Sterling Commerce
An IBM Company

Sterling Global Inventory Visibility

Configuration Guide

Release 8.0

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Preface

This manual describes how to use the Sterling Multi-Channel Fulfillment Solution Configurator for Global Inventory Visibility.

Intended Audience

This manual is intended for use by system administrators and managers who need to configure the Sterling Multi-Channel Fulfillment Solution rules and business processes as they pertain to their business practices for global inventory visibility.

Structure

This manual contains the following sections:

Chapter 1, "Introduction"

This chapter briefly describes the contents of this guide.

Chapter 2, "Navigating in the Configurator"

This chapter explains the layout of the Sterling Multi-Channel Fulfillment Solution Configurator, actions you can perform throughout the application, and important concepts you should be aware of before using the application.

Chapter 3, "Configuring Inventory Rules"

This chapter explains how you can configure rules and common codes used for product item availability calculations and inventory handling.

Chapter 4, "Configuring Inventory Types and Considerations"

This chapter explains how you can configure inventory types and considerations used to determine inventory availability for a specific demand type.

Chapter 5, "Configuring Cost Factor Groups"

This chapter explains how cost factors can be applied to inventory to determine a derived cost. The cost factors can vary for different Enterprise or Seller organizations based on vendor preference, transaction type, and so forth. You define a cost factor group to represent a set of cost factors that are applied for a specific organization's needs.

Chapter 6, "Configuring Product Item Specific Distribution Groups"

This chapter explains how you can create a set of nodes/external organizations that can be used when determining product item sourcing.

Chapter 7, "Configuring Inventory Node Type Rules"

This chapter explains how you can configure inventory rules based on node types.

Chapter 8, "Configuring Resource Capacity"

This chapter explains how you can configure resource capacity components to determine delivery service item and provided service item availability.

Chapter 9, "Configuring Value Added Services"

This chapter explains how you can configure the value added services in the Sterling Multi-Channel Fulfillment Solution.

Chapter 10, "Configuring Count"

This chapter explains how you can configure the count and related features in the Sterling Multi-Channel Fulfillment Solution.

Chapter 11, "Synchronizing with Node Inventory"

This chapter explains how you can reconcile your internal inventory picture with the actual inventory picture at the nodes, by loading inventory pictures from nodes, and synchronizing inventory tables.

Appendix A, "Time-Triggered Transaction Reference"

This chapter explains time-triggered transactions that are utilities that perform a variety of individual functions, automatically and at specific time intervals.

Sterling Multi-Channel Fulfillment Solution Documentation

For more information about the Sterling Multi-Channel Fulfillment Solution® components, see the following manuals:

- *Sterling Multi-Channel Fulfillment Solution® Release Notes*
- *Sterling Selling and Fulfillment Suite® Release Notes*
- *Sterling Multi-Channel Fulfillment Solution® Installation Guide*
- *Sterling Multi-Channel Fulfillment Solution® Upgrade Guide*
- *Sterling Multi-Channel Fulfillment Solution® Configuration Deployment Tool Guide*
- *Sterling Multi-Channel Fulfillment Solution® Performance Management Guide*
- *Sterling Multi-Channel Fulfillment Solution® High Availability Guide*
- *Sterling Multi-Channel Fulfillment Solution® System Management Guide*
- *Sterling Multi-Channel Fulfillment Solution® Localization Guide*
- *Sterling Multi-Channel Fulfillment Solution® Customization Guide*
- *Sterling Multi-Channel Fulfillment Solution® Integration Guide*
- *Sterling Selling and Fulfillment Suite® Integration Guide*
- *Sterling Multi-Channel Fulfillment Solution® Product Concepts*
- *Sterling Warehouse Management System® Concepts Guide*

- *Sterling Multi-Channel Fulfillment Solution Platform® Configuration Guide*
- *Sterling Distributed Order Management® Configuration Guide*
- *Sterling Supply Collaboration® Configuration Guide*
- *Sterling Global Inventory Visibility® Configuration Guide*
- *Sterling Product Management® Configuration Guide*
- *Sterling Logistics Management® Configuration Guide*
- *Sterling Reverse Logistics® Configuration Guide*
- *Sterling Warehouse Management System® Configuration Guide*
- *Sterling Multi-Channel Fulfillment Solution 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 Multi-Channel Fulfillment Solution Mobile Application® User Guide*
- *Sterling Multi-Channel Fulfillment Solution Analytics® Guide*
- *Sterling Multi-Channel Fulfillment Solution® Javadocs*
- *Sterling Multi-Channel Fulfillment Solution® Glossary*
- *Sterling Parcel Carrier Adapter® Guide*

Conventions

The following conventions may be used in this manual:

Convention	Meaning
. . .	Ellipsis represents information that has been omitted.

Convention	Meaning
< >	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. This is only applicable for Release 8.0 or above.
<INSTALL_DIR_OLD>	User-supplied location of the Sterling Multi-Channel Fulfillment Solution installation directory for previously installed releases. This is only applicable for Release 8.0 or above.
<YANTRA_HOME>	User-supplied location of the Sterling Supply Chain Applications installation directory. This is only applicable for Release 7.7, 7.9, and 7.11.
<YANTRA_HOME_OLD>	User-supplied location of the Sterling Supply Chain Applications installation directory for previously installed releases. This is only applicable for Releases 7.7, 7.9, and 7.11.
<YFS_HOME>	For releases 7.3, 7.5, and 7.5 SP1, this is the user-supplied location of the Sterling Supply Chain Applications installation directory. For releases 7.7, 7.9, and 7.11, this is the user-supplied location of the <YANTRA_HOME>/Runtime directory. For release 8.0, the <YANTRA_HOME>/Runtime directory is no longer used and this is the same location as <INSTALL_DIR>.
<YFS_HOME_OLD>	This is the <YANTRA_HOME>/Runtime directory of previously installed releases. This is only applicable for Releases 7.7, 7.9, and 7.11.

Convention	Meaning
<ANALYTICS_HOME>	User-supplied location of the Sterling Multi-Channel Fulfillment Solution Analytics installation directory. **Note:** This convention is used only in the *Sterling Multi-Channel Fulfillment Solution Analytics Guide*.
<COGNOS_HOME>	User-supplied location of the Cognos installation directory. **Note:** This convention is used only in the *Sterling Multi-Channel Fulfillment Solution Analytics Guide*.
<MQ_JAVA_INSTALL_PATH>	User-supplied location of the IBM WebSphere MQ Java components installation directory. **Note:** This convention is used only in the *Sterling Multi-Channel Fulfillment Solution System Management Guide*.
<DB>	Refers to the Oracle, DB2, or MSSQL depending on the database server.
<DB_TYPE>	Depending on the database used, considers the value oracle, db2, or sqlserver.

1

Introduction

This book concentrates on the rules and setup configurations that make up the Global Inventory Visibility business application in the Sterling Multi-Channel Fulfillment Solution Configurator. This book is intended for both Hub and Enterprise administrators using the Sterling Multi-Channel Fulfillment Solution Configurator to set up the Sterling Multi-Channel Fulfillment Solution environment. Business analysts should also use this book to plan appropriate business practices as they pertain to the Sterling Multi-Channel Fulfillment Solution. Programmers should refer to the *Sterling Multi-Channel Fulfillment Solution Customization Guide* for information about extending the Sterling Multi-Channel Fulfillment Solution. System Integrators should refer to the *Sterling Multi-Channel Fulfillment Solution Integration Guide* for information about integrating external applications with the Sterling Multi-Channel Fulfillment Solution.

> **Important:** This book assumes that you have read and are familiar with the concepts and business functionality detailed in the *Sterling Multi-Channel Fulfillment Solution Product Concepts*.

The Sterling Multi-Channel Fulfillment Solution Configurator is a collection of all the rules and setup configurations necessary to implement the Sterling Multi-Channel Fulfillment Solution, organized so that configuration can be done for each business application separately. The following business applications can be configured within the Sterling Multi-Channel Fulfillment Solution Configurator:

- Distributed Order Management
- Global Inventory Visibility

- Product Management
- Logistics Management
- Supply Collaboration
- Reverse Logistics
- Platform

1.1 Business Models

There is no single business model that encompasses the environment in which the entire Sterling Multi-Channel Fulfillment Solution can be used. Therefore, there is no single way to configure your Sterling Multi-Channel Fulfillment Solution environment.

For example, your company might be considered a multi-divisional corporation, a third-party logistics company, or a marketplace business. Each of these business models require a different conceptual approach to the Sterling Multi-Channel Fulfillment Solution configuration.

1.1.1 Multi-Divisional Corporation

The **multi-divisional corporation model** is a business corporation whose primary focus is managing purchase and sales activities. A typical multi-divisional corporation can be a buyer, a seller, or both. It could also be a retailer, a manufacturer, or both. Whatever form the multi-divisional corporation takes, it normally has multiple channels with different types of customers, such as, consumers, retailers, dealers, and original equipment manufacturers.

In the multi-divisional corporation model, each division might be set up as an Enterprise in the Sterling Multi-Channel Fulfillment Solution. This setup allows both segregation of transactions by division and global visibility at the corporate level. Each Enterprise configures their own business rules, workflow, and transaction processing.

1.1.2 Third-Party Logistics

Traditional **third-party logistics** companies provide a range of outsourced services such as warehousing, transportation, and contract manufacturing.

Large companies can gain the competitive advantage through the real-time management of their supply chains. These advantages include lower costs and improved customer service. Additionally, new sales channels such as web stores, hand-held devices, and in-store kiosks provide companies new methods of reaching their customers. All of these issues have increased the complexity of the fulfillment process.

The Sterling Multi-Channel Fulfillment Solution provides the engine needed to run the operations of a contract fulfillment provider as well as a centralized system for real-time order execution and event driven problem solving for an entire fulfillment network. It enables fulfillment providers to configure the fulfillment process to meet the needs of their clients.

In the third-party logistics model, each client might be set up as an Enterprise. This setup allows the third-party logistics Hub to have visibility of all transactions in the Hub environment, while the clients that are set up as Enterprises only have visibility to their own transactions. This allows the third-party logistics business to provide unique transaction processing to its clients.

1.1.3 Marketplace

A **marketplace** is an online intermediary that connects Buyers and Sellers. Marketplaces eliminate inefficiencies by aggregating offerings from many Sellers or by matching Buyers and Sellers in an exchange or auction. For Buyers, they lower purchasing costs and help them reach new Sellers. For Sellers, they lower sales costs and give them access to new customers. It is a central location, or Hub, where a trusted intermediary integrates both procedures and technology to lower the costs and enhance the effectiveness of Buyer and Seller transactions.

In the marketplace model, each market might be set up as an Enterprise. This setup allows each market to be unique with their own product or service handling.

1.2 Global Inventory Visibility Configuration

The Sterling Global Inventory Visibility application is a collection of common components used to define inventory and capacity availability throughout the system.

In the Sterling Multi-Channel Fulfillment Solution, inventory is defined as physical product items against which supply and demand checks can be made. For example, refrigerators and dishwashers are considered to be inventory product items.

Capacity defines a physical location's resource availability to fulfill delivery and provided service items. For example, refrigerator delivery can be considered a delivery service item and dishwasher installation can be considered a provided service item.

In the Sterling Multi-Channel Fulfillment Solution Configurator you can use the Global Inventory Visibility configuration grouping to establish the following aspects of the Sterling Multi-Channel Fulfillment Solution for your business applications:

- Inventory Rules
- Inventory Types and Considerations
- Distribution Rules
- Resource Capacity

1.2.1 Inventory Rules

Inventory business rules are used to set up rules and common codes associated with inventory handling in the Sterling Multi-Channel Fulfillment Solution, including:

- Available-to-promise (ATP) rules
- ATP monitoring rules
- Product classes
- Inventory reasons

For more information about Inventory Rules, see Chapter 3, "Configuring Inventory Rules".

1.2.2 Inventory Types and Considerations

Inventory Types and Considerations is used to identify the supply and demand type associations used to determine inventory availability for a specific demand type. You can also create new supply and demand types for use in the Sterling Multi-Channel Fulfillment Solution. For more

information about Inventory Types and Considerations, see Chapter 4, "Configuring Inventory Types and Considerations".

1.2.3 Distribution Rules

Distribution Rules is used to create a set of nodes/external organizations that can be used when determining item sourcing. You can define distribution rules that establish the ship node determination process within a distribution group. These rules determine the default node that an item should be sourced from within a group based on priority. You can create rules for individual items at a source node or for the entire source node. For more information about Distribution Rules, see Chapter 6, "Configuring Product Item Specific Distribution Groups".

1.2.4 Resource Capacity

Resource Capacity is used to define components that determine delivery service item and provided service item availability. Resource capacity availability is used to determine appointments for a delivery service and/or provided service of a defined unit of measure for specific time slots and geographical regions. For more information about Resource Capacity, see Chapter 8, "Configuring Resource Capacity".

2

Navigating in the Configurator

This chapter discusses the layout of the Sterling Multi-Channel Fulfillment Solution Configurator, actions you can perform throughout the application, and important concepts you should be aware of before using the application.

2.1 Starting the Sterling Multi-Channel Fulfillment Solution Configurator

To access the Sterling Multi-Channel Fulfillment Solution Configurator:

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

   where,

   - `hostname` is the computer name or IP address of the computer where the Sterling Multi-Channel Fulfillment Solution is installed.
   - `portnumber` is the listening port of the computer where the Sterling Multi-Channel Fulfillment Solution is installed.

   The browser displays the Sign In window.

2. Enter your login ID and password and choose the Sign In button. The Sterling Multi-Channel Fulfillment Solution Consoles Home Page displays.
3. From the menu bar, choose Configuration > Launch Configurator. The Sterling Multi-Channel Fulfillment Solution Configurator opens in a new window.

Note: Additionally, enterprise users who maintain an enterprise can access the Sterling Multi-Channel Fulfillment Solution Configurator by means of `http://<Sterling Multi-Channel Fulfillment Solution installation server>/yantra/console/login.jsp`.

Note: If both the Sterling Multi-Channel Fulfillment Solution Configurator and the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console are opened at the same time, and if a dialogue window is opened in either application, the other stops responding to user input until that dialogue window is closed. This is due to a bug in the Java platform.

2.2 The Sterling Multi-Channel Fulfillment Solution Configurator Layout

The Sterling Multi-Channel Fulfillment Solution Configurator is a graphical user interface that can be used to configure different aspects of the Sterling Multi-Channel Fulfillment Solution. The different configurations are defined by logical groupings called applications that can be accessed from the Configurator's menu bar.

Figure 2–1 Applications Menu

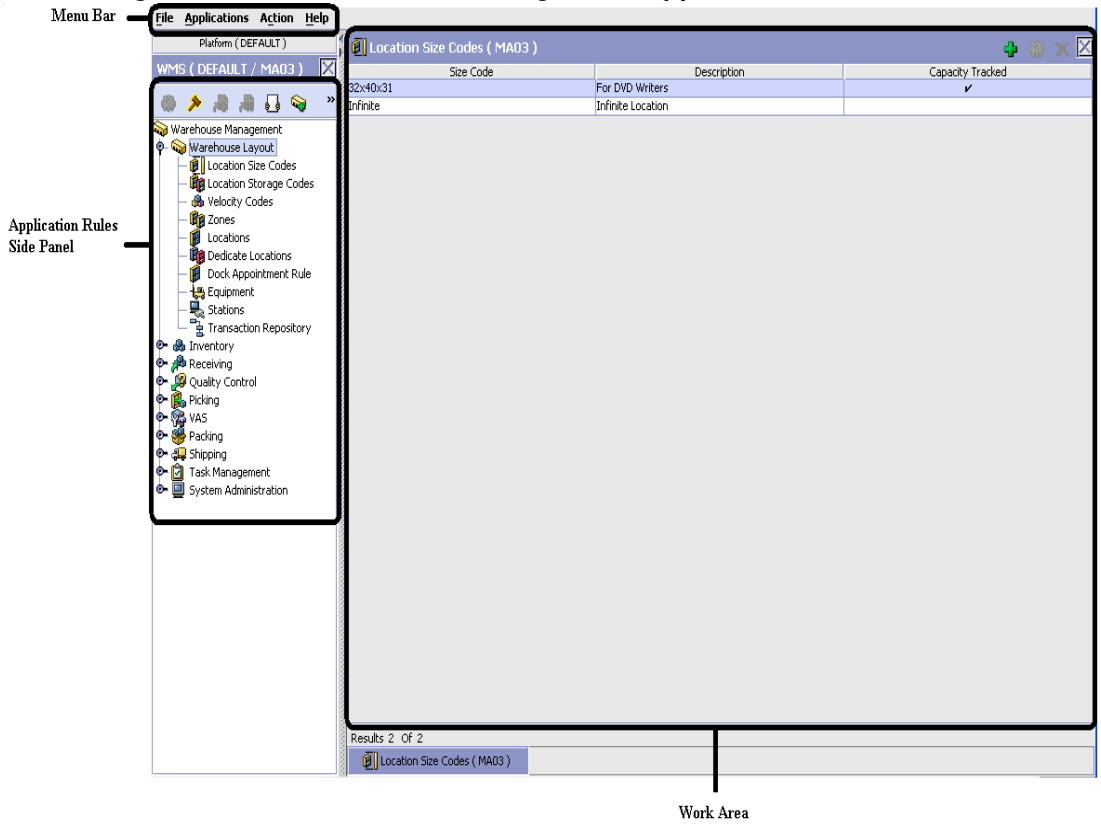
Each application focuses on a particular aspect of the Sterling Multi-Channel Fulfillment Solution and contains all of the rules, common codes, and settings necessary for the Sterling Multi-Channel Fulfillment Solution to work in a real-world business setting.

The following applications can be configured in this version of the Sterling Multi-Channel Fulfillment Solution:

- Distributed Order Management
- Global Inventory Visibility
- Product Management
- Logistics Management
- Supply Collaboration
- Reverse Logistics
- Warehouse Management
- Platform

When you select the application that you want to configure, the Configurator displays a side panel containing all of the available configuration rules for the selected application and a work area in which these rules can be configured.

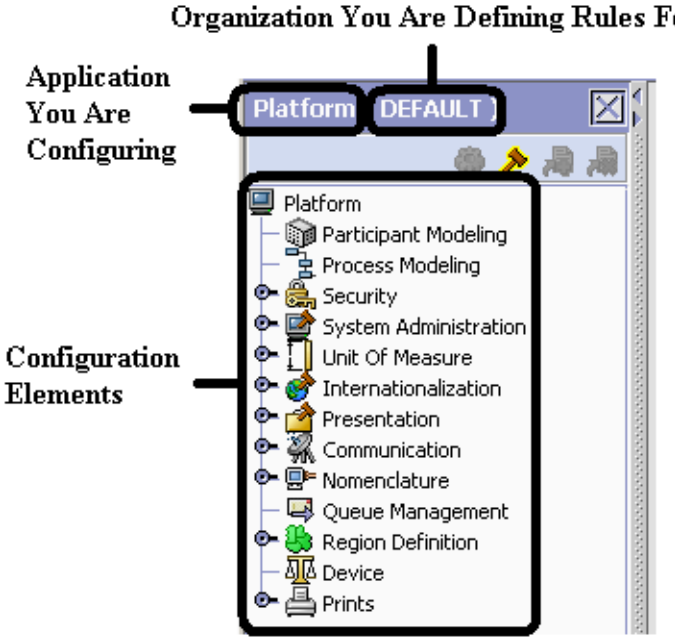
Figure 2–2 The Standard Configurator Application Interface



2.2.1 Application Rules Side Panel

The application rules side panel displays a hierarchical tree of elements specific to processes used with in the application.

Figure 2–3 Example of Application Rules Side Panel



The application rules side panel also identifies the organization you are configuring rules for and what, if any, rules are inherited from another organization.

You can use the application rules side panel for:

- Accessing Configuration Screens
- Determining Inheritance
- Loading Another Organization's Rules

2.2.1.1 Accessing Configuration Screens

The main purpose of the application rules side panel is to provide an interface to access the application's individual configuration screens. To access a configuration screen, browse through the application tree and double-click on the applicable configuration element, the element's configuration screen displays in the work area.

2.2.1.2 Determining Inheritance

In the Sterling Multi-Channel Fulfillment Solution, when an Enterprise is created it can inherit all or part of an existing Enterprise's configuration rules. This inheritance is done at the configuration group level. A configuration group is a classification of similar configuration elements. For example, all of the rules and configurations dealing with items are grouped together into one configuration group and all of the rules and configurations dealing with organizations are grouped into another.

An administrator organization is set for every organization defined within the system. Only the administrator organization can modify the rules defined for a particular organization. If a particular organization administers multiple organizations, then they can load the rules of organization that it administers within the application tree. For more information about loading another organization's rules, see Section 2.2.1.3, "Loading Another Organization's Rules".

Configuration groups are associated with organization levels. Organization levels determine how configuration groups are inherited and which organizations can maintain them. The organization levels defined in the Sterling Multi-Channel Fulfillment Solution are:

- Hub Level - Configuration groups that are associated with the Hub organization
- Enterprise Level - Configuration groups that are associated with the individual Enterprise organizations within the Hub environment
- Catalog Organization - Configuration groups that are associated with the organization(s) that maintains the catalog(s) within the Hub environment
- Inventory Organization - Configuration groups that are associated with the organization(s) that maintains the inventory within the Hub environment
- Organization - Configuration groups that are associated with any organization within the Hub environment.

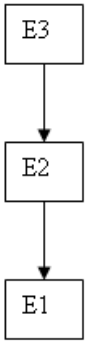
Enhanced Inheritance for Process Models

An Enterprise can inherit the configurations of the following entities from other Enterprises:

- Pipelines

- User Exits
- Services
- Actions
- Conditions
- Statuses
- Transactions
- Events

When an Enterprise inherits these entities from some other Enterprise, the current Enterprise can view the configurations that are inherited from all other Enterprises (including the Hub) in the inheritance hierarchy. In addition, the current Enterprise can view the configurations that are defined for the Hub. For example, consider the following inheritance hierarchy:



In this hierarchy, Enterprise E1 is inheriting from Enterprise E2, which in turn is inheriting from Enterprise E3. Enterprise E1 can view the configurations that are defined for Enterprise E2 and Enterprise E3. In addition, Enterprise E1 can view the configurations that are defined for the Hub.

The following table details the rules used to determine which organizations can maintain a configuration group as defined by the organization level. The table also describes the rules that determine how configuration groups are inherited when an organization is created.

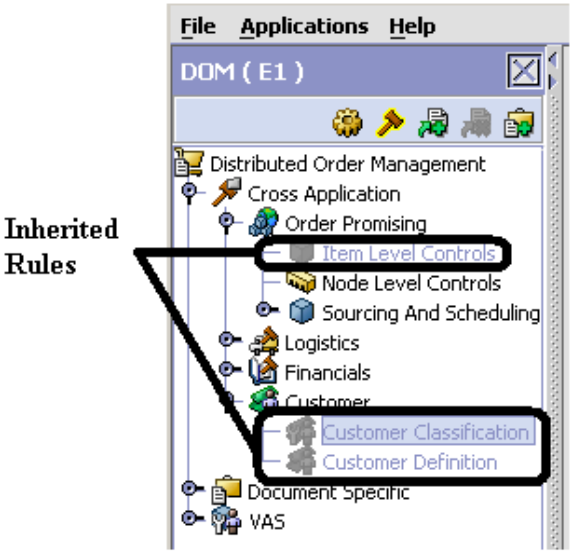
Table 2–1 Organization Level Rules

Organization Level	Organizations That Can Modify at this Level...	Inheritance Details
Hub Level	Only the Hub organization can modify configuration groups at the Hub level. All other organizations have read-only access.	All organizations share this information.
Enterprise Level	Only Enterprise organizations can modify configuration groups at the Enterprise level. Any business transaction requiring Enterprise configuration is picked up from the Enterprise established by the transactional context. For example, order documents have a specific Enterprise.	An Enterprise can inherit this configuration from another Enterprise. Additionally, this configuration can be overridden at a configuration group level.
Catalog Organization	Organizations that are designated as catalog organizations can modify configuration groups at the catalog organization level.	None.
Inventory Organization	Organizations that are designated as inventory organizations can modify configuration groups at the inventory organization level.	None.
Organization	Any organization assigned a role (Seller, Buyer, etc.) can modify configuration groups at the organization level.	None.

Important: You cannot inherit from an Enterprise that does not have the same inventory, capacity, and catalog organizations as the organization you are configuring.

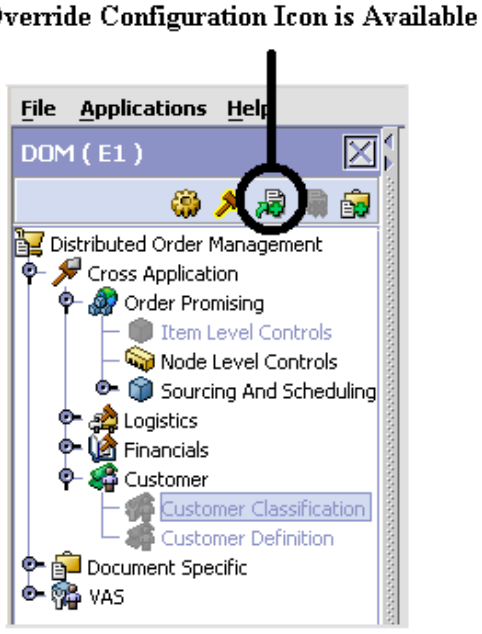
The application rules side panel displays rules that have been inherited as grayed out.

Figure 2–4 Inherited Rules in the Application Rules Side Panel



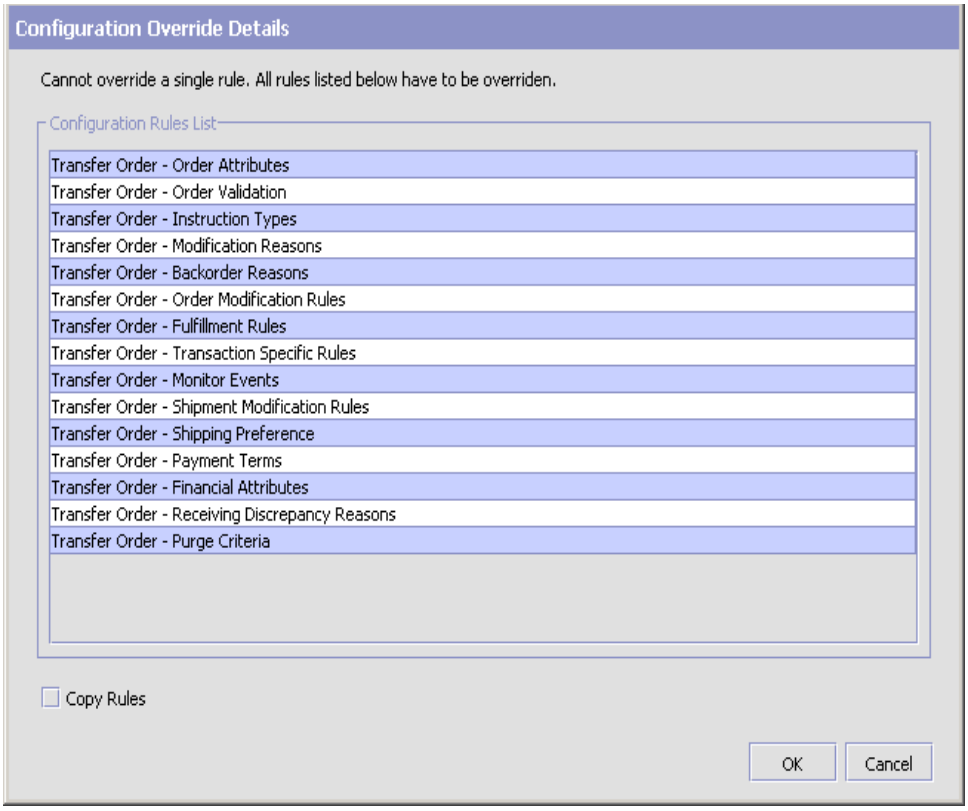
As stated in the table above, depending on the organization you are logged in as, you may be able to override some inherited rules. If a rule can be overridden, the Override Configuration icon becomes available in the application rule side panel when you highlight the rule.

Figure 2–5 Override Configuration Icon



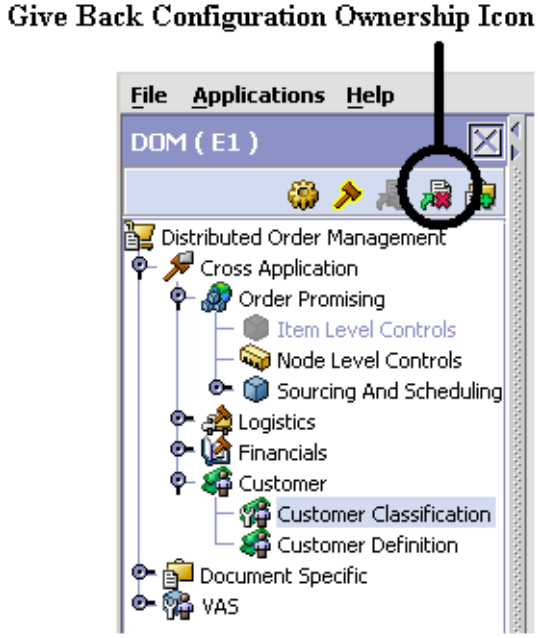
When you choose to override a rule you also override any other rules in the configuration group the rule you are overriding is associated with. When you choose the Override Configuration icon the Configuration Override Details pop-up window displays. This window provides the list of rules that are overridden.

Figure 2–6 Example of Configuration Override Details Pop-Up Window



If you override a configuration group and then decide to "re-inherit" the original rules, you can choose the Give Back Configuration Ownership icon. This icon becomes available in the application rules side panel for rules that have been overridden.

Figure 2–7 Give Back Configuration Ownership Icon



When you select the Give Back Configuration Ownership Icon, the Configuration Override Details pop-up window displays. This window provides the list of rules that are re-inherited.

> **Important:** If you select the Delete Rules field on the Configuration Override Details pop-up window, you give back rule ownership to the organization you originally inherited from, however you do not retain any of the rules that you inherited from them.
>
> If you do not select this field, you give back rule ownership to the organization you originally inherited from, but you retain the rules that you inherited from them.

2.2.1.3 Loading Another Organization's Rules

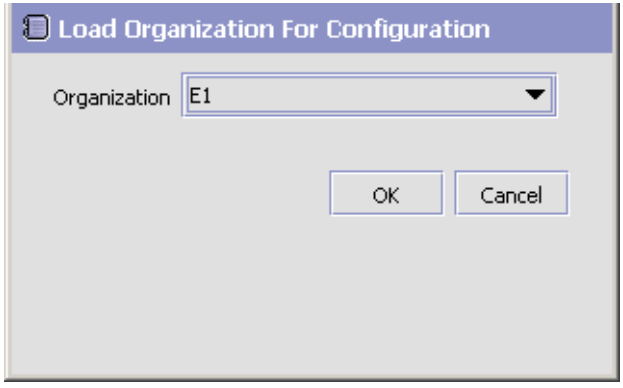
An administrator organization is set for every organization defined within the system. Only the administrator organization can modify the rules defined for a particular organization. If a particular organization administers multiple organizations, then they can load the rules of

organization that it administers within the application tree. See Table 2–1 for the rules that determine which organizations you can administer.

> **Note:** The rules that are available from the tree in the application rules side panel may vary depending on the type of organization you select and the roles it has been assigned.

To load another organization's rules:

1. From the applicable application rules side panel, choose . The Load Organizations for Configuration pop-up window displays.



2. From Organization, select the organization that you want to work with.
3. Choose OK. The organization's rules display in the application rules side panel.

Note: The application rules side panel displays the organization you are working with in parentheses.

2.2.2 Work Area

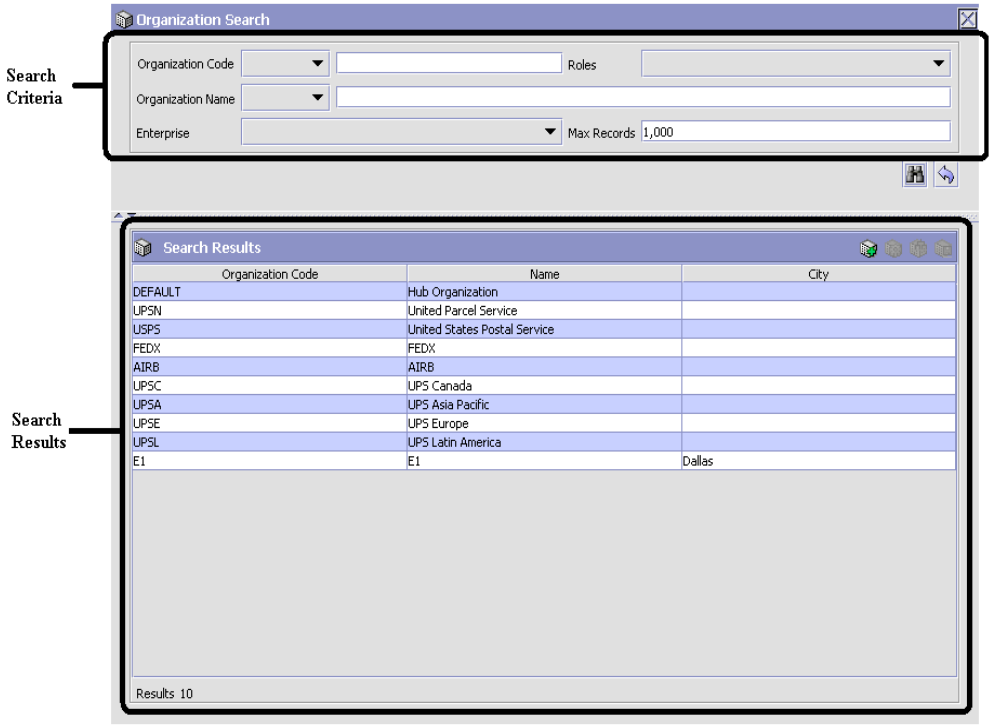
The work area is the main area in which different configurationscreens appear. The following are the main types of screens that you can be seen in the work area:

- Search Window
- List Window
- Details Window
- Drag and Drop Window

2.2.2.1 Search Window

A search window provides you with a means to perform a filtered search. The upper panel of a search window offers criteria applicable to the entity you are searching through which you can narrow your search. The lower panel lists the results of a search once it has been performed.

