycle Count.

9.1.3 End-User Impact

None.

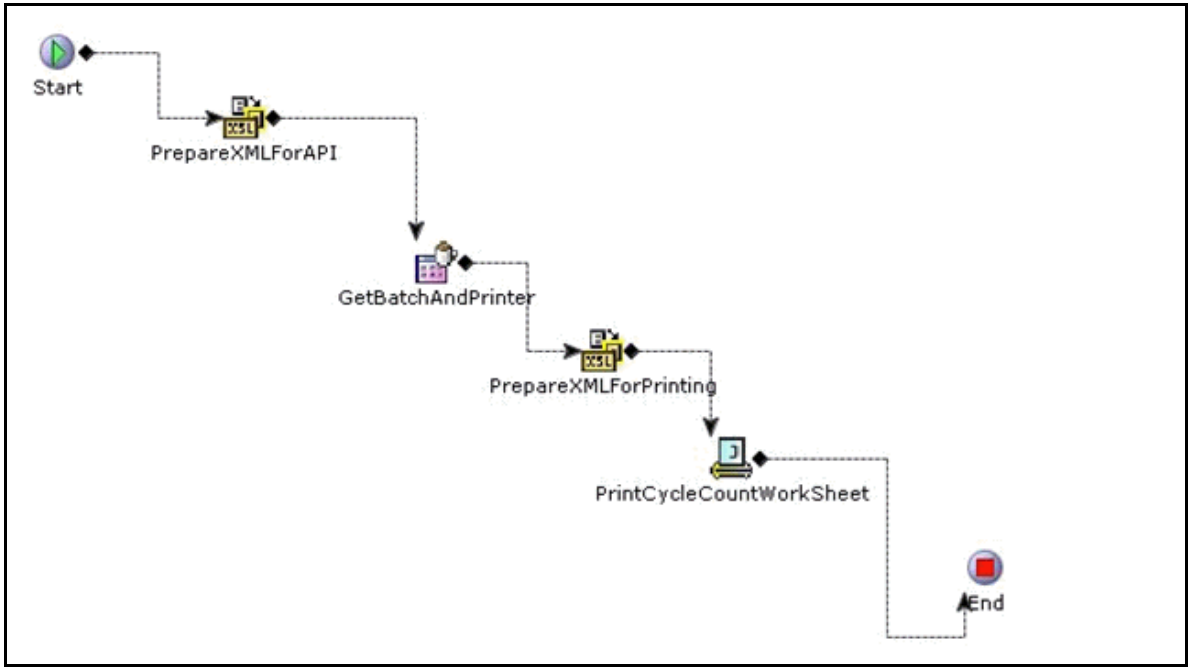
9.1.4 Implementation

When invoked, the getCountRequestList API provides a list of count requests that are generated. The getTaskList API provides the task list for all count requests. Count tasks are created for an item and location. The createBatch API creates the count sheets for the given tasks.

9.1.4.1 Printing Cycle Count Worksheet

The service component PrepareXMLforAPI prepares XML for invoking multi API GetBatchAndPrinter. This multi API calls the getBatchDetails and getPrinter APIs. The service PrepareXMLForPrinting prepares the input XML for printing a count sheet. The PrintCycleCountWorksheet service prints the count sheets. This is illustrated by Figure 9–1.

Figure 9–1 Printing Cycle Count worksheet



To print a cycle count worksheet or variance report:

1. Configure a printer for the store.
2. Add the `StorePrinterAlias` parameter to the device attributes of the printer and assign the printer name.
3. Associate the printer to print the cycle count worksheet and variance report.
4. Select “Use Sterling Selling and Fulfillment Foundation Resource Bundle” for the jasper print component of the service.
5. Specify the number of copies to print for the jasper print component.

9.1.4.2 Configuring Agents

The agents that need to be configured for count tasks are:

- `EXECUTE_COUNT_PROGRAM`

  This agent creates count requests based on the count program defined.

- CREATE_COUNT_TASKS_79

  This agent creates new count tasks from the count requests that have been generated.

9.1.5 Reference Implementation

This section explains the reference implementation provided by the Sterling Store Inventory Management for Cycle Counts.

9.1.5.1 Count Program

A default count program is provided. Based on the Count Program Condition settings, count tasks are generated.

The Count Program Condition provided by the Sterling Store Inventory Management is Count items in a store 4 times a Year.

9.1.5.2 Adjustment Reason Code

The adjustment reason code provided for cycle count is:

Table 9–4 Adjustment Reason Code

Reason Code	Description
STORE-CYCLE-COUNT	Defines the adjustment reason code for inventory change due to cycle count.

9.1.5.3 Cancellation Reason Code

The Count Cancellation reason code provided for cycle count is:

Table 9–5 Cancellation Reason Code

Reason Code	Description
STORE-INCOMPLETE-COUNTS	Indicates the cancellation reason for cycle counts. The user cannot change this value. The system inserts this value as part of the store configurator modification or store synchronization process.

9.1.5.4 Count Task Type

The Count Task Type provided for cycle counts is:

Table 9–6 Count Task Type

Reason Code	Description
COUNT	Indicates the task type for cycle counts. The user cannot change this value. The system inserts this value as part of the store configurator modification or store synchronization process.

9.1.5.5 Count Request Type

The Count Request Type defined for cycle count is:

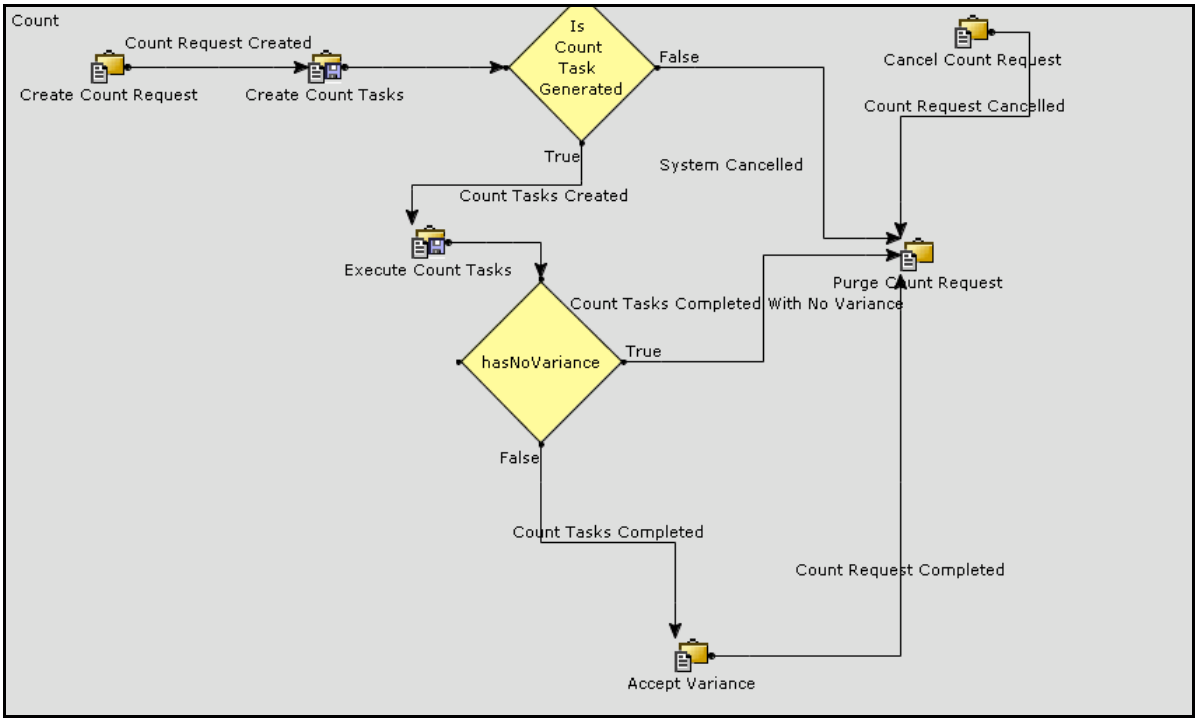
Table 9–7 Count Request Type

Reason Code	Description
DEFAULT	Indicates the count request type for cycle counts. The user cannot change this value. The system inserts this value as part of the store configurator modification or store synchronization process.

9.1.5.6 Pipeline Configuration

To support the Cycle Count process, a pipeline has been defined. Figure 9–2 illustrates the Cycle Count Pipeline.

Figure 9–2 Cycle Count Pipeline



9.2 Physical Counts

The Physical Count process is performed in a store to synchronize the physical and system inventory quantity. During this process, no inventory transaction is performed in the store, except for recording the count quantity. Typically, the physical count process is performed once a year, and on all items in the store.

9.2.1 Physical Count Process

The Physical Count process is:

1. The store manager starts the physical count.
2. A count request is generated.
3. A store associate performs the count.

4. A store associate records the count details such as count sheet number, item, location, and item quantity in the system.
5. The system creates a count task for each item and location, and adds it to a batch. Each batch represents a count sheet.
6. The system records the count and calculates variance.
7. If variances are found as a result of count, a store associate can:
   - Accept the variance and rectify the count entry error for selected count sheets.
   - Initiate a recount on selected count sheets.
8. After accepting the variances, the store manager can print one or more physical count reports.
9. The store manager ends the physical count process.

9.2.2 Solution

A Physical Count is a process where a store stops all inventory transactions, and physically counts its entire inventory.

9.2.2.1 Starting Physical Counts

Before starting the physical count process in a store, you must ensure no inventory transaction is performed, except for recording count. Starting a Physical Count process is permission controlled. The startPhysicalCountForStore API is called, which invokes createCountRequest, releaseCountRequest, and startPhysicalCount APIs.