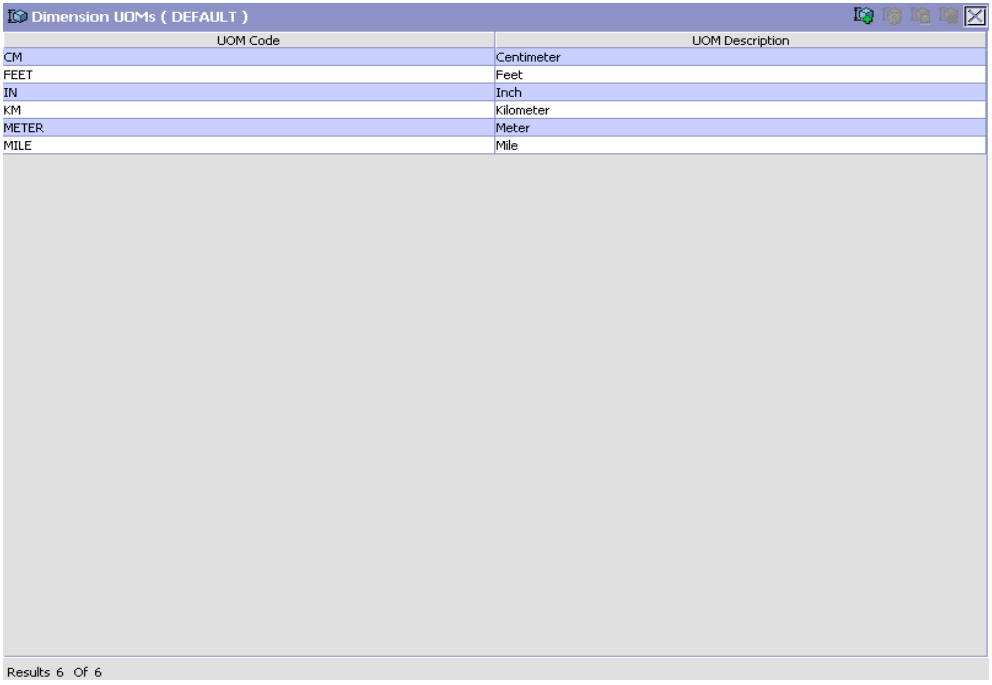
Figure 2–8 Search Window Example



2.2.2.2 List Window

When you choose to configure a specific rule or code that does not require a search, the Configurator may display a basic list window of the rules and codes that have previously been configured.

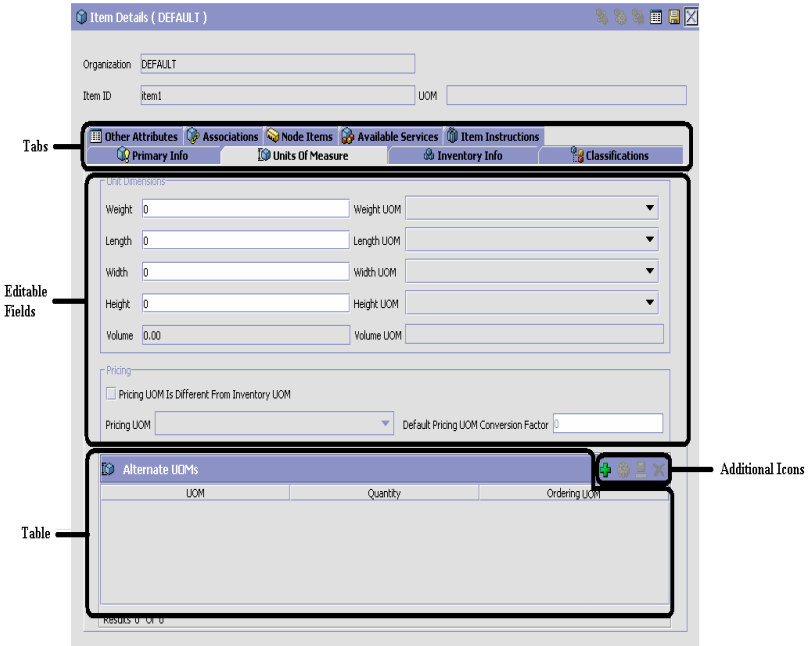
Figure 2–9 List Window Example



2.2.2.3 Details Window

A details window is the main interface through which a bulk of the configuration is done. A details window can contain editable fields and tables, tabs to configure different aspects of an entity, and additional actions that can be performed on an entity.

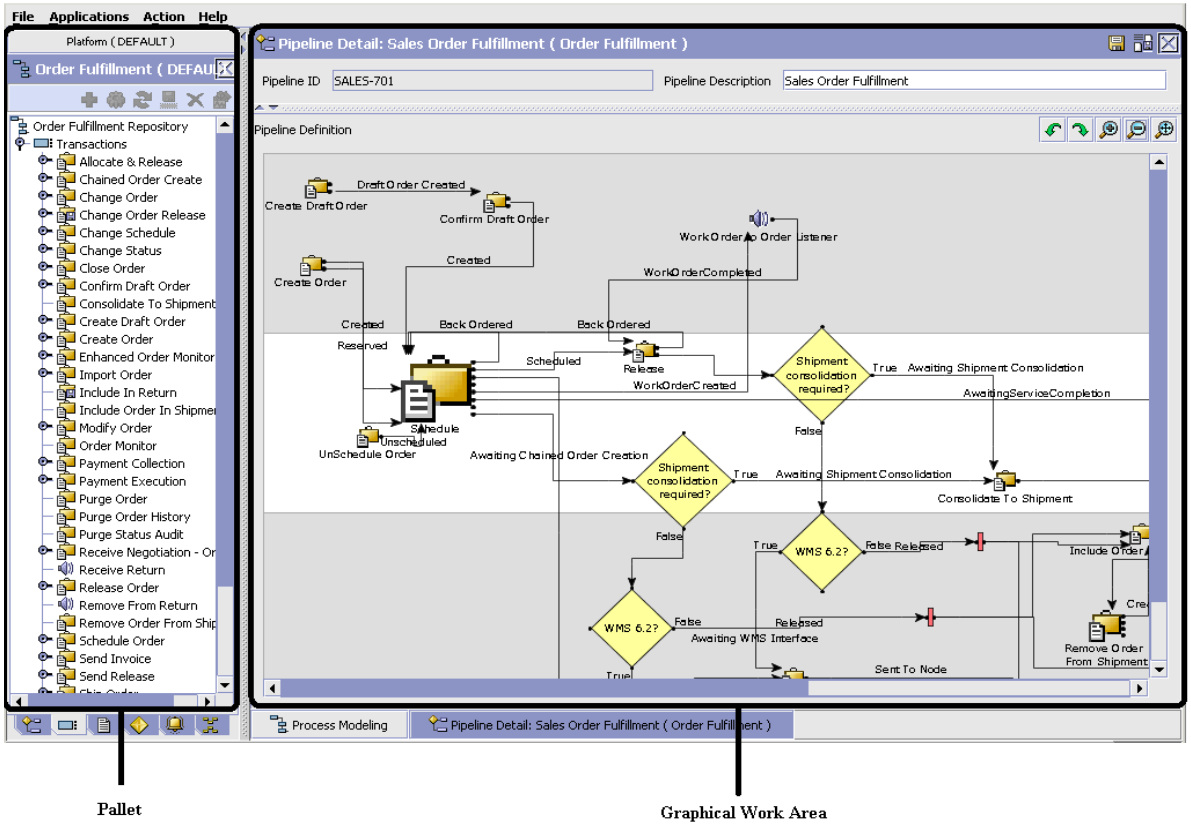
Figure 2–10 Details Window Example



2.2.2.4 Drag and Drop Window

You can use a graphical drag and drop window to ease the construction of pipelines, pipeline determination, event handlers, status monitoring rules, and services. A drag and drop window consists of a pallet and a graphical work area.

Figure 2–11 Drag and Drop Window Example



To begin building any of these entities, choose a component, such as a transaction, from the pallet. Drag the component into the graphical work area. The transaction is now displays as a graphical representation of itself.

To connect one component to another, you must drag the mouse from the outgoing port of a component until it forms a connecting line with the incoming port of another component. The links between components can be set up either horizontally or vertically.

To delete components or links, right-click on the component and choose Delete. Once components and links have been established you can move them around by dragging them, the links redraw themselves according to the new position. If you press and hold the CTRL key while dragging a component, the component is copied within the graphical work area.

2.3 Actions Available in the Sterling Multi-Channel Fulfillment Solution Configurator

The following actions can be performed throughout the Sterling Multi-Channel Fulfillment Solution Configurator:

- Using Configurator's Lookup Functionality
- Viewing the User Logged into the Configurator
- Using Lists and List Filtering
- Using On-Line Help
- Troubleshooting Errors
- Using Special Characters

2.3.1 Using Configurator's Lookup Functionality

Throughout the Sterling Multi-Channel Fulfillment Solution Configurator there are many fields that have a lookup functionality to find or create additional records as they pertain to that field. For example, on the Primary Info tab of the Organization Details screen, the Locale field has a lookup functionality to create a new locale from that screen. When you choose the Create New lookup button the Locale Details information displays in a pop-up screen for you to modify.

Figure 2–12 Lookup Icon Example

The information that displays in a lookup field varies depending on how many records you have pertaining to that particular field. When there are 20 or less records, the lookup displays as a drop-down list with a Create New button. When there are between 21 and 75 records, the lookup displays as a drop-down list with a Search button.

When there are more than 75 records, the lookup displays as a text box with a Search button. You can type the value in the text box or search for the value using the Search button. If you enter a value, it is validated when it is saved. You should always type the value as it would appear if it was displayed as a drop-down list. For example, for a currency lookup, you should type the currency description in the text box even though the

currency code is saved in the table. An error displays on save if the user has entered an invalid value.

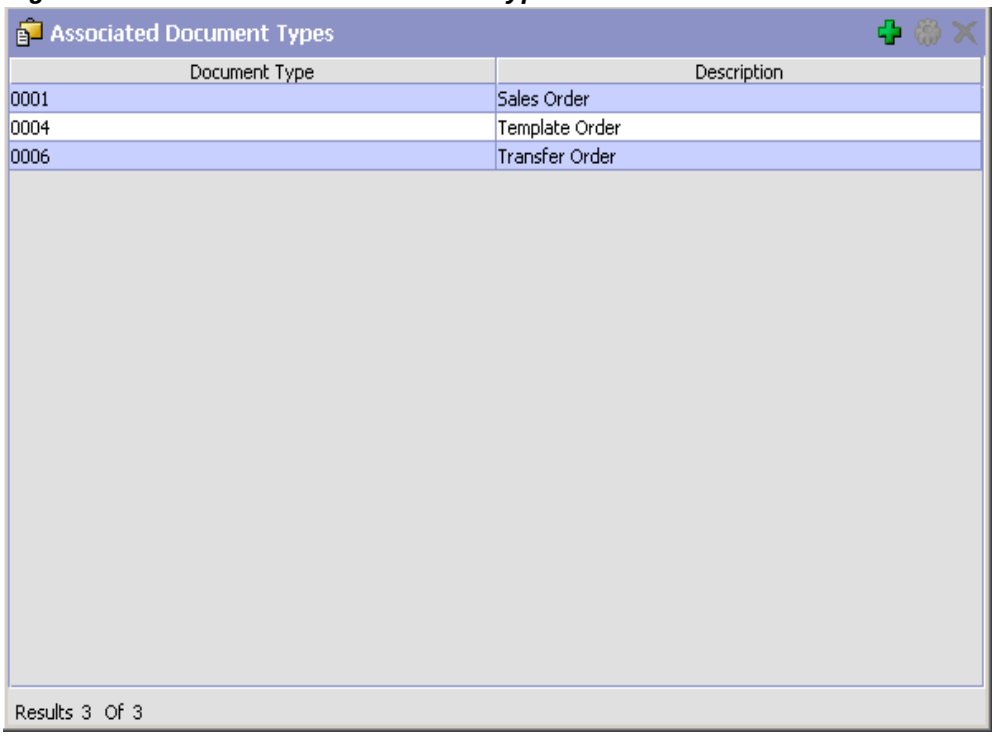
When you use a lookup for a particular field in the Configurator, you should refer to the corresponding section in this guide to set up the particular information.

2.3.2 Viewing the Document Types Associated with an Application

In the Distributed Order Management, Supply Collaboration, Reverse Logistics, and Logistic Management configuration applications, you can view all of the document types associated with the application. Sales Order, Transfer Order, and Purchase Order are all examples of document types.

To view an application's associated document types, open the applicable application from the menu and choose from the application rules side panel. The Associated Document Types window displays displaying a list of all of the document types associated with the application you are working in.

Figure 2–13 Associated Document Types Window



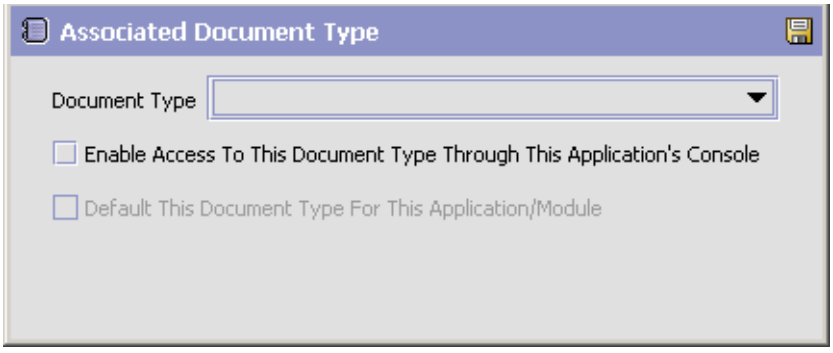
2.3.2.1 Adding a Document Type to an Application

You can add a document type that is associated with another application to the application you are currently working in.

> **Important:** An added document type's associated screens may be irrelevant to the application you are associating it with.

To add a document type to an application:

1. From the Associated Document Types window, choose . The Associated Document Type pop-up window displays.



2. From Document Type, select the document type that you want to associate with the application.
3. Select Enable Access To This Document Through This Applications Console.
4. Choose .

2.3.3 Viewing the User Logged into the Configurator

You can view the user logged into the Configurator and their locale at any time. To view this information, move your mouse over the User icon and Locale icons in the bottom right-hand corner of the application to display the tool tips.

2.3.4 Using Lists and List Filtering

When viewing any list in the Configurator, it is possible to filter the contents of the list based in criteria that you define. Filtering is accomplished by right-clicking anywhere on the list's column headings and using the Table Filter Editor associated with the list.

Figure 2–14 Column Headings in a List

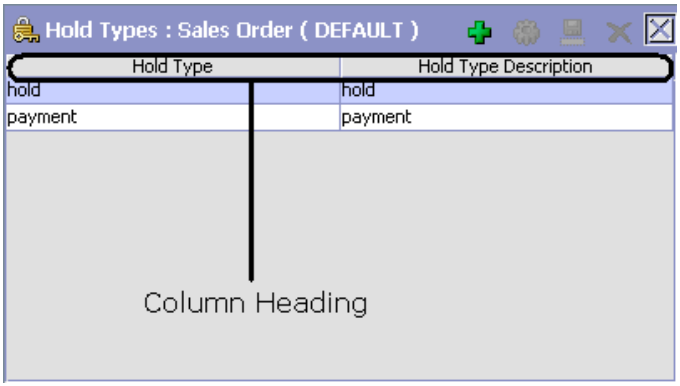


Figure 2–15 Table Filter Editor Window Example

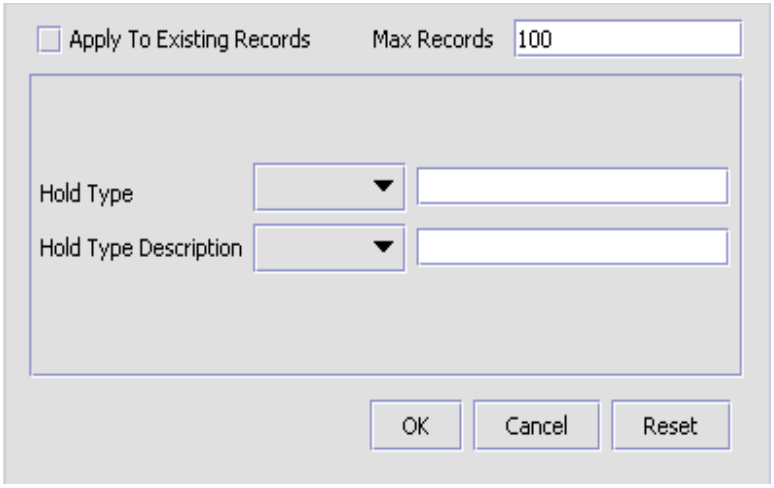


Table 2–2 Table Filter Editor Window

Field	Description
Apply To Existing Records	Checking this box applies a new filter set of results that have been previously filtered instead of the whole set.

Table 2–2 Table Filter Editor Window

Field	Description
Max Records	Specify the maximum number of records that are to be returned from a filter. The default number is 100
Dynamic Fields	Fields such as "Hold Type" and "Hold Type Description" in Figure 2–15 are dynamically populated based on the list you are currently viewing. These fields can be searched using text strings combined with criteria such as **Is**, **Starts With**, or **Contains.**

Important: Search strings are case sensitive. For example, "Item" does not return the same values as "item".

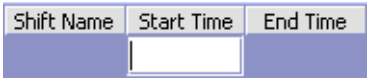
2.3.5 Date and Time Entry

Date fields through the Configurator have a calendar icon that can be used to find dates as it pertains to that field. When you click on this icon, a small calendar displays. You can navigate through this calendar to determine the appropriate date. For example, on the Create Calendar window, the Default Effective To field has a calendar icon that you can use to verify the appropriate ship by date to populate the field.

Figure 2–16 Calendar Icon example

You can also enter time of day information throughout the Configurator. To do this, double click on the time field, and enter the time of day.

Figure 2–17 Time Field example



Time should be entered in a 24 hour time format everywhere throughout the Configurator.

2.3.6 Using On-Line Help

You can access the Sterling Multi-Channel Fulfillment Solution Online Help through Help > Online Help.

2.3.7 Troubleshooting Errors

You can view the description and cause of any error raised in the Sterling Multi-Channel Fulfillment Solution, as well as the actions to troubleshoot it.

To view the Sterling Multi-Channel Fulfillment Solution system error descriptions:

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

2.3.8 Using Special Characters

Throughout the Sterling Multi-Channel Fulfillment Solution Configurator there may be instances where you need to use special characters in data entry. For information about the use of special characters in the Sterling Multi-Channel Fulfillment Solution, see the *Sterling Multi-Channel Fulfillment Solution Customization Guide*.

3

Configuring Inventory Rules

Inventory business rules are used to set up rules and common codes used for product item availability calculations and inventory handling in the Sterling Multi-Channel Fulfillment Solution.

You can access the Inventory Rules window by choosing the Inventory Rules branch from the tree in the application rules side panel.

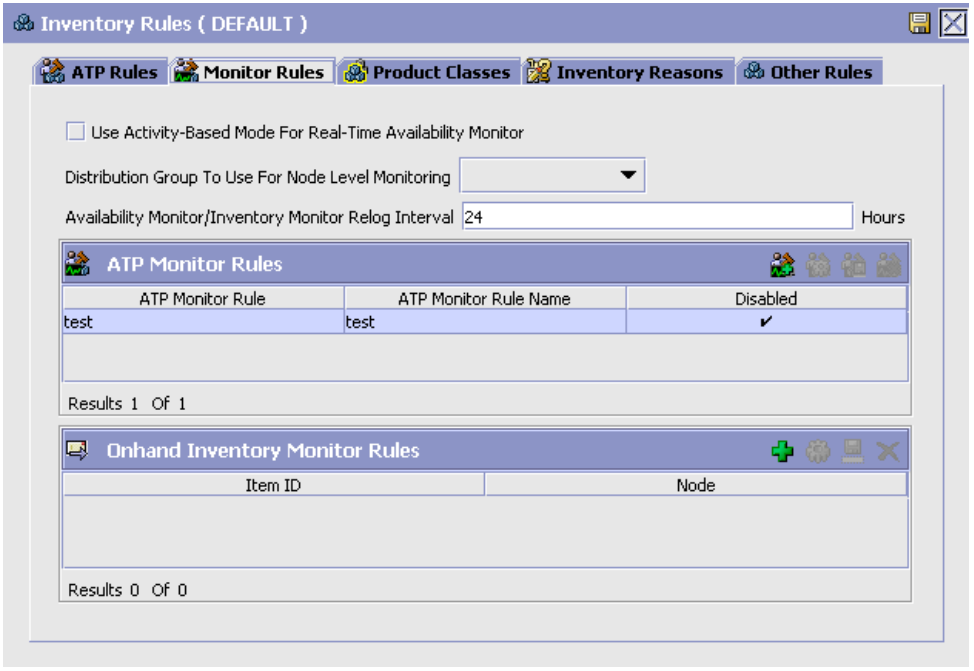


Table 3–1 Inventory Rules Screen, ATP Rules

Fields	
Default ATP Rule	Select the ATP rule you want to default to a catalog item if no ATP rule is specified
Lead Days	Enter the lead days you want to default to a catalog item if no lead days is specified. L**ead days** is the amount of time it takes to procure an item for shipping.
ATP Rules	
ATP Rule	The ATP rule identifier.
ATP Rule Description	The description for the ATP rule.

Table 3–2 Inventory Rules Screen, Monitor Rules

Fields	
Use Activity-Based Mode For Real-Time Availability Monitor	Select this checkbox if you want to use the real-time availability monitor in activity-based mode.
Distribution Group To Use For Node Level Monitoring.	Select a distribution group to use for node level monitoring from the dropdown, if applicable.
Availability Monitor/Inventory Monitor Relog Interval (Hours)	Enter the availability monitor/inventory monitor relog interval, in hours.
ATP Monitor Rules	
ATP Monitor Rule	The ATP monitor rule identifier.
ATP Monitor Rule Name	The ATP monitor rule name.
Disabled	This field indicates whether the ATP monitor rule is disabled.
Onhand Inventory Monitor Rules	
Item ID	The item for this monitor rule.
Node	The node on this monitor rule.

Table 3–3 Inventory Rules Screen, Product Classes

Fields	
Product Class	The product class.
Short Description	The short description for this product class.

Table 3–4 Inventory Rules Screen, Inventory Reasons

Fields	
Inventory Reason	The inventory reason.
Short Description	The short description for this inventory reason.

For more information about the Other Rules tab, see Section 3.5, "Defining Additional Inventory Rules".

You can use the Inventory Rules branch for:

- Defining ATP Rules
- Defining Monitoring Rules
- Defining Product Classes
- Defining Inventory Reasons
- Defining Additional Inventory Rules

3.1 Defining ATP Rules

Available-to-promise (ATP) rules enable you to determine the availability of a product item for current and future demand. This determination makes the most efficient use of inventory so that product items are not set aside for future orders when they could be used to fulfill more immediate demands. The availability of a product item is based on current and future supply, lead days, and ATP configuration. The **lead days** is the amount of time it takes a node to procure a product item for shipping. The **processing time** covers the time it takes for a product item to be received by a supplier and made ready for

shipment (inbound processing) as well as shipping it from the warehouse (outbound processing).

ATP rules enable you to effectively manage orders for product items. Parameters can be set for the amount of time a product item is available for current and future orders. With a First Expiration First Out (FEFO) inventory management system, perishable product items can be sold and shipped well before their expiration dates, ensuring first expired inventory is consumed first.

ATP rules enable you to fulfill current and future customer demand as well as more effectively manage warehouse inventory and processing time for product items.

The Sterling Multi-Channel Fulfillment Solution provides a default ATP rule, called DEFAULT, that is used when no other rule has been defined.

Suggestion: Due to the system-wide impact of creating ATP rules, Sterling Commerce strongly recommends the following:

- **If you are configuring ATP rules for the Hub organization, do not alter the factory default ATP rule. Use this rule as a guideline for setting up new ATP rules.**
- **If you are configuring ATP rules for an Enterprise organization, view the Hub's factory default ATP rule and use it as a guideline when creating new ATP rules.**

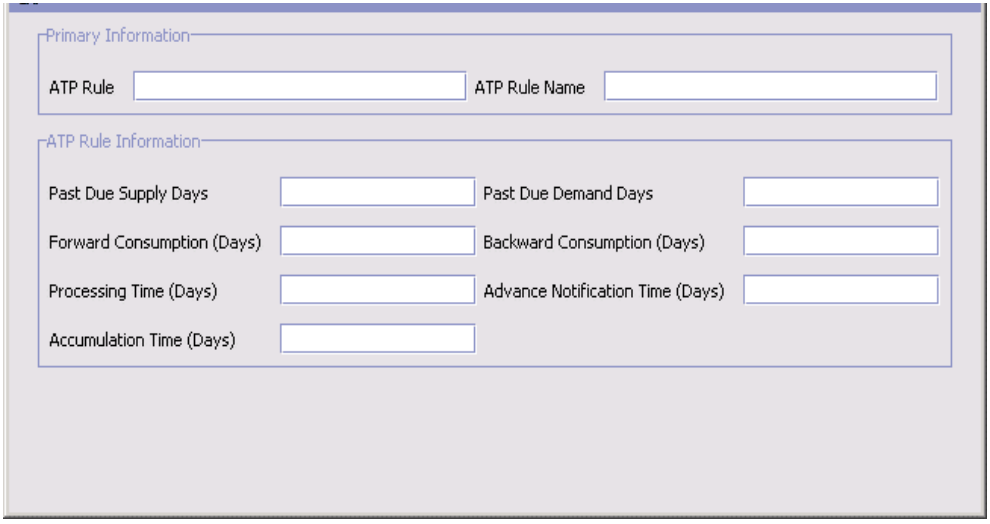
You can use the ATP Rules tab for:

- Creating an ATP Rule
- Modifying an ATP Rule
- Deleting an ATP Rule
- Setting the Default ATP Rule and Default Lead Days

3.1.1 Creating an ATP Rule

To create an ATP rule:

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.
2. Choose the ATP Rules tab.
3. Choose . The ATP Rule Details pop-up window displays.



4. Enter information in the applicable fields. Refer to Table 3–5 for field value descriptions.
5. Choose .

Table 3–5 ATP Rule Details Pop-Up Window

Field	Description
ATP Rule	Enter the ATP rule.
ATP Rule Name	Enter the name of the ATP rule.
ATP Rule Information	

Table 3–5 ATP Rule Details Pop-Up Window

Field	Description
Past Due Supply Days	Enter the number of days after which supply that is not received cannot be considered in ATP calculations. For example, if you do not want to fulfill orders on supplies that are overdue by 2 days, enter 2 as the parameter for Past Due Supply Days. **Note:** Sterling Commerce suggests using a value of ’730’ initially. Evaluate the system's behavior and adjust this value higher or lower as necessary.
Past Due Demand Days	Enter the number of days after which demand for a product item is not considered in the ATP calculation. For example, if demand for a product item is delayed for longer than the requested ship date, you can limit the amount of time this demand can use up available inventory. Any demand that is past due for the number of days specified in this parameter is not included in ATP calculations for demand. **Note:** Sterling Commerce suggests using a value of ’730’ initially. Evaluate the system's behavior and adjust this value higher or lower as necessary.

Table 3–5 ATP Rule Details Pop-Up Window

Field	Description
Forward Consumption (Days)	Enter the number of days future supply can be consumed to fulfill a current demand. **Note:** Sterling Commerce suggests using a value of '730' initially. Evaluate the system's behavior and adjust this value higher or lower as necessary. **Note:** For tag controlled items, if demands are being matched against future inventory (purchase orders), during scheduling of a current order, the ForwardConsumptionDays is not considered. However, during an existing supply and demand reallocation the ForwardConsumptionDays is considered. This may cause a new order (refer to previous note) to be backordered because reallocation of other existing demand considers incoming supply only up to ForwardConsumptionDays. To avoid this, if possible, set the ForwardConsumptionDays in the ATP rule equal to the value defined in the "Maximum no. of days order can be shipped/delivered beyond its requested date" rule. For more information, see the note in Table 3-13 "Scheduling Rule Details" for the "Maximum no. of days order can be shipped/delivered beyond its requested date" field in the *Sterling Distributed Order Management Configuration Guide*.
Backward Consumption (Days)	Enter the number of days to go back and check for available supply for a current demand. Demands are matched against the supply available on the same day. If there is not enough inventory available to fulfill the order that day, you can allow the system to consume inventory that was available several days back. You can determine how far back the system can check for available inventory before looking forward. **Note:** Sterling Commerce suggests using a value of '730' initially. Evaluate the system's behavior and adjust this value higher or lower as necessary.

Table 3–5 ATP Rule Details Pop-Up Window

Field	Description
Processing Time (Days)	Enter the amount of time it takes for inbound and outbound processing of a product item. This should also include special services such as gift wrapping, kit items, and special delivery. For example, if it takes 1 day to receive roses and store them in the warehouse and another 2 days to pick, pack, and ship them, then the processing time is 3 days. This parameter is used by the Schedule time-triggered transaction to determine if an order can be scheduled against expected supply. **Note:** Sterling Commerce recommends using a value of '0' for this field.

Table 3–5 ATP Rule Details Pop-Up Window

Field	Description
Advance Notification Time (Days)	Enter the number of days in advance that a node needs to be notified to prepare an order for shipment. Release date is based on Advanced Notification Time. This is calculated as: <release date> = <requested ship date> - <advanced notification time>. An order is picked up for release if any line has a release date less than or equal to today. All other lines in the order with a ship date less than or equal to the lines satisfying the release date are also scheduled to ensure that they are shipped together. This parameter is used by the Release time-triggered transaction to determine when an order should be released to the ship node. **Note:** Sterling Commerce recommends using a value of '0' for this field.
Accumulation Time (Days)	Enter the number of days for which a supply can be considered available for future demand. This parameter determines whether a currently available supply of a product item can be considered for future order fulfillment. This parameter must be set to less than or equal to the Backward Consumption Days. For example, if a purchase order becomes 'onhand' on 11/1 and this parameter is set to 10 days, the inventory from the purchase order is considered available until 11/11. **Note:** Sterling Commerce suggests using a value of '730' initially. Evaluate the system's behavior and adjust this value higher or lower as necessary.

3.1.2 Modifying an ATP Rule

To modify an ATP rule:

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.
2. Choose the ATP Rules tab.
3. Select the applicable ATP rule and choose . The ATP Rule Details pop-up window displays.

4. Modify information in the applicable fields. Refer to Table 3–7 for field value descriptions.
5. Choose .

3.1.3 Deleting an ATP Rule

To delete an ATP rule:

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.
2. Choose the ATP Rules tab.
3. Select the applicable ATP rule and choose .

3.1.4 Setting the Default ATP Rule and Default Lead Days

To set the default ATP rule and default lead days:

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.
2. Choose the ATP Rules tab.
3. From Default ATP Rule, select the ATP rule you want to default to a catalog item if no ATP rule is specified. For more information about setting an ATP rule for a catalog item, see the *Sterling Product Management Configuration Guide*.
4. In Lead days, enter the lead days you want to default to a catalog item if no lead days is specified. L**ead days** is the amount of time it takes to procure an item for shipping. For more information about setting the lead days for a catalog item, see the *Sterling Product Management Configuration Guide*.
5. Choose .

3.2 Defining Monitoring Rules

ATP Monitoring Rules enable you to define a monitoring system for tracking the inventory availability of an item and raising specific actions or events when the inventory falls below a specified minimum level.

Onhand Inventory Monitor Rules define a monitoring system for tracking inventory changes for a given item and node combination. Each time the

inventory availability of an item for a specific node falls below or above a specified level, an action is raised.

You can therefore define three different monitoring rules in this screen:

- Event Based ATP Monitor Rules, which corresponds to the Real-time Availability Monitor.
- Action Based ATP Monitor Rules, which corresponds to the Availability Monitor.
- Onhand Inventory Monitor Rules, which corresponds to the Inventory Monitor, and is also action based.

3.2.1 Event Based ATP Monitor Rules

The event based ATP monitor rule determines the parameters used to monitor the availability of inventory items. If the available quantity changes between the configured levels, the Real Time Availability Monitor raises the REALTIME_AVAILABILITY_CHANGE event. The Real Time Availability Monitor is a time-triggered transaction that can be found and configured under the General process type.

For more information about configuring transactions, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*. For more information about the real-time availability monitor, see Section A.5.8, "Real-time Availability Monitor".

Note: If several items utilize the same thresholds, Sterling Commerce recommends using the same monitoring rule for all of those items.

You can use the Event Based ATP Monitor Rule inner panel for:

- Creating an Event Based ATP Monitoring Rule
- Modifying an Event Based ATP Monitoring Rule
- Deleting an Event Based ATP Monitoring Rule

3.2.1.1 Creating an Event Based ATP Monitoring Rule

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.
2. Choose the Monitor Rules tab.
3. If you want to be able to run the real-time availability monitor in activity-based mode, check Use Activity-Based Mode for Real-Time Availability Monitor. If this is checked, it is applicable for all monitoring rules, for all items.
4. If you want to specify a distribution group to use, select a distribution group from the Distribution Group to Use For Node Level Monitoring drop-down menu. If this is checked, it is applicable for all monitoring rules, for all items.
5. Choose . The ATP Monitor Rule Details pop-up window displays.
6. Select the Event Based ATP Monitor Rule radio button.
7. Enter information in the applicable fields. Refer to Table 3–6 for field value descriptions.
8. Choose .

Note: Once this rule is created, it is necessary to apply this rule to an item for it to take effect. For more information about defining a product's inventory information, see the *Sterling Product Management Configuration Guide*.