The validations performed before the start of a physical count are:

Table 9–8 Start Physical Count Validations

Validation	Result
If the physical count process has already started	The Start Physical Count button is disabled.
On clicking the Start Physical Count button	A warning message displays.

9.2.2.2 Recording Physical Counts

A store associate records the count in a worksheet that is printed using an external system. After finishing the count, you need to record the count details in the system. The recordPhysicalCountSheet API is called to record the physical count details.

> **Note:** In Release 7.1 HF13 and higher, the yfs.ui.countRecords property is provided in the `yfs.properties` file in order to generate the desired number of lines in the count sheets when performing a physical count.

9.2.2.3 Viewing the Physical Count Status

The logic used to display the missing count sheets is:

1. The system finds the lowest count sheet number recorded.
2. The system finds the highest count sheet number recorded.
3. All count sheets missing within this range display. The individual count sheet numbers display only if the range of missing count sheets is greater than 5.

   The getPhysicalCountStatus API is called to check if a physical count is running. If the physical count has started, the getCountRequestList API is used to get count requests. For each count request, the getBatchList API is called to identify the count sheets.

   For more information about physical count variance report, see the *Sterling Store Inventory Management: User Guide*.

9.2.2.4 Searching Count Sheets

The getBatchList API is called to retrieve all count sheets or the specified count sheet.

9.2.2.5 Viewing Variance

You can view variances during a physical count, when accepting the variance or during an audit inquiry.

The getCountResultListForStore API is invoked to get all items with a variance. To display the data at the item location level, the

getCountRequestList API is called. This API returns the count result at item, location level.

The Sterling Store Inventory Management provides pagination for all Variance screens and the Count Sheet Search screen.

9.2.2.6 Rectifying Counts

The getItemUOMList, getCountList, and getTaskList APIs are called to display the count sheet.

Upon confirming, the recordPhysicalCountSheet API is invoked.

Upon clicking Void, the recordPhysicalCountSheet API is invoked and the value of void is set to “Y”.

9.2.2.7 Cancelling Physical Counts

To cancel a physical count, a multi API is invoked. The multi API comprises of cancelPhysicalCount and endPhysicalCount APIs.

9.2.2.8 Accepting Variances

To accept variances, the acceptVarianceForPhysicalCount API is called. This API gets all missing items and creates count tasks for each missing item. The results of these count tasks are set to zero and all location level tasks are cancelled. Now, the acceptVariance API is invoked.

9.2.2.9 Ending Physical Counts

After accepting a variance, you can end the physical count by clicking the End button. The endPhysicalCount API is invoked to end the physical count.

9.2.2.10 Audit Inquiry

An Audit Inquiry displays the audit for the last completed physical count. The getCountRequestList API is invoked to get the current count request.

Table 9–9 Audit Inquiry Validation

Validation	Result
If no physical count is performed	An error message displays.

The configuration rules set up for physical count are:

- Adjustment Reasons
- Cancellation Reasons
- Task types
- Count Request types

9.2.2.10.1 Adjustment Reasons

The adjustment reason code configured as part of the Sterling Store Inventory Management for physical count is STORE-PHYSICAL-COUNT. This reason code is used to update inventory change due to physical count.

9.2.2.10.2 Cancellation Reasons

The cancellation reason code is used when a store associate wants to cancel a physical count that was started accidentally. The count cancellation reason provided by the Sterling Store Inventory Management is STORE-INVALID-COUNT.

9.2.2.10.3 Task types

The task type provided by the Sterling Store Inventory Management for physical count is PCCOUNT.

9.2.2.10.4 Count Request types

The count request type for physical counts is PHYSICAL-COUNT.

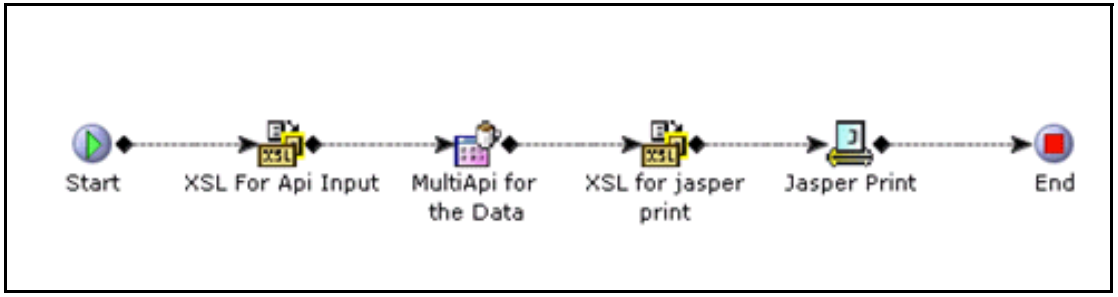
9.2.3 End-User Impact

None.

9.2.4 Implementation

The SOP_PhysicalCount_Varianc_1.0 service invokes the multi API. This multi API comprises of getPrinter, getMissingItems, and getCountResultListforStore APIs. This service prepares the input XML for jasper print and prints the variance report as illustrated in Figure 9–3.

Figure 9–3 SOP_PhysicalCount_Varianc_1.0



To print a variance report:

- Configure a printer for the store.
- Add the `StorePrinterAlias` parameter to the device attributes of the printer, and assign the printer name.
- Associate the printer to print the variance report.
- Select “Use Sterling Selling and Fulfillment Foundation Resource Bundle” for the jasper print component of the service.
- Specify the number of copies to print for the jasper print component.

9.2.5 Reference Implementation

This section explains the reference implementation provided by the Sterling Store Inventory Management for physical counts.

9.2.5.1 Adjustment Reason Code

The Sterling Store Inventory Management adjustment reason code for physical count is:

Table 9–10 Adjustment Reason Code

Reason Code	Description
STORE-PHYSICAL-COUNT	Defines the adjustment reason code for inventory change due to a physical count.

9.2.5.2 Cancellation Reason Code

The Sterling Store Inventory Management count cancellation reason code for physical counts is:

Table 9–11 Cancellation Reason Code

Reason Code	Description
STORE-INVALID-COUNTS	Indicates the cancellation reason for physical count. The user cannot change this value. The system inserts this value as part of the store configurator modification or store synchronization process.

9.2.5.3 Count Task Type

The Sterling Store Inventory Management count task type for physical count is:

Table 9–12 Count Task Type

Reason Code	Description
PCCOUNT	Indicates the task type for physical count. The user cannot change this value. The system inserts this value as part of the store configurator modification or store synchronization process.

9.2.5.4 Count Request Type

The count request type defined for physical counts is:

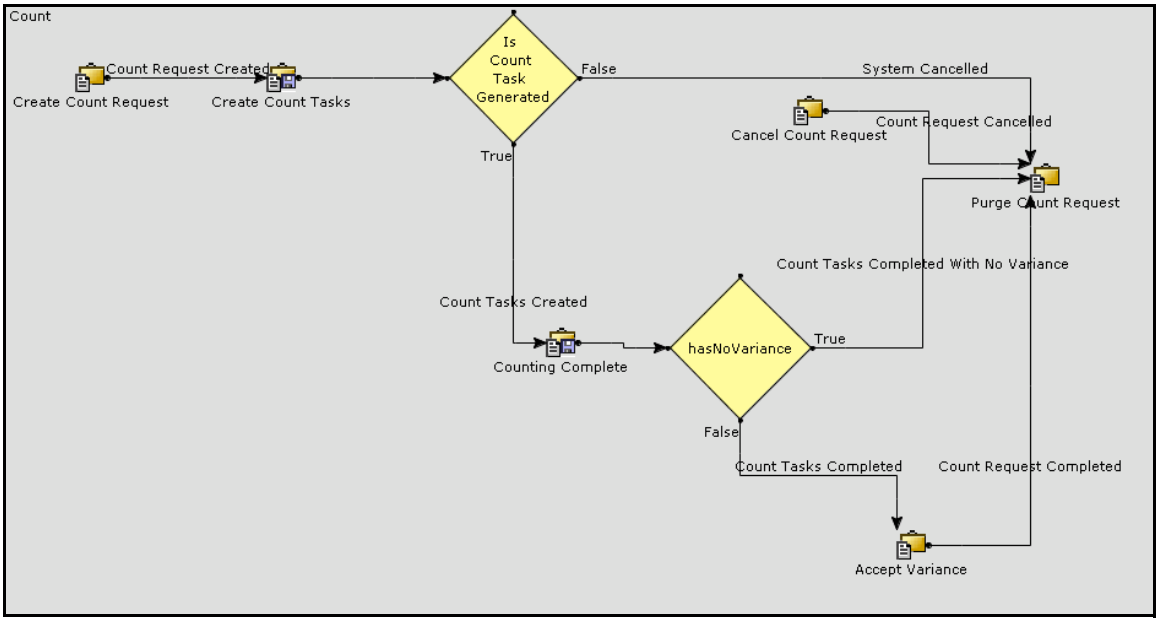
Table 9–13 Count Request Type

Reason Code	Description
PHYSICAL-COUNT	Indicates the count request type for physical count. The user cannot change this value. The system inserts this value as part of the store configurator modification or store synchronization process.

9.2.5.5 Pipeline Configuration

Figure 9–4 illustrates the Physical Count Pipeline.

Figure 9–4 Physical Count Pipeline



10

Receiving

The Sterling Store Inventory Management enables you to control the receiving process with the information that is available in a store. The Sterling Store Inventory Management supports receiving inventory through paper-based or mobile devices.

This chapter explains the receiving process and solution offered by the Sterling Store Inventory Management.

10.1 Receiving Processes

The Receiving processes followed in a store are:

- Receipts made for an order or a shipment:

  Inventory is received from other stores, distribution centers (DC), or vendors.

- Receipts made for Blind Receiving:

  Inventory is received when no BOL or order number exists for the inventory in the system.

10.1.1 Print Receiving Worksheets

The Print Receiving worksheet process is:

1. The receiving worksheet is printed based on the inbound order or shipment.
2. The store associate records receipt information in the receiving worksheet.
3. The store associate records the receipt details in the console.

10.1.2 Record Receiving

The Record Receiving process is:

1. The store associate can record receiving worksheet details based on the BOL number or order number.
2. The store associate can record additional items that are listed in the order, and may be present in some other shipment of the same BOL.
3. The Sterling Store Inventory Management provides the ability to select all records if no discrepancy exists while receiving against an order or shipment.

10.1.3 Blind Receiving

The Blind Receiving process is:

1. The store associate receives inventory with no BOL or order number.
2. The inventory details are recorded on a blank worksheet. The blank worksheet is printed using an external system.
3. The store associate records details from the worksheet in the system and clicks the Confirm button.

10.2 Solutions

This section explains the various configurations that may be completed during the Receiving process.

The configuration rules that need to be set up for receiving are:

- Receiving preferences
- Receiving Discrepancies provided by the Sterling Store Inventory Management
- The disposition codes configured by the Sterling Store Inventory Management

10.2.1 Print a Receiving Worksheet for Expected Inbound Shipments

The user can print a receiving worksheet for a shipment based on the BOL number. The getShipmentList API is invoked to get a list of

shipments associated with the BOL. For more information about receiving worksheets for a shipment, see the *Sterling Store Inventory Management: User Guide*.

Table 10–1 Validations Performed

Validations	Result
If you enter an incorrect BOL number	Upon clicking the Print button, an error message displays.
If the BOL# that you entered does not have allowed shipments for which inventory can be received	Upon clicking the Print button, a warning message displays.
If the BOL# does not exist in the Sterling Multi-Channel Fulfillment solution	Upon clicking the Print button, error message displays.

10.2.1.1 Select Shipment for the BOL or Order Number Entered

The getShipmentList API provides a list of shipments for the entered BOL or order number. The print service is called to print the receiving worksheet for the selected shipment.

10.2.2 Print a Receiving Worksheet for Expected Inbound Orders

The user can print a receiving worksheet for a known order. The getShipmentList API is invoked to get a list of shipments associated with the order number. For a list of validations performed, see Table 10–1. For more information about receiving worksheet for an order, see the *Sterling Store Inventory Management: User Guide*.

10.2.2.1 Search for the Expected Shipments

The getOrganizationList API provides a list of DCs. Based on the search criteria, the getShipmentList API is invoked.

Table 10–2 Validations Performed

Error Case	What Happens?
If you enter an incorrect store or vendor	An error message displays.
If you enter an incorrect item ID	An error message displays.
If you enter the From date greater than the To date	An error message displays.

10.2.2.2 Search for the Expected Order

Based on the search criteria, the user can search receipts for an order. If shipments are not present for the order, a worksheet is printed based on the order details. The getOrderList API is used to list the order. For a list of validations performed, see Table 10–2.

10.2.3 Recording Receipt of a Shipment

The user can record the quantity received from the receiving worksheet. The getShipmentList API is called to check if the BOL number exists for the shipment. If multiple shipments exist for the BOL, in the Shipment Selection screen, select the required shipment. The getShipmentDetails API displays the Record screen. Once the user records the receiving details, on clicking the Confirm button the recordReceiptInOneStep API is invoked for recording the details. This API records the discrepancy.

Note: The summation of ordered quantity - (minus) the summation of received quantity must be zero to result in a receipt with no discrepancy.

When the user checks the Receipt Complete flag, the discrepancy is calculated and the shipment is received. After recording the receiving worksheet for a shipment, a discrepancy report is printed. For more information about receipt discrepancy reports, see the *Sterling Store Inventory Management: User Guide*.

Table 10–3 Validations Performed

Error Case	What Happens?
If you enter an incorrect BOL #	Upon clicking the Proceed button, an error message displays.
If you enter a BOL # that does not have allowed shipments for which inventory can be receipt	Upon clicking the Proceed button, an error message displays.
If you enter an invalid item ID	An error message displays.

10.2.4 Recording Receipt of an Order

The user can record inventory received against an order. The getShipmentList API is called to check if any shipment exists for the order. If shipments do not exist for the order, the getOrderDetails API is called to allow the user to record against the order. The Sterling Store Inventory Management creates a dummy shipment for an order without shipments. Once the user records the receiving details, upon clicking the Confirm button the recordReceiptInOneStep API is invoked for recording the details. This API records the discrepancy. When the user checks the Receipt Complete flag, the discrepancy is calculated and order is received.

Note: The summation of ordered quantity - (minus) the summation of received quantity must be zero to result in a receipt with no discrepancy.

For a list of validations performed, see Table 10–3. After recording the receiving worksheet for an order, a discrepancy report is printed. For more information about receipt discrepancy reports, see the *Sterling Store Inventory Management: User Guide*.

10.2.5 Recording Blind Receipts

The user can record blind receipt. Once the user records the receiving details, upon clicking the Confirm button the recordReceiptInOneStep API is invoked for recording the details.

Table 10–4 Validations Performed

Error Case	What Happens?
If you enter an invalid store code	An error message displays.
If you enter an invalid item ID	An error message displays.

10.2.6 Searching for Inbound Shipments

You can view shipments that are already received and that can be received. The getOrganizationList API provides a list of all DCs. After you enter the search criteria, the getShipmentList API is invoked. The getShipmentDetails API displays details for the selected shipment. For a list of validations performed, see Table 10–2.

10.3 End-User Impact

None.

10.4 Implementation

You can print a receiving worksheet, receiving discrepancy report, or a customer label for an order or shipment.

To print a worksheet, discrepancy report, or customer label:

1. Configure a printer for the store.
2. Add the `StorePrinterAlias` parameter to the device attributes of the printer, and assign the printer name.
3. Associate the printer to print the receiving worksheet, receiving discrepancy report, or a customer label.
4. Select “Use Sterling Selling and Fulfillment Foundation Resource Bundle” for the jasper print component of the service.
5. Specify the number of copies to print for the jasper print component.

10.4.1 Enterprise-Level Configurations

This section explains how to set up your Receiving Preferences for receiving.

To set up the Enterprise-level Receiving Preferences:

1. Log in to the Sterling Multi-Channel Fulfillment solution as the Enterprise user.
2. From the Application Console menu bar, choose Configuration > Launch Sterling Store Inventory Management Configurator. The Sterling Store Inventory Management Configurator displays.
3. From the Configuration Setup screen, choose Configure Inbound Process Modeling.
4. From the tree in the application rules side panel, choose Receiving > Document Specific > Purchase Order > Receiving Preferences.

   For more information about how to set up the enterprise-level configurations, see Section 3.5.4.2, "Configuring Purchase Order Receiving Rules".

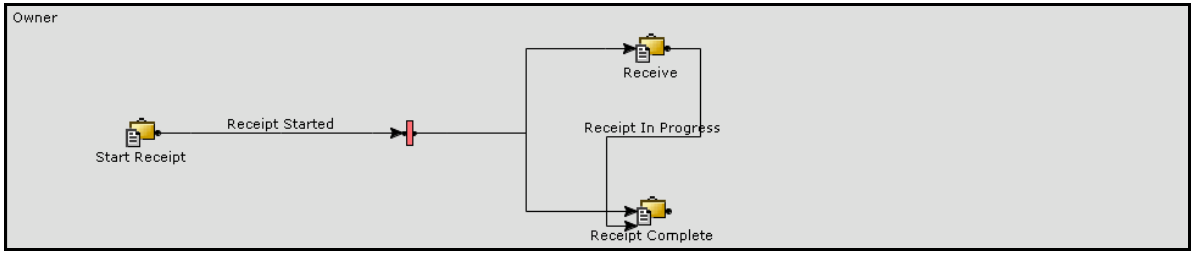
10.5 Reference Implementation for Receiving

This section explains the reference implementation provided by the Sterling Store Inventory Management for Receiving.

10.5.1 Receiving Pipeline

Figure 10–1 illustrates the Receiving Pipeline.

Figure 10–1 Receiving Pipeline



10.5.2 Receiving Discrepancies

The discrepancy codes defined in the Sterling Store Inventory Management are:

- OVER
- SHORT
- DAMAGE

10.5.3 Node Disposition

The disposition codes configured in the Sterling Store Inventory Management is QC-PASSED.

11

Managing Locations

A store manager can manage back room locations in a store. This is applicable only to those stores that can track inventory in multiple locations within the store.

11.1 Solution

In a store modelled with multiple locations, in addition to the two locations set as part of the configuration, a store associate can create additional locations. All locations created in the store are regular locations. The store associate can also delete existing locations.

11.2 End-User Impact

Before deleting a location or remodeling a store, the store associate must ensure that inventory does not exist in the location. For example, consider a model store with multiple locations. Before this store is modelled as a store with one location, the administrator needs to move inventory from locations that are not defined in the new store.

11.3 Implementation

The getLocationList API is used to call the existing locations in a store. The deleteLocation API is used to delete a location. The createLocation API is used to create a location.

11.4 Reference Implementation

This section explains the reference implementation for managing locations, provided as part of the Sterling Store Inventory Management.

11.4.1 Store With Multiple Locations

The configuration provided by the Sterling Store Inventory Management is:

Table 11–1 Store with Multiple Locations

Store ID	Store Type
Matrix_MODEL_MULTIPLE_LOCATION	Model Store
Matrix_S4	Follower store

12

Shipping

Shipping includes the processes from the point when shipments are created up to the point when shipments are picked up by a customer or loaded into trailers.