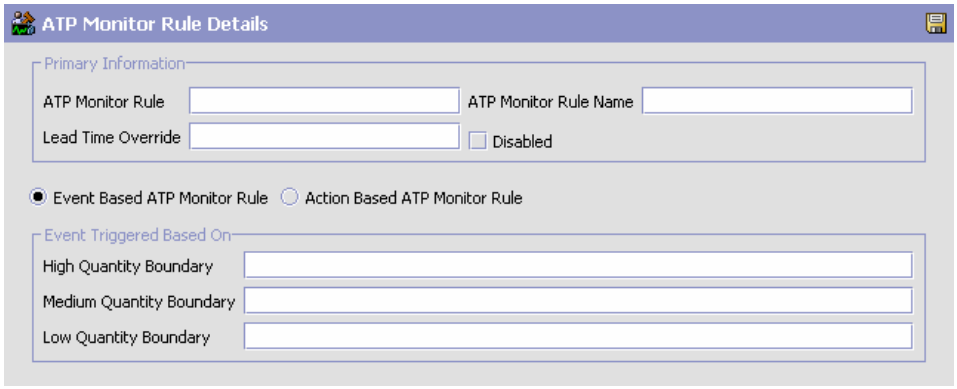


Table 3–6 Event Based ATP Monitor Rule Details Pop-Up Window

Field	Description
ATP Monitor Rule	Enter the ATP monitor rule.
ATP Monitor Rule Name	Enter the name of the ATP monitor rule.
Lead Time Override (Days)	By default, inventory items are monitored from current date to current date plus the inventory item's lead days. If this field is set, the inventory items are monitored from current date to current plus the lead time override (Days).
Disabled	Check this if you want this monitoring rule to be disabled.
Event Triggered Based On	
High Quantity Boundary	Enter the available inventory level above which an inventory item is considered as being in high quantity.

Table 3–6 Event Based ATP Monitor Rule Details Pop-Up Window

Field	Description
Medium Quantity Boundary	Enter the available inventory level above which an inventory item is considered as being in medium quantity.
Low Quantity Boundary	Enter the available inventory level above which an inventory item is considered as being in low quantity.

3.2.1.2 Modifying an Event Based ATP Monitoring Rule

To modify an ATP monitoring rule:

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.
2. Choose the Monitor Rules tab.
3. If you want to be able to run the real-time availability monitor in activity-based mode, check Use Activity-Based Mode for Real-Time Availability Monitor. If this is checked, it is applicable for all monitoring rules, for all items.
4. If you want to be able to run the real-time availability monitor at the node level, check Use Real-Time Availability Monitor at Node Level. If this is checked, it is applicable for all monitoring rules, for all items.
5. If you want to specify a distribution group to use, select a distribution group from the Distribution Group to Use drop-down menu. If this is checked, it is applicable for all monitoring rules, for all items.
6. Select the applicable ATP monitoring rule and choose . The ATP Monitor Rule Details pop-up window displays.
7. Select the Event Based ATP Monitor Rule radio button.
8. Modify information in the applicable fields. Refer to Table 3–6 for field value descriptions.
9. Click .

3.2.1.3 Deleting an Event Based ATP Monitoring Rule

To delete an ATP monitoring rule:

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.

2. Choose the Monitor Rules tab.
3. Select the Event Based ATP Monitor Rule radio button.
4. Select the applicable ATP monitoring rule and click .

3.2.2 Action Based ATP Monitor Rules

The availability of an item can be tracked on the current day, subsequent days within the ATP timeframe, and subsequent days outside the ATP timeframe. This enables you to more accurately order supplies to meet current and future demand.

For more information about configuring transactions, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*. For more information about the availability monitor, see Section A.5.1, "Availability Monitor".

The action based ATP monitor:

- Checks the availability of all product items set up for monitoring.
- Divides the monitoring into lead and post-lead days.
- Establishes and builds an ATP table for availability within and beyond lead days based on planned supplies and actual demand. (Information about available supplies and demand is added until the end of a defined monitoring period.)
- Raises actions for any product items that fall below specified minimum inventory levels. For example, an e-mail can be sent to purchasing or warehouse managers concerning product item shortages so additional supplies can be ordered.

You can use the Action Based Monitor Rules inner panel for:

- Creating an Action Based ATP Monitoring Rule
- Modifying an ATP Monitoring Rule
- Deleting an ATP Monitoring Rule

3.2.2.1 Creating an Action Based ATP Monitoring Rule

To create an action based ATP monitoring rule:

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.

2. Choose the Monitor Rules tab.
3. Click . The ATP Monitor Rule Details pop-up window displays.
4. Select the Action Based ATP Monitor Rule radio button.
5. Enter information in the applicable fields. Refer to Table 3–7 for field value descriptions.
6. Click .

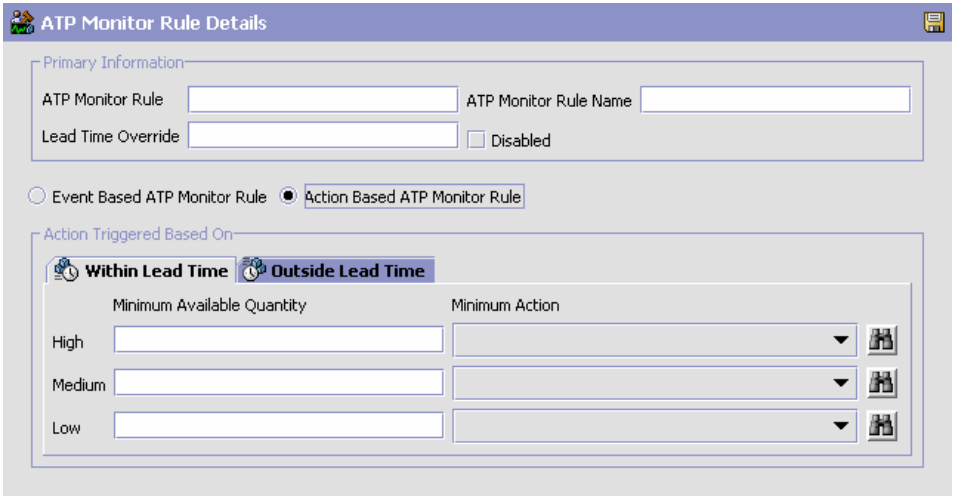


Table 3–7 Action Based ATP Monitor Rule Details Pop-Up Window

Field	Description
ATP Monitor Rule	Enter the ATP monitor rule.
ATP Monitor Rule Name	Enter the name of the ATP monitor rule.
Lead Time Override (Days)	By default, inventory items are monitored from current date to current date plus the inventory item's lead days. If this field is set, the inventory items are monitored from current date to current plus the lead time override (Days).
Disabled	Check this if you want this monitoring rule to be disabled.
Action Triggered Based On	

Table 3–7 Action Based ATP Monitor Rule Details Pop-Up Window

Field	Description
Within Lead Time	Calculated as the following: Today + Lead Days + Processing Time
High Minimum Available Quantity	Enter an amount for the minimum available inventory level within lead days. This defines the number of units which should be available every day within the lead days. If availability is less than this, an action is raised.
High Minimum Action	Select a pre-defined action that is raised if the available inventory level falls below the defined minimum for High.
Medium Minimum Available Quantity	Enter an amount (that is less than High) for the minimum available inventory level within lead days. If availability is less than this, a higher priority action is raised.
Medium Minimum Action	Select a pre-defined action that is raised if the available inventory level falls below the defined minimum for Medium.
Low Minimum Available Quantity	Enter an amount (that is less than Medium) for the minimum available inventory level within lead days. If availability is less than this, a higher priority action is raised.
Low Minimum Action	Select a pre-defined action that is raised if the available inventory level falls below the defined minimum for Low.
Outside Lead Time	Calculated from the end of lead days to (Today + Max Monitoring Days).
High Minimum Available Quantity	Enter an amount for the minimum available inventory level beyond lead days. This defines the number of units that should be available every day beyond the lead days. If an availability is less than this, an action is raised.
High Minimum Action	Select a pre-defined action that is raised if the available inventory level falls below the defined minimum for High.
Medium Minimum Available Quantity	Enter an amount (that is less than High) for the minimum available inventory level beyond lead days. If availability is less than this, an action is raised.

Table 3–7 Action Based ATP Monitor Rule Details Pop-Up Window

Field	Description
Medium Minimum Action	Select a pre-defined action that is raised if the available inventory level falls below the defined minimum for Medium.
Low Minimum Available Quantity	Enter an amount (that is less than Low) for the minimum available inventory level beyond lead days. If availability is less than this, an action is raised.
Low Minimum Action	Select a pre-defined action that is raised if the available inventory level falls below the defined minimum for Low.

3.2.2.2 Modifying an ATP Monitoring Rule

To modify an ATP monitoring rule:

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.
2. Choose the Monitor Rules tab.
3. Select the applicable ATP monitoring rule and click . The ATP Monitor Rule Details pop-up window displays.
4. Modify information in the applicable fields. Refer to Table 3–7 for field value descriptions.
5. Click .

3.2.2.3 Deleting an ATP Monitoring Rule

To delete an ATP monitoring rule:

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.
2. Choose the ATP Monitor Rules tab.
3. Select the applicable ATP monitoring rule and click .

3.2.3 Onhand Inventory Monitor Rules

An onhand inventory monitor rule uses the Inventory Monitor time-triggered transaction, which can be found and configured under the General process type.

For more information about configuring transactions, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*. For more information about the Inventory Monitor, see Section A.5.3, "Inventory Monitor".

You can use the Onhand Inventory Monitor Rules inner panel for:

- Creating an Onhand Inventory Monitor Rule
- Modifying an Onhand Inventory Monitor Rule
- Deleting an Onhand Inventory Monitor Rule

3.2.3.1 Creating an Onhand Inventory Monitor Rule

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.
2. Choose the Monitor Rules tab.
3. In the Onhand Inventory Monitor Rules inner panel, click . The Onhand Inventory Monitor Rule Details pop-up window displays.
4. Enter information in the applicable fields. Refer to Table 3–8 for field value descriptions.
5. Click .

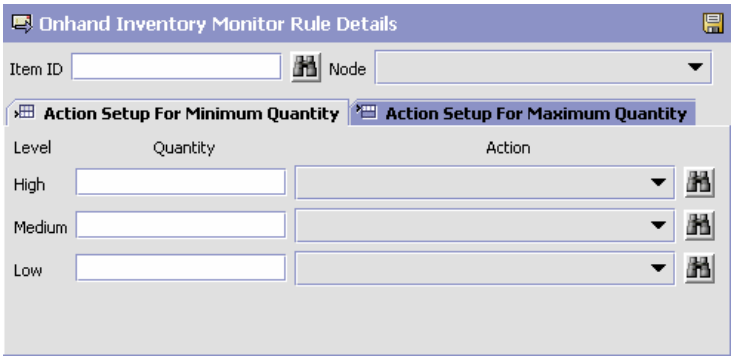


Table 3–8 Onhand Inventory Monitor Rule Details fields

Field	Description
Item ID	The ID of the inventory item that is being monitored.
Node	From the drop-down list, select the node that stores the inventory item.
Action Setup for Minimum Quantity	
High Quantity	The high quantity, below which the inventory monitor raises the associated action.
Medium Quantity	The medium quantity, below which the inventory monitor raises the associated action.
Low Quantity	The low quantity, below which the inventory monitor raises the associated action.
Action	Select a pre-defined action that is raised whenever the available quantity falls below the specified quantity.
Action Setup for Maximum Quantity	
High Quantity	The high quantity above which the inventory monitor raises the associated action.
Medium Quantity	The medium quantity, above which the inventory monitor raises the associated action.
Low Quantity	The low quantity, above which the inventory raises the associated action.
Action	Select a pre-defined action that is raised whenever the available quantity rises below the specified quantity.

3.2.3.2 Modifying an Onhand Inventory Monitor Rule

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.
2. Choose the Monitor Rules tab.
3. In the Onhand Inventory Monitor Rules inner panel, select the appropriate and click . The Onhand Inventory Monitor Rule Details pop-up window displays.
4. Enter information in the applicable fields. Refer to Table 3–8 for field value descriptions.
5. Click .

3.2.3.3 Deleting an Onhand Inventory Monitor Rule

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.
2. Choose the Monitor Rules tab.
3. In the Onhand Inventory Monitor Rules inner panel, select the appropriate rule and click .

3.3 Defining Product Classes

You can define common codes used when indicating a product class in the Inventory Console. The **product class** is a product item's classification, such as first quality, second quality, or finished good.

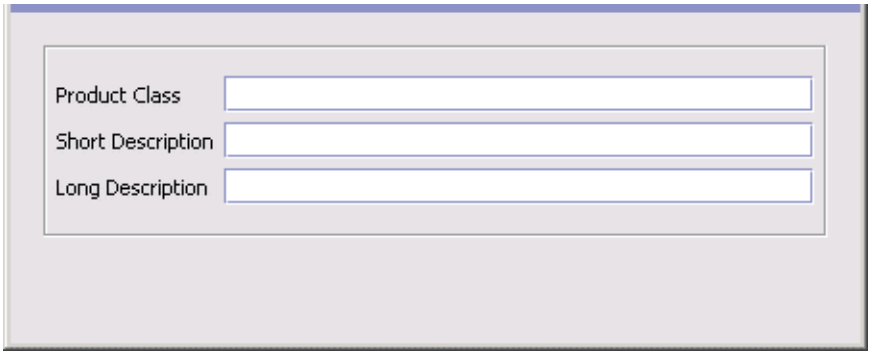
You can use the Product Classes tab for:

- Creating a Product Class
- Modifying a Product Class
- Deleting a Product Class

3.3.1 Creating a Product Class

To create a product class:

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.
2. Choose the Product Classes tab.
3. Choose . The Product Class Details pop-up window displays.



4. In Product Class, enter the product class.
5. In Short Description, enter a brief description of the product class.
6. In Long Description, enter a more detailed description of the product class.
7. Choose .

3.3.2 Modifying a Product Class

To modify a product class:

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.
2. Choose the Product Classes tab.
3. Select the applicable product class and choose . The Product Class Details pop-up window displays.
4. In Short Description, enter a brief description of the product class.
5. In Long Description, enter a more detailed description of the product class.
6. Choose .

3.3.3 Deleting a Product Class

To delete a product class:

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.
2. Choose the Product Classes tab.
3. Select the applicable product class and choose .

3.4 Defining Inventory Reasons

You can define common codes used to identify reasons for performing a modification in the Inventory Console.

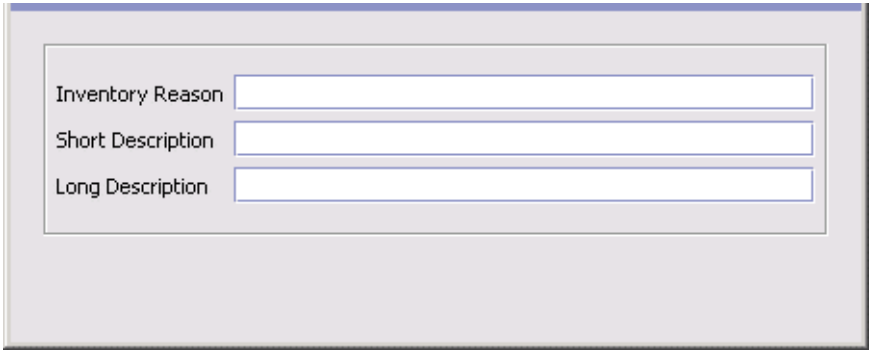
You can use the Inventory Reasons tab for:

- Creating an Inventory Reason
- Modifying an Inventory Reason
- Deleting an Inventory Reason

3.4.1 Creating an Inventory Reason

To create an inventory reason:

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.
2. Choose the Inventory Reasons tab.
3. Choose . The Inventory Reason Details pop-up window displays.



4. In Inventory Reason, enter the inventory reason.

5. In Short Description, enter a brief description of the inventory reason.
6. In Long Description, enter a more detailed description of the inventory reason.
7. Choose .

3.4.2 Modifying an Inventory Reason

To modify an inventory reason:

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.
2. Choose the Inventory Reasons tab.
3. Select the applicable inventory reason and choose . The Inventory Reason Details pop-up window displays.
4. In Short Description, enter a brief description of the inventory reason.
5. In Long Description, enter a more detailed description of the inventory reason.
6. Choose .

3.4.3 Deleting an Inventory Reason

To delete an inventory reason:

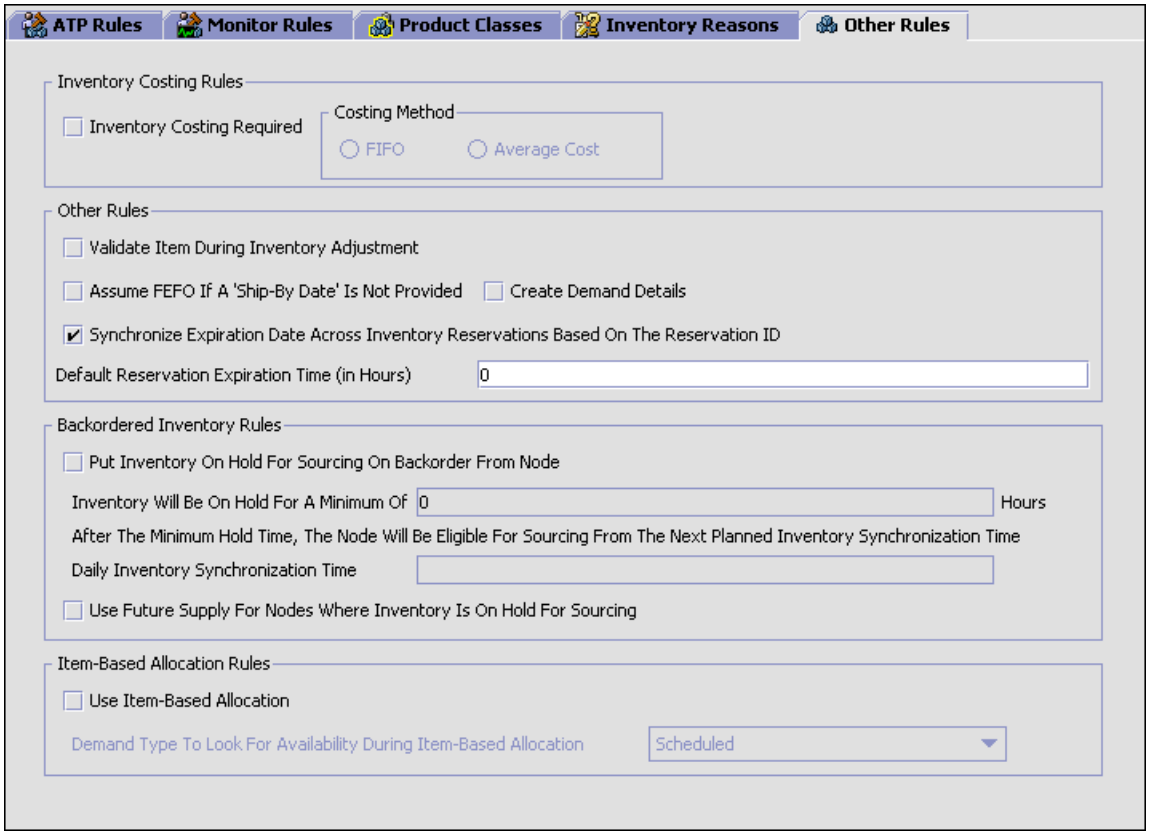
1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.
2. Choose the Inventory Reasons tab.
3. Select the applicable inventory reason and choose .

3.5 Defining Additional Inventory Rules

You can define additional rules that pertain to the Sterling Multi-Channel Fulfillment Solution inventory handling functionality.

To set up additional inventory rules:

1. From the tree in the application rules side panel, choose Inventory Rules. The Inventory Rules window displays in the work area.
2. Choose the Other Rules tab.



3. Enter information in the applicable fields. Refer to Table 3–9 for field value descriptions.
4. Choose .

Table 3–9 Other Rules Tab

Field	Description
Inventory Costing Rules	
Inventory Costing Required	Select this field if inventory costing is necessary. When inventory costing is used, you must select a Costing Method.
Costing Method	

Table 3–9 Other Rules Tab

Field	Description
FIFO	Select this inventory costing method if you calculate inventory costs using a First In First Out (FIFO) algorithm. If you select this costing method, you must also specify a Sales Cost Level.
Average Cost	Select this inventory costing method if you calculate inventory costs using an average item cost algorithm. If you select this costing method, you must also specify a Standard Cost Computation Rule.
Other Rules	
Validate Item During Inventory Adjustment	Check this box if you want the item to be validated against the catalog during inventory adjustments.
Assume FEFO if A 'Ship-By Date' Is Not Provided	Check this box to ship all perishable items on a First Expired First Out (FEFO) basis, if the ship date is not provided for the items. If you uncheck this box, all perishable items for which the ship date is not provided are not shipped on the FEFO basis.
Create Demand Details	Check this box to enable recording of the inventory demand details whenever a demand is created in the Sterling Multi-Channel Fulfillment Solution. You can view the demand details in the Inventory Console. **Important:** If you have implemented either the EXTERNAL_DEMAND_CHANGE event or the DEMAND_CHANGE event to be raised when inventory changes, then Sterling Commerce recommends to check this box. **Warning:** If you check this box, it affects the overall performance of the entire system due to the large amount of data that can be potentially recorded.
Synchronize Expiration Date Across Inventory Reservations Based On The Reservation ID	Check this box to synchronize the expiration date across inventory reservations based on the reservation identifier.

Table 3–9 Other Rules Tab

Field	Description
Default Reservation Expiration Time (in Hours)	Enter the number of hours after which you want the reservation to expire. This affects only those reservations for which the expiration date is not specified when creating the reservation.
Backordered Inventory Rules	
Put Inventory On Hold For Sourcing On Backorder From Node	Select this field if you want the system to put inventory on hold for sourcing when an item that is released to a node is backordered. This functionality is to prevent inventory from being scheduled to nodes that are providing an incorrect inventory picture. When a node is on hold for sourcing it is ignored when scheduling algorithms are run.
Inventory Will Be On Hold For A Minimum Of <number of hours> Hours	If you select the Put Inventory On Hold For Sourcing On Backorder From Node option, enter the time (in hours) that nodes are placed on hold for sourcing. **Note:** If the issue that caused the discrepancy in the inventory picture is resolved before this minimum time has passed, the node can be manually released from the sourcing hold through the Application Consoles.
After The Minimum Hold Time, The Node Will Be Eligible For Sourcing From The Next Planned Inventory Synchronization Time Daily Inventory Synchronization Time	Enter the time (in your organization's time format) at which daily inventory synchronization occurs. Once the node has been on hold for the minimum hold time, it is made available at the next Daily Inventory Synchronization Time. **Note:** If the issue that caused the discrepancy in the inventory picture is resolved before the Daily Inventory Synchronization Time has been reached, the node can manually be released from sourcing hold through the Application Consoles.
Use Future Supply For Nodes Where Inventory Is On Hold For Sourcing.	Select this option to allow the use of a future supply for nodes where inventory is on hold for sourcing.
Item Based Allocation Rules	

Table 3–9 Other Rules Tab

Field	Description
Use Item Based Allocation	Check this box to enable item-based allocation. Item-based allocation is applicable for the items and nodes which have the 'Item Based Allocation Allowed' attribute enabled. For more information about item-based allocation, see the *Sterling Multi-Channel Fulfillment Solution Product Concepts*.
Demand Type To Look For Availability During Item Based Allocation	From the drop-down list, select the demand type to be used for obtaining availability during the item-based allocation process.

4

Configuring Inventory Types and Considerations

You can use the Inventory Types and Considerations branch for:

- Defining Supply Types, Demands Type, and Considerations
- Inventory Availability Safety Factor

4.1 Defining Supply Types, Demands Type, and Considerations

Use Supply Types, Demand Types, and Considerations for:

- Defining Inventory Considerations
- Defining Inventory Supply Types
- Defining Inventory Demand Types

4.1.1 Defining Inventory Considerations

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

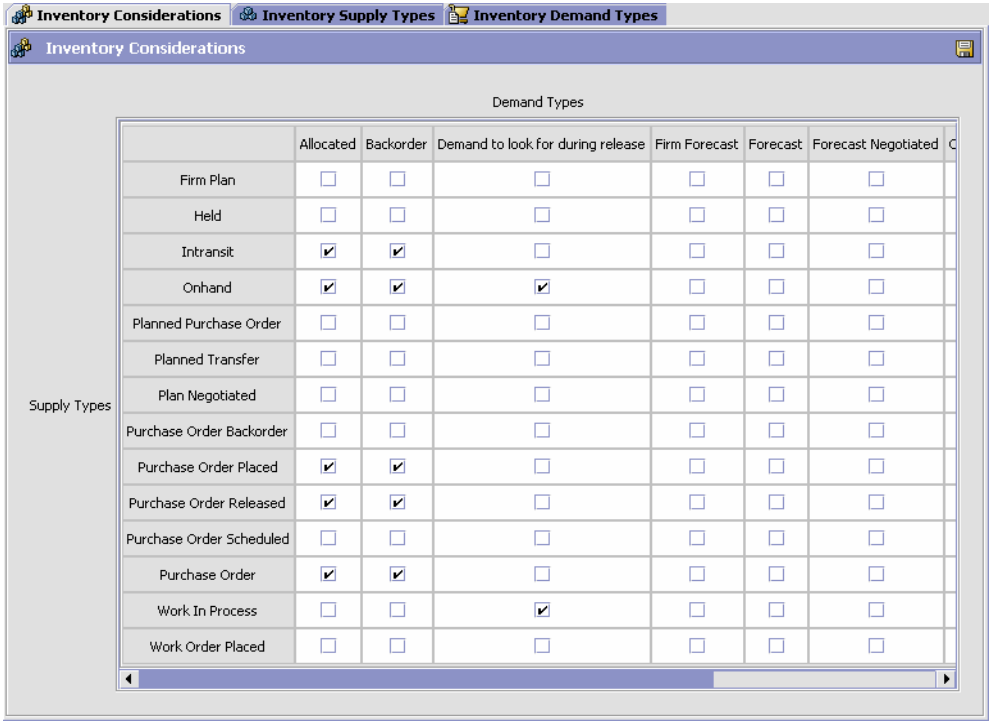
For example, you can configure a Scheduled demand type to check for availability against Onhand supply and Purchase Order supply. You can also configure an Allocated demand type to check for availability against only Onhand supply. With this configuration, scheduled inventory demands check for inventory that is both physically available and available in the future, while allocated inventory demands only check for inventory that is physically available.

Note: Unassigned demands are mapped to a supply using the demand owner's default Distribution Rule. If you do not configure the default Distribution Rule, the APIs may return results as AVAILABLE, causing orders to get accepted even though they cannot be actually sourced.

Note: When considering supply types and demand types used by particular nodes, note that the supply types at a ship node marked as INFINITE are considered to be ONHAND. Therefore, ONHAND supply types must be mapped to particular demand types, otherwise, orders for the node are backordered when availability calculations are made for the demand type.

To define inventory considerations:

1. From the tree in the application rules side panel, choose Inventory Types and Considerations > Supply Types, Demand Types, and Considerations. The Inventory Types and Considerations window displays in the work area.
2. Choose the Inventory Considerations tab.



3. From the Demand Types columns, select the check boxes of the supply types you want to be considered when inventory availability is performed for that demand type.
4. Choose .

4.1.2 Defining Inventory Supply Types

You can define parameters for the supply types used when maintaining inventory in the Sterling Multi-Channel Fulfillment Solution.

You can use the Inventory Supply Types tab for:

- Creating an Inventory Supply Type
- Modifying an Inventory Supply Type
- Deleting an Inventory Supply Type

4.1.2.1 Creating an Inventory Supply Type

To create an inventory supply type:

1. From the tree in the application rules side panel, choose Inventory Types and Considerations > Supply Types, Demand Types, and Considerations. The Inventory Types and Considerations window displays in the work area.
2. Choose the Inventory Supply Types tab.
3. From the Inventory Supply Types table, choose . The Inventory Supply Type Details pop-up window displays.
4. Enter information in the applicable fields. Refer to Table 4–1 for field value descriptions.
5. Choose .

Figure 4–1 Inventory Supply Type Details

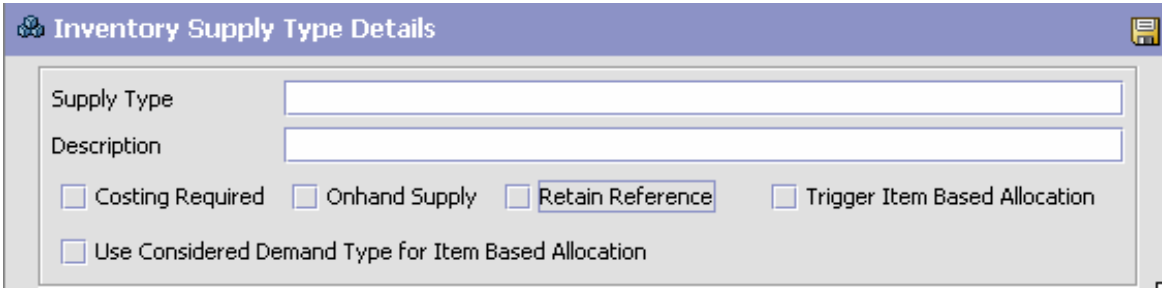


Table 4–1 Inventory Supply Type Details Pop-up Window

Field	Description
Supply Type	Enter the name of the new supply type. **Important:** The supply type you enter here is the code that is passed and returned by the Sterling Multi-Channel Fulfillment Solution APIs. It is also the code that displays in the Inventory Console of the Sterling Multi-Channel Fulfillment Solution user interface.
Description	Enter a brief description of the new supply type. **Important:** The description you enter here is how this supply type is represented displays throughout the Configurator.
Costing Required	Select this field if you want costing data to be generated for inventory in this supply type.
Onhand Supply	Select this field if the supply type indicates that supply is physically available at a node. **Note:** Only supply types identified as Onhand are considered for inventory audits.
Retain Reference	Select this field to record references along with the supply record.
Trigger Item Based Allocation	Check this box to enable the triggering of item-based allocation when changes occur with this supply type. This is applicable for non on-hand supply types only.
Use Considered Demand Type for Item Based Allocation	Check this box to indicate that the demand with demand types, that consider this supply type, should be considered for item-based allocation.

4.1.2.2 Modifying an Inventory Supply Type

To modify an inventory supply type:

1. From the tree in the application rules side panel, choose Inventory Types and Considerations > Supply Types, Demand Types, and Considerations. The Inventory Types and Considerations window displays in the work area.
2. Choose the Inventory Supply Types tab.

3. From the Inventory Supply Types table, locate the applicable inventory supply type and choose . The Inventory Supply Type Details pop-up window displays.
4. Enter information in the applicable fields. Refer to Table 4–1 for field value descriptions.
5. Choose .

4.1.2.3 Deleting an Inventory Supply Type

To delete an inventory supply type:

1. From the tree in the application rules side panel, choose Inventory Types and Considerations > Supply Types, Demand Types, and Considerations. The Inventory Types and Considerations window displays in the work area.
2. Choose the Inventory Supply Types tab.
3. From the Inventory Supply Types table, locate the applicable inventory supply type and choose .

4.1.3 Defining Inventory Demand Types

You can define parameters for the demand types used when maintaining inventory in the Sterling Multi-Channel Fulfillment Solution.

> **Note:** If you create a custom demand type and want the availability picture displayed in the Inventory Console to be for the custom demand type, you need to extend the user interface and pass the demand type to the getATP API call.

You can use the Inventory Demand Types tab for:

- Creating an Inventory Demand Type
- Modifying an Inventory Demand Type
- Deleting an Inventory Demand Type

4.1.3.1 Creating an Inventory Demand Type

To create an inventory demand type:

1. From the tree in the application rules side panel, choose Inventory Types and Considerations > Supply Types, Demand Types, and Considerations. The Inventory Types and Considerations window displays in the work area.
2. Choose the Inventory Demand Types tab.
3. From the Inventory Demand Types table, choose . The Inventory Demand Type Details pop-up window displays.
4. Enter information in the applicable fields. Refer to Table 4–2 for field value descriptions.
5. Choose .

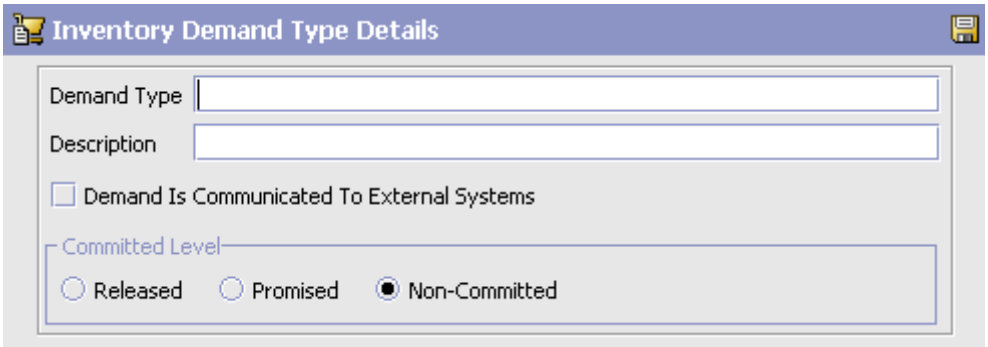


Table 4–2 Inventory Demand Type Details Pop-up Window

Field	Description
Demand Type	Enter the name of the demand type. **Important:** The demand type you enter here is the code that is passed and returned by the Sterling Multi-Channel Fulfillment Solution APIs. It is also the code that displays in the Inventory Console.
Description	Enter a brief description of the demand type. **Important:** The description you enter here is how this demand type is represented throughout the Configurator.
Demand Is Communicated To External Systems	Select this field to indicate that demands of this type are communicated to an external system for use in availability computations.
Committed Level	

Table 4–2 Inventory Demand Type Details Pop-up Window

Field	Description
Released	Select this option if the demand type represents a demand that has been scheduled and released.
Promised	Select this option if the demand type represents reservations created without orders.
Non-Committed	Select this option if the demand type represents demands that are not yet reserved or assigned to a specific node.

4.1.3.2 Modifying an Inventory Demand Type

To modify an inventory demand type:

1. From the tree in the application rules side panel, choose Inventory Types and Considerations > Supply Types, Demand Types, and Considerations. The Inventory Types and Considerations window displays in the work area.
2. Choose the Inventory Demand Types tab.
3. From the Inventory Demand Types table, locate the applicable inventory demand type and choose . The Inventory Demand Type Details pop-up window displays.
4. Enter information in the applicable fields. Refer to Table 4–2 for field value descriptions.
5. Choose .

4.1.3.3 Deleting an Inventory Demand Type

To modify an inventory demand type:

1. From the tree in the application rules side panel, choose Inventory Types and Considerations > Supply Types, Demand Types, and Considerations. The Inventory Types and Considerations window displays in the work area.
2. Choose the Inventory Demand Types tab.
3. From the Inventory Demand Types table, locate the applicable inventory demand type and choose .

4.2 Inventory Availability Safety Factor

The Sterling Multi-Channel Fulfillment Solution enables you to define an inventory availability safety factor, that indicates what percentage of current or future inventory should be excluded during order promising.

For example, you may consider that your Planned Purchase Order supply is less reliable than your In Transit supply for order promising. Therefore, you may want to exclude 60% of the Planned Purchase Order supply type when promising, as opposed to 10% of the In Transit supply type.

By default, fractional quantities are not truncated. That functionality can be turned off by modifying the yfs.install.displaydoublequantity property in the <INSTALL_DIR>/properties/customer_overrides.properties file. For additional information about modifying properties and the customer_overrides.properties file, see the *Sterling Multi-Channel Fulfillment Solution Installation Guide*.

The behavior is as follows:

- If the property is set to Y, the fractional quantity is used after applying the percentage. This is the default behavior.
- If the property is set to N, the fractional quantity is truncated to the nearest lower integer after applying the percentage. For example, if a purchase order is placed with a quantity of 10, and the inventory availability safety factor percentage of the PO_PLACED supply type is set to 25%, a quantity of 7 would be available to fulfill future demand, as opposed to 7.5.

To modify, enable, or disable the inventory availability safety factor:

1. From the tree in the application rules side panel, choose Inventory Types in Considerations > Inventory Availability Safety Factor. The Inventory Availability Safety Factor window displays in the work area. Refer to Table 4–3 for field descriptions.

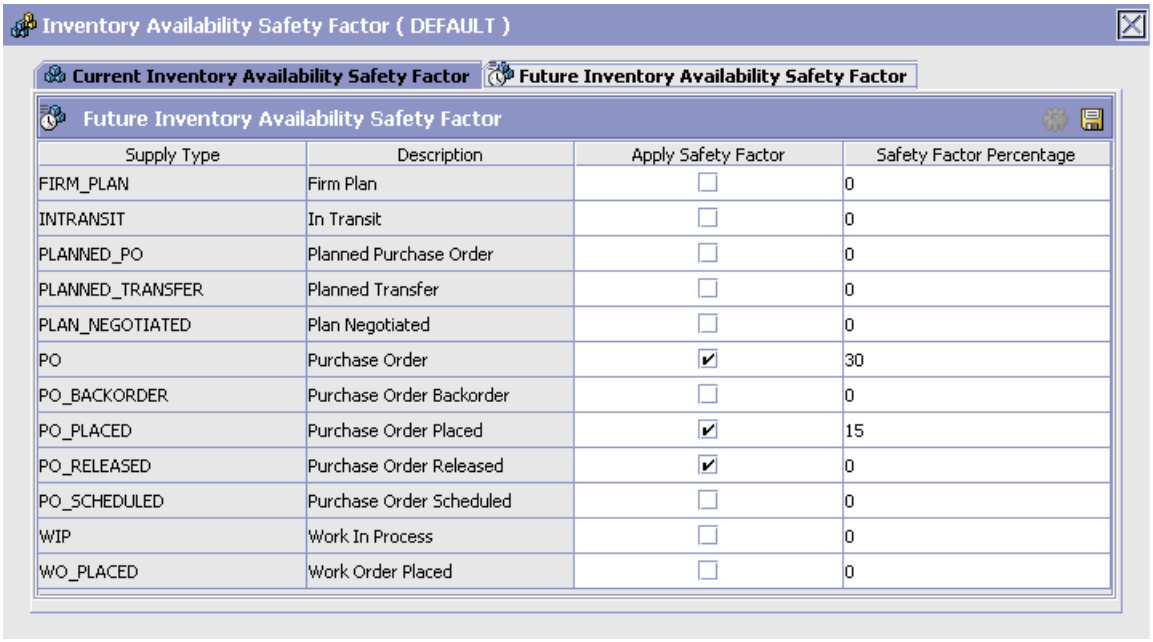


Table 4–3 Inventory Availability Safety Factor Window

Field	Description
Supply Type	The name of the supply type.
Description	The description of the supply type.
Apply Safety Factor	Check this if you want to exclude the specified safety factor percentage during order promising for this supply type. **Note:** For safety factors to apply, this flag must also be checked for the node type and scheduling rule. For more information, refer to Chapter 7, "Configuring Inventory Node Type Rules", and the *Sterling Distributed Order Management Configuration Guide*.
Safety Factor Percentage	The percentage you want to exclude during order promising for this supply type.

2. To modify current inventory availability safety factors, select the Current Inventory Availability Safety Factor tab. To modify future

inventory availability safety factors, select the Future Inventory Availability Safety Factor tab.

3. To modify the Safety Factor Percentage, double-click the desired percentage and enter a new value, between 0 and 100.

> **Note:** The Safety Factor Percentage indicates the percentage to **exclude** during order promising.

4. To enable or disable the safety factor, check or uncheck the desired Apply Safety Factor checkbox.
5. Click .

> **Note:** A Safety Factor Percentage or Quantity specified for an individual item overrides values specified for a supply type. For more information about defining inventory information for product items, see the *Sterling Product Management Configuration Guide*

5

Configuring Cost Factor Groups

When implementing inventory costing, cost factors can be applied to inventory to determine a derived cost. The cost factors can vary for different Enterprise or Seller organizations based on vendor preference, transaction type, and so forth. You define a cost factor group to represent a set of cost factors that are applied for a specific organization's needs.

You define inventory cost factor groups at the Enterprise level. In general, each Enterprise should specify the cost factor group to be used for the following purposes when determining the derived cost:

- Landed Cost Determination
- Standard Cost Determination
- Work in Process Handling

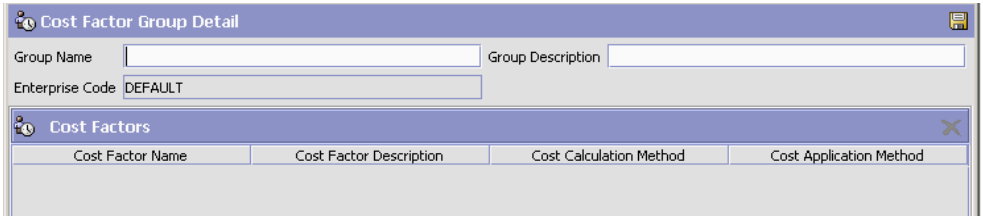
Enterprises should also specify the cost factor group to be used for the following purposes for each Seller organization:

- Landed Cost Determination
- Standard Cost Determination

Enterprises should also specify the cost factor group to be used for Work in Process Handling at the item level for each physical kit component item.

5.1 Defining Inventory Cost Factor Groups

1. From the tree in the application rules side panel, choose Cost Factor Groups. The Cost Factor Groups window displays in the work area.
2. Choose . The Cost Factor Group Detail window displays.

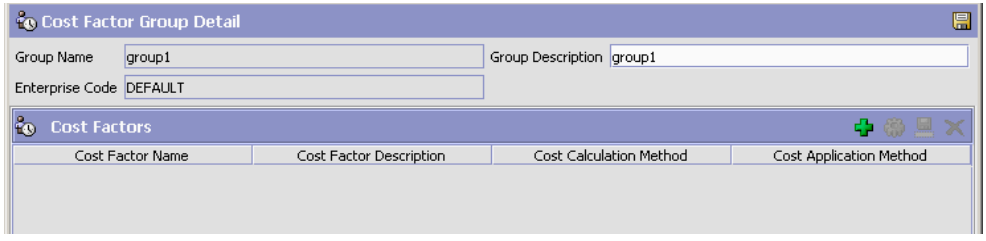


3. In Group Name, enter the name you want to use to reference this specific set of cost factors.
4. In Group Description, enter a brief description of this set of cost factors.
5. Choose .
6. The newly created cost factor group name now displays in the Cost Factor Group list window.

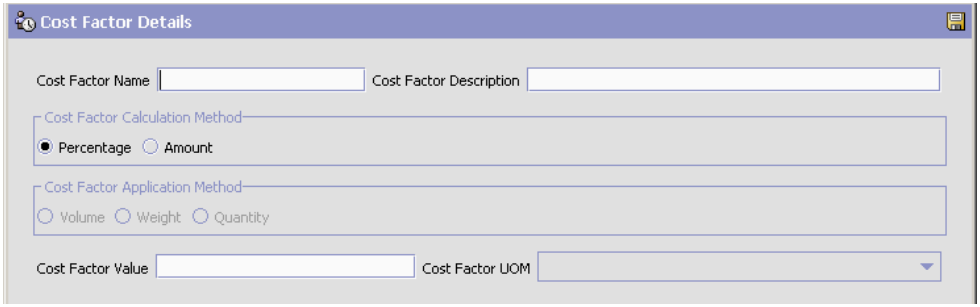
5.2 Associating Cost Factors with a Cost Factor Group

1. In the Cost Factor Group list window, double-click on the cost factor group for which you want to define cost factors.

The Cost Factor Group Detail window displays with the Create New icon enabled in the Cost Factors panel.



2. Choose . The Cost Factors Details window displays.



3. Enter information in the applicable fields. Refer to Table 5–1 for field value descriptions.
4. Choose .

Table 5–1 Cost Factor Details Window

Field	Description
Cost Factor Name	Enter a unique name for this cost factor.
Cost Factor Description	Enter a brief description of this cost factor.
Cost Factor Value	Specify the actual value used by this cost factor; percentage or amount.
Cost Factor Calculation Method	
Percentage	Select this option if this cost factor is calculated using a specific percentage.
Amount	Select this option if this cost factor is calculated using a specific amount. **Note:** For physical kits this applies to the parent item.
Cost Factor Application Method (for Amount cost factor calculation method only)	

Table 5–1 Cost Factor Details Window

Field	Description
Volume	Select this option if you want the amount cost factor calculation to be based on the inventory item's volume. An item's volume is calculated as height * width * length. You must then select the applicable unit of measure from the Cost Factor UOM drop-down list. **Note:** While configuring dimension UOMs, be sure to configure the equivalent Volume UOM. For more information about defining the equivalent volume UOM, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.
Weight	Select this option if you want the amount cost factor calculation to be based on the inventory item's weight. You must then select the applicable unit of measure from the Cost Factor UOM drop-down list.
Quantity	Select this option if you want the amount cost factor calculation to be based on the quantity of the inventory item. You must then select the applicable unit of measure from the Cost Factor UOM drop-down list. **Note:** The non-applicable UOMs are ignored during cost factor calculation.
Cost Factor UOM	Select the unit of measure that is applicable to the Cost Factor Application Method that you selected.

6

Configuring Product Item Specific Distribution Groups

You can create a set of nodes/external organizations that can be used when determining product item sourcing. You can define distribution rules that establish the ship node determination process within the distribution group. The rules determine the default node that an item should be sourced from within a group based on priority. You can create rules for individual product items at a source node or for the entire source node.

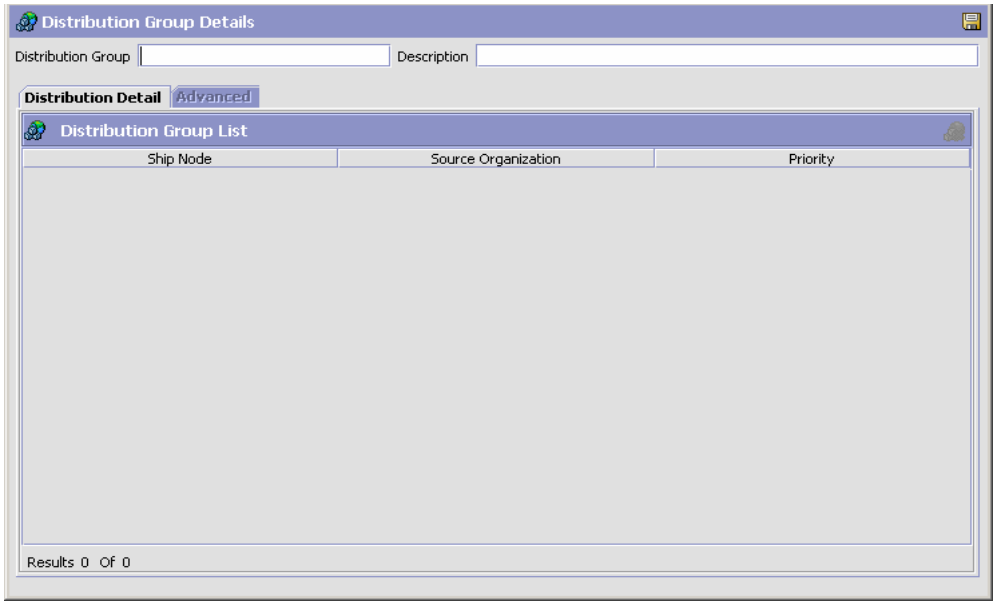
You can use the Product Sourcing Distribution Group branch for:

- Creating a Distribution Group
- Deleting a Distribution Group

6.1 Creating a Distribution Group

To create a distribution group:

1. From the tree in the application rules side panel, choose Product Sourcing Distribution Group. The Product Sourcing Distribution Groups window displays in the work area.
2. Choose . The Distribution Group Detail window displays.



3. In Distribution Group, enter the name of the distribution group.
4. In Description, enter a brief description of the distribution rule.
5. Choose .

You can use the Distribution Group Details window for:

- Adding Nodes/External Organizations to a Distribution Group
- Modifying a Distribution Group's Node/External Organization
- Deleting a Distribution Group's Node/External Organization
- Adding Advanced Distribution Details to a Distribution Group (For Backward Compatibility Only)
- Deleting Advanced Distribution Details

6.1.1 Adding Nodes/External Organizations to a Distribution Group

To add a node/external organization to a distribution group:

1. In the Distribution Group Details window, choose . The Distribution Details pop-up window displays.
2. Enter information into the applicable fields. Refer to Table 6–1 for field value descriptions.
3. Choose .

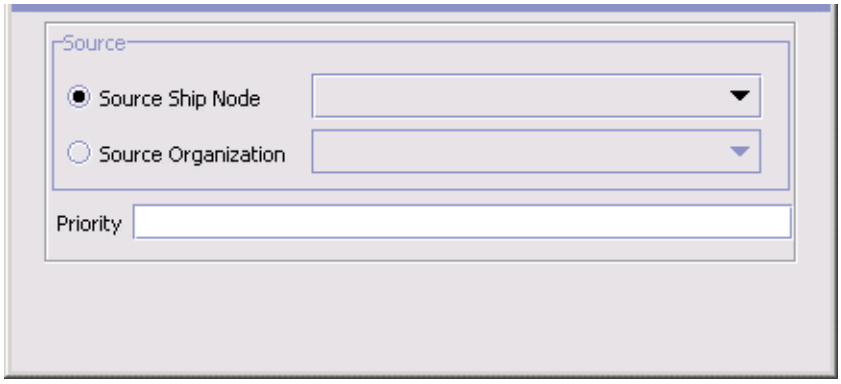


Table 6–1 Distribution Details Window

Field	Description
Source	
Source Ship Node	Select Source Ship Node and select the applicable node if you want to add a node within your organization to the distribution group.
Source Organization	Select Source Organization and select the applicable organization if you want to add an external organization to the distribution group.
Priority	Enter the node/external organization's priority within the distribution group. **Note:** Priority is not unique to a distribution group, therefore more than one distribution group can have the same priority.

Note: If you adding nodes or external organizations to a distribution group, do not use the advanced tab. Use sourcing rules instead. For more information about configuring sourcing rules, see the *Sterling Distributed Order Management Configuration Guide*.

6.1.2 Modifying a Distribution Group's Node/External Organization

To modify a distribution group's node/external organization:

1. In the Distribution Rule Details window, choose the Distribution Detail tab.
2. Select the applicable distribution detail and choose . The Distribution Details pop-up window displays.
3. Enter information into the applicable fields. Refer to Table 6–1 for field value descriptions.
4. Choose .

6.1.3 Deleting a Distribution Group's Node/External Organization

To delete a distribution group's node/external organization:

1. In the Distribution Rule Details window, choose the Distribution Detail tab.
2. Select the applicable distribution detail and choose .

6.1.4 Adding Advanced Distribution Details to a Distribution Group (For Backward Compatibility Only)

You can add specific details, such as sourcing information, and assign them a date range through which they are effective.

Important: Sterling Commerce strongly recommends the use of sourcing rules instead of advanced distribution groups. This feature is provided for backward compatibility purposes only.

Note: If setting up advanced distribution rules, do not use the base distribution rules under the distribution detail tab.

To add advanced distribution details to a distribution rule:

1. In the Distribution Group Details window, choose the Advanced tab.
2. From the Distribution table, choose . The Distribution Details pop-up window displays.
3. Enter information in the applicable fields. Refer to Table 6–2 for field value descriptions.
4. Choose .

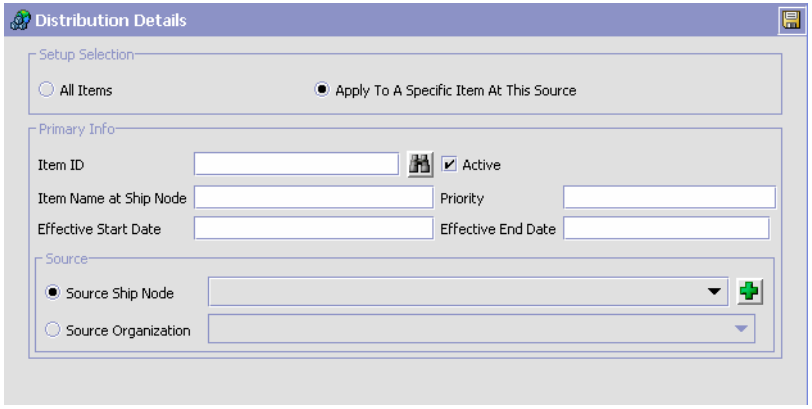


Table 6–2 Advanced Distribution Details window

Field	Description
All Items	Select this option to apply the distribution rule to all of the items in the node you are setting the rule up for.
Apply To Specific Item At This Source	Select this option to apply the distribution rule to a specific item in the node or organization you are setting the rule up for.
Primary Info	
Item ID	If you selected Apply To Specific Item At This Source, enter the item ID for which you are creating the Distribution Rule.
Active	Check Active if the distribution rules are active.
Item Name at Node	If you selected Apply To Specific Item At This Source, enter the node's name for the item. The distribution record created for the inventory consolidator displays in the Inventory Console.
Priority	Enter a priority number for the node for this item and inventory scheduling, with 1 being the highest priority.
Effective Start Date	The date the distribution details take effect.
Effective End Date	The date after which the distribution details are no longer applied.
Source	
Source Ship Node	Choose Source Ship Node and select the applicable node if you are setting up the distribution details to be sourced from a particular ship node.
Source Organization	Choose Source Organization and select the applicable organization if you are setting up the distribution details to be sourced from a particular organization.

6.1.5 Deleting Advanced Distribution Details

To delete a advanced distribution details:

1. In the Distribution Group Details window, choose the Advanced tab.
2. From the Distribution table, select the applicable distribution details and choose .

6.2 Deleting a Distribution Group

To delete a distribution group:

1. From the tree in the application rules side panel, choose Product Sourcing Distribution Group. The Product Sourcing Distribution Groups window displays in the work area.
2. Select the applicable distribution rule and choose .

7

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 creating node types, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

You can use the Inventory Node Type Rules branch for:

- Creating an Inventory Node Type Rule
- Modifying an Inventory Node Type Rule
- Deleting an Inventory Node Type Rule

7.1 Creating an Inventory Node Type Rule

To create an inventory node type rule:

1. From the tree in the application rules side panel, choose Inventory Node Type Rules. The Inventory Node Type Rules window displays in the work area.
2. Choose . The Inventory Node Type Rule Details window displays.
3. Enter information into the applicable fields. Refer to Table 7–1 for field value descriptions.
4. Click .

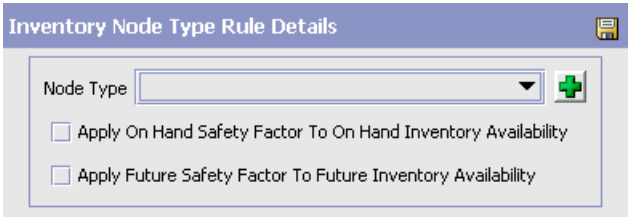


Table 7–1 Inventory Node Type Rule Details Pop-up

Field	Description
Node Type	Select the node type for which this rule should be used. For more information about node types, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*
Apply On Hand Safety Factor To On Hand Inventory Availability	Check this flag to apply the on hand safety factor to on hand inventory availability for nodes with this node type. **Note:** For safety factors to apply, this flag must also be checked for the supply type and scheduling rule. For more information about Safety Factors, see Section 4.2, "Inventory Availability Safety Factor".
Apply Future Safety Factor To Future Inventory Availability	Check this flag to apply the future safety factor to future inventory availability for nodes with this node type. **Note:** For safety factors to apply, this flag must also be checked for the supply type and scheduling rule. For more information about Safety Factors, see Section 4.2, "Inventory Availability Safety Factor".

7.2 Modifying an Inventory Node Type Rule

To modify an inventory node type rule:

1. From the tree in the application rules side panel, choose Inventory Node Type Rules. The Inventory Node Type Rules window displays in the work area.
2. Select the applicable inventory node type rule and choose . The Service Slot Group Details pop-up window displays.

3. Enter information into the applicable fields. Refer to Table 7–1 for field value descriptions.
4. Click .

7.3 Deleting an Inventory Node Type Rule

To delete an inventory node type rule:

1. From the tree in the application rules side panel, choose Inventory Node Type Rules. The Inventory Node Type Rules window displays in the work area.
2. Select the applicable inventory node type rule and choose .

8

Configuring Resource Capacity

Resource capacity components are used to determine delivery service item and provided service item availability. Resource capacity availability is used to determine appointments for a delivery service and/or provided service of a defined unit of measure for specific time slots and geographical regions.

For more information about configuring delivery services and provided services, see the *Sterling Product Management Configuration Guide*.

You can use the Resource Capacity branch for:

- Defining Capacity Rules
- Defining Region Usage for Resource Pools
- Defining Slot Groups
- Defining Resource Pools

8.1 Defining Capacity Rules

You can define rules to set capacity reservation expiration limits and to allow resource capacity assignments to span across service slots.

To define capacity rules:

1. From the tree in the application rules side panel, choose Resource Capacity > Capacity Rules. The Capacity Rules window displays.

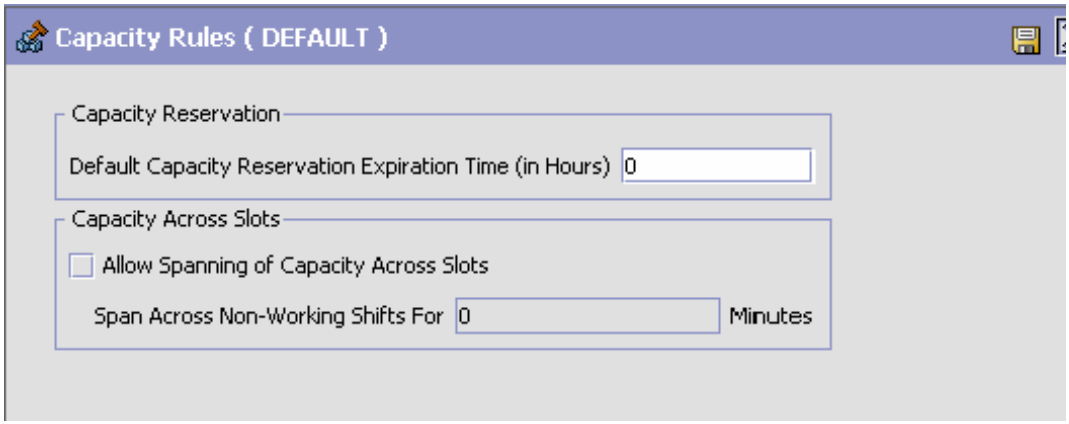


Table 8–1 Capacity Rules Window

Field	Description
Capacity Reservation	
Default Capacity Reservation Expiration Time (in Hours)	Enter the number of hours after which a capacity reservation should expire. Once the expiration time has passed, the reservation is available for purging.
Capacity Across Slots	
Allow Spanning of Capacity Across Slots	Check this box to allow service resource capacity assignments to span across multiple service slots. **Note:** This option is only available to resource pools that maintain capacity at the service resource level and have a service slot group that is not hierarchical.
Span Across Non-Working Shifts For <n> Minutes	Enter the number of minutes for which a shift can span across its adjacent non-working shift or shifts.

2. Enter information in the applicable field. Refer to Table 8–1 for field value descriptions.
3. Choose .

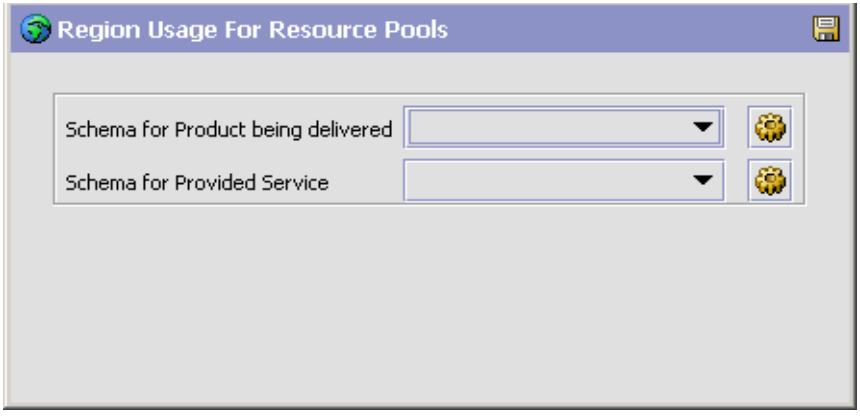
8.2 Defining Region Usage for Resource Pools

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 configuring region schemas, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

You can define the region schemas used for configuring delivery service resource pools and provided service resource pools. For more information about resource pools, see Section 8.4, "Defining Resource Pools".

To define region usage for resource pools:

1. From the tree in the application rules side panel, choose Resource Capacity > Region Usage For Resource Pools. The Region Usage For Resource Pools pop-up window displays.



2. From Schema for Product being delivered, select the region schema you want to use when creating delivery service resource pools.

> **Note:** If you have pre-existing resource pools and you have added additional regions to them, Schema for Product being delivered is not selectable.

3. From Schema for Provided Service, select the region schema you want to use when creating provided service resource pools.

Note: If you have pre-existing resource pools and you have added additional regions to them, Schema for Provided Service is not selectable.

4. Choose .

8.3 Defining Slot Groups

A slot group is a collection of service slots. A service slot is defined as a period of time against which service item promising can be made.

You can define multiple slots and slot groups, enabling you to schedule appointments of different granularity for different resource pools. For example, you may want to associate a slot group comprised of service slots that promise four-hour windows with a delivery service resource pool, and a slot group comprised of service slots that promise two-hour windows with a provided service resource pool.

The slots within a slot group can be defined at different levels of hierarchy. The hierarchical slot group may be comprised of parent slots and subsequent child slots. For example, if a full day slot is considered as the parent slot, the morning and afternoon slots within the full day slot are considered child slots. The child slot itself can be branched to a number of successive child slots. For example, the morning slot can be divided into AM1 and AM2 and the afternoon slot in PM1 and PM2.

Within a slot group, slots can overlap when the capacity is maintained at the resource pool level. For example, if a parent slot extends from 08:00 to 18:00, the child slots can be between 08:00 to 13:00 and 12:00 to 18:00, and so forth.

The slot group associated with a resource pool maintains the capacity at the service resource level and does not allow overlapping of slots at the same level in the hierarchy. For example, a slot group that has a full day slot at the parent level and a morning and afternoon slots as its child slots.

Note: Slot groups are defined by the capacity organization and not by the organization that provides the capacity.

For more information about associating a slot group with a resource pool, see Section 8.4, "Defining Resource Pools".

You use the Service Slot Groups screen for:

- Creating a Slot Group
- Creating Hierarchical Service Slots
- Modifying a Slot Group
- Modifying Hierarchical Service Slots
- Deleting a Slot Group
- Deleting the Hierarchical Service Slots

8.3.1 Creating a Slot Group

To create a slot group:

1. From the tree in the application rules side panel, choose Resource Capacity > Slot Group. The Service Slot Groups window displays in the work area.
2. Choose . The Service Slot Group Details pop-up window displays.
3. Enter information in the applicable fields. Refer to Table 8–2 for field value descriptions.
4. Choose .

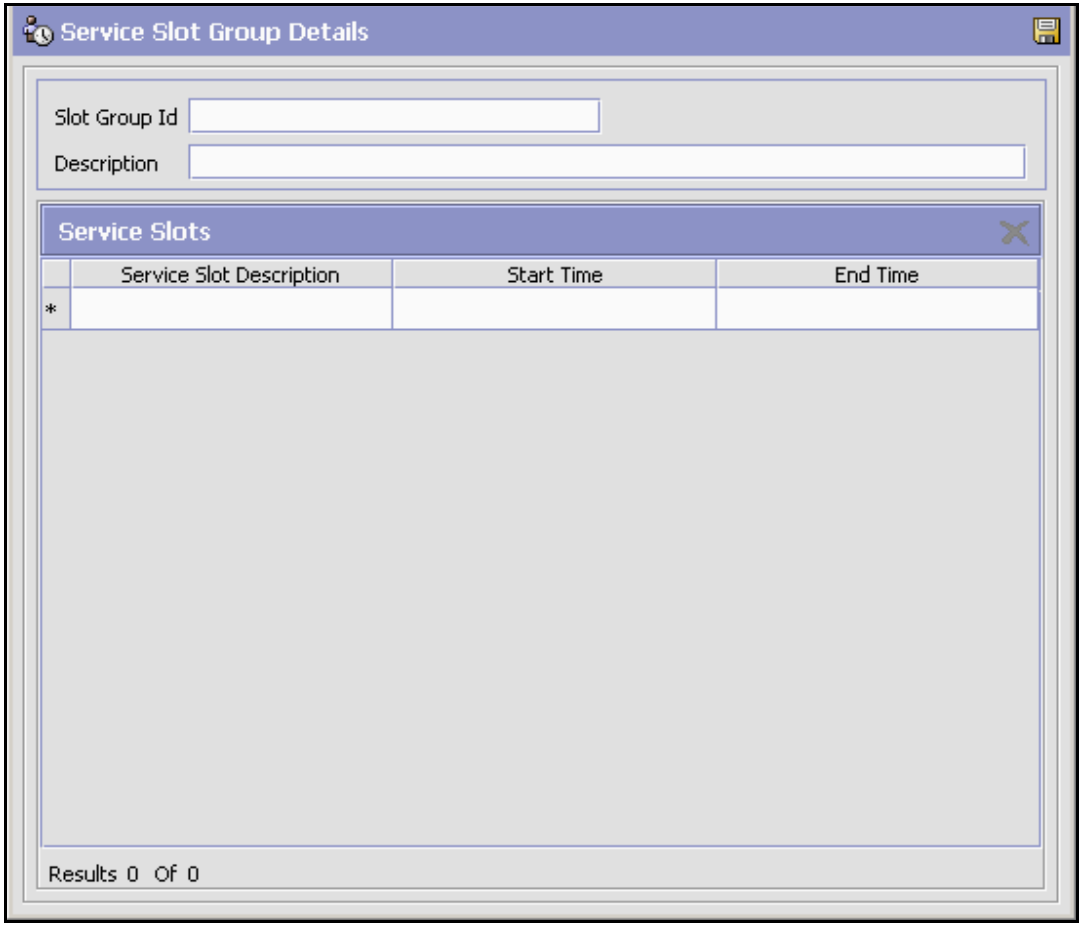


Table 8–2 Service Slot Group Details Pop-Up Window

Field	Description
Slot Group ID	Enter the name of the slot group.
Description	Enter a brief description of the slot group.
Service Slots	A list of the slot group's service slots.

8.3.1.1 Creating Hierarchical Service Slots

To create hierarchical service slots:

1. From the tree in the application rules side panel, choose Resource Capacity > Slot Group. The Service Slot Groups window displays in the work area.
2. Locate the applicable slot group and choose . The Service Slot Group Details pop-up window displays.
3. Select the service slot under which you need to create the child slots.
4. Choose . The Service Slot Details pop-up window displays.
5. Enter information in the applicable fields. Refer to Table 8–3 for field value descriptions.
6. Choose .

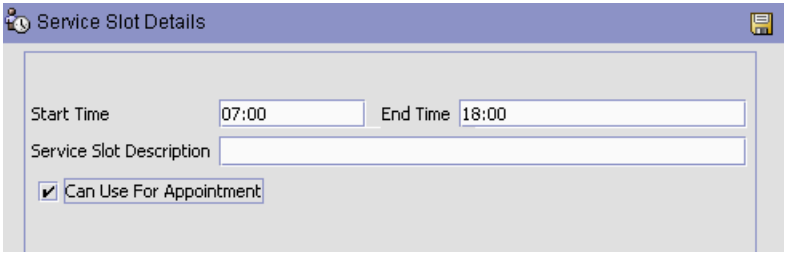


Table 8–3 Creating Hierarchical Service Slots Screen

Fields	Description
Service Slot Description	Enter a brief description of the service slot.
Start Time	Enter the starting time for the service slot.

Table 8–3 Creating Hierarchical Service Slots Screen

Fields	Description
End Time	Enter the ending time for the service slot.
Can Use For Appointment	Check this box to use this slot for planning appointments. In some business cases, certain parent slots are used only for the purpose of defining maximum available capacity of their child slots and they are not actually used for appointment planning. These slots are configured to prevent over promising against their child slots. Therefore, you must be able to configure whether or not a slot can be used for planning appointments. If a slot is configured such that it cannot be used for appointment planning, it is shown as an available option when planning an appointment. Therefore, with this configuration, if a full day Slot is configured such that it cannot to be used for planning appointments, you can only see morning and afternoon slots as available when planning appointments.

8.3.2 Modifying a Slot Group

To modify a slot group:

1. From the tree in the application rules side panel, choose Resource Capacity > Slot Group. The Service Slot Groups screen displays in the work area.
2. Locate the applicable slot group and choose . The Service Slot Group Details pop-up window displays.
3. Enter information in the applicable fields. Refer to Table 8–2 for field value descriptions.
4. Choose .

8.3.2.1 Modifying Hierarchical Service Slots

To modify hierarchical service slots:

1. From the tree in the application rules side panel, choose Resource Capacity > Slot Group. The Service Slot Groups screen displays in the work area.