Sometimes the price of the items may have changed since the customer purchased the items. The store associate must be able to apply the latest price on the items.

Shipping involves:

- Printing Pick Tickets
- Searching for Shipments
- Recording Back Room Picks
- Recording Customer Picks
- Creating Loads
- Adding to a Manifest
- Closing a Manifest

12.1 Printing Pick Tickets

Pick ticket is a sheet containing the list of items that need to be pulled from inventory to fill an order.

12.1.1 Solution

Pick tickets can be printed for a particular shipment. If pick tickets are printed for all pending shipments or orders, the getShipmentList API is

called. This API checks to see if the status is less than the shipment shipped and pick ticket is not printed for the shipment.

12.1.2 End-User Impact

The search criteria entered by the user to search for a shipment is case-sensitive.

You may want to create store-specific pipelines and not use the reference implementation provided by the Sterling Store Inventory Management.

To create a pipeline for outbound execution, follow these steps:

1. Log in to the Sterling Multi-Channel Fulfillment solution as the Enterprise user.
2. From the Application Console menu bar, select Configuration > Launch Sterling Store Inventory Management Configurator. The Sterling Store Inventory Management Configurator displays.
3. From the Configuration Setup screen, select Configure Outbound Process Modeling > Configure Shipping Process.
   a. In the Store condition group, enable the ON_SUCCESS event of the CREATE SHIPMENT transaction.
   b. Call the Store Change Shipment Status action.

   For more information about configuring pipelines, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

12.1.3 Implementation

This section explains the various implementations required for shipping.

12.1.3.1 Process Modeling

The ON_SUCCESS event of CREATE SHIPMENT transaction calls, the SOP_ChangeStatus_Backroom_1.0 service. This service calls the getRuleDetails API to provide rule details for the back room pick. If the flag is set to “Y”, the CHECK_BACKROOM_PICK_REQD.0001.ex (BaseTransactionKey="Change_Shipment_Status") transaction changes the status of the shipment to Ready For Backroom Pick. Otherwise, the shipment is in the Ready For Customer status.

For the BACKROOM_PICK (BaseTransactionKey=" Change_Shipment_Status") transaction, if the Pickup Status is Ready For Backroom Pick, the drop status is Ready For Customer.

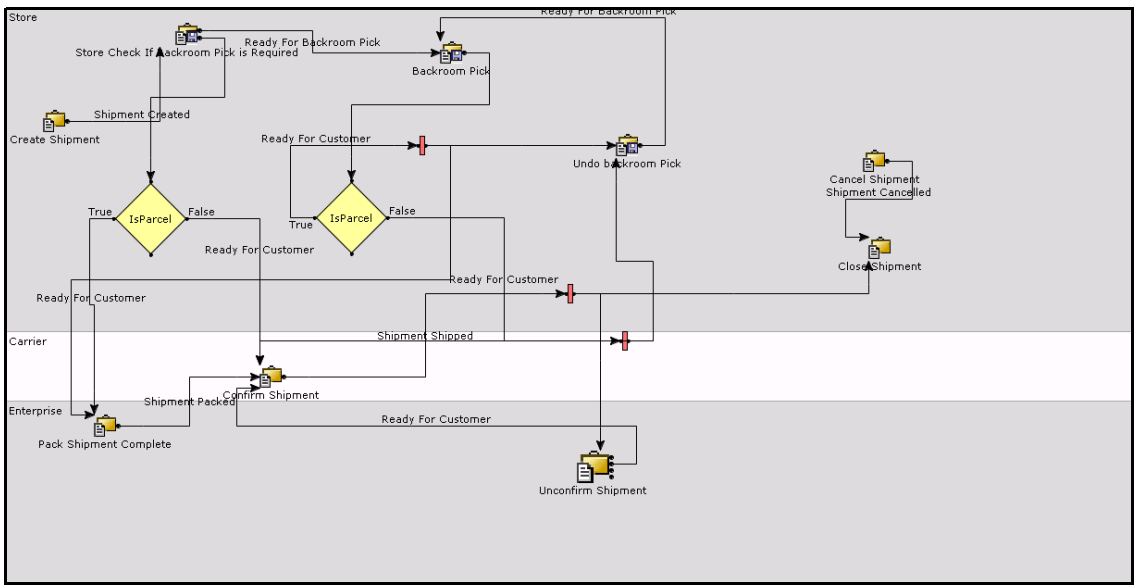
12.1.4 Reference Implementation

This section explains the reference implementation for shipping, provided as part of the Sterling Store Inventory Management.

12.1.4.1 Pipeline Configuration

Figure 12–1 illustrates the in shipping pipeline.

Figure 12–1 Shipping Pipeline



The `Check if backroom pick is required` transaction is introduced between the Shipment Created and Ready For Backroom Pick statuses. If a back room pick is not needed, the flow goes to Ready For Customer Pick status.

The Backroom Pick transaction is introduced between the Ready For Customer Pick and Ready For Backroom Pick statuses.

12.2 Searching for Shipments

The store associate can search for shipments based on certain search criteria. Along with the list of shipments that match the search criteria, the store associate can view other details related to the shipments.

12.2.1 Solution

The Sterling Store Inventory Management provides screens for searching shipments. The screen also provides related tasks pertaining to the shipment console.

Searching for Shipments

The getShipmentList API is used to retrieve a list of all the shipments.

Shipment Details

The store associate can view the shipment details such as items in the shipment, quantity of items, unit price of the item, and line price for the selected shipment. The getShipmentDetails API retrieves the shipment details.

Undo Back Room Pick

Sometimes, after performing the back room pick, the customer may decide not to pick up the order. The store associate needs to undo the back room pick process so that the items can be moved back. The getCommonCodeList API provides the reason codes to undo Back Room pick. Once the store associate clicks the Undo button, the undoPick API is called to undo the back room pick.

Table 12–1 Validations Performed

Error Case	What Happens?
If the shipment status is not valid for undo back room pick	An error message displays.

Viewing Shipment Audits

You may want to track the changes done to a shipment. The Shipment Audit screen provides details of the changes done to a shipment. The getAuditList API provides a list of reason codes.

Table 12–2 Validations Performed

Error Case	What Happens?
If the user does not select a shipment and clicks View Shipment Audit	An error message displays.

Changing a Shipment Container

You can add, modify, or delete containers of a shipment.

- To add containers to a shipment:
  - The addToContainer API is called for stores integrated with Sterling Multi-Channel Fulfillment solution.
  - The changeShipment API is called for stores that are not integrated with Sterling Selling and Fulfillment Foundation.
- To modify containers of the shipment:
  - The changeShipmentContainer API is called for stores integrated with Sterling Multi-Channel Fulfillment solution.
  - The changeShipment API is called for stores that are not integrated with Sterling Multi-Channel Fulfillment solution.
- To delete a container from the shipment:
  - The changeShipmentContainer API is called for stores integrated with Sterling Multi-Channel Fulfillment solution.
  - The changeShipment API is called for stores that are not integrated with Sterling Multi-Channel Fulfillment solution.
- If the container is added to a manifest, the removeContainerFromManifest API is called.

Table 12–3 Validations Performed

Error Case	What Happens?
If the user clicks on modify container information without selecting the shipment	An error message displays.

Removing Shipment From Manifest

Sometimes, a store associate may want to remove shipments from the manifest. This may be due to containers being damaged in the shipment. In such situations, the removeContainerFromManifest API is called to remove the shipment.

Table 12–4 Validations Performed

Error Case	What Happens?
If the user clicks on remove shipment from manifest without selecting the shipment	An error message displays.
If shipment is not added to the manifest	An error message displays.

Undo BOL

The store associate may want to remove shipments from a load due to many reasons like non-availability of carriers, items being damaged, or change in the ship date. In such situations, the manageLoad API is called to undo BOL.

Table 12–5 Validations Performed

Error Case	What Happens?
If user clicks on Undo BOL without selecting a shipment	An error message displays.

12.2.2 End-User Impact

None.

12.2.3 Implementation

None.

12.2.4 Reference Implementation

None.

12.3 Recording Back Room Picks

The movement of items from back room to the customer service area needs to be tracked in a store with multiple locations. Based on the store configuration, the Sterling Store Inventory Management supports recording of back room picks for a store with or without locations.

12.3.1 Solution

During the recording of the a back room pick, the changeShipment API is called to record the picked quantity. The changeShipmentStatus API is called when the shipment status needs to be changed from “Ready for Backroom Pick” to “Ready for Customer”. The moveLocationInventory API is called to move inventory from the back room pick location to customer pick location. During back room pick, if no items are picked for any of the shipments, the shipment is cancelled. The changeShipment API is invoked and the value of the Cancelled Shipment flag is set to “Y”.

If there is a shortage due to inadequate inventory, the remaining items are backordered. Backordering enables you to track the shortage of inventory at a particular location. When inventory shortage is selected, the changeShipmentStatus and moveLocationInventory APIs are called. The changeShipment API is also called in which the value of the BackOrder flag is set to “Y”. If you select Will Pick Later, the shipment status does not change. The changeShipment and moveLocationInventory APIs are called. If you select Shortage resolution varies by line, the changeShipmentStatus and moveLocationInventory APIs are called. The changeShipment API is also called in which the value of the BackOrder flag is set to “N”.

Barcode Configuration

Barcode configuration is done to get the default quantity for items that you scanned during the back room pick operation.

12.3.2 End-User Impact

None.

12.3.3 Implementation

This section explains the various implementations required for recording back room pick.

Statuses

Ready For Customer (1100.70.06.30) and Ready For Backroom Pick (1100.70.06.10) are the statuses provided by the Sterling Store Inventory Management. It is recommends you to not delete these statuses.