2. Select the applicable slot group and choose . The Service Slot Group Details pop-up window displays.
3. Select the appropriate slot and choose . The Service Slot Details pop-up window displays.
4. Enter information in the applicable fields. Refer to Table 8–2 for field value descriptions.
5. Choose .

8.3.3 Deleting a Slot Group

To delete a slot group:

1. From the tree in the application rules side panel, choose Resource Capacity > Slot Group. The Service Slot Groups screen displays in the work area.
2. Locate the applicable slot group and choose .

8.3.3.1 Deleting the Hierarchical Service Slots

To delete a hierarchical service slot:

1. From the tree in the application rules side panel, choose Resource Capacity > Slot Group. The Service Slot Groups window displays in the work area.
2. Locate the applicable slot group and choose .
3. Select the appropriate slot and choose

Note: You cannot delete a parent slot if child slots exist. Therefore, you must delete the child slots before deleting the parent slot.

8.4 Defining Resource Pools

Delivery and provided services are supplied by defined service nodes. Service nodes can provide multiple delivery and provided services. Resource pools provide the ability to define how much service capacity is available for these services by geographical area and time slots. A resource pool is an aggregate collection of resources needed to perform a delivery service or provided service. A resource pool is defined by the

organization that is providing the capacity. For more information about configuring nodes capacity organization, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

A resource pool is comprised of the following components:

- Service slot group
- Resource calendar
- Delivery items or service items
- Regions served
- Standard capacity definition
- Team Members

You can use the Resource Pools branch for:

- Creating and Modifying a Resource Pool
- Deleting a Resource Pool

8.4.1 Creating and Modifying a Resource Pool

To create a resource pool:

1. From the tree in the application rules side panel, choose Resource Capacity > Resource Pools. The Resource Pool Search window displays in the work area.
2. Choose . The Create Resource Pool pop-up window displays.
3. Enter information in the applicable fields. Refer to Table 8–4 for field value descriptions.

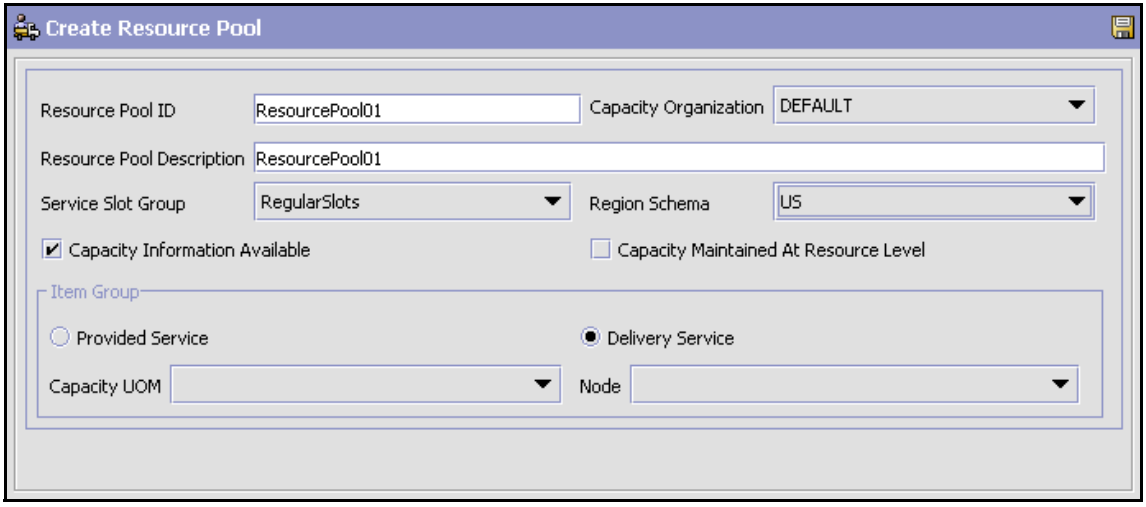


Table 8–4 Create Resource Pool Pop-Up Window

Field	Description
Resource Pool ID	Enter the name of the resource pool as you want it to appear.
Capacity Organization	Select the organization that maintains the capacity within this resource pool.
Resource Pool Description	Enter a brief description of the resource pool.
Service Slot Group	Select the service slot group you want to use to determine service promising. For more information about configuring service slot groups, see Section 8.3, "Defining Slot Groups". **Important:** When you change the service slot group, ensure that you reset the capacity of the original slot group in the Capacity Console. The capacity should be made unavailable. For more information about using the Capacity Console, see the *Sterling Global Inventory Visibility User Guide*.
Region Schema	Select the region schema to associate with this resource pool.

Table 8–4 Create Resource Pool Pop-Up Window

Field	Description
Capacity Information Available	Select this to indicate that this resource pool can be considered as a source for capacity. If you do not select this, infinite capacity is considered.
Capacity Maintained At Resource Level	Select to indicate that capacity is maintained at the resource level for this resource pool.
Item Group	
Provided Service	Select this if you are configuring a resource pool for one or more provided services.
Delivery Service	Select this if you are configuring a resource pool for one or more delivery services.
Capacity UOM	Select the unit of measure of the capacity you want to use to for the resource pool. For more information about defining unit of measure for a capacity, see the *Sterling Product Management Configuration Guide*.
Node	Select the node to associate with the resource pool.

4. Choose . The Resource Pool Details window displays.
5. Enter information in the applicable fields. Refer to Table 8–5 for field value descriptions.
6. Choose .

Figure 8–1 Resource Pool Details

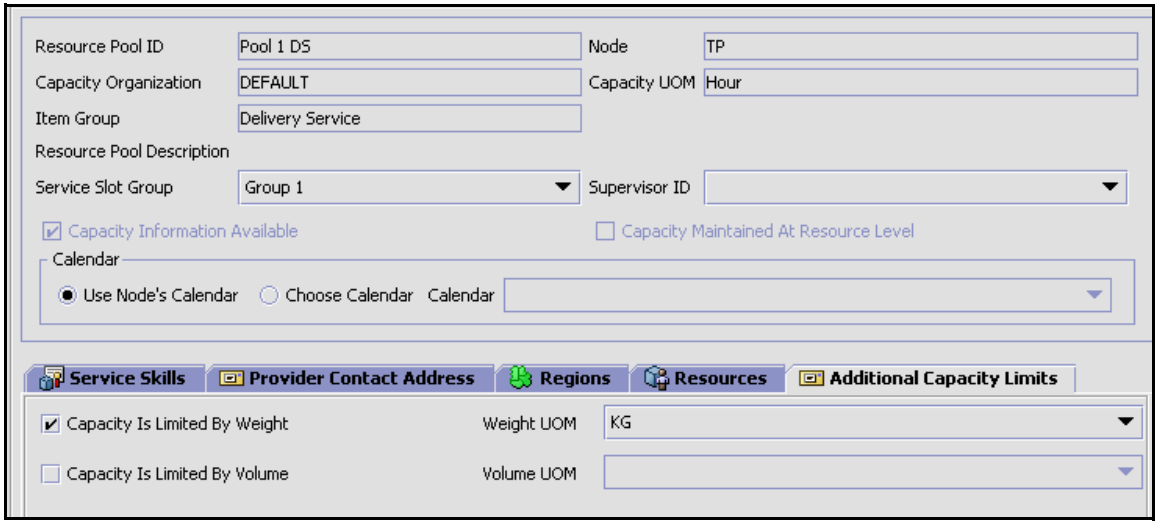


Table 8–5 Resource Pool Details Window

Field	Description
Resource Pool ID	The name of the resource pool as you want it to appear.
Node	The node you want to associate with the resource pool.
Capacity Organization	The organization that maintains the capacity within this resource pool.
Capacity UOM	The capacity unit of measure you want to use to for the resource pool.
Item Group	Indicates whether the resource pool is for delivery services or provided services.
Resource Pool Description	Enter a brief description of the resource pool.
Service Slot Group	Select the service slot group you want to use to determine service promising. For more information about configuring service slot groups, see Section 8.3, "Defining Slot Groups".

Table 8–5 Resource Pool Details Window

Field	Description
Supervisor ID	Select the supervisor ID from the drop-down list. When determining the supervisor to use for a service work order, the Sterling Multi-Channel Fulfillment Solution looks for the supervisor ID for a given node and seller organization combination, and then for the resource pool supervisor, and if no supervisor is found in either case, the default supervisor for the node. Click to add a new user that can be selected as a supervisor. The user is added in the context of the node that is being configured. For more information about configuring users, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*. For more information about configuring service supervisors, see the *Sterling Distributed Order Management Configuration Guide*.
Capacity Information Available	Select Capacity Information Available to indicate that this resource pool can be considered as a source for capacity.
Capacity Maintained At Resource Level	Select this field to indicate that capacity is maintained at the service resource level for this resource pool. Capacity can only be maintained at the service resource level if the resource pool measures capacity in a time-based unit of measure. **Note:** This feature has been designated for a future release.
Calendar	
Use Nodes Calendar	Select Use Nodes Calendar, if you want to use the shipping calendar defined for the node in Participant Modeling to determine resource availability. For more information about configuring calendars and defining a node's calendar, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.
Choose Calendar	Select Choose Calendar if you want to override the node's defined shipping calendar with different calendar to determine resource availability. For more information about defining calendars, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

Table 8–5 Resource Pool Details Window

Field	Description
Calendar	If you selected Choose Calendar, select the applicable calendar to use to determine resource availability. The calendars of the node as well as the calendars of the primary enterprise of the node display in the drop-down list.
Service Skills	
Service Skill ID	The Service Skill ID
Description	A description of the service skill
Provider Contact Address The contact address of the organization that provides this resource pool.	
Regions	
Service Specific Regions	Select Service Specific Regions to be able to define particular service regions from the Regions table.
Service All Regions	Select Service All Regions to indicate that this resource pool can service all regions configured in the region usage.
By Regions Only	Select By Regions Only if this resource pool services the specified regions for all time slots throughout the selected days. **Note**: If you select this radio button, you cannot select the By Regions And Slots radio button unless you delete all the region associations to this resource pool first.
By Regions And Slots	Select By Regions And Slots if this resource pool only services specified time slots throughout the day. **Note**: If you select this radio button, you cannot select the By Regions Only radio button unless you delete all the region associations to this resource pool first.
Regions	A list of regions serviced by the resource pool. For information about adding regions to a resource pool, see Section 8.4.1.3, "Adding a Region Serviced by the Resource Pool". For information about removing regions from a resource pool, see Section 8.4.1.4, "Removing a Serviced Region from a Resource Pool".

Table 8–5 Resource Pool Details Window

Field	Description
Resources	
Resource ID	The Resource ID.
Calendar ID	The Calendar ID of the calendar the resource is using.
Notes	Any additional notes on this resource.
Additional Capacity Limits	
Capacity is Limited By Weight	Check this box to limit the capacity by Weight. Select the appropriate UOM from the Weight UOM drop-down list.
Capacity is Limited By Volume	Check this box to limit the capacity by Volume. Select the appropriate UOM from the Volume UOM drop-down list.

Note: You cannot modify the additional capacity limits configured for the same UOM types. However, modification is possible only if one of the capacity limits are not configured.

Note: For a Provided Service, only nodes belonging to the provider organization are displayed. For a Delivery Service, all nodes are displayed whether it belongs to the provider's node or not.

You can use the Resource Pool Details window for:

- Adding a Service Skill to a Resource Pool
- Removing a Service Skill from a Resource Pool
- Adding a Region Serviced by the Resource Pool
- Removing a Serviced Region from a Resource Pool
- Creating and Modifying a Service Resource

- Deleting a Service Resource

8.4.1.1 Adding a Service Skill to a Resource Pool

You can add multiple service skills to a resource pool. The resource pool can run services only for the specified service skills. For example, a resource pool consisting of a set of plumbers can provide multiple installation services, such as washing machine hookup and refrigerator hookup. The Service skills needed could be multiple installation skills like plumbing and electrical skills.

To add a service skill to a resource pool:

1. In the Resource Pool Details window, choose from the Service skills table. The Service Skills List pop-up window displays.
2. Select the applicable service skills and choose . The service skill is added to the Service Skills table.

8.4.1.2 Removing a Service Skill from a Resource Pool

To remove a service skill from a resource pool, in the Resource Pool Details window, select the applicable service skill from the Service Skills table and choose .

8.4.1.3 Adding a Region Serviced by the Resource Pool

You can associate regions that define the set of geographical areas a resource pool services. You can also specify the days of week and time of day that the resource pool services a given region as well as specify whether the region is the resource pool's primary region. If a region is not marked as a primary region, it is only considered if all other resource pools that may have been configured with the region marked as a primary region have no available capacity. For more information about configuring regions and region schemas, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

Important: If you are configuring a resource pool for delivery services, the regions you add must belong to the region schema you associated with delivery services for resource pool usage.

If you are configuring a resource pool for provided services, the regions you add must belong to the region schema you associated with provided services for resource pool usage.

For more information about associating region schemas for resource pool usage, see Section 8.2, "Defining Region Usage for Resource Pools".

To add a region to a resource pool:

1. In the Resource Pool Details window, select the `By Regions` radio button if you would like to add a region for all time slots for a given day, or `By Region And Slots` if you want to pick the time of day to service a specific region. Click from the Regions table. The Region Search pop-up window displays.
2. Enter the applicable search criteria and Click . A list of regions displays.
3. Select the region you want to add to the resource pool and Click . The region is added to the Regions table in the Resource Pool Details window.
   - If you want to select a child region or browse through the region hierarchy, select the applicable parent region and choose . In the Explore Region pop-up window select the applicable child region from the region tree and choose . You can also navigate within this window to browse through the complete region hierarchy until you find the region you want to select.
4. In the Regions table, select the Primary check box if the resource pool is a primary provider of the region and select the check boxes of the days of the week for each time slot, if applicable, when the resource pool can fulfill a service to the region.

8.4.1.4 Removing a Serviced Region from a Resource Pool

To remove a serviced region from a resource pool, in the Resource Pool Details window, select the applicable region from the regions table and choose .

8.4.1.5 Creating and Modifying a Service Resource

A *service resource* in the Sterling Multi-Channel Fulfillment Solution is used to define one or more people that work as a team, and is represented as a single entity, that can perform provided or delivery services. Each resource has a calendar associated with it by either selecting one of the calendars defined by the node of the resource pool it belongs to, or using a node's shipping calendar. Services resources are associated with a single resource pool.

You can also associate team members with a service resource that can be selected to perform work order tasks in the Sterling Multi-Channel Fulfillment Solution Consoles.

To create a resource for a resource:

1. In the Resource Pool Details window, choose from the Resources table. The Service Resources Details pop-up window displays.
2. Enter information in the applicable fields. Refer to Table 8–6 for field value descriptions.

Table 8–6 Service Resource Details Window

Field	Description
Resource ID	The name of the Resource as you want it to appear.
Calendar	
Use Node's Calendar	Select this option if the service resource being configured should use the shipping calendar of the node the resource pool is associated with.
Use Calendar	Select this option if the service resource being configured should use a calendar that is not the node's shipping calendar.
Calendar	Select a calendar for the service resource to use. The calendars of the node as well as the calendars of the primary enterprise of the node display in the drop-down list.

Table 8–6 Service Resource Details Window

Field	Description
Contact Address	The service resource's contact address. Choose to enter an address. Choose the Contact Info tab to view additional contact information.
Team Members	
Use this inner panel to add team members to your service resource. These team members are added to work order appointments when this resource is selected to run the appointment. • Click to add team members to the service resource. • Click to remove the selected team members from the service resource.	
User ID	The identifier of the team member associated with this resource.
User Name	The name of the team member associated with this resource.
Notes	
Add any additional notes here.	

3. Choose .

8.4.1.6 Deleting a Service Resource

To remove a service resource from a resource pool, in the Resource Pool Details window, select the applicable service resource from the resources table and choose .

8.4.2 Deleting a Resource Pool

To delete a resource pool:

1. From the tree in the application rules side panel, choose Resource Capacity > Resource Pools. The Resource Pool Search window displays in the work area.

2. Enter the applicable search criteria and choose . A list of resource pools displays.
3. Select the applicable resource pool and choose .

9

Configuring Value Added Services

Value Added Services (VAS) are performed to meet customer demands. Different types of VAS activities include:

- Monogramming on a T-shirt
- Building computer to buyer's specification
- Segregating individual boxes from larger boxes
- Stain guarding a sofa
- Installing a PC at home

As the above examples suggest, Value Added Services related activities apply both before and after the shipping process.

To support supplying Value Added Services, there may be a Value Added Service area in the warehouse, where Value Added Services are performed. These activities can include packaging, monogramming and ticketing. The retrieval and rules are defined further in this section.

Establish how the policies and procedures of your Value Added Services processing works by:

- Defining Activities
- Defining Work Order Cancellation Reasons
- Defining Allocation Considerations
- Defining Value Added Services Modification Rules
- Defining Value Added Services Process Type Details
- Defining the Value Added Services Process Model
- Defining Purge Criteria

9.1 Defining Activities

Activities in the warehouse are grouped into Activity Groups. Examples of activity groups include Receiving, VAS, Picking and Packing.

Each activity group is associated with activity codes that define each activity that is performed. For example, receiving activity group has pre-receiving, quality control and receiving activities.

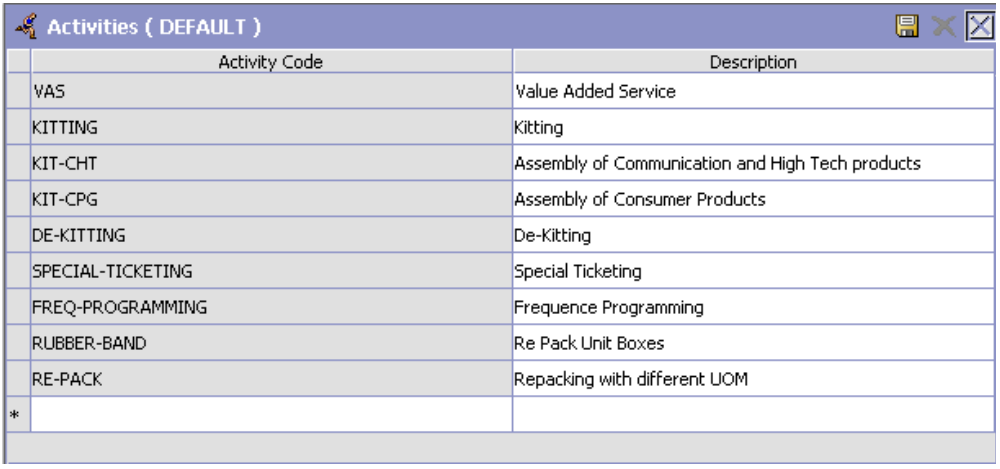
Use Activities for:

- Creating an Activity Code
- Modifying an Activity Code
- Deleting an Activity Code

9.1.1 Creating an Activity Code

To create an activity code:

1. From the tree in the application rules side panel, choose VAS > Activities. The Activities window displays.
2. Enter information in the applicable fields. Refer to Table 9–1 for field value descriptions.
3. Choose .



	Activity Code	Description
	VAS	Value Added Service
	KITTING	Kitting
	KIT-CHT	Assembly of Communication and High Tech products
	KIT-CPG	Assembly of Consumer Products
	DE-KITTING	De-Kitting
	SPECIAL-TICKETING	Special Ticketing
	FREQ-PROGRAMMING	Frequence Programming
	RUBBER-BAND	Re Pack Unit Boxes
	RE-PACK	Repacking with different UOM
*		

Table 9–1 Activities Window

Field	Description
Activity Code	Enter a name for the activity code. Activity code is the unique identity of the activity.
Description	Enter a brief description for the activity code.

9.1.2 Modifying an Activity Code

Once an activity code has been created, it cannot be modified. It can only be deleted. However, the activity code description may be modified.

To modify an activity code:

1. From the tree in the application rules side panel, choose VAS > Activities. The Activities window displays, with the list of activities.
2. Enter information in the applicable fields. Refer to Table 9–1 for field value descriptions.
3. Choose .

9.1.3 Deleting an Activity Code

To delete an activity code:

1. From the tree in the application rules side panel, choose VAS > Activities. The Activities window displays, with the list of activities.
2. Choose the Activity List to be deleted.
3. Choose .

9.2 Defining Work Order Cancellation Reasons

A reason code is associated with cancellation of work order requests. When cancelling a work order, a Work Order Cancellation Reason must be supplied; therefore at least a default value for work order cancellations should be configured.

Note: Viewing of Work Order Cancellation Reason Code is available only for Enterprise and Node users.

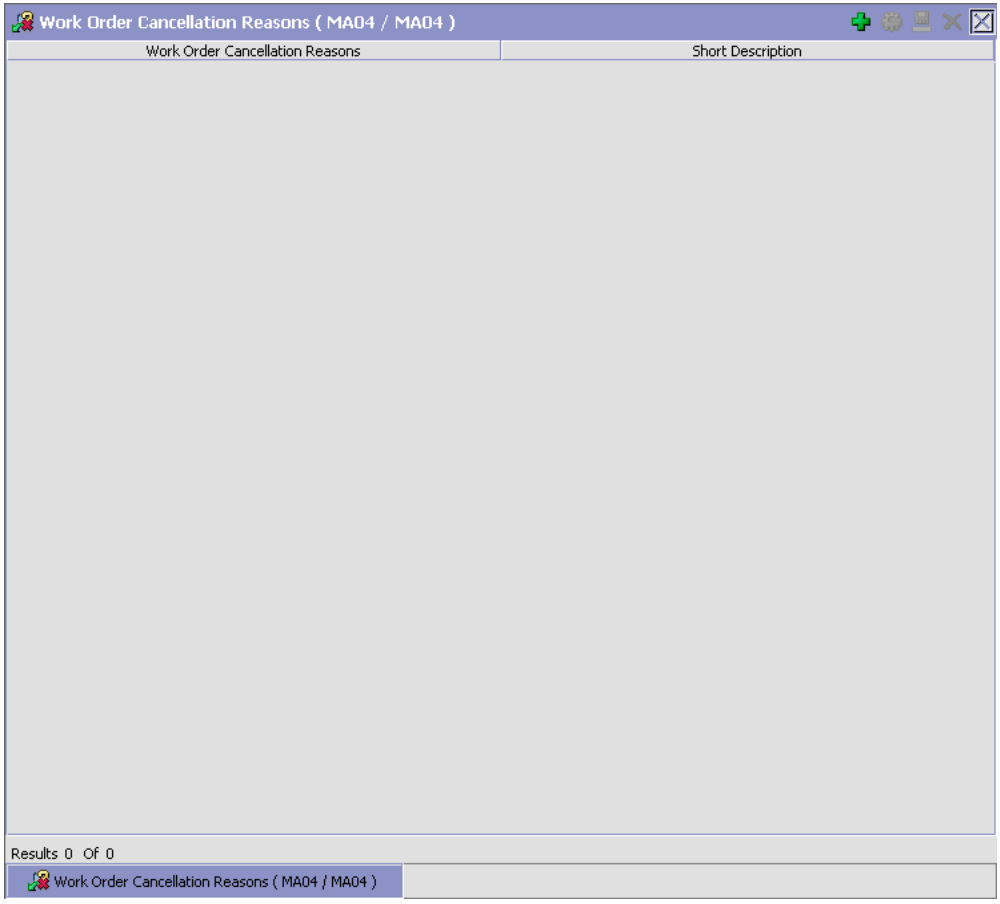
Use Work Order Cancellation Reasons for:

- Creating a Work Order Cancellation Reason
- Creating a New Work Order Cancellation Reason from an Existing Work Order Cancellation Reason
- Modifying a Work Order Cancellation Reason
- Deleting a Work Order Cancellation Reason

9.2.1 Creating a Work Order Cancellation Reason

To create a work order cancellation reason:

1. From the tree in the application rules side panel, choose VAS > VAS Process > Work Order Cancellation Reasons. The Work Order Cancellation Reasons window displays.



2. In the Work Order Cancellation Reasons window, choose .
3. The Cancellation Reason Details pop-up window displays.
4. Enter information in the applicable fields. Refer to Table 9–2 for field value descriptions.
5. Choose .

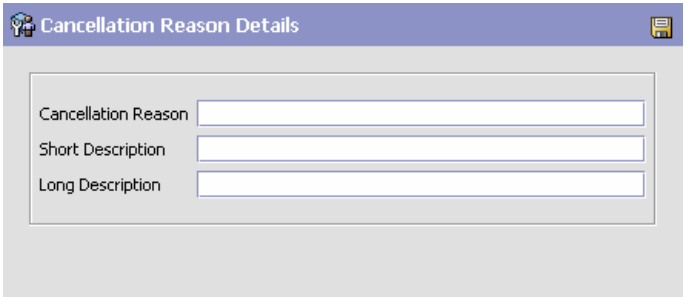


Table 9–2 Cancellation Reason Code Details Pop-up Window

Field	Description
Cancellation Reasons	Enter a code for the work order cancellation reason.
Short Description	Enter a short description for the work order cancellation reason code.
Long Description	Enter a long description for the work order cancellation reason code.

9.2.2 Creating a New Work Order Cancellation Reason from an Existing Work Order Cancellation Reason

To create a new Work Order Cancellation Reason from an existing Work Order Cancellation Reason:

1. From the tree in the application rules side panel, choose VAS > VAS Process > Work Order Cancellation Reasons. The Work Order Cancellation Reasons window displays with the list of Work Order Cancellation Reason Codes.
2. Choose the Work Order Cancellation Reason to be copied.
3. Choose . The Cancellation Reasons Details pop-up window displays.
4. Enter information in the applicable fields. Refer to Table 9–2 for field value descriptions.
5. Choose .

9.2.3 Modifying a Work Order Cancellation Reason

Once a Work Order Cancellation Reason has been created, it can be modified.

To modify a Work Order Cancellation Reason:

1. From the tree in the application rules side panel, choose VAS > VAS Process > Work Order Cancellation Reasons. The Work Order Cancellation Reasons window displays with the list of Work Order Cancellation Reason Codes.
2. Choose the Work Order Cancellation Reason to be modified.
3. Choose . The Cancellation Reason Details pop-up window displays.
4. Enter information in the applicable fields. Refer to Table 9–2 for field value descriptions.
5. Choose .

9.2.4 Deleting a Work Order Cancellation Reason

To delete a Work Order Cancellation Reason Code:

1. From the tree in the application rules side panel, choose VAS > VAS Process > Work Order Cancellation Reasons. The Work Order Cancellation Reasons window displays with the list of Work Order Cancellation Reason Codes.
2. Choose the Work Order Cancellation Reason to be deleted.
3. Choose .

9.3 Defining Allocation Considerations

A work order for service items belonging to one of the following service item group codes would result in inventory transformations on confirmation:

- KIT - Kitting
- DKIT - De-kitting
- COMPL - Compliance
- INVC Inventory-Change

The Allocation Considerations configuration is used by the Sterling Multi-Channel Fulfillment Solution to provide visibility into such inventory transformations. For instance:

- When a work order is created, demand is placed against the original inventory (the one being consumed), and supply is increased for the new inventory (the one being created).

> **Note:** The supply being increased is not an onhand supply. It is an indicative supply that would be available in future.
>
> The demands being increased are not promised demands.

- When a work order is allocated, the demands placed are modified to indicate that the demands are promised. The supplies may also be modified to indicate their increased chance of arrival.

> **Note:** These demands and supplies could be utilized to assess the availability of inventory.

- When a work order is confirmed, the supply for the original inventory is removed and supply for the new inventory is created.

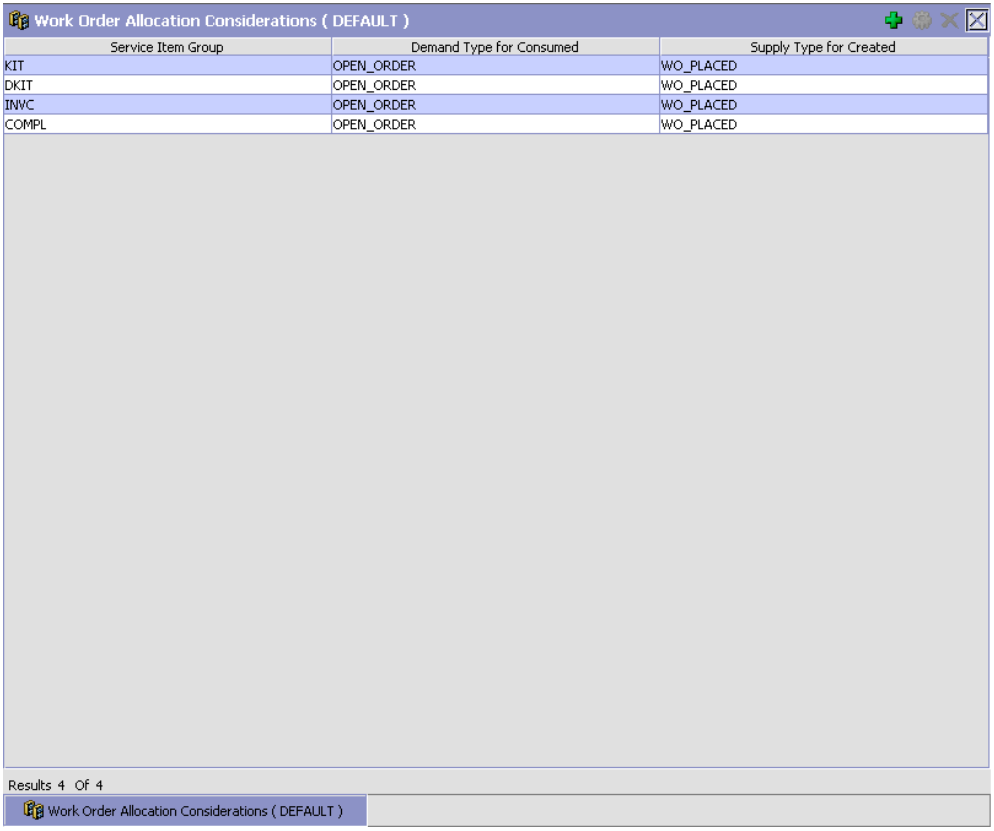
Use Allocation Considerations for:

- Creating a Work Order Allocation Consideration
- Modifying a Work Order Allocation Consideration
- Deleting a Work Order Allocation Consideration

9.3.1 Creating a Work Order Allocation Consideration

To create a work order allocation consideration:

1. From the tree in the application rules side panel, choose VAS > VAS Process > Allocation Considerations. The Work Order Allocation Considerations window displays.



2. In the Work Order Allocation Considerations window, choose . The Work Order Allocation Consideration pop-up window displays.
3. Enter information in the applicable fields. Refer to Table 9–3 for field value descriptions.
4. Choose .

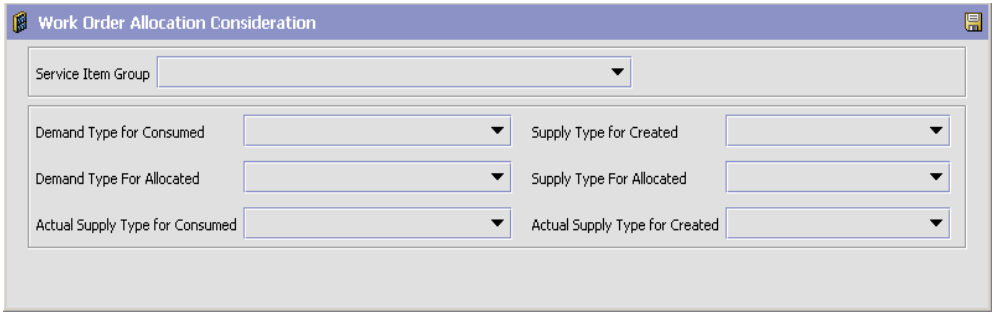


Table 9–3 Work Order Allocation Consideration Pop-up Window

Field	Description
Service Item Group	Select the service item group for which the allocation considerations are being created.
Demand Type for Consumed	Associate the type of demand to identify inventory consumed to work orders for the service item group.
Supply Type for Created	Associate the type of supply to identify inventory created by the work order for the service item group. Typical values for supply type are 'ONHAND'.
Demand Type for Allocated	Associate the type of demand to identify inventory allocated to work orders for the service item group.
Supply Type for Allocated	Associate the type of supply to identify inventory allocated by the work order for the service item group.
Actual Supply Type for Consumed	Associate the actual type of demand to identify inventory allocated to work orders for the service item group.
Actual Supply Type for Created	Associate the actual type of supply to identify inventory created by the work order for the service item group.

9.3.2 Modifying a Work Order Allocation Consideration

Once a work order allocation consideration has been created, it can be modified.

To modify a work order allocation consideration:

1. From the tree in the application rules side panel, choose VAS > VAS Process > Allocation Considerations. The Work Order Allocation Considerations window displays with the list of Work Order Allocation Considerations.
2. Choose the Work Order Allocation Consideration to be modified.
3. Choose . The Work Order Allocation Consideration pop-up window displays.
4. Enter information in the applicable fields. Refer to Table 9–3 for field value descriptions.
5. Choose .

9.3.3 Deleting a Work Order Allocation Consideration

To delete a work order allocation consideration:

1. From the tree in the application rules side panel, choose VAS > VAS Process > Allocation Considerations. The Work Order Allocation Considerations window displays with the list of Work Order Allocation Considerations.
2. Choose the Work Order Allocation Consideration to be deleted.
3. Choose .

9.4 Defining Value Added Services Modification Rules

Most order document types flow through a pipeline without requiring any intervention by a customer service representative. However, there are times when modifications are required, such as modifying quantity or activities required. The Sterling Multi-Channel Fulfillment Solution supports modifications through the Sterling Multi-Channel Fulfillment Solution Application Consoles and APIs. It is critical to decide which modifications are allowed for each modification type, modification level, and status combination.

Important: Contemplate business and system integration implications before allowing a modification that is disallowed as part of the system defaults.

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

9.4.1 Setting Up the Value Added Services Modification Rules

To set up VAS modification rules:

1. From the tree in the application rules side panel, choose VAS > VAS Process > VAS Modification Rules. The Modification Rules window displays.
2. In the Modification Rules window, select the VAS Process for which you want to set up a modification rule. See Table 9–5 for field value descriptions.
3. Choose to allow modification.
4. Choose to disallow modification.
5. Choose to ignore modification.

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

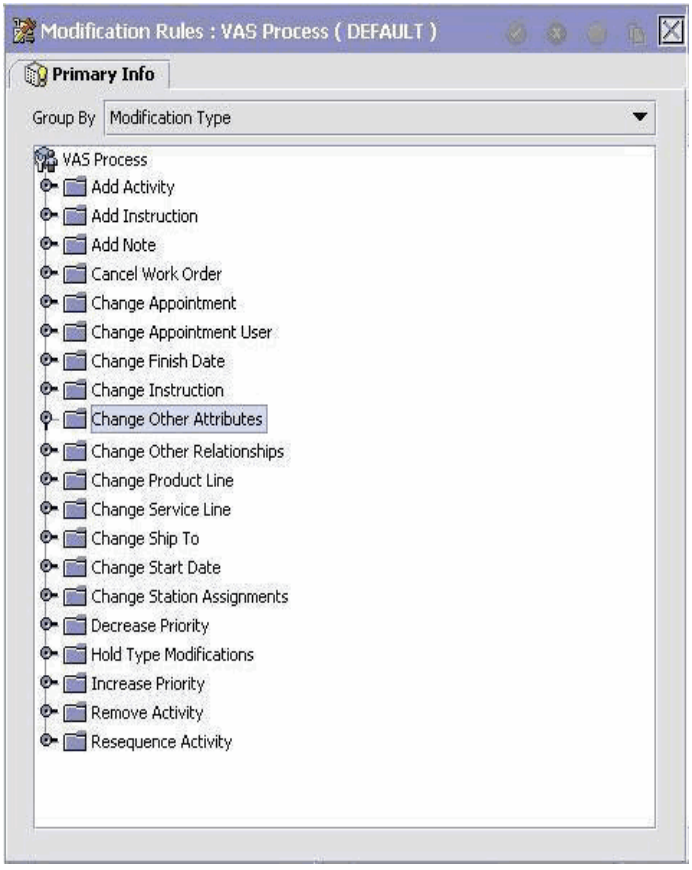


Table 9–4 Modification Rules Window, Group By

Field	Description
Group by	**View the VAS modification rules grouped by the Modification Type, Modification Level, or Status.**
Modification Type	Indicates the VAS modification rules grouped by the Modification Type. Statuses display grouped by the Modification Level for each Modification Type.

Table 9–4 Modification Rules Window, Group By

Field	Description
Modification Level	Indicates the VAS modification rules grouped by the Modification Level. Statuses display grouped by the Modification Type for each Modification Level.
Status	Indicates the VAS Modification Rules grouped by the Status. Modification Types display grouped by Modification Level for each Modification Type. For more information about group by status, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

Table 9–5 Modification Rules Window, Primary Information

Field	Description
Primary Info	
Add Activity	Allow, disallow, or ignore the addition of an activity appropriately.
Add Instruction	Allow, disallow, or ignore the addition of an instruction appropriately.
Add Note	Allow, disallow, or ignore the addition or modification of notes associated with a work order.
Cancel Work Order	Allow, disallow, or ignore the cancellation of a work order appropriately.
Change Appointment	Allow, disallow, or ignore the addition, deletion, or modification of a work order appointment.
Change Appointment User	Allow, disallow, or ignore the addition, deletion, or modification of users assigned to complete an appointment in the work order.
Change Finish Date	Allow, disallow, or ignore the modification of a finish date by which the tasks should be finished.
Change Instruction	Allow, disallow, or ignore the modification of an instruction appropriately.
Change Other Attributes	Allow, disallow, or ignore the modification of other attributes appropriately.
Change Other Relationships	Allow, disallow, or ignore the modification of other relationships appropriately.

Table 9–5 Modification Rules Window, Primary Information

Field	Description
Change Product Line	Allow, disallow, or ignore the addition, deletion, or modification of the deliverable product line associated with a work order.
Change Service Line	Allow, disallow, or ignore the addition, deletion, or modification of the Service Line associated with a work order.
Change Ship To	Allow, disallow, or ignore the changes made to the service location address of the customer, where the service is performed if the item is a Provided Service Item.
Change Start Date	Allow, disallow, or ignore the modification of a start date appropriately.
Change Station Assignments	Allow, disallow, or ignore the modification of station assignments appropriately.
Decrease Priority	Allow, disallow, or ignore the decrease in priority appropriately.
Hold Type Modifications	Allow, disallow, or ignore the modification of the Hold Type with which a work order is associated.
Increase Priority	Allow, disallow, or ignore the increase in priority appropriately.
Remove Activity	Allow, disallow, or ignore the removal of an activity appropriately.
Resequence Activity	Allow, disallow, or ignore the resequencing of an activity appropriately.
Activity	Allow, disallow, or ignore the modification types at the activity level appropriately.
Work Order	Allow, disallow, or ignore the modification types at the work order level appropriately.

9.5 Defining Value Added Services Process Type Details

Value Added Services Process Type Details define parameters and templates that distinguish a process type.

A **process type pipeline** is a series of transactions and statuses that guide document types, such as a Value Added Services execution, through a predefined process. A pipeline consists of the different statuses a document goes through during fulfillment, negotiation, shipment, or receipt. You can also set up transactions consisting of events, actions, and conditions, as they pertain to the pipeline you are configuring.

Repositories

A repository is a logical collection of entities that define the business process workflow.

The following entities are included in a repository:

- Pipelines
- Transactions
- Statuses
- Conditions
- Actions
- Services

The Sterling Multi-Channel Fulfillment Solution provides a base repository for each of the system-defined process types. Some of the entities within a repository are copied when creating a new document type. For more information about creating a new document type, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

For more information about defining process type details, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

9.5.1 Viewing Value Added Services Process Type Details

To view Value Added Services process type details:

1. From the tree in the application rules side panel, choose VAS > VAS Process > VAS Process Type Details. The Process Type Details: Work Order window displays.
2. Primary information of the Process Type displays in the applicable fields. Refer to Table 9–6 for field value descriptions.

For more information about defining the primary information for process type details, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

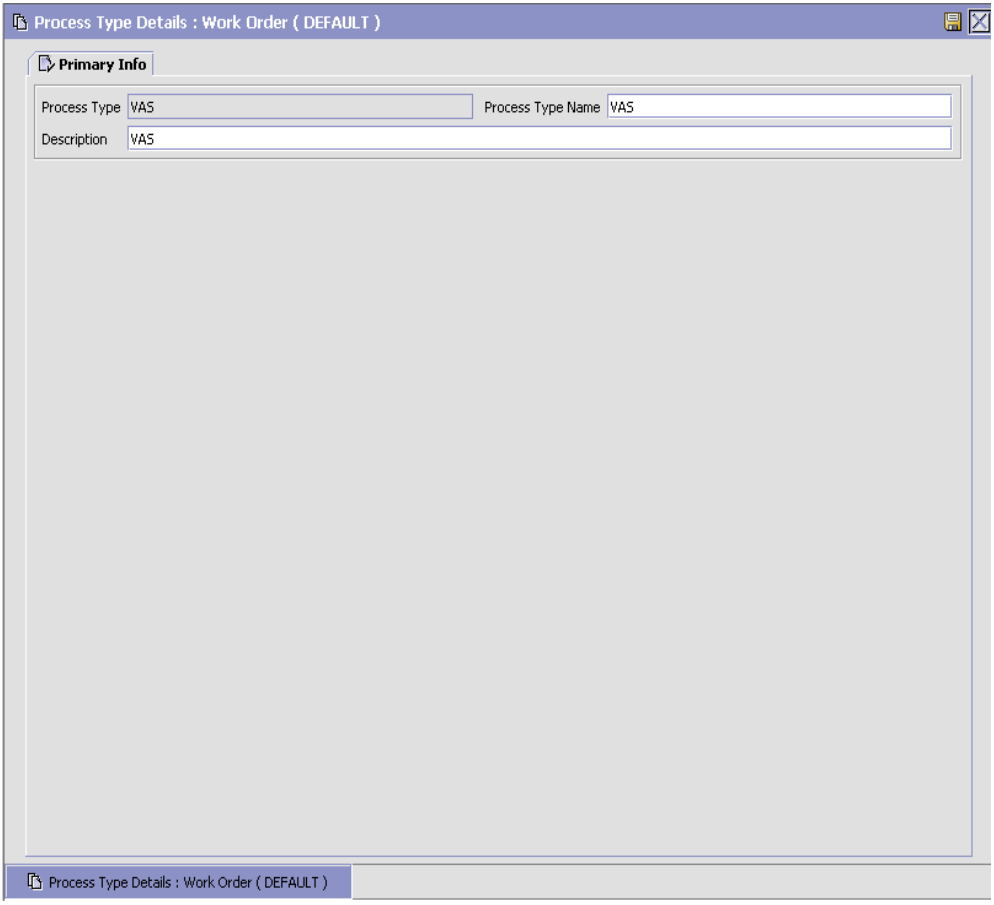


Table 9–6 Process Type Details: Work Order Window

Field	Description
Primary Info	
Process Type	This is automatically populated by the system as "WO_VAS".

Table 9–6 Process Type Details: Work Order Window

Field	Description
Process Type Name	This indicates the name of the process type.
Description	This provides a brief description for the process type.

9.6 Defining the Value Added Services Process Model

The Value Added Services process is modeled through a pipeline. This represents the process configuration that is unique to a warehouse. A warehouse may also specify unique processes for each participating enterprise.

For example, a warehouse that performs ticketing for outbound shipments after pick and pack into a carton is complete.

9.6.1 Pipeline Determination

Pipeline determination is used to set up conditions that affect which pipeline is used during the start of the business process workflow. For example, an organization deals with sales orders that sometimes contain hazardous materials. They have two separate pipelines, one in which orders with order lines without any hazardous materials go through and one in which orders with order lines containing hazardous materials must go through for inspection before continuing through the order process. The organization uses pipeline determination to set up a condition that determines whether or not order lines contain hazardous materials and sends the order line down the correct pipeline.

For more information about Pipeline Determination, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

9.6.2 Hub Rule

When you expand the Pipeline Determination branch, the display depends on what role you are logged in as. If you are logged in as a Hub role, the Hub Rule displays. If you are logged in as an Enterprise role, both the Hub Rule and all user created determination rules (For example, My Rule) components display. Double-click on the applicable rule to display the pipeline determination rules.

Note: If you are logged in as an Enterprise role, the Hub Rule screen is grayed out and cannot be modified.

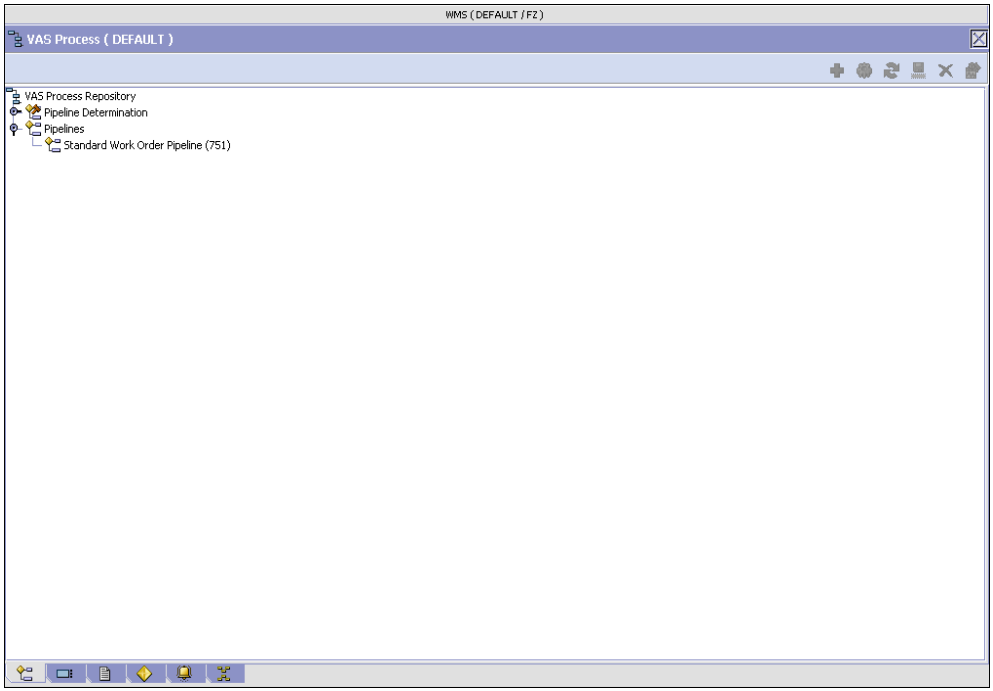
For more information about Pipeline Determination and Hub Rule, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

9.6.3 Pipelines

For more information about Pipelines, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

To view the Value Added Services pipeline details:

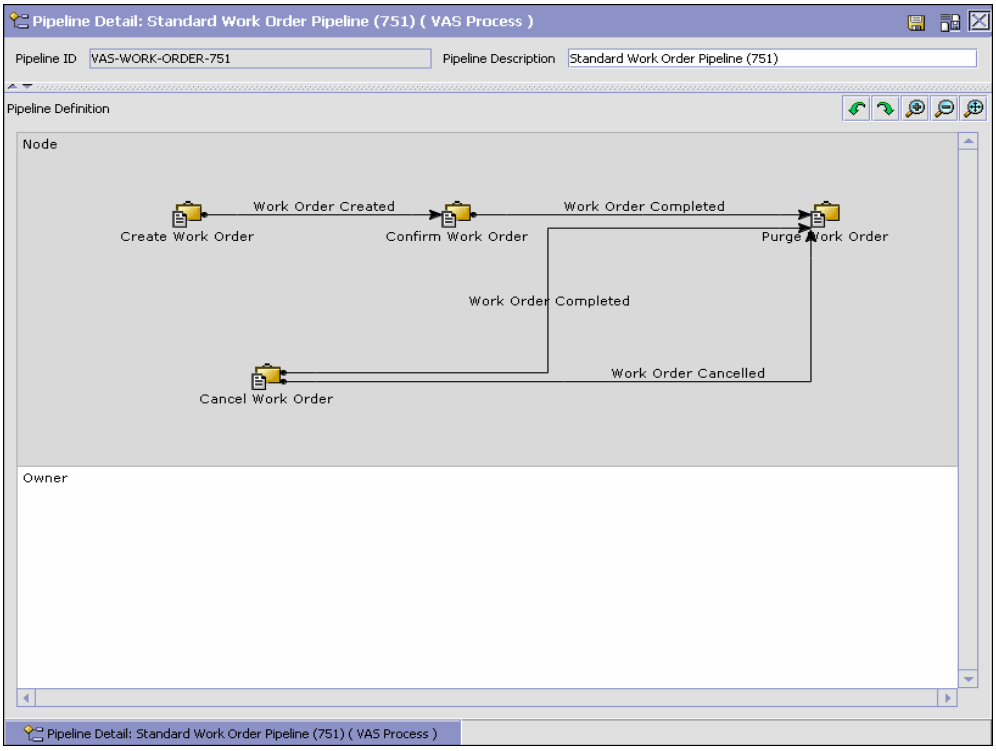
1. From the tree in the application rules side panel, choose VAS > VAS Process > VAS Process Model. The VAS Process window displays.



2. In the VAS Process window, choose VAS Process Repository > Pipelines > Standard Work Order Pipeline.

3. The Pipeline Detail: Standard Work Order Pipeline (VAS Process) window displays.

For more information about creating a pipeline, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.



9.6.4 Transactions

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 activity within the Sterling Multi-Channel Fulfillment Solution. 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. These transactions can be changed within the limits defined in the base transaction.

For more information about Transactions, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

To view the transaction details for a Value Added Services pipeline:

1. From the tree in the application rules side panel, choose VAS > VAS Process > VAS Process Model. The VAS Process window displays.
2. In the VAS Process window, choose .
3. The Transactions tab window displays.

For more information about creating Transactions, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

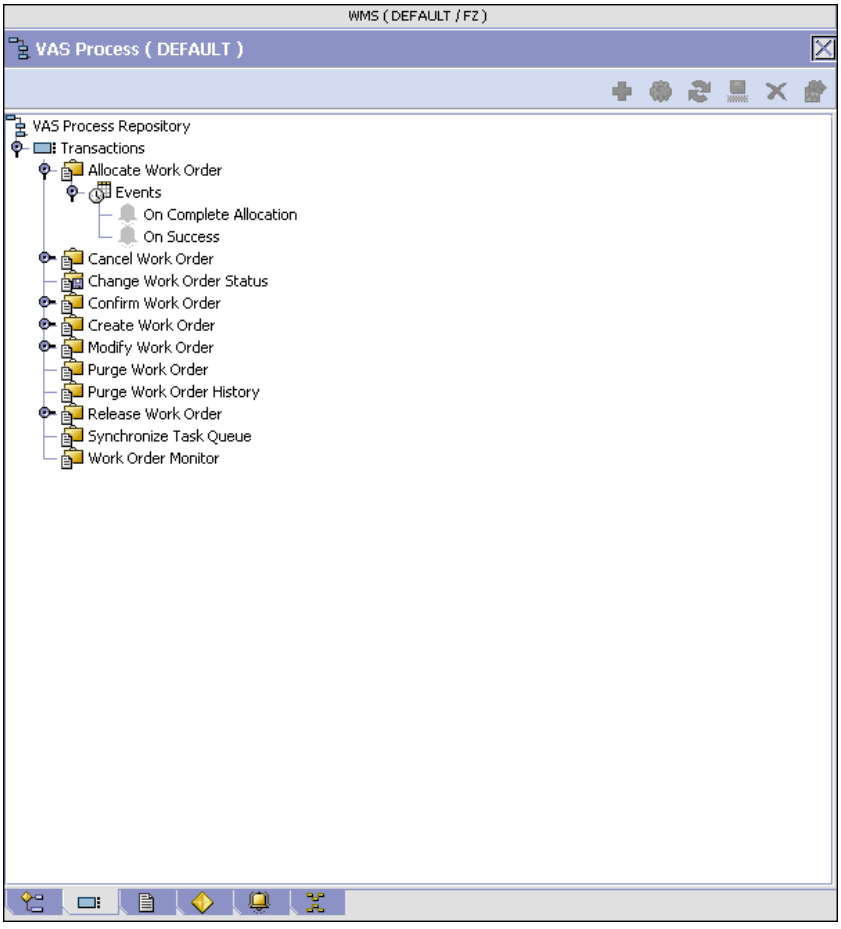


Table 9–7 Work Order VAS Pipeline - Transactions Tab Window

Field	Description
Allocate Work Order	This transaction represents allocation of the work order for the Value Added Services process.
Cancel Work Order	This transaction represents the cancellation of a work order created for Value Added Services.
Confirm Work Order	This transaction represents that the work order needs to be confirmed for Value Added Services.

Table 9–7 Work Order VAS Pipeline - Transactions Tab Window

Field	Description
Create Work Order	This transaction represents creation of a work order for Value Added Services.
Purge Work Order	This transaction represents the purge of work orders created for Value Added Services.
Release Work Order	This transaction represents the release of work orders created for Value Added Services.

9.6.5 Statuses

Statuses are the actual states that a document moves through in the pipeline. A transaction can contain two types of statuses, a drop status and a pickup status. A document is moved into a **drop status** when the events and conditions of a transaction have been completed. A **pickup status** takes the document from the previous drop status and moves it through the next transaction. Created and Scheduled are examples of statuses.

For more information about Statuses, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

To view the status details of a Value Added Services pipeline:

1. From the tree in the application rules side panel, choose VAS > VAS Process > VAS Process Model. The VAS Process window displays.
2. In the VAS Process window, choose .
3. The Statuses tab window displays.

For more information about creating Statuses, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

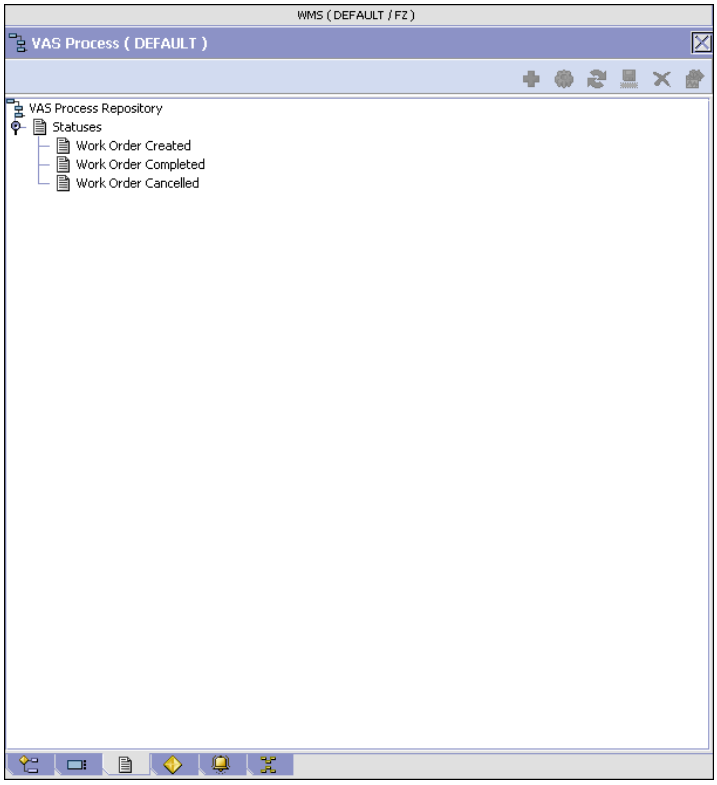


Table 9–8 Work Order VAS Pipeline - Statuses Tab Window

Field	Description
Work Order Created	This indicates that a work order is created. This corresponds to the first step of the 'Create Work Order' transaction.
Work Order With Components Created	This indicates that components items required have been added to the work order. This corresponds to completion of the 'Create Work Order' transaction.

Table 9–8 Work Order VAS Pipeline - Statuses Tab Window

Field	Description
Work Order Allocated	This indicates that allocation process is completed for the work order. This corresponds to 'Allocate Work Order' transaction.
Work Order Confirmed	This indicates all activities required for the work order is complete. This corresponds to the 'Confirm Work Order' transaction. This transaction creates inventory for the parent item on the work order. Putaway process for the finished inventory to storage or to packing or shipping zones can be initiated.
Work Order Canceled	This indicates cancellation of the Work Order for the shipment. This corresponds to the 'Cancel Work Order' transaction.

9.6.6 Conditions

A **condition** matches document type attributes against decision points and routes the documents to different paths based on the specified attribute and value combinations. The document type attributes against which conditions can be created are predefined in the Sterling Multi-Channel Fulfillment Solution. You can use these attributes in any combination or you can create conditions that run the appropriate application logic for specific circumstances.

For more information about Conditions, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

To view the condition details of a Value Added Services pipeline:

1. From the tree in the application rules side panel, choose VAS > VAS Process > VAS Process Model. The VAS Process window displays.
2. In the VAS Process window, choose .
3. The Conditions tab window displays.

For more information about creating Conditions, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

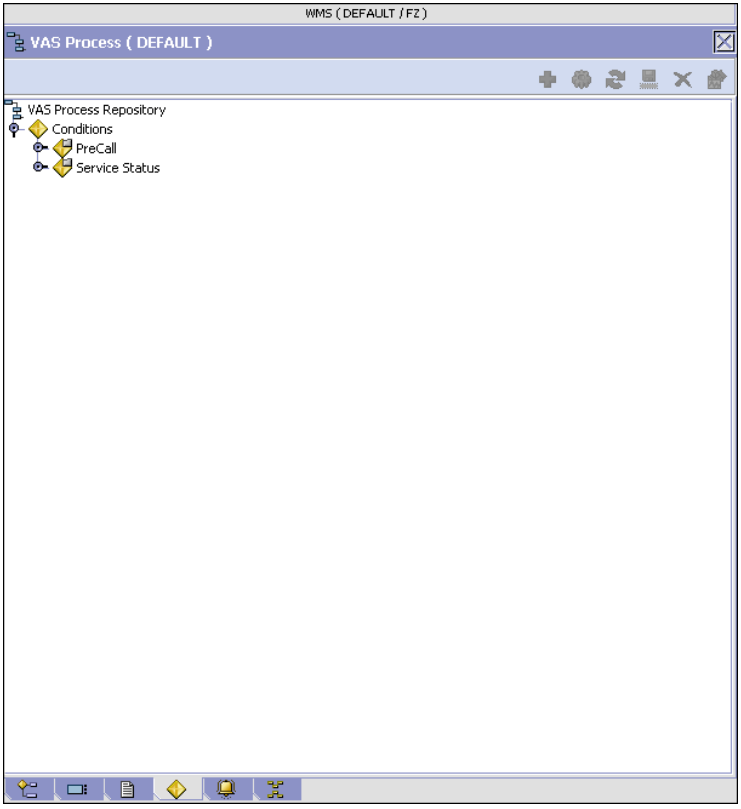


Table 9–9 Work Order VAS Pipeline - Conditions Tab Window

Field	Description
HasComponents	Condition that evaluates if the 'HasComponents' field is 'Y' for a Work Order for Value Added Services.

9.6.7 Actions

An **action** is a process or program that is triggered by an event. These processes and programs send user alert notifications and automatically resolve issues.

For example, when an order is released (the event), you can set an action to send the customer an e-mail.

For more information about Actions, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

To view the action details of a Value Added Services pipeline:

1. From the tree in the application rules side panel, choose VAS > VAS Process > VAS Process Model. The VAS Process window displays.
2. In the VAS Process window, choose .
3. The Actions tab window displays.

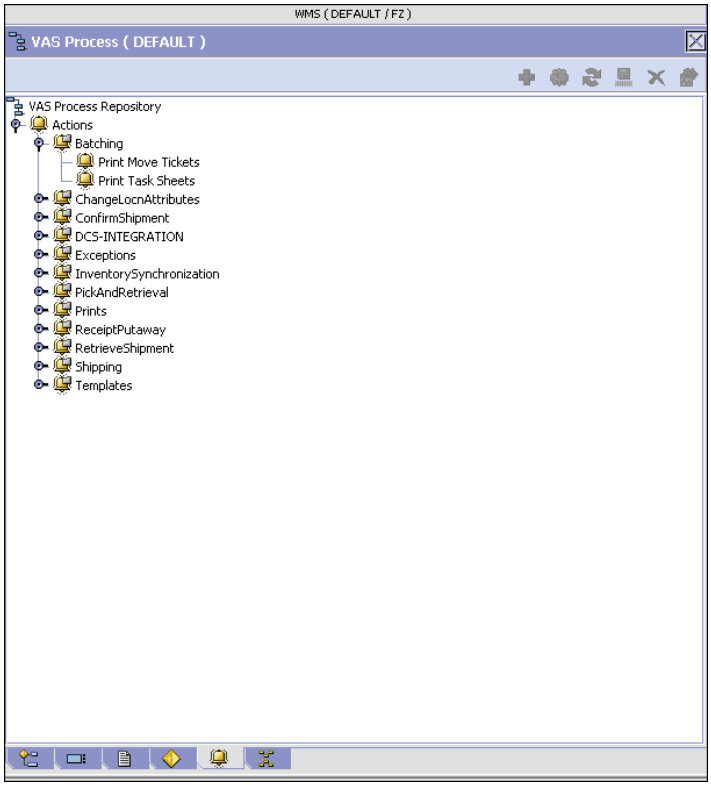


Table 9–10 Work Order VAS Pipeline - Action Tab Window

Field	Description
Templates	Default templates are provided for: **Publish Data** – Send data to external queue or internal tables. **Raising an Exception** – Raise an alert using the Sterling Multi-Channel Fulfillment Solution Event Management from the published information. **Send Email** – Raise an email action utilizing a template to format from the published information. **Send Email-HTML format** – Raise an email action to create an HTML email format from the published information.

9.6.8 Service Definitions

Service definitions are a representation of the logic that regulates document workflow services. The Service Builder is a graphical interface that enables you to create a graphical representation of these *services*.

For more information about Service Definitions, the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

To view the service definition details of a Value Added Services pipeline:

1. From the tree in the application rules side panel, choose VAS > VAS Process > VAS Process Model. The Work Order VAS window displays.
2. In the Work Order VAS window, choose .
3. The Service Definitions tab window displays.

Table 9–11 Work Order VAS Pipeline - Service Definition Tab Window

Field	Description
Service Definitions	Displays service definitions that are specific to the VAS pipeline, if any.

9.7 Defining Purge Criteria

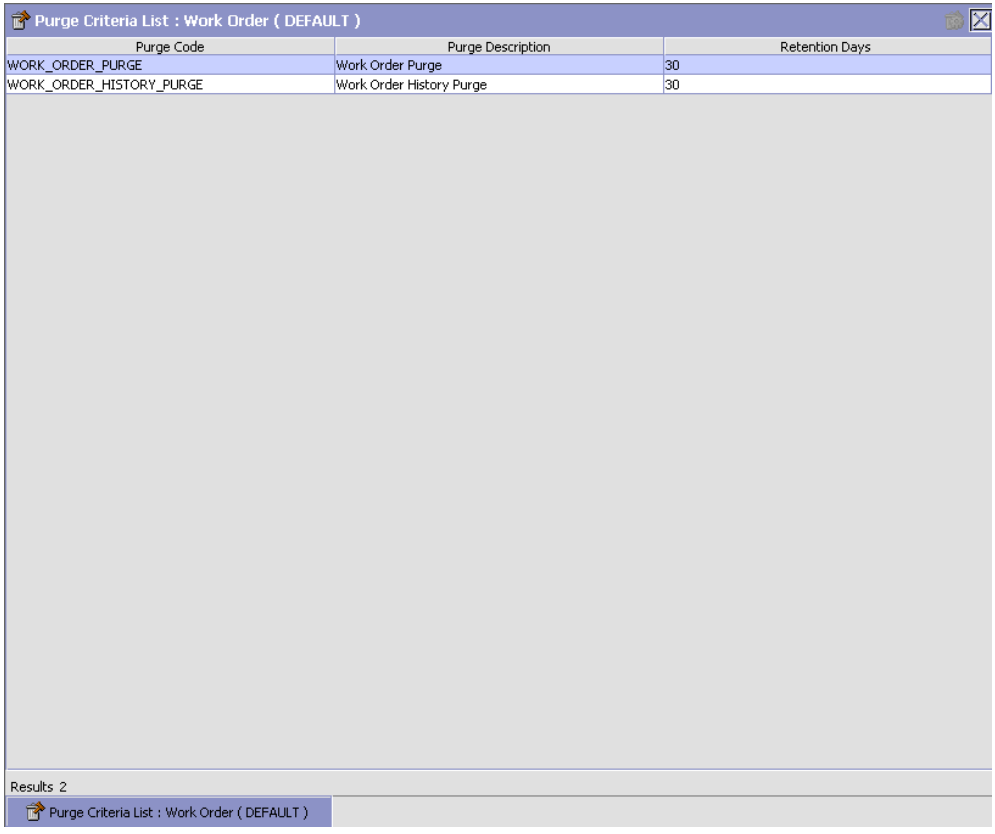
Transactional data collected by the Sterling Multi-Channel Fulfillment Solution during the execution are periodically removed from the 'live' transactional tables. It is common to retain order related information for extended period of time. There are history tables provided for relevant transactional tables to move data from the day-to-day 'live' tables to a historical table.

Purges are the process by which old data is removed from the system database. Purges minimize the number of unused database records to increase search efficiency and reduce the size of the required physical disk.

9.7.1 Setting Up Purge Criteria

To set up purge criteria:

1. From the tree in the application rules side panel, choose VAS > VAS Process > Purge Criteria. The Purge Criteria List window displays.



2. In the Purge Criteria List window, choose . The Purge Criteria Details pop-up window displays.
3. Enter information in the applicable fields. Refer to Table 9–12 for field value descriptions.
4. Choose .

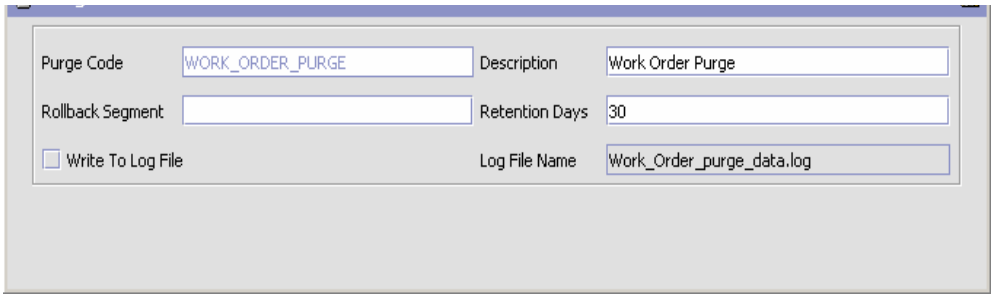


Table 9–12 Purge Criteria Details Pop-up Window

Field	Description
Purge Code	Identifies a purge program. This is a system defined code.
Description	Description of the purge.
Rollback Segment	Defines the rollback segment that should be explicitly used for the purge transaction qualified by the purge code. This is useful when there are huge logical data sets that have to be purged. This is optional and used for order related purges.
Retention Days	Enter the number of days of data to be retained in the database (going backwards from the time the program runs). Make sure that your table size takes into account the number of retention days entered here. The inventory purge does not take retention days into account when purging.

Table 9–12 Purge Criteria Details Pop-up Window

Field	Description
Write To Log File	Check this box if you want purged data written to a log. The log can be backed up and used as a journal at a later date.
Log File Name	Enter a log file name. This is applicable only if 'Write To Log File' is checked. This file consists records of the specific table that is purged. The log file is created in the directory specified in the `yfs.purge.path` property. If this is not passed, it defaults to the value specified in the `yfs.properties` file. If a variable is introduced, then the `yfs.purge.path` is ignored. To modify this property, add an entry for it in the `<INSTALL_DIR>/properties/customer_overrides.properties` file. For additional information about modifying properties and the `customer_overrides.properties` file, see the *Sterling Multi-Channel Fulfillment Solution Installation Guide*. For more information about using variables for the log file directory, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*. For information about file name limitations relating to internationalization, see the *Sterling Multi-Channel Fulfillment Solution Localization Guide*.

10

Configuring Count

Count requests are initiated through the console on an ad hoc basis. System events like exception being recorded during putaway, retrieval or pick, or location quantity dropping below minimum levels or to zero can be used to initiate a count request. A request also includes date and time parameters indicating the start and end time expected for the task.

For example, a user may request a count for a zone that has slow moving items to start the next day by assigning a low priority.

Count Requests may also be generated on a regular basis to consistently maintain inventory accuracy.