Barcode Implementation

This section explains how to set the Barcode configuration.

To set the Barcode configurations:

1. Log in to the Sterling Multi-Channel Fulfillment solution as the Enterprise user.
2. From the Application Console menu bar, select Configuration > Launch Sterling Store Inventory Management Configurator. The Sterling Store Inventory Management Configurator displays.
3. From the Configuration Setup screen, select Store Management > Store Settings > Tasks common to all stores.
4. In Tasks common to all stores, select Onboard a store, to configure a new store.

   For more information about configuring a new store, see Section 3.11.1, "Onboarding a Store".

12.3.4 Reference Implementation

This section explains the reference implementation provided as part of the Sterling Store Inventory Management for recording back room pick operations.

12.3.4.1 Barcode Configuration

The barcode configuration provided by the Sterling Store Inventory Management are:

Table 12–6 Barcode Configuration

Reason Code	Description
SCAN_MODE	This is applicable for a store with no location, one location, and three locations.
ENTRY_MODE	This is applicable to all stores.

12.4 Recording Customer Picks

It is assumed that a store has only one customer pick location. When a customer walks into a store with proof of purchase, a store associate needs to verify the identity of the customer.

12.4.1 Solution

In a customer pick scenario, when a customer walks into the store to pick up orders, the store associate must verify the customer identity. There are various criteria based on which the verification is done. You can search for an order using the credit card number, order number, customer name, or phone number. Depending on the search criteria, appropriate APIs are called. If you do not enter the credit card number in the Search screen, the getshipmentList API is called. If the credit card number is entered, the getCreditCardOrderUE user exit is called for validation. If the credit card validation fails, an error message displays.

During verification of customer details, if you type the credit card number, the last four digits of the credit card number is verified using the getShipmentDetails API. For orders not existing in the Sterling Selling and Fulfillment Foundation, the credit card validation is done through the getCreditCardOrderUE user exit.

A store associate may apply the latest price to the items picked up by the customer. The getCurrentPriceListUE user exit is called to get the latest price. The shipment details are passed to this user exit.

Store associates can scan the items to be picked by enabling the scan mode. Scan mode cannot be enabled for stores with multiple locations or when location control is enabled. When scanning items, the translateBarCode API is called. This converts the barcode on an item to item ID. Depending on the information, either the Shortage Resolution screen or Confirm screen displays.

A customer may pick up part of an order or the entire order and pick the remaining items at a later time. In that case, the shipment status will not change. The changeShipment and moveLocationInventory APIs are called. If there is a shortage of ordered items in the store, the changeShipmentStatus and moveLocationInventory APIs are called. Along with this, the changeShipment API is called and the value of the BackOrder flag is set to “Y”. If you select Shortage resolution varies by line, the changeShipmentStatus and moveLocationInventory APIs are called. The changeShipment API is also called in which the value of the BackOrder flag is set to “N”.

You can confirm an order by calling the ConfirmCustomerPick custom API. If the price is overridden, the changeOrderPriceUE user exit calls the changeOrder API.

12.4.2 End-User Impact

None.

12.4.3 Implementation

This section explains the various implementations required for recording customer pick.

Credit Card Implementation

To validate the credit card number, you must implement the getCreditCardOrderUE user exit. This user exit’s default implementation gets the order for the entered credit card number. Then the list of orders are looped through and a query is formed to get the shipment list for each order from the getShipmentList API.

Extended Price Implementation

The getCurrentPriceListUE user exit is called to get the latest prices of an item. If the returned value of this user exit is more than the price of items when ordered, the original price is maintained. If the returned value is less than the original price, the current price displays. If this user exit is not implemented the ordered price will be the same as the current price.

Barcode Implementation

This section explains how to set the barcode configuration.

To set the barcode configurations:

1. Log in to the Sterling Selling and Fulfillment Foundation as the Enterprise user.
2. From the Application Console menu bar, select Configuration > Launch Sterling Store Inventory Management Configurator. The Sterling Store Inventory Management Configurator displays.
3. From the Configuration Setup screen, select Store Management > Store Settings > Tasks common to all stores.
4. In Tasks common to all stores, select Onboard a store, to configure a new store.

   For more information about configuring a new store, see Section 3.11.1, "Onboarding a Store".

12.4.4 Reference Implementation

This section explains the reference implementation provided as part of the Sterling Store Inventory Management for recording customer pick.

12.4.4.1 Cancellation Reason Codes

The following table lists the cancellation reason codes provided by the Sterling Store Inventory Management when the customer wants to cancel an order.

Table 12–7 Cancellation Reason Codes

Reason Codes	Description
CN1	Change Of Mind
CN2	Cheaper Price Found
CN3	Late/Failed Delivery
CN4	Unacceptable Delivery Time Promised
CN5	Product No Longer Available
CN6	Fraudulent Order
CN7	Address Undeliverable

Table 12–7 Cancellation Reason Codes

Reason Codes	Description
CN8	Duplicate Order
CN9	Other

12.5 Creating Loads

A customer may want the order to be delivered to a particular address. In such situations, the Sterling Store Inventory Management allows a store associate to consolidate shipments that have common customers or destinations. The store associate can also determine the load's weight and volume.

12.5.1 Solution

Once an order is confirmed for a particular customer, a shipment is created for that order. The shipment can be delivered to the customer through a load or manifest.

You can create a new load or merge shipments to an existing load. Once the shipment number or order number is entered, the getShipmentList API is called. This API groups all the shipments added as part of load.

You can consolidate shipments based on the BillToCustomerId, BillToAddressKey, and ToAddressKey attributes. In the Shipment Consolidation screen, all shipments with the common BillToCustomerId, BillToAddressKey, and ToAddressKey attributes display. When you click the Next button, the create load screen appears. If any loads exist with the same BillToCustomerId, BillToAddressKey, and ToAddressKey then the load details display in the load consolidation screen. You can either create a new load for the consolidated shipments or include shipments in any of the displayed load.

When a new load is created, the manageLoads API is called with create option. If shipments need to be merged with an existing load, the manageLoads API is called with merge option.

You can determine the number of pallets or cartons for each load. You also need to determine the SCAC and Service for the load from the drop-down list. Only the Truck-Load or Less-Than-Load carrier services are displayed. Once the load is confirmed, the manageLoad API is called.

This API updates the load. To confirm the shipment, the receiveIntransitUpdates API is called.

If you save the load, the manageLoad API is called where the value of the generateBOLNo attribute is set to “N”.

You can remove shipments from a load by removing the shipment lines. The splitShipment API is called internally. Using the manageLoads API, the shipment is removed from a load.

12.5.2 End-User Impact

If you do not want to use the reference implementation provided by the Sterling Store Inventory Management, you can create store-specific pipelines.

To create a pipeline for outbound execution:

1. Log in to the Sterling Multi-Channel Fulfillment solution as the Enterprise user.
2. From the Application Console menu bar, select Configuration > Launch Sterling Store Inventory Management Configurator. The Sterling Store Inventory Management Configurator displays.
3. From the Configuration Setup screen, select Configure Outbound Process Modeling > Configure Shipping Process.
   a. In the Store condition group, enable the ON_SUCCESS event of the CREATE SHIPMENT transaction.
   b. Use the IS STORE condition to conditionally call the SET Bp FLAG action.

   For more information about configuring pipelines, see the *Sterling Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

12.5.3 Implementation

To print a BOL:

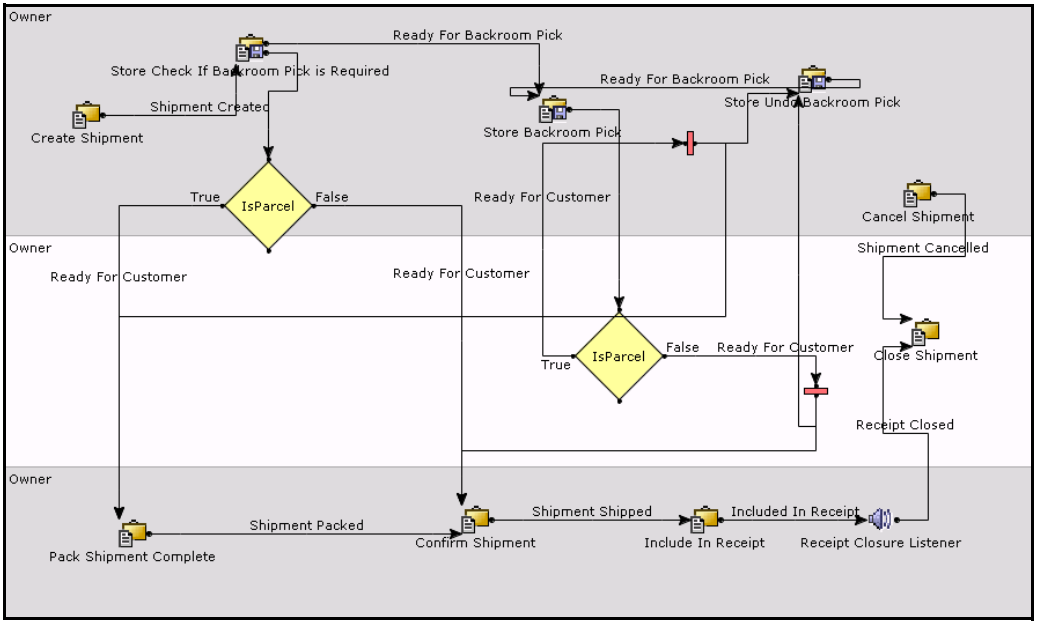
- Configure a printer for the store.
- Add the StorePrinterAlias parameter to the device attributes of the printer, and assign the printer name.