A count request is also created through the Sterling Multi-Channel Fulfillment Solution Event Management and inventory monitors, when inventory at a location reaches zero quantity or when minimum or maximum inventory levels are breached.

Use Count set-up for:

- Defining Count Program
- Viewing Region Usage for Count
- Defining Corporate Count Request Cancellation Reasons
- Defining Corporate Count Request Purge Criteria

10.1 Defining Count Program

The Sterling Multi-Channel Fulfillment Solution is equipped to automatically generate a count request using the Automatic Count Generation functionality for all nodes, a specific node, or all nodes in a region.

The Automatic Count Generation is set up through Count Programs, which define the valid date range of the program, the applicable zones in the warehouse, the products that are to be counted, and the periodicity of the count requests.

The Count Program is associated with a count calendar that would provide information about the list of working days, when the relevant nodes would perform count for this program.

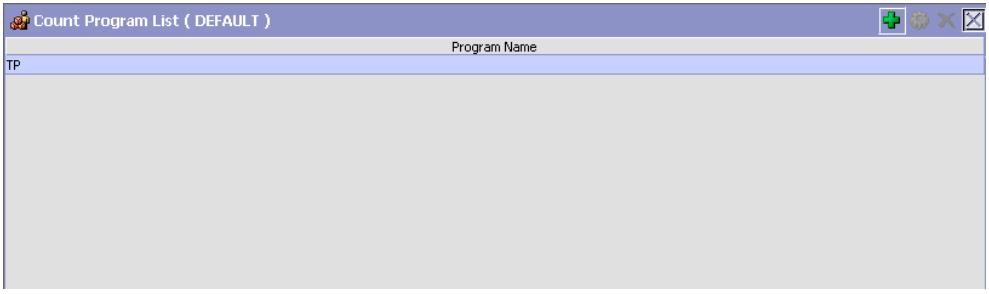
Use Count Program for:

- Creating a Count Program
- Modifying a Count Program
- Deleting a Count Program

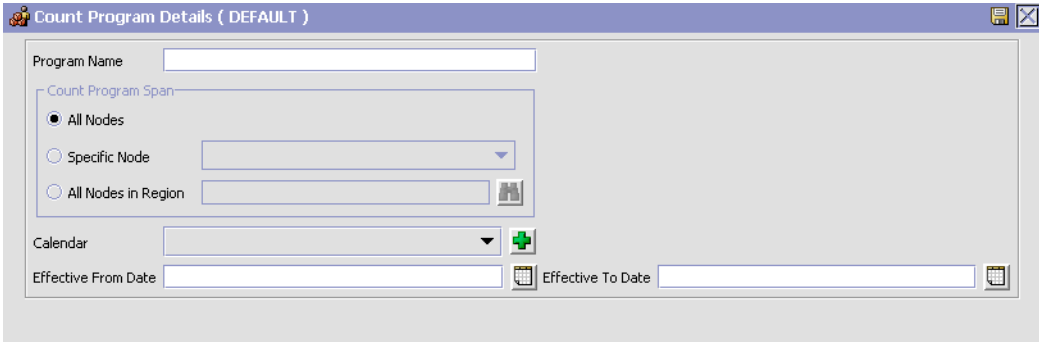
10.1.1 Creating a Count Program

To create a count program:

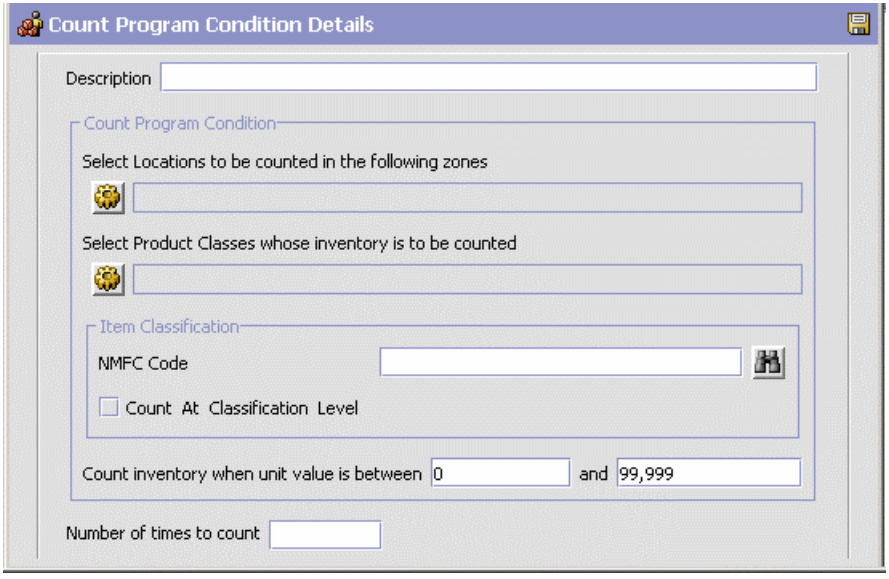
1. From the tree in the application rules side panel, choose Count > Count Program. The Count Program List window displays.



2. In the Count Program List window, choose . The Count Program Details window displays.



3. Enter a valid Program Name for the Program being created.
4. Choose the relevant count program span for the Program.
   - Choose 'All Nodes,' if the program is to span all the nodes.
   - Choose 'Specific Node' and the specific node from the drop-down list, if the program is to span a specific node.
   - Choose 'All Nodes in Region' and choose to select the relevant region from the Regions pop-up window, if the program is to span all nodes in a region. For more information about configuring region schemas, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.
5. Choose the relevant Calendar to be used for the Program, from the drop-down list. The calendar of the node as well as the calendars of the primary enterprise of the node display in the drop-down list. For more information about creating a new calendar, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.
6. Choose . The Count Program Conditions panel is now displays in the Count Program Details window.
7. In the Count Program Conditions panel, choose . The Count Program Condition Details Pop-up displays.



8. Enter information in the applicable fields. Refer Table 10–1 for field value descriptions.
9. Choose . The pop-up window is closed, and you are returned to the Count Program Details window.
10. After setting up all the relevant Count Program Conditions, choose in the Count Program Details window.

Table 10–1 Count Program Condition Details Pop-up Window

Field	Description
Description	Enter a description for the count program condition.
Count Program Condition	
Select locations to be counted in the following zones	Choose . In the List of Values pop-up, choose the zones that are to be counted.

Table 10–1 Count Program Condition Details Pop-up Window

Field	Description
Select Product Classes whose inventory is to be counted	Choose . In the List of Values pop-up, choose the product classes that are to be counted.
Item Classifications	Displays the item classifications that are available to be counted.
Count at Classification Level	Select if the counting is to be done at the item classification level.
Count inventory when unit value is between	Enter the minimum unit value to be counted. This defaults to 0 if no value is provided.
and	Enter the maximum unit value to be counted. This defaults to 99,999 if no value is provided.
Number of times to count	Enter the number of times to count.

10.1.2 Modifying a Count Program

To modify a Count Program:

1. From the tree in the application rules side panel, choose Count > Count Program. The Count Program List window displays with the list of existing programs.
2. Choose the Count Program that is to be modified. Choose .
3. The Count Program Details window displays. Modify the entries as necessary.
4. Choose .

10.1.3 Deleting a Count Program

To delete a count program:

1. From the tree in the application rules side panel, choose Count > Count Program. The Count Program List window displays with the list of existing programs.
2. Choose the Count Program that is to be deleted.
3. Choose .

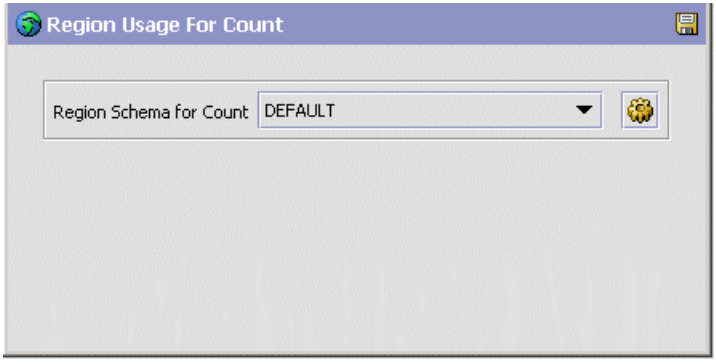
10.2 Viewing Region Usage for Count

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 configuring region schemas, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

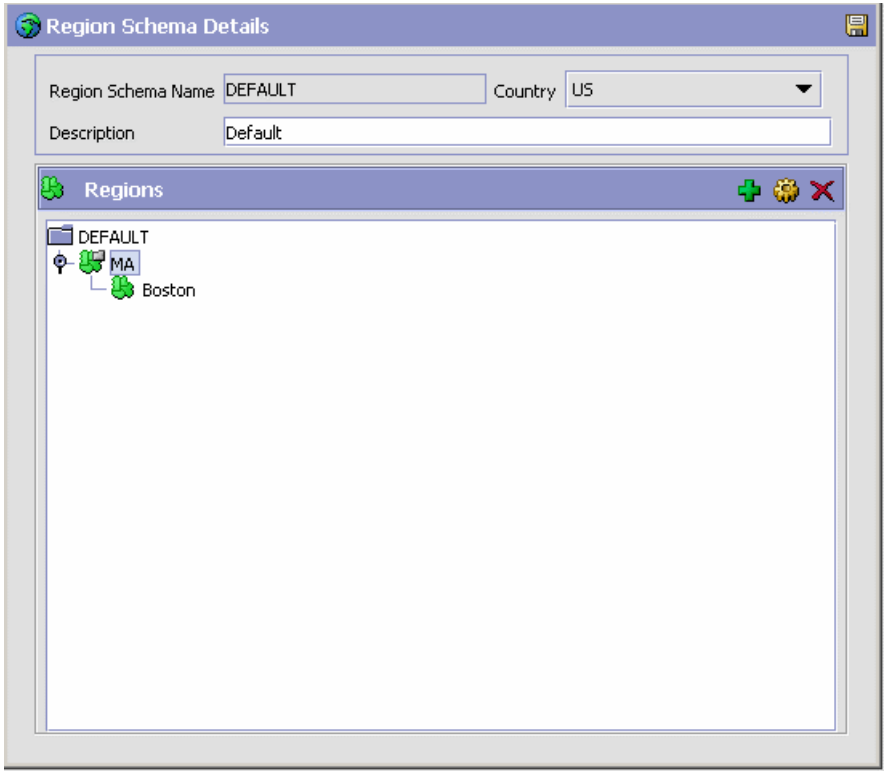
You can view the region schemas used for configuring count programs. For more information about count programs, see Section 10.1, "Defining Count Program".

To view region usage for count:

1. From the tree in the application rules side panel, choose Count > Region Usage For Count. The Region Usage For Count pop-up window displays.



2. From Region Schema for Count, select the region schema you want to view the details for.
3. Choose . The Region Schema Details pop-up window displays.
4. Choose .



10.3 Defining Corporate Count Request Cancellation Reasons

A reason code is associated with cancellation of corporate count requests.

Note: Viewing of Corporate Count Request Cancellation Reason Code is available only for Enterprise and Node users.

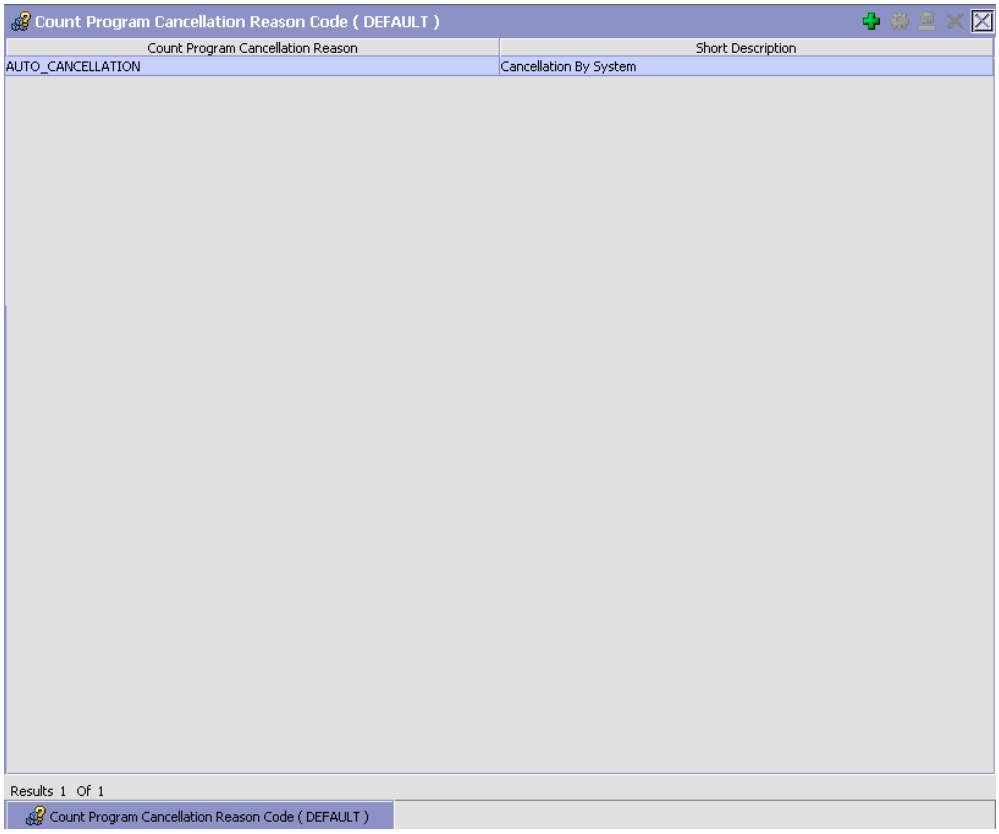
Use Corporate Count Request Cancellation Reasons for:

- Creating a Corporate Count Request Cancellation Reason
- Creating a New Corporate Count Request Cancellation Reason from an Existing Corporate Count Request Cancellation Reason
- Modifying a Corporate Count Request Cancellation Reason
- Deleting a Corporate Count Request Cancellation Reason

10.3.1 Creating a Corporate Count Request Cancellation Reason

To create a corporate count request cancellation reason:

1. From the tree in the application rules side panel, choose Count > Corporate Count Request Cancellation Reasons. The Corporate Count Request Cancellation Reason Code window displays.



2. In the Corporate Count Request Cancellation Reason Code window, choose .
3. The Corporate Count Request Cancellation Reason Code Details pop-up window displays.
4. Enter information in the applicable fields. Refer Table 10–2 for field value descriptions.
5. Choose .

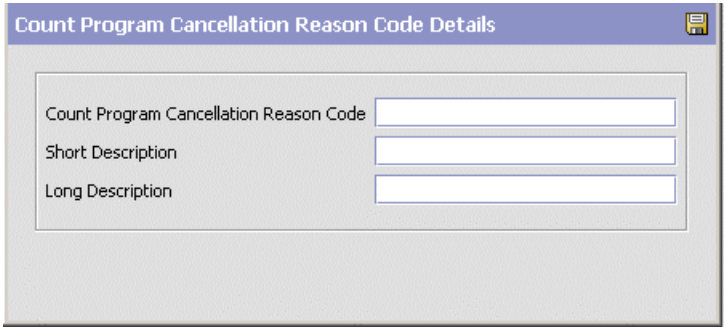


Table 10–2 Corporate Count Request Cancellation Reason Code Details Pop-up Window

Field	Description
Corporate Count Request Cancellation Reason Code	Enter a code for the corporate count request cancellation reason.
Short Description	Enter a short description for the corporate count request cancellation reason code.
Long Description	Enter a long description for the corporate count request cancellation reason code.

10.3.2 Creating a New Corporate Count Request Cancellation Reason from an Existing Corporate Count Request Cancellation Reason

To create a new corporate count request cancellation reason from an existing corporate count request cancellation reason:

1. From the tree in the application rules side panel, choose Count > Corporate Count Request Cancellation Reasons.
2. The Corporate Count Request Cancellation Reason Codes window displays with the list of Corporate Count Request Cancellation Reasons.

3. Choose the Corporate Count Request Cancellation Reason to be copied.
4. Choose . The Corporate Count Request Cancellation Reason Code Details pop-up window displays.
5. Enter information in the applicable fields. Refer Table 10–2 for field value descriptions.
6. Choose .

10.3.3 Modifying a Corporate Count Request Cancellation Reason

Once a Corporate Count Request Cancellation Reason has been created, it can be modified.

To modify a corporate count request cancellation reason:

1. From the tree in the application rules side panel, choose Count > Corporate Count Request Cancellation Reasons.
2. The Corporate Count Request Cancellation Reason Codes window displays with the list of Corporate Count Request Cancellation Reasons.
3. Choose the Corporate Count Request Cancellation Reason to be modified.
4. Choose . The Corporate Count Request Cancellation Reason Code Details pop-up window displays.
5. Enter information in the applicable fields. Refer Table 10–2 for field value descriptions.
6. Choose .

10.3.4 Deleting a Corporate Count Request Cancellation Reason

To delete a corporate count request cancellation reason code:

1. From the tree in the application rules side panel, choose Count > Corporate Count Request Cancellation Reasons.

2. The Corporate Count Request Cancellation Reason Codes window displays with the list of Corporate Count Request Cancellation Reasons.
3. Choose the Corporate Count Request Cancellation Reason to be deleted.
4. Choose .

10.4 Defining Corporate Count Request Purge Criteria

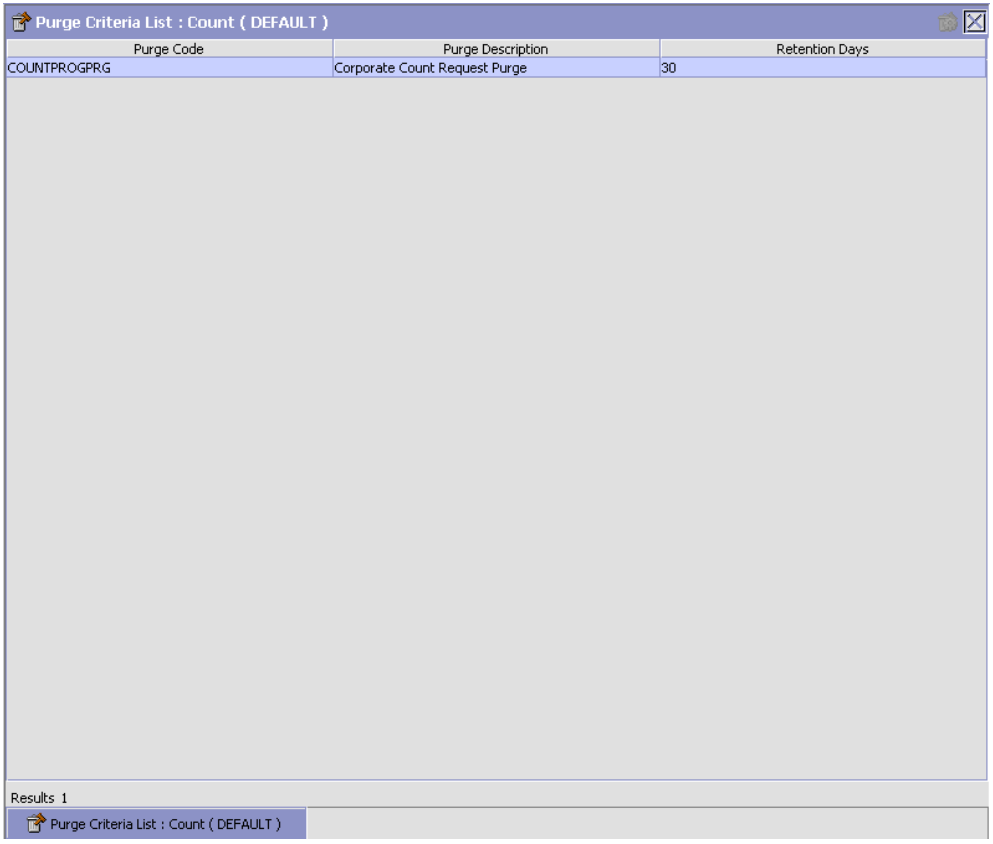
Transactional data collected by the Sterling Multi-Channel Fulfillment Solution during the execution are periodically removed from the 'live' transactional tables. It is common to retain order related information for extended period of time. There are history tables provided for relevant transactional tables to move data from the day-to-day 'live' tables to a historical table.

Purges are the process by which old data is removed from the system database. Purges minimize the number of unused database records to increase search efficiency and reduce the size of the required physical disk.

10.4.1 Setting Up Corporate Count Request Purge Criteria

To set up purge criteria:

1. From the tree in the application rules side panel, choose Count > Corporate Count Request Purge Criteria. The Purge Criteria List window displays.



2. In the Purge Criteria List window, choose . The Purge Criteria Details pop-up window displays.
3. Enter information in the applicable fields. Refer Table 10–3 for field value descriptions.
4. Choose .

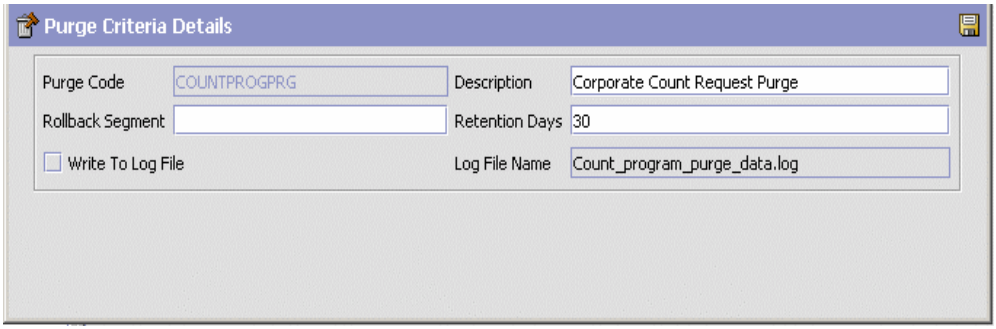


Table 10–3 Purge Criteria Details Pop-up Window

Field	Description
Purge Code	Identifies a purge program. This is a system defined code.
Description	Description of the purge.
Rollback Segment	Defines the rollback segment that should be explicitly used for the purge transaction qualified by the purge code. This is useful when there are huge logical data sets that have to be purged. This is optional and used for order related purges.
Retention Days	Enter the number of days of data to be retained in the database (going backwards from the time the program runs). Make sure that your table size takes into account the number of retention days entered here.

Table 10–3 Purge Criteria Details Pop-up Window

Field	Description
Write To Log File	Check this box if you want purged data written to a log. The log can be backed up and used as a journal at a later date.
Log File Name	The log file is created in the directory specified in the `yfs.purge.path` property. If this is not passed, it defaults to the value specified in the `yfs.properties` file. If a variable is introduced, then the `yfs.purge.path` is ignored. To modify this property, add an entry for it in the `<INSTALL_DIR>/properties/customer_overrides.properties` file. For additional information about modifying properties and the `customer_overrides.properties` file, see the *Sterling Multi-Channel Fulfillment Solution Installation Guide*. For more information about using variables for the log file directory, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*. For information about filename limitations related to internationalization, see the *Sterling Multi-Channel Fulfillment Solution Localization Guide*.

11

Synchronizing with Node Inventory

The Sterling Multi-Channel Fulfillment Solution provides the functionality to reconcile its internal inventory picture with the actual inventory picture at the nodes. This is done in two phases:

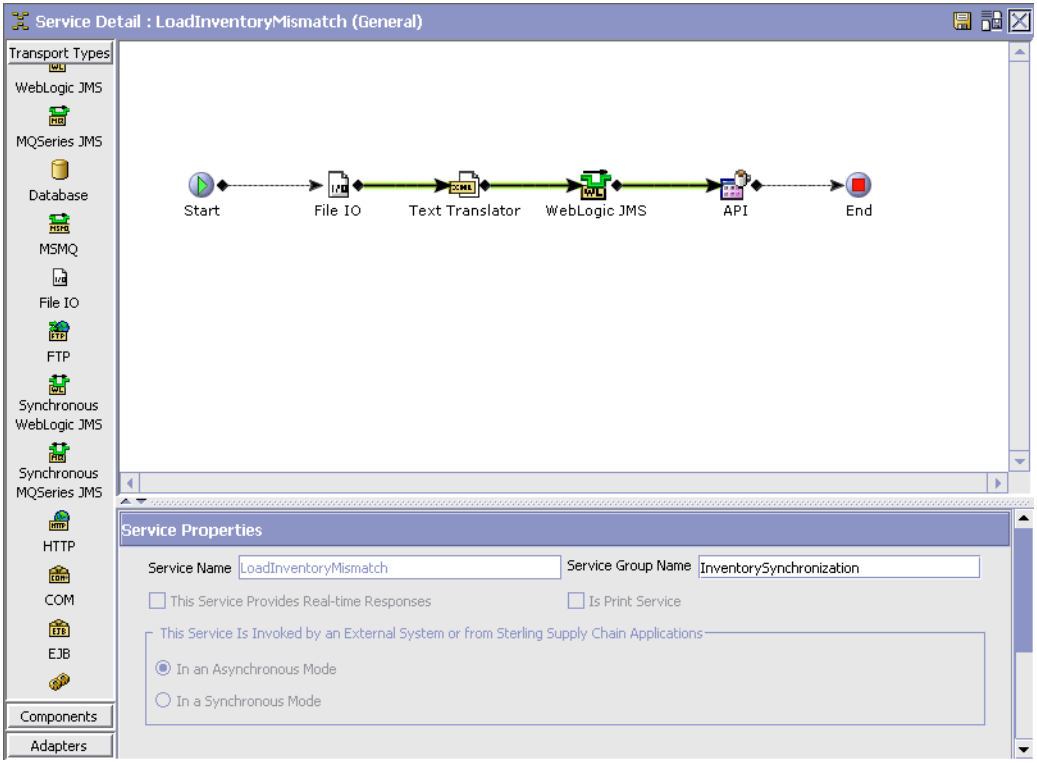
- Loading the Inventory Picture from a Node
- Synchronizing the Inventory Tables

11.1 Loading the Inventory Picture from a Node

In order to reconcile internal and node inventory pictures, the Sterling Multi-Channel Fulfillment Solution first needs to successfully load the node's inventory picture.

To achieve this, you need to use the LoadInventoryMismatch Service in the Service Definition Framework:

1. From the Applications menu of the Sterling Multi-Channel Fulfillment Solution Configurator, click Platform.
2. From the tree in the application rules side panel, double-click Process Modeling.
3. Click the General tab. In the Process Types swimlane, right-click the General process type, and click Model Process. The Repository Details window and work area display for the General process type.
4. Click the Service Definitions tab.
5. Expand the InventorySynchronization branch.
6. Right-click LoadInventoryMismatch, and click details. The Service Detail window displays in the work area.



11.1.1 The LoadInventoryMismatch service

The LoadInventoryMismatch service goes through several different steps.

> **Note:** Although we have used WebLogic JMS as an example, the Sterling Multi-Channel Fulfillment Solution supports the use of WebSphere and JBoss MQ JMS.

From File IO to Text Translator

The LoadInventoryMismatch service first looks at a particular directory where the node uploads the inventory information in an XML file of the following format:

```
<?xml version="1.0" encoding="UTF-8" ?>
```

```
<Inventory YantraMessageGroupID=”OPTIONAL”
ShipNode="REQUIRED" ApplyDifferences=""
CompleteInventoryFlag="" ReasonCode="" ReasonText="">
    <Items>
        <Item InventoryOrganizationCode="REQUIRED"
ItemID="REQUIRED" ProductClass="" UnitOfMeasure="" >
            <Supplies>
                <Supply ETA="" Quantity="" Segment=""
SegmentType="" ShipByDate="" SupplyType=""
SupplyReference="" SupplyReferenceType=""
SupplyLineReference="" AvailabilityType="">
                    <Tag BatchNo="" LotNumber=””
LotAttribute1="" LotAttribute2="" LotAttribute3=""
LotKeyReference="" ManufacturingDate="" RevisionNo="" />
                </Supply>
            </Supplies>
        </Item>
        <Item ...>
            ...
        </Item>
    </Items>
    <Items>
        <Item ...>
            ...
        </Item>
    </Items>
</Inventory>
```

That XML is then passed on to the Text Translator

Note: There are as many messages sent to the JMS queues as there are <Items> nodes. In order to control the number of those messages, make use of the number of <Item> nodes within each <Items> node appropriately. Sterling Commerce recommends including 100 <Item> nodes within each <Items> node.

From Text Translator to WebLogic JMS

The Text Translator parses the XML files, one at a time, and includes the attributes of the <Inventory> node into every one of the <Items> node.

If the YantraMessageGroupID attribute is not passed, the Sterling Multi-Channel Fulfillment Solution generate one automatically. That attribute is unique for every file.

When a file has been successfully parsed, each <Items> node is added to the JMS Queue as a message. When the file has been completely parsed, the EOF (End Of File) node is added to the JMS Queue.

From WebLogic JMS to API

The JMS Queue then reads every message in the queue. The loadInventoryMismatch API is called for each message in the queue, with the appropriate XML as input.

When an EOF message is received by the IntegrationServer, the server first checks if there are any reprocessable messages for this service with the same YantraMessageGroupID. If there are any pending error messages to be reprocessed, then the EOF message is marked as a reprocessable error message and inserted into the YFS_REPROCESS_ERROR table. This message needs to be reprocessed along with other reprocessable errors for this service.

If there is no pending error messages to be processed, it calls the SyncLoadedInventory Service. For more information about the Sync Loaded Inventory service, see Section 11.2.1, "The SyncLoadedInventory Service".

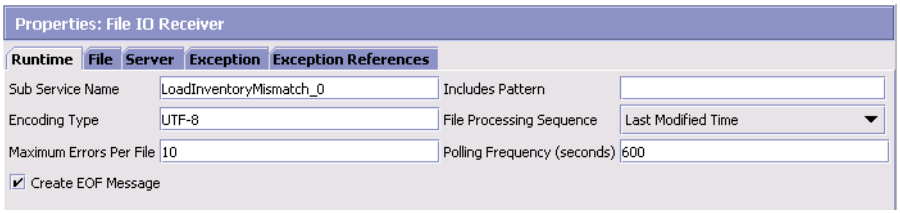
The loadInventoryMismatch API inserts into the YFS_INVENTORY_SUPPLY_TEMP for each <Item> ... </Item> node.

11.1.2 Configuring the LoadInventoryMismatch service

The LoadInventoryMismatch service is responsible for loading the inventory picture from the node, and eventually populating the YFS_INVENTORY_SUPPLY_TEMP table with the appropriate data.

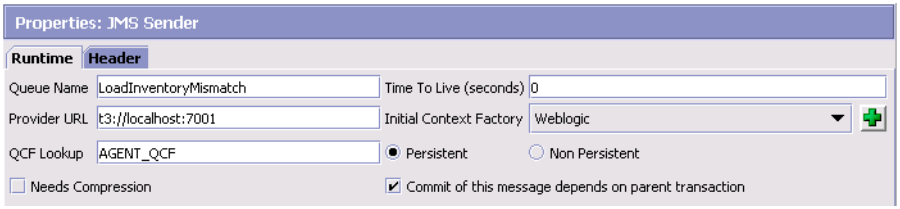
The following steps are required to configure the service appropriately:

1. In the LoadInventoryMismatch Service Detail window, click the green connector in between File IO and Text Translator. The File IO Receiver properties display under the graphic area.



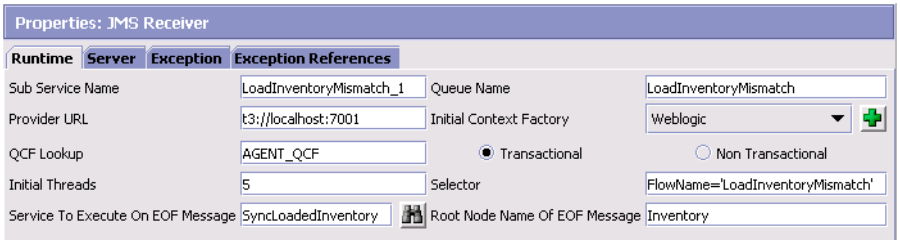
   - Click the Runtime tab.
   - Ensure that the Create EOF Message field is checked.
   - For descriptions of the rest of the fields, refer to the Service Builder Nodes and Parameters appendix of the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.
   - Click the File tab.
   - In the Incoming Directory field, enter the directory where the node uploads the inventory XMLs.
   - For descriptions of the rest of the fields, refer to the Service Builder Nodes and Parameters appendix of the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

2. In the LoadInventoryMismatch Service Detail window, click the green connector in between Text Translator and WebLogic JMS. The JMS Sender properties display under the graphic area.



- Click the Runtime tab.
- Ensure that the Queue Name entered is the name of an existing JMS Queue, and that it matches the Queue Name of the JMS Receiver properties.
- For descriptions of the rest of the fields, refer to the Service Builder Nodes and Parameters appendix of the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

3. In the LoadInventoryMismatch Service Detail window, click the green connector in between WebLogic JMS and API. The JMS Receiver properties display under the graphic area.



- Click the Runtime tab.
- Ensure that the Queue Name entered is the name of an existing JMS Queue, and that it matches the Queue Name of the JMS Sender properties.
- For descriptions of the rest of the fields, refer to the Service Builder Nodes and Parameters appendix of the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.
- Click the Exception tab.
- Ensure that the Is Reprocessing field is checked.

11.2 Synchronizing the Inventory Tables

When a file containing the node's inventory picture has been successfully loaded into the YFS_INVENTORY_SUPPLY_TEMP table, the differences in the inventory pictures need to be reconciled. This is done through the SyncLoadedInventoryService.