- Associate the printer to print BOL.
- Select “Use Sterling Selling and Fulfillment Foundation Resource Bundle” for the jasper print component of the service.
- Specify the number of copies to print for the jasper print component.

12.5.4 Reference Implementation

Figure 12–2 illustrates the shipment pipeline for a transfer order.

Figure 12–2 Shipment Pipeline



12.6 Adding to a Manifest

The store associate must create a manifest for parcel manifest shipments. If the store associate wants to select a carrier for the shipment, and if a manifest is already open for that carrier, shipments are added to that carrier manifest. The store associate can close any open manifest when necessary.

12.6.1 Solution

When adding a shipment to a manifest, or creating a new manifest, you can select the carrier. Depending on the carrier, the manifest information displays. You can select the SCAC and Services for the shipment from the drop-down list. Only parcel carrier services are displayed. When you change the value of SCAC and Services, the Manifest Found panel refreshes depending on the output of the manifestList API. You can add containers to a manifest using the addContainerToManifest API. You cannot create a new manifest for a carrier, that already has an open manifest.

You can view all open and closed manifests. To display this information, the getManifestList API is called where the shipment status is less than the confirm ship status. When closing the manifest, the manifest is printed for that carrier.

12.6.2 End-User Impact

None.

12.6.3 Implementation

When executing the closeManifest transaction, the ON_SUCCESS event prints the manifest. If you do not want to print the manifest, you can disable the ON_SUCCESS event.

12.6.4 Reference Implementation

None.

12.7 Closing a Manifest

You can close a manifest once you add a shipment to it. However, Sterling Store Inventory Management also provides the ability to keep the manifest open until the arrival of the truck. Once you close a manifest, it indicates the shipment has been shipped.

12.7.1 Solution

The Close Manifest screen displays a list of all the open manifests. The getManifestList API provides the list of all shipments with the status less

than the confirm ship status. Once you click the Close Manifest button, the closeManifest API is invoked to close the selected manifest.

12.7.2 End-User Impact

None.

12.7.3 Implementation

When executing the closeManifest transaction, the ON_SUCCESS event prints the manifest. If you do not want to print the manifest, you can disable the ON_SUCCESS event.

12.7.4 Reference Implementation

None.

13

Alert Console

The Alert management module of the Sterling Store Inventory Management enables a store associate to view and resolve alerts. Alerts may be automatically generated when certain events occur on a system, or when created by users. A store associate can view and resolve alerts that are assigned to them. Alerts are sent to different queues depending on the configured notification definitions. If alerts are assigned to a queue, all users who have subscribed to the queue can view them.

13.1 Solutions

The Sterling Store Inventory Management provides the ability to create appropriate types of alerts, and ensures that these alerts are processed in a timely and efficient manner.

Using the Alert Type configuration, you can define the alert types. You can use queues to group related alerts. Users can be subscribed to one or more queues and can process alerts from their subscribed queues.

13.2 End-User Impact

None.

13.3 Implementation

This section describes how to configure alerts and queues.

13.3.1 Configuring Alerts

You can define different alert types and assign them to the SOP_INFOALERTS queue.

To configure an alert type:

1. Log in to the Sterling Selling and Fulfillment Foundation as the Enterprise user.
2. From the Application Console menu bar, click Configuration > Launch Sterling Store Inventory Management Configurator. The Sterling Store Inventory Management Configurator displays.
3. From the Configuration Setup screen, click Configure Alert Management > Define Alert Types.

   For more information about configuring an alert, see Section 3.8, "Configuring Alert Management".

13.3.2 Configuring Queues

All informational alerts are grouped under the SOP_INFOALERTS queue. All queues are defined at the Enterprise level. Any additional queues configured for informational alerts need to be grouped under the SOP_INFOALERTS queue.

To configure queues:

1. Log in to the Sterling Selling and Fulfillment Foundation as an Enterprise user.
2. From the Application Console menu bar, click Configuration > Launch Sterling Store Inventory Management Configurator. The Sterling Store Inventory Management Configurator displays.
3. From the Configuration Setup screen, click Configure Alert Management > Define Alert Queues.

   For more information about configuring queues, see Section 3.8, "Configuring Alert Management".

13.3.3 Triggering the Agent

This section provides information on the time-triggered transactions.

13.3.3.1 Shipment Monitor

The Shipment Monitor transaction is used to trigger an agent which raises the Delayed Customer Pick alert. You need to run the agent server to trigger an agent.

Attributes

The following are the attributes for this time-triggered transaction:

Table 13–1 Shipment Monitor Attributes

Attribute	Value
Base Transaction ID	SHIPMENT_MONITOR
Base Document Type	Order
Base Process Type	Order Fulfillment
Abstract Transaction	No
APIs Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table 13–2 Shipment Monitor Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
CollectPendingJobs	If this parameter is set to N, the agent will not collect information on the pending jobs for that time-triggered transaction.
Number Of Records To Buffer	Optional. Number of records to retrieve and process at one time. If left blank or specified as 0 (zero), it defaults to 5000.

13.3.3.2 SOP Availability Monitor

The SOP Availability Monitor transaction is used to trigger an agent which raises the Inventory Shortage alert. You need to run the agent server to trigger an agent.

Attributes

The following are the attributes for this time-triggered transaction:

Table 13–3 SOP Availability Monitor Attributes

Attribute	Value
Base Transaction ID	SOP_AVAILABILITY_MONITOR
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table 13–4 SOP Availability Monitor Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
CollectPendingJobs	If this parameter is set to N, the agent will not collect information on the pending jobs for that time-triggered transaction.
Number Of Records To Buffer	Optional. Number of records to retrieve and process at one time. If left blank or specified as 0 (zero), it defaults to 5000.
InventoryOrganization Code	Required. Inventory organization code to use when shipment monitor criteria is passed.
StoreID	Required. If the store identifier is not passed, then the alert is not raised for the store.

13.4 Reference Implementation

By default, the SOP_INFOALERTS queue is provided by the Sterling Store Inventory Management to post informational alerts. The default queue provided for system alerts is SOP_GENERAL_ALERT.

Alerts, alert types, and queue subscriptions are provided for the Matrix-R organization.

By default, the following alert types are provided:

- SOP_DELAYED_CUST_PICK (DELAYED CUSTOMER PICK) — This exception is raised whenever there is a delayed customer pick.
- SOP_ADJ_OVER_VARIANCE (INVENTORY ADJUSTMENT VARIANCE VALUE ABOVE THRESHOLD VALUE) — This exception is raised whenever the adjustment variance value is above the threshold value.
- SOP_ITEM_SHORT (ITEM SHORTAGE) — An exception type is created for item shortage.
- SOP_GENERAL (STORE GENERAL EXCEPTION) — This queue is provided for posting general alerts.

In the Exception Type Details, the Expiration days and Followup Hours are always set to zero.

14

Summary of Components

This chapter is a quick reference for individuals who are already familiar with the Sterling Selling and Fulfillment Foundation to indicate which components were added or modified to implement the Sterling Store Inventory Management.

This chapter explains about:

- Database Extensions for the IBM Sterling Store Inventory Management
- APIs and User Exits
- Services
- Monitor Events
- Transactions
- Events

14.1 Database Extensions for the IBM Sterling Store Inventory Management

The following tables were extended for implementing the Sterling Store Inventory Management:

- YFS_SHIP_NODE
- YFS_SHIPMENT
- YFS_SHIPMENT_LINE
- YFS_COUNT
- YFS_TASK

YFS_SHIP_NODE

Table 14–1 YFS_SHIP_Node Extensions

Column Name	Data Type	Description
IS_MODEL_STORE	Char (1)	• If you onboard a store as a model store, this flag is set to “Y”. • If you onboard a store as a follower store this flag is set to “N”. • If a store is not onboard, this flag is set to blank.
MODEL_STORE_NO	Char (24)	The model store number whose business process is adopted by the store corresponding to this node record. In the Sterling Store Inventory Management, a store must be either a model store (in which case this field is blank), or it must adopt the business processes of a model store (in which case this field contains the model store number).

YFS_SHIPMENT

Table 14–2 YFS_SHIPMENT Extensions

Column Name	Data Type	Description
IS_PICKTICKET_PRINTED	Char (1)	This flag indicates whether the pick ticket has been printed for this shipment.
IS_BACKROOM_PICK_REQUIRED	Char (1)	This flag indicates whether or not a backroom pick is needed.

YFS_SHIPMENT_LINE

Table 14–3 YFS_SHIPMENT_LINE Extensions

Column Name	Data Type	Description
BACKROOM_PICKED_QUANTITY	Number (14)	This field contains the picked quantity during a back room pick. This field displays the picked quantity to the users.

YFS_COUNT

Table 14–4 YFS_COUNT Extension

Column Name	Data Type	Description
SEQUENCE_NUMBER	Varchar2 (40)	This field contains the sequence number from the count sheet used for a physical count. While recording count, the user enters the sequence number along with the item, location, and quantity. It is possible to retrieve the sequence number later. So, a new column is added to hold this value.

YFS_TASK

Table 14–5 YFS_TASK Extension

Column Name	Data Type	Description
SYSTEM_QUANTITY	Number (14)	This field contains the on hand quantity at the time the task is created. This field is printed in the count sheet at the item location level.

14.2 APIs and User Exits

This section lists the APIs introduced in the Sterling Store Inventory Management, and the features affected.

Table 14–6 APIs and User Exits

API or User Exit	Feature Affected
manageCountSheet()	Cycle Count
recordCountSheet()	Cycle Count
syncStoreRule()	Store Configurator
startPhysicalCountForStore()	Physical Count
getCountResultForStore()	Physical Count
getMissingItemsForPhysicalCount()	Physical Count
acceptVarianceForPhysicalCount()	Physical Count
recordPhysicalCountSheet()	Physical Count
getPhysicalCountAccuracyUE()	Physical Count
recordReceiptInOneStep()	Receiving
getStoreUserGroupList()	User Management

14.3 Services

The following services are introduced in the Sterling Store Inventory Management and can be found in the service definitions of the sales order document type:

- Counts
- Receiving
- Shipping
- Shipout

14.3.1 Counts

This section describes the services used in physical and cycle counts.

14.3.1.1 Cycle Count

The services used in cycle counts are:

- SOP_CyclecountWorkSheet_1.0
- SOP_CycCnt_Variance_1.0

14.3.1.2 Physical Count

The services used in physical counts are:

- SOP_PC_VarianceResearch_1.0
- SOP_PhysicalCount_Variance_1.0

14.3.2 Receiving

The services used in Receiving are:

- SOP_InboundDiscrepancy_1.0
- SOP_ReceivingWSForShipment_1.0
- SOP_ReceivingWSForOrder_1.0
- SOP_PrintCustomerLabel_1.0
- SOP_PrintReceivingWSANDLabels_1.0
- SOP_PrintOrderCutomerLabel_1.0
- SOP_PrintOrderReceivingWSANDLabels_1.0

14.3.3 Shipping

The services used in shipping are:

- SOP_PrintPickTicket_1.0
- SOP_ChangeStatus_Backroom_1.0

14.3.4 Shipout

The service used in delivery is SOP_BOLPRINT_1.0.

14.4 Monitor Events

The following monitor events are introduced in the Sterling Store Inventory Management:

Table 14–7 Monitor Events

Monitor Event	Feature Affected
Cancel Shipment	Delivery
Store Delayed Customer Pick	Shipping
Ready For Customer Pick	Shipping

14.5 Transactions

The following transactions are introduced in the Sterling Store Inventory Management:

Table 14–8 Transactions

Transaction	Feature Affected
backroom Pick	Shipping
Customer Pick	Shipping
Undo backroom Pick	Shipping
Check If backroom Pick is Required	Shipping

14.6 Events

The following transaction events are implemented in the Sterling Store Inventory Management:

Table 14–9 Events

Transaction	Event
SOP_PCA_PRINT	SOP BOL Print
SOP_PCA_PRINT	SOP PCA Print CyclecountVariance
SOP_PCA_PRINT	SOP PCA Print CyclecountWorksheet
SOP_PCA_PRINT	SOP PCA Print InboundDiscrepancy
SOP_PCA_PRINT	SOP PCA Print PCVarianceResearch
SOP_PCA_PRINT	SOP PCA Print PCVariance

Table 14–9 Events

Transaction	Event
SOP_PCA_PRINT	SOP PCA Print PickTicket
SOP_PCA_PRINT	SOP PCA Print RecOrderWorksheet
SOP_PCA_PRINT	SOP PCA Print RecShipmentWorksheet

15

Reference Implementation

The Sterling Store Inventory Management reference implementation provides transactional and configurational data to demonstrate how the features that are introduced in the Sterling Store Inventory Management in addition to the reference implementation such as Participant Modeling, User Groups and Users, Queue Management, and Catalog Management.

This reference implementation is used as a starting point for your implementation of the Sterling Store Inventory Management. Although, the data provided need not be used exactly as it is given, this reference implementation gives you an idea of how to configure the Sterling Store Inventory Management suitable to your business.

15.1 Reference Implementation Setup

The reference implementation installation scripts set up configuration data in order to demonstrate the Sterling Store Inventory Management features.

Using the Sterling Store Inventory Management Configurator, the Sterling Store Inventory Management is configured by modules that reflect different aspects of the product.

For more information about the reference implementation such as Participant Modeling, User Groups and Users, Queue Management, and Catalog Management, see the *Sterling Selling and Fulfillment Suite: Applications Reference Implementation Guide*.

15.2 Store Layout Configuration

In the Sterling Store Inventory Management, it is assumed that a store has only one zone, and the zone name is same as the name of the store.

15.2.1 Location Size Code

The location size codes are configured in terms of standard pallet size. The location size code is the same as the store name and has infinite capacity.

15.2.2 Locations

In the Sterling Store Inventory Management, a store can be modelled as:

- No Location — Here, a store can be configured with no locations. In this kind of store, you cannot perform any inventory actions.
- Single Location — This is mainly applicable in a store with small setup. The store has only one location.
- Store is modelled with three locations — Here, one location is designated as dock location, one as back location, and one as front location.
- Store tracks inventory in multiple locations — Here, one location is designated as dock location and one as front location. The remaining locations can be marked as back locations.

15.2.3 Devices

Printers are used in a store to print labels or reports. The printers that the Sterling Store Inventory Management supports are:

Table 15–1 Printers

Printer Name	Print Documents
HP-LASERJET-4300	PICKTICKET, VICS_BOL, COUNTSHEET, RECEIVING WORKSHEET
Zebra- 140	Store_Acknowledgement

15.3 Inventory Rules Configuration

The Sterling Store Inventory Management defines certain inventory attributes to track inventory in a store.

15.3.1 Product Class

The product classes refers to the product classification of an item. The typical product class are first quality, second quality, or finished good.

In the Sterling Store Inventory Management, the product class defined is Good. This indicates that the inventory is of good quality.

15.3.2 Inventory Status

The inventory status refers to the availability of inventory in a store. The inventory status defined in the Sterling Store Inventory Management is:

Table 15–2 Inventory Status

Status	Description	Supply Type
N	Normal	ONHAND

15.3.3 Inventory Adjustment Reasons

Inventory adjustments are associated with a reason code and reason text. These codes are used as tracking mechanisms for the exceptions that require an adjustment. The inventory adjustment reason enables tracking and reporting of adjustments at the reason code level.

Typically, inventory adjustment transactions are written for exceptions where inventory is found or not found.

Table 15–3 lists the default configurations for inventory adjustment reasons.

Table 15–3 Inventory Adjustment Reasons

Reason Code	Accounting bin (Y/N)	Description
SHIP		This reason code is used by the system when confirming shipments.
RECEIPT		This reason code is used by the system when receiving inventory.
BLIND		This reason code is used by the system during blind receiving.

Table 15–3 Inventory Adjustment Reasons

Reason Code	Accounting bin (Y/N)	Description
STORE-PHYSICAL-COUNT	Y	Indicates that a different bin location is associated with the physical count.
STORE-CYCLE-COUNT	Y	Indicates that a different bin location is associated with the cycle count.
Missing		Indicates that the inventory is missing.
STORE-MOVE		Indicates that the inventory is moved for some other reasons.
Re-Classify		Indicates that the adjustment is due to reclassification of items.
Found-New		Indicates that the adjustment is due to new items found in a location.
Scrap		Indicates that the item has been scrapped.
SOP_ADJUSTMENT		Indicates the host adjustment reason code used for performing adjustment operations such as Re-Classify, Found-New, and Scrap.

15.3.4 Inventory Transitions

Inventory status transitions may be specified at the zone level to allow you to automatically change the status of inventory in a store.

The default inventory status transition in the Sterling Store Inventory Management is shown the table below:

Table 15–4 Inventory Status Transitions

Zones	Transition
For all zones	Blank to Normal

15.3.5 Count Process

Count process ensures accurate stock level information in a store. The user can perform either cycle count and/or physical count.

Count Program

A default STORE_CYCLE_COUNT count program and STORE_CALENDAR calendar is provided to ensure that every item in a store is counted at least once in a quarter.

Count Request Cancellation Reasons

The cancellation reason code for cycle count is: STORE_INCOMPLETE_COUNT.

The cancellation reason code for physical count is: STORE_INVALID_COUNT.

Count Task Type

Different task types are created for cycle count and physical count. Counts can be performed either through paper-based or mobile devices.

Table 15–5 Count Task Types

Task Type	Description
COUNT	Cycle count performed through mobile devices.
PCCOUNT	Physical count performed through mobile devices.

Paper-Based Counting

In a paper-based counting, count worksheets are printed that provides a list of items to count. Based on the count program, a count request is generated. The count request creates count worksheets, which are then printed.

The purge criteria for cycle count is 30 days.

15.4 Inbound Rules Configuration

The inbound rules configured in the Sterling Store Inventory Management are:

Receiving Process

The various methods of receiving processes that a store can follow are:

- Receive inventory against a purchase order.
- Stores receive ASN that are sent through E-mail or Fax. The same process is followed for receiving transfer orders.
- Blind Receiving is receiving inventory when no BOL or order number exists for the inventory in the system.

Once the inventory is received, a receiving worksheet is printed.

15.4.1 Node Receiving Preferences

You can receive a case or pallet, or both. The configuration set as part of receiving preferences are:

Table 15–6 Node Receiving Preferences

Case / Pallet	Build Preferences
Case	Optional
Pallet	Optional

Check the Shipment Entry Allowed box for blind receiving.

The disposition code for receipt with QC or without QC is set to QC-PASSED.

15.4.2 Receiving Disposition Setup

A disposition code identifies the product class and inventory status to be assigned to the inventory being received.