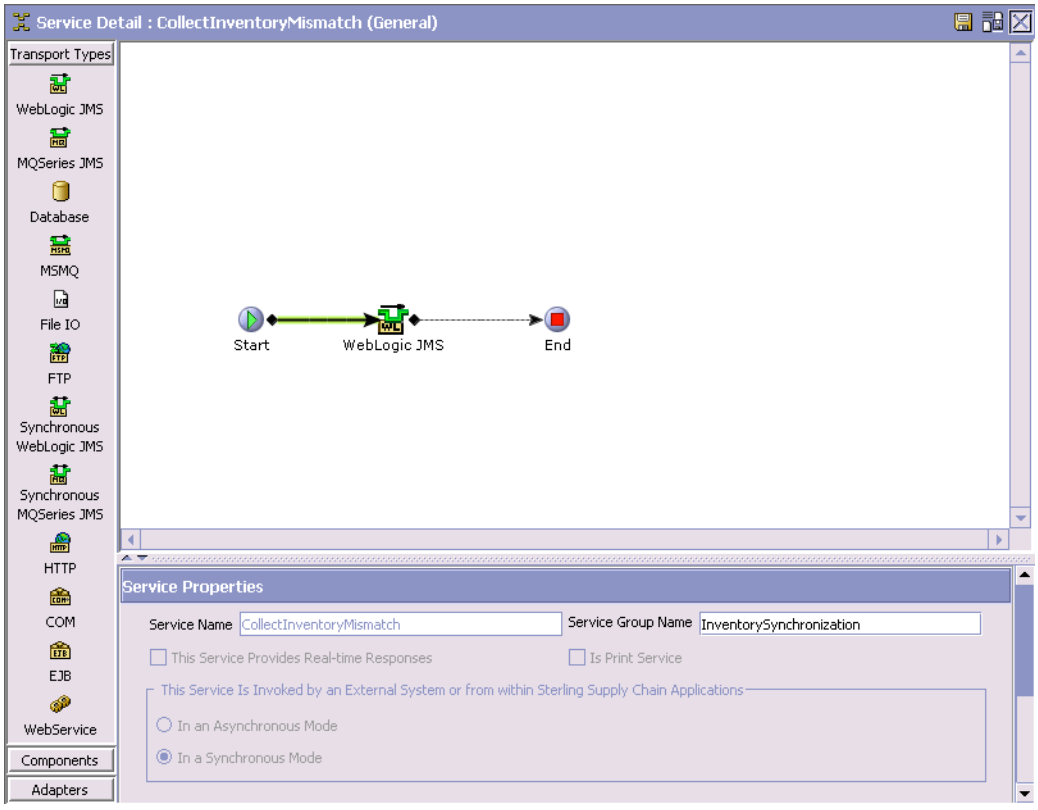
11.2.1 The SyncLoadedInventory Service

The SyncLoadedInventory service calls the syncLoadedInventory API after the node's inventory picture has been successfully loaded into the YFS_INVENTORY_SUPPLY_TEMP table. The syncLoadedInventory API compares the YFS_INVENTORY_SUPPLY and YFS_INVENTORY_SUPPLY_TEMP tables, and whenever a difference is noticed, updates the YFS_INVENTORY_SUPPLY table, and raises the ON_INV_MISMATCH event.

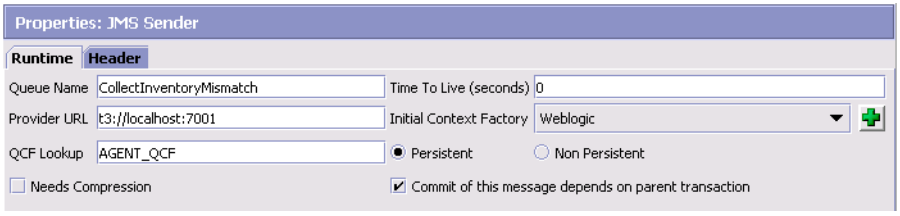
11.2.2 Configuring the CollectInventoryMismatch Service

The ON_INV_MISMATCH event invokes the CollectInventoryMismatch service, which places the published XML into a JMS queue.

1. From the Applications menu of the Sterling Multi-Channel Fulfillment Solution Configurator, click Platform.
2. From the tree in the application rules side panel, double-click Process Modeling.
3. Click the General tab. In the Process Types swimlane, right-click the General process type, and click Model Process. The Repository Details window and work area display for the General process type.
4. Click the Service Definitions tab.
5. Expand the InventorySynchronization branch.
6. Right-click CollectInventoryMismatch, and click details. The Service Detail window displays in the work area.



7. In the CollectInventoryMismatch Service Detail window, click the green connector in between Start and WebLogic JMS. The JMS Sender properties display under the graphic area.



- Click the Runtime tab.

- Ensure that the Queue Name entered is the name of an existing JMS Queue.
- For descriptions of the rest of the fields, refer to the Service Builder Nodes and Parameters appendix of the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

11.2.3 Executing the synchronization process

To start the process of synchronizing with node inventory, the pre configured LoadInvMismatchFileServer and LoadInvMismatchJMSServer servers in the LoadInventoryMismatch service need to be started using the provided `agentserver.cmd` or `agentserver.sh` in the `<INSTALL_DIR>/bin` directory:

- `<INSTALL_DIR>/bin/agentserver.sh LoadInvMismatchFileServer`
- `<INSTALL_DIR>/bin/agentserver.sh LoadInvMismatchJMSServer`

Once the two servers is running, files containing inventory information from nodes can be uploaded into the incoming directory specified for the File I/O component in the LoadInventoryMismatch service.

11.2.4 Purging the Temporary Table

Once the inventory picture of the Sterling Multi-Channel Fulfillment Solution has been successfully updated, the contents of the YFS_INVENTORY_SUPPLY_TEMP need to be cleaned up. This can be achieved by running the Purge Inventory Supply Temp time-triggered purge transaction.

For more information about the Purge Inventory Supply Temp time-triggered purge transaction, see Section A.3.3.8, "Inventory Supply Temp Purge".

A

Time-Triggered Transaction Reference

The Sterling Multi-Channel Fulfillment Solution provides a collection of time-triggered transactions, which are utilities that perform a variety of individual functions, automatically and at specific time intervals.

Time-triggered transactions perform repetitive actions on a scheduled basis, typically performing database updates, raising events, or calling APIs. One type of transaction, monitors, are designed to watch for processes or circumstances that are out of bounds and then raise alerts. Often, but not always, they retrieve tasks from the task queue or work from the pipeline.

Some transactions enable you to collect statistical data regarding the application's health. This data is collected periodically, using the value specified for the `yantra.statistics.persist.interval` attribute in the `yfs.properties` file. By default, statistics collection set to on. To modify this property, add an entry in the `<INSTALL_DIR>/properties/customer_overrides.properties` file. For additional information about modifying properties and the `customer_overrides.properties` file, see the *Sterling Multi-Channel Fulfillment Solution Installation Guide*.

For more information about statistics persistence, see the *Sterling Multi-Channel Fulfillment Solution Performance Management Guide*. For more information about the specific statistics parameters used, see the applicable time-triggered transactions.

The time-triggered transactions described in this appendix are unique transactions, that may or may not be document type specific. For document specific transactions, the nomenclature helps define which unique transaction it is based on: a transaction ID is in the format `Unique_Transaction_ID.Document_Type_Code`. For example, the transaction ID for Purge Return is `PURGE.0003`, indicating that it is based on the unique transaction `PURGE`, for document type `0003`, which is

Return Order. Therefore, in order to be able to configure Purge Return, you should look for the PURGE transaction ID in this appendix, which is Order Purge.

The Sterling Multi-Channel Fulfillment Solution provides the following types of time-triggered transactions:

- Business Process Time-Triggered Transactions - responsible for processing
- Time-Triggered Purge Transactions - clear out data that may be discarded after having been processed
- Task Queue Syncher Time-Triggered Transactions - update the task queue repository with the latest list of open tasks to be performed by each transaction, based on the latest pipeline configuration.
- Monitors - watch and send alerts for processing delays and exceptions

The Sterling Multi-Channel Fulfillment Solution tracks the following statistics for each time-triggered transaction:

- ExecuteMessageCreated - The number of jobs added to the JMS queue in a given time interval.
- ExecuteMessageSuccess - The number of jobs that were run successfully in a given time interval.
- ExecuteMessageError - The number of jobs that failed to run in a given time interval.
- GetJobsProcessed - The number of GetJob messages that were processed in a given time interval.

Note: Some of the statistics collected and tracked in Release 8.0 for time-triggered transactions, monitors, and integration and application servers may change with the next release of the Sterling Multi-Channel Fulfillment Solution.

A.1 Running Time-Triggered Transactions

All time-triggered transactions are threadable. This means that you can run multiple instances of a transaction within a single process. For more information about running time-triggered transactions, see the *Sterling*

Multi-Channel Fulfillment Solution Installation Guide. For more information about fine-tuning system performance while running them concurrently, see the *Sterling Multi-Channel Fulfillment Solution Performance Management Guide*.

A.1.1 Steps to Complete Before Scheduling Time-Triggered Transactions

Before running and scheduling a time-triggered transaction, ensure that you have completed the following:

1. Configure a JMS Connection Factory to correlate with the QCF name configured for the time-triggered transaction. The Sterling Multi-Channel Fulfillment Solution factory defaults include the `AGENT_QCF` as the JMS Connection Factory. For more information about configuring JMS, see the documentation for your specific application server.
2. Configure JMS Server Destinations to correlate with the group or individual name of the time-triggered transaction. The Sterling Multi-Channel Fulfillment Solution factory defaults include the `DefaultAgentQueue` as the server destination.

   Note: Do not put a dot (.) in the name of a JMS Server Destination, for example,'A.0001'. If you do, the Sterling Multi-Channel Fulfillment Solution is unable to communicate with it.

3. Using the Sterling Multi-Channel Fulfillment Solution Configurator, configure each time-triggered transaction required for your business process as described in Section 4.2.6, "Defining Transactions". Each set of time-triggered transaction criteria parameters must ensure the appropriate association of a JMS Agent Server.

A.2 Business Process Time-Triggered Transactions

This section provides an alphabetical list of all business process transactions.

Note: Some of the statistics collected and tracked in Release 8.0 for time-triggered transactions, monitors, and integration and application servers may change with the next release of the Sterling Multi-Channel Fulfillment Solution.

Note: All Business Process Time-Triggered Transactions have a `CollectPendingJobs` criteria parameter. If this parameter is set to `N`, the agent does not collect information on the pending jobs for that time-triggered transaction. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console.

By default, `CollectPendingJobs` is set to `Y`. It can be helpful to set it to `N` if one particular time-triggered transaction is performing a significant amount of `getPendingJobs` queries, and the overhead cost is too high.

A.2.1 Change Load Status

This transaction is equivalent to the `changeLoadStatus()` API. For detailed information about this transaction, see the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

To be configured as part of your load processing pipeline, this transaction can be used whenever an automatic change in the status of a load is required. This automatic change could represent exporting load information to load planning software or transmission to the load's carrier.

Note: This transaction should be configured to work from the task queue.

Attributes

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

Table A–1 Change Load Status Attributes

Attribute	Value
Base Transaction ID	CHANGE_LOAD_STATUS
Base Document Type	Load
Base Process Type	Load Execution
Abstract Transaction	Yes
APIs Called	`changeLoadStatus()`

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–2 Change Load Status Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–3 Change Load Status Statistics

Statistic Name	Description
NumLoadsChanged	Number of loads whose status was changed.

Pending Job Count

For this transaction the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the CurrentDate value in the YFS_Task_Q table.

Events Raised

This transaction raises events as specified under the changeLoadStatus() API in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

A.2.2 Change Shipment Status

This transaction is equivalent to the changeShipmentStatus() API. For detailed information about this transaction, see the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

To be configured as part of your shipment processing pipeline, this transaction can be used whenever an automatic change in the status of a shipment is required. For example, this automatic change could represent exporting shipment information to a warehouse management system or to transmit an Advance Shipping Notice to the buyer.

Note: This transaction should be configured to work from the task queue.

Attributes

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

Table A–4 Change Shipment Status Attributes

Attribute	Value
Base Transaction ID	CHANGE_SHIPMENT_STATUS
Base Document Type	Order
Base Process Type	Order Delivery
Abstract Transaction	Yes
APIs Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–5 Change Shipment Status Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–6 Create Chained Order Statistics

Statistic Name	Description
NumShipmentsChanged	Number of shipments whose status was changed.

Pending Job Count

For this transaction the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table.

Events Raised

This transaction raises events as specified under the `changeShipmentStatus()` API in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

A.2.3 Close Delivery Plan

To boost system performance, this transaction serves as a temporary purge until the Delivery Plan Purge deletes delivery plan-related data (see Section A.3.3.3, "Delivery Plan Purge").

This transaction picks all delivery plans that do not have any of their loads or shipments still open and marks the deliveryplan_closed_flag='Y'. This flag indicates no further operations are possible on the plan.

This transaction corresponds to the base transaction close delivery plan (CLOSE_DELIVERY_PLAN) in the load pipeline.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge jobs.

Attributes

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

Table A–7 Close Delivery Plan Attributes

Attribute	Value
Base Transaction ID	CLOSE_DELIVERY_PLAN
Base Document Type	Load
Base Process Type	Load Execution
Abstract Transaction	No
APIs Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–8 Close Delivery Plan Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–9 Close Delivery Plan Statistics

Statistic Name	Description
NumDeliveryPlansClosed	Number of delivery plans closed.

Pending Job Count

For this transaction the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table.

Events Raised

The following events are raised by this time-triggered transaction:

Table A–10 Events Raised by Close Delivery Plan Transaction

Transaction/Event	Key Data	Data Published	Template Support?
ON_SUCCESS	delivery_plan_dbd.txt	YDM_CLOSE_DELIVERY_PLAN.ON_SUCCESS.xml	Yes

However, note that the template name would read <TransactionId>.ON_SUCCESS.xml.

A.2.4 Close Load

To boost system performance, this transaction serves as a temporary purge until the Load Purge deletes load-related data (see Section A.3.3.11, "Load Purge").

This transaction corresponds to the base transaction Close Load (CLOSE_LOAD) in the load pipeline.

If you use the Load processing pipeline, you must schedule this transaction. Only closed loads are picked up by the purge transaction. Therefore, it is required that this transaction be made part of the pipeline and scheduled to run at the end of the day.

Note: This transaction should be made part of the pipeline. In addition, it should be configured to work from the task queue.

Attributes

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

Table A–11 Close Load Attributes

Attribute	Value
Base Transaction ID	CLOSE_LOAD
Base Document Type	Load
Base Process Type	Load Execution
Abstract Transaction	No
APIs Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–12 Close Load Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Next Task Queue Interval	Optional. Specifies in hours how long a failed task should be suspended before it is considered for reprocessing. Defaults to 5 hours.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–13 Close Load Statistics

Statistic Name	Description
NumLoadsClosed	Number of loads closed.

Pending Job Count

For this transaction the pending job count is the number of open delivery plans, which are not associated to any open loads and open shipments.

Events Raised

The following events are raised by this time-triggered transaction:

Table A–14 Events Raised by the Close Load Transaction

Transaction/Event	Data Published	Template Support?
ON_SUCCESS	YDM_CLOSE_LOAD_PLAN.ON_SUCCESS.xml	Yes

However, note that the template name would read <TransactionId>.ON_SUCCESS.xml.

A.2.5 Close Manifest

This time-triggered transaction sets the manifest's MANIFEST_CLOSED_FLAG flag to 'Y' and updates the manifest status to CLOSED. This time-triggered transaction confirms all the shipments that are pending confirmation, and closes the manifest.

Note: If the Close Manifest Agent is triggered without any criteria, it closes all the candidate manifests across all ShipNodes.

The `yfs.closemanifest.online` property in the `yfs.properties_ysc_ext.in` file is used to set this time-triggered transaction to work in online or offline mode. To modify this property, add an entry for it in the `<INSTALL_DIR>/properties/customer_overrides.properties` file. For additional information about modifying properties and the customer_

overrides.properties file, see the *Sterling Multi-Channel Fulfillment Solution Installation Guide*.

- **Online mode:** In the online mode, the close manifest transaction runs as usual, confirming all shipments in the manifest and then closing the manifest.
- **Offline mode:** In the offline mode, the close manifest transaction triggers an agent and changes the manifest status to 'Closure Requested'. When the agent runs, it confirms either each shipment of the manifest, or closes the manifest, in an execution call.

The mode of operation (online or offline) is decided on the basis of the value specified for the yfs.closemanifest.online property in the yfs.properties_ycs_ext.in file. To modify this property, add an entry for it in the <INSTALL_DIR>/properties/customer_overrides.properties file. For additional information about modifying properties and the customer_overrides.properties file, see the *Sterling Multi-Channel Fulfillment Solution Installation Guide*.

The default out-of-the-box shipped property causes the Close Manifest transaction to run in online mode.

Note: In instances where the Close Manifest transaction is run in offline mode, ensure that all Agent Criteria defined for the transaction are configured properly.

Attributes

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

Table A–15 Close Manifest Attributes

Attribute	Value
Base Transaction ID	CLOSE_MANIFEST
Base Document Type	General
Base Process Type	Manifesting
Abstract Transaction	No
APIs Called	confirmShipment()

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–16 Close Manifest Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
AgentCriteriaGroup	Optional. Used to classify nodes. This value can be accepted by WMS time-triggered transactions that only perform their tasks on the nodes with a matching node transactional velocity value. Valid values are: LOW, HIGH, and any additional values defined by the Hub from Platform > System Administration > Agent Criteria Groups.
ShipNode	Optional. Ship node for which the Close Manifest needs to be run. If not passed, then all ship nodes are monitored.

Statistics Tracked

The following are statistics are tracked for this transaction:

Table A–17 Close Manifest Statistics

Statistic Name	Description
NumShipmentsConfirmed	Number of shipments confirmed.
NumManifestsClosed	Number of manifests closed.
NumManifestsErrored	Number of manifests errored.
NumShipmentsErrored	Number of shipments errored.

Pending Job Count

For this transaction the pending job count is the sum of open manifests and shipments belonging to manifests (with MANIFEST_STATUS='1200').

Events Raised

The following events are raised by this time-triggered transaction:

Table A–18 Events Raised by the Close Manifest Transaction

Transaction / Event	Key Data	Data Published	Template Support?
ON_SUCCESS	manifest_dbd.txt	YDM_CLOSE_MANIFEST.ON_SUCCESS.xml	Yes

A.2.6 Close Order

This time-triggered transaction sets the order's ORDER_CLOSED flag to 'Y' and raises the ON_SUCCESS event. These actions are only performed when the entire ORDER_QTY for all the order lines reaches the configured pickup status. If an order has ORDER_CLOSED set to 'Y', it is not picked up for monitoring.

Note: The Close Order agent must be configured along with the Purge transaction in the pipeline.

Note: The Close Order agent must be run before running the Monitor agent in order to avoid alerts getting raised for cancelled orders.

Note: Many of this transaction's elements and attributes are template-driven. Refer to the XML for element level details.

Attributes

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

Table A–19 Close Order Attributes

Attribute	Value
Base Transaction ID	CLOSE_ORDER
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 A–20 Close Order Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Next Task Queue Interval	Optional. Specifies in hours how long a failed task should be suspended before it is considered for reprocessing. Defaults to 5 hours.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–21 Close Order Statistics

Statistic Name	Description
NumOrdersProcessed	Number of orders processed.
NumOrdersClosed	Number of orders closed.

Pending Job Count

For this transaction the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE

value less than or equal to (<=) the current date value in the YFS_Task_Q table, if tasks on hold are not ready to be processed.

Events Raised

The following events are raised by this time-triggered transaction:

Table A–22 Events Raised by the Close Order Transaction

Transaction/Event	Data Published	Template Support?
ON_SUCCESS	YFS_CLOSE_ORDER.ON_SUCCESS.xml	Yes

A.2.7 Close Receipts

This time-triggered transaction closes receipts using the receiving rule specified.

Attributes

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

Table A–23 Close Receipts Attributes

Attribute	Value
Base Transaction ID	RECEIPT_COMPLETE
Base Document Type	Order
Base Process Type	Receipt (Purchase Order Receipt, Return Receipt, Transfer Order Receipt, Sales Order Receipt)
Abstract Transaction	No
APIs Called	None
User Exits Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–24 Close Receipts Criteria Parameters

Parameter	Description
Action	Triggers the transaction. If left blank, it defaults to Get, the only valid value.
Number of Records To Buffer	Number of records to retrieve and process at one time. If left blank or specified as 0 (zero), it defaults to 5000.
EnterpriseCode	Enterprise for which the Close Receipts needs to be run. If not passed, then all enterprises are monitored.
Node	Node for which the Close Receipts Purge needs to be run. If not passed, then all nodes are monitored.
AgentCriteriaGroup	Used to classify nodes. This value can be accepted by WMS time-triggered transactions that only perform their tasks on the nodes with a matching node transactional velocity value. Valid values are: LOW, HIGH, and any additional values defined by the Hub from Platform > System Administration > Agent Criteria Groups.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–25 Close Receipts Statistics

Statistic Name	Description
NumReceiptsClosed	Number of receipts closed.

Pending Job Count

For this transaction the pending job count is the number of Receipts that can be closed (with OPEN_RECEIPT_FLAG='Y').

Events Raised

The following events are raised by this time-triggered transaction:

Table A–26 Events Raised by the Close Receipts Transaction

Transaction/Event	Key Data	Data Published	Template Support?
ON_SUCCESS	receipt_dbd.txt	YFS_RECEIPT_COMPLETE.ON_SUCCESS.xml	Yes

Troubleshooting Tip: When multiple inbound shipments are received into the same location, and the inventory received is not license plated, an error message, "There is no inventory for put away at the SourceLocation" displays. The solution to this problem lies in one of these steps:

- Manually create move requests for receipts that you already received. For more information about creating move requests, refer to the *Sterling Warehouse Management System User Guide*.
- For receipts that are expected to be received, ensure that the inventory is license plated and that you don't receive inbound shipments and inventory for put away into the same location.

A.2.8 Close Shipment

To boost system performance, this transaction serves as a temporary purge until the Shipment Purge deletes all shipment-related data (see Section A.3.3.28, "Shipment Purge").

This transaction picks all shipments eligible to be closed, based on the pipeline configuration for pickup for transaction CLOSE_SHIPMENT, and marks the shipment_closed_flag='Y'. This flag indicates no further operations are possible on the shipment. There is no status change involved. This transaction can be configured in the pipeline so that it picks up either Shipped or Delivered status.

This transaction corresponds to the base transaction close shipment (CLOSE_SHIPMENT) in the shipment pipeline.

Note: This transaction should be made part of the pipeline. In addition, it should be configured to work from the task queue.

Attributes

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

Table A–27 Close Shipment Attributes

Attribute	Value
Base Transaction ID	CLOSE_SHIPMENT
Base Document Type	Order
Base Process Type	Order Delivery
Abstract Transaction	No
APIs Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–28 Close Shipment Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Next Task Queue Interval	Optional. Specifies in hours how long a failed task should be suspended before it is considered for reprocessing. Defaults to 5 hours.

Statistics Tracked

The following are statistics are tracked for this transaction:

Table A–29 Close Shipment Statistics

Statistic Name	Description
NumShipmentsClosed	Number of shipments closed.

Pending Job Count

For this transaction the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table.

Events Raised

The following events are raised by this time-triggered transaction:

Table A–30 Events Raised by the Close Shipment Transaction

Transaction/Event	Key Data	Data Published	Template Support?
ON_SUCCESS	shipment_dbd.txt	YDM_CLOSE_SHIPMENT.ON_SUCCESS.xml	Yes

A.2.9 Collect Shipment Statistics

Collect Shipment Statistics is a time-triggered transaction which can be invoked to process the shipments, and generate information required for the Daily Shipment Report.

Attributes

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

Table A–31 Collect Shipment Statistics Attributes

Attribute	Value
Transaction Name	Collect Shipment Statistics
Transaction ID	COLLECT_STATISTICS
Base Document Type	Order
Base Process Type	Order Delivery

Table A–31 Collect Shipment Statistics Attributes

Attribute	Value
Abstract Transaction	No
APIs Called	None
User Exits Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–32 Collect Shipment Statistics Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Node	Required. The warehouse management ship node for which records are being processed.
AgentCriteriaGroup	Optional. Used to classify nodes. This value can be accepted by WMS time-triggered transactions that only perform their tasks on the nodes with a matching node transactional velocity value. Valid values are: LOW, HIGH, and any additional values defined by the Hub from Platform > System Administration > Agent Criteria Groups.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–33 Statistics for Collect Shipment Statistics

Statistic Name	Description
NumDaysStatisticsCollected	Number of days for which shipment statistics have been collected.

Pending Job Count

For this transaction the pending job count is the number of days for which shipment statistics needs to be collected. The number of days is calculated as the difference (in days) between the current date and the last date when shipment statistics was collected.

Events Raised

The following events are raised by this time-triggered transaction:

Table A–34 Events Raised by the Collect Shipment Statistics Transaction

Transaction / Event	Data Published	Template Support?
ON_SUCCESS	YDM_COLLECT_STATISTICS.ON_SUCCESS.xml	No

A.2.10 Complete Planned Order

Complete Planned Order takes planned orders to completion after negotiations are resolved. Use this time-triggered transaction on a planned order after negotiation is complete. This time-triggered transaction was deprecated in Release 5.0 SP1.

Attributes

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

Table A–35 Complete Planned Order Attributes

Attribute	Value
Transaction Name	Complete Planned Order
Transaction ID	PLAN_ORDER_COMPLETE
Base Document Type	Order
Base Process Type	Planned Order Execution
Abstract Transaction	No
APIs Called	None
User Exits Called	None

Criteria Parameters

The following are the parameters for this transaction:

Table A–36 Order Complete Criteria Parameters

Parameter	Description
DocumentType	Required. The type of document to process for a particular run. Valid values are: • 0001 - Sales Order (Default) • 0002 - Planned Order
TotalRecords	Optional. Number of records for the time-triggered transaction to pass. If not passed, defaults to 5000.

Statistics Tracked

None.

Pending Job Count

None.

Events Raised

The following events are raised by this time-triggered transaction:

Table A–37 Events Raised by the Order Complete Transaction

Transaction/Event	Key Data	Data Published	Template Support?
PLAN_ORDER_ COMPLETE	modifyOrder _dbd.txt	YFS_ getPlannedOrderSta tus_Output.xml	No

A.2.11 Consolidate Additional Inventory

The Consolidate Additional Inventory time-triggered transaction consolidates supply and demand from the YFS_INVENTORY_SUPPLY_ ADDNL and YFS_INVENTORY_DEMAND_ADDNL tables. Consolidation is performed by summing up the quantities of additional supply and demand in the YFS_INVENTORY_SUPPLY and YFS_INVENTORY_DEMAND tables.

If no matching supply or demand is found, a new supply or demand is created with the sum quantity of the changes in the YFS_INVENTORY_SUPPLY_ADDNL and YFS_INVENTORY_DEMAND_ADDNL tables. After the changes are applied, the records in the YFS_INVENTORY_SUPPLY_ADDNL and YFS_INVENTORY_DEMAND_ADDNL tables that were used in the consolidation process, are deleted.

Attributes

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

Table A–38 Consolidate Additional Inventory Attributes

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

Criteria Parameters

The following are the parameters for this transaction:

Table A–39 Consolidate Additional Inventory Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
Number of Records To Buffer	Optional. Number of inventory item records (whose additional supplies and demands are consolidated_ to retrieve and process at one time. If left blank or specified as 0 (zero), it defaults to 5000.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–40 Consolidate Additional Inventory Statistics

Statistic Name	Description
NumInventorySupplyAddnlsProcessed	Number of additional inventory supply records processed in the consolidation.
NumInventoryDemandAddnlsProcessed	Number of additional inventory demand records processed in the consolidation.
NumInventoryDemandDtlsProcessed	Number of inventory demand details records processed in the consolidation.

Pending Job Count

For this transaction the pending job count is the number of distinct inventory items in the YFS_Inventory_Supply_Addnl and YFS_Inventory_Demand_Addnl tables, multiplied by two.

Events Raised

None.

A.2.12 Consolidate To Shipment

This is a task queue based transaction in the order pipeline that corresponds to base transaction CONSOLIDATE_TO_SHIPMENT. This transaction finds a shipment into which a given order release can be included. If it finds an existing shipment, it calls changeShipment() API. Otherwise, it calls the createShipment() API.

To find the existing shipments it matches ShipNode, ShipTo Address, SellerOrganizationCode, Carrier, DocumentType and so forth, of the Order Release with that of existing shipments. List of attributes it matches is actually based on Document Template for Document Type of the Order.

This transaction is applicable only to the shipments in one of the following Statuses:

- Shipment Created
- ESP Check Required

- On ESP Hold
- Released from ESP Hold
- Released For Routing
- Awaiting Routing
- Shipment Routing
- Sent To Node
- Shipment Being Picked

> **Troubleshooting Tip:** To successfully consolidate an Order Release to an existing shipment, the Add Line and related modification types on shipment in its current status should be allowed.

For more information, see the details provided under the `createShipment()`, `changeShipment()`, and `releaseOrder()` APIs in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

> **Note:** This transaction is a part of the Order Fulfillment pipeline. In addition, it should be configured to work from the task queue.

> **Note:** Order releases with GIFT_FLAG set to `Y` are never consolidated with any other release.

Attributes

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

Table A–41 Consolidate to Shipment Attributes

Attribute	Value
Base Transaction ID	CONSOLIDATE_TO_SHIPMENT
Base Document Type	Order
Base Process Type	Order Fulfillment

Table A–41 Consolidate to Shipment Attributes

Attribute	Value
Abstract Transaction	No
APIs Called	`createShipment()` and `changeShipment()`
User Exits	• It calls beforeConsolidateToShipment in com.yantra.ydm.japi.ue. YDMBeforeConsolidateToShipment for each release before it begins processing. • After it finds the shipments, it calls determineShipmentToConsolidateWith in com.yantra.ydm.japi.ue.YDMDetermineShipmentToConsolidateWith. For more information, see the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–42 Consolidate to Shipment Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Next Task Queue Interval	Optional. Specifies in hours how long a failed task should be suspended before it is considered for reprocessing. Defaults to 5 hours.

Statistics Tracked

The following statistics are tracked for this transaction:

Pending Job Count

Table A–43 Consolidate to Shipment Statistics

Statistic Name	Description
NumOrderReleasesConsolidated	Number of order releases consolidated.

For this transaction the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table.

Events Raised

The following events are raised by this time-triggered transaction:

Table A–44 Events Raised by the Consolidate to Shipment Transaction

Transaction / Event	Key Data	Data Published	Template Support?
ON_SUCCESS	shipment_dbd.txt	YDM_CONSOLIDATE_TO_SHIPMENT.ON_SUCCESS.xml	Yes

Note: This transaction also raises events as specified under the `createShipment()` and `changeShipment()` APIs in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

However, note that the template name would read <TransactionId>.ON_SUCCESS.xml.The XML and DTD depicted above represent the output that the abstract transaction CONSOLIDATE_TO_SHIPMENT transaction is capable of generating.

A.2.13 Create Chained Order

This transaction creates one or more chained orders from an order whose OrderHeaderKey is stored in the task queue object. Chainable lines of the order can also be added to existing chained orders, instead of creating new chained orders with these lines. The existing chained orders must be identified by the `determineChainedOrderForConsolidation` user exit. If

the user exit is not implemented, or if the user exit returns a blank document, one or more new chained orders are created.

For more information about the creation of chained orders, see the information provided under the `createChainedOrder()` API and the `YFSDetermineChainedOrderForConsolidation` user exit in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

This transaction should be invoked after order scheduling.

Attributes

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

Table A–45 Create Chained Order Attributes

Attribute	Value
Base Transaction ID	CHAINED_ORDER_CREATE
Base Document Type	Order
Base Process Type	Order Fulfillment
Abstract Transaction	Yes
APIs Called	`createChainedOrder()`

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–46 Create Chained Order Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Next Task Queue Interval	Optional. Specifies in hours how long a failed task should be suspended before it is considered for reprocessing. Defaults to 5 hours.

Statistics Tracked

The following statistics are tracked for this transaction:

Note: If there are 2 orders being processed and the first order creates a chained order, the DetermineChainedOrderForConsolidation user exit causes the lines of the 2nd order to be added to the first order. The number of chained orders created is counted as 2.

Table A–47 Create Chained Order Statistics

Statistic Name	Description
NumOrdersProcessed	Number of orders processed for creating chained order.
NumOrdersCreated	Number of chained orders created.

Pending Job Count

For this transaction the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table.

Events Raised

This transaction raises events as specified under the `createChainedOrder()` API in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

A.2.14 Create Derived Order

This transaction creates one or more derived orders from an order whose OrderHeaderKey is stored in the task queue object. For existing derived orders, you can add derivable lines or create new derived orders with these lines. The existing derived orders must be identified by the `determineDerivedOrderForConsolidation` user exit. If the user exit is not implemented or if the user exit returns a null document, new derived orders are created. For more information about the creation of derived orders, see the details provided under the `createDerivedOrder()` API and `YFSDetermineDerivedOrderForConsolidation` user exit in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

Attributes

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

Table A–48 Create Derived Order Attributes

Attribute	Value
Base Transaction ID	DERIVED_ORDER_CREATE
Base Document Type	Order
Base Process Type	Order Fulfillment
Abstract Transaction	Yes
APIs Called	`createDerivedOrder()`

Note: The TransactionKey posted in the task queue object must be an instance of the Abstract Transaction DERIVED_ORDER_CREATE for the ProcessType associated with the Order. Otherwise, an exception is thrown.

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–49 Create Derived Order Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Next Task Queue Interval	Optional. Specifies in hours how long a failed task should be suspended before it is considered for reprocessing. Defaults to 5 hours.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–50 Create Derived Order Statistics

Statistic Name	Description
NumOrdersProcessed	Number of orders processed.
NumOrdersCreated	Number of derived orders created.

Note: If there are 2 orders being processed and the first order creates a derived order, the DetermineChainedOrderForConsolidation user exit causes the lines of the 2nd order to be added to the first order. The number of derived orders created is counted as 2.

Pending Job Count

For this transaction the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table.

Events Raised

This transaction raises events as specified under the `createDerivedOrder()` API in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

A.2.15 Create Order Invoice

This transaction creates one or more invoices from an order whose OrderHeaderKey is stored in a task queue object. The `createOrderInvoice()` API is called for the OrderHeaderKey.

Configure this transaction in the pipeline only after all processing that can impact quantity or price has been completed. Post invoice creation, the line quantity cannot be reduced below the invoiced quantity.

Note: Both the Create Order Invoice and Create Shipment Invoice transactions can create invoices for an Order. When configuring your pipeline, ensure that only *one* of these two transactions is configured to create invoices for a particular order line. For more information, see Section A.2.16, "Create Shipment Invoice".

Attributes

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

Table A–51 Create Order Invoice Attributes

Attribute	Value
Base Transaction ID	CREATE_ORDER_INVOICE
Base Document Type	Order
Base Process Type	Order Fulfillment
Abstract Transaction	Yes
APIs Called	`createOrderInvoice()`

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–52 Create Order Invoice Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–53 Create Order Invoice Statistics