The standard disposition configuration are:

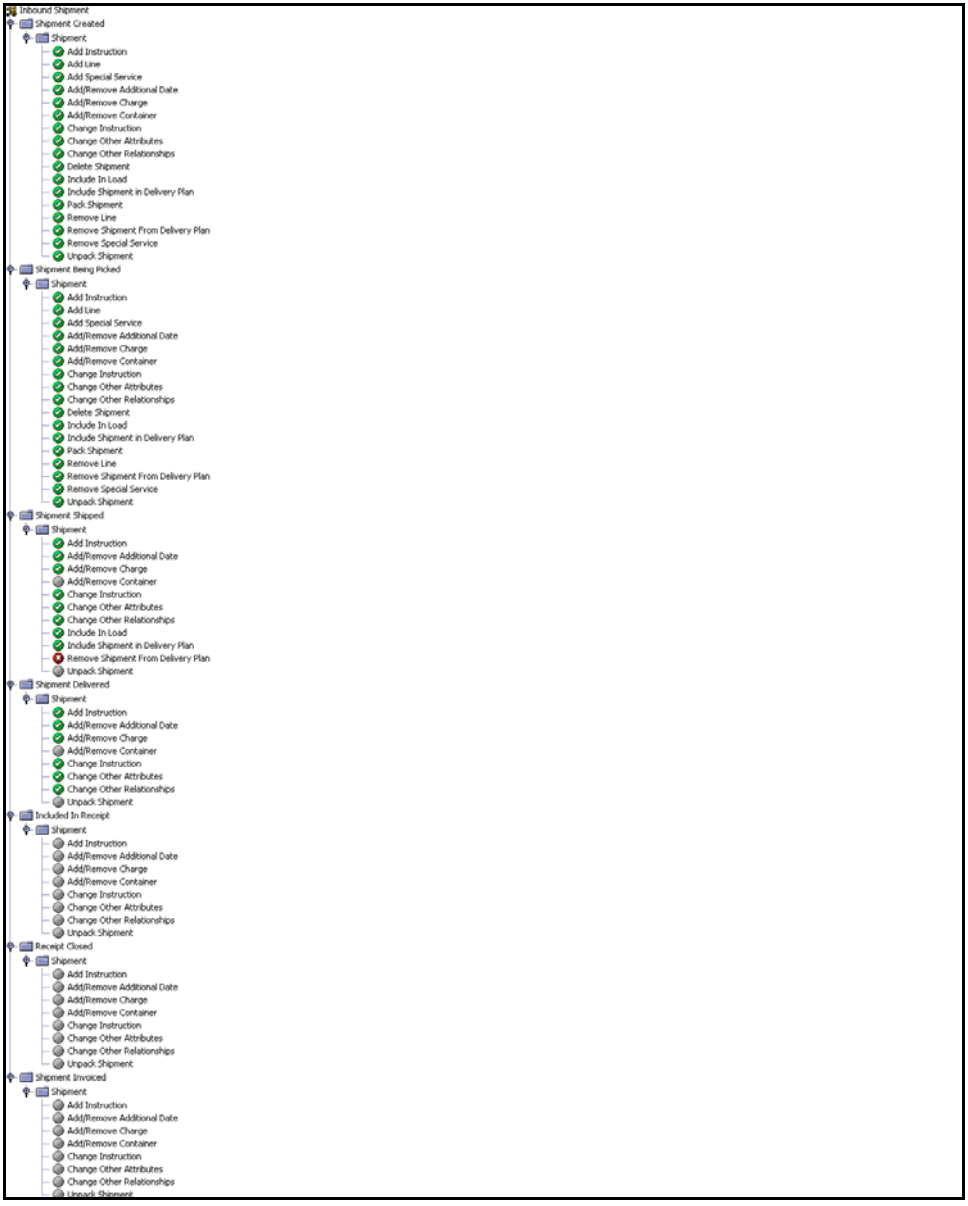
Table 15–7 Disposition Configuration

Disposition Code	Product Class	Inventory Status	Final Disposition
QC-PASSED	Good	Blank	Y

15.4.3 Shipment Modification Rules

The Shipment Modification Rules apply to the following document types:

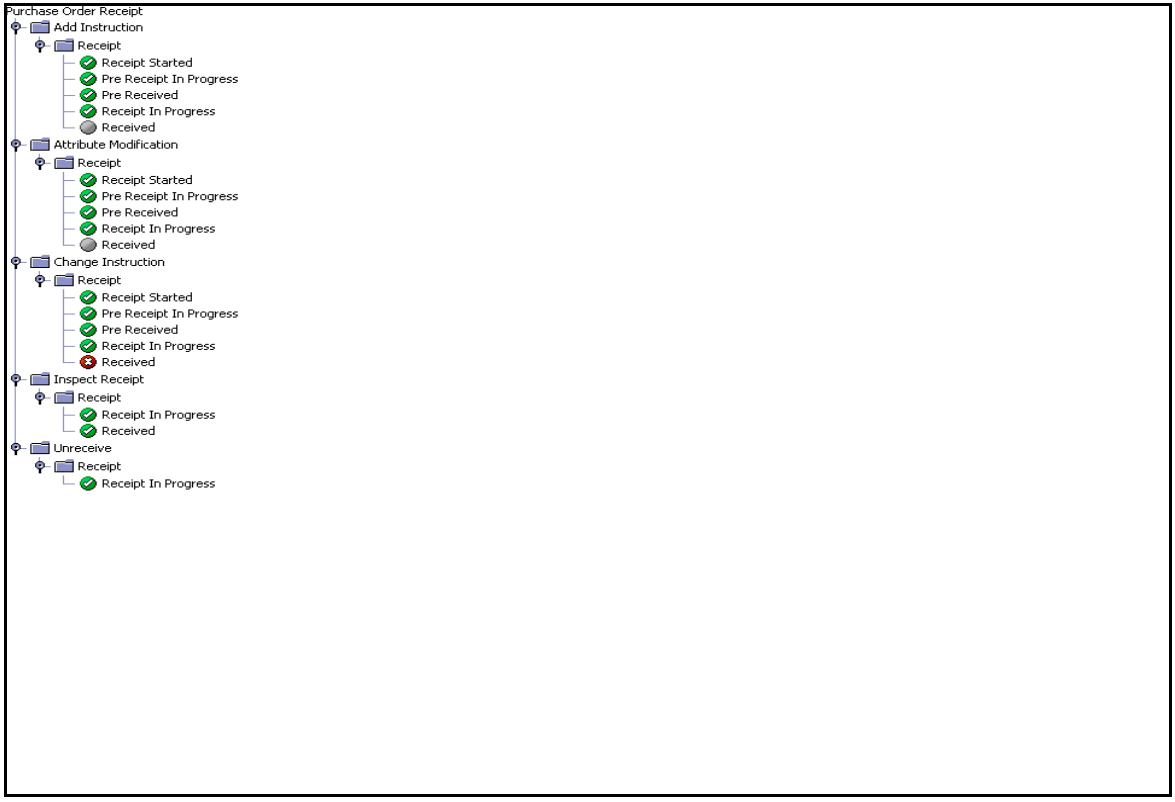
- Purchase Order
- Transfer Order


Inbound Shipment
Shipment Created
Shipment
Add Instruction
Add Line
Add Special Service
Add/Remove Additional Date
Add/Remove Charge
Add/Remove Container
Change Instruction
Change Other Attributes
Change Other Relationships
Delete Shipment
Include In Load
Include Shipment in Delivery Plan
Pack Shipment
Remove Line
Remove Shipment From Delivery Plan
Remove Special Service
Unpack Shipment
Shipment Being Picked
Shipment
Add Instruction
Add Line
Add Special Service
Add/Remove Additional Date
Add/Remove Charge
Add/Remove Container
Change Instruction
Change Other Attributes
Change Other Relationships
Delete Shipment
Include In Load
Include Shipment in Delivery Plan
Pack Shipment
Remove Line
Remove Shipment From Delivery Plan
Remove Special Service
Unpack Shipment
Shipment Shipped
Shipment
Add Instruction
Add/Remove Additional Date
Add/Remove Charge
Add/Remove Container
Change Instruction
Change Other Attributes
Change Other Relationships
Include In Load
Include Shipment in Delivery Plan
Remove Shipment From Delivery Plan
Unpack Shipment
Shipment Delivered
Shipment
Add Instruction
Add/Remove Additional Date
Add/Remove Charge
Add/Remove Container
Change Instruction
Change Other Attributes
Change Other Relationships
Unpack Shipment
Included In Receipt
Shipment
Add Instruction
Add/Remove Additional Date
Add/Remove Charge
Add/Remove Container
Change Instruction
Change Other Attributes
Change Other Relationships
Unpack Shipment
Receipt Closed
Shipment
Add Instruction
Add/Remove Additional Date
Add/Remove Charge
Add/Remove Container
Change Instruction
Change Other Attributes
Change Other Relationships
Unpack Shipment
Shipment Invoiced
Shipment
Add Instruction
Add/Remove Additional Date
Add/Remove Charge
Add/Remove Container
Change Instruction
Change Other Attributes
Change Other Relationships
Unpack Shipment

15.4.4 Receipt Modification Rules

The Receipt Modification Rules apply to the following document types:

- Purchase Order
- Transfer Order



15.4.5 Sourcing Rules

Sourcing rules are necessary to create chained orders for a sales order. The Matrix-R Enterprise has sourcing rules configured for products being shipped and for procured.

The fulfillment type is defined at the Enterprise level. The Matrix-R Enterprise has sourcing rules configured.

In the reference implementation, a procurement rule is configured for all items and node types as a Store. Based on the requirement, an Enterprise can change its sourcing and procurement rules.

15.4.5.1 Print Services

For the Inbound process the following print services are provided:

- Customer Order Label
- Receiving Worksheet
- Receiving Discrepancy Report

15.5 Outbound Rules Configuration

The Outbound process includes managing and controlling the outgoing materials from the point when shipments are created, to the point when shipments are picked up by a customer or loaded into trailers. Once the shipment is created, the shipment is ready for backroom pick or customer pick.

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Index

A

B

C

D

E

F

I

M

P

R

S

T

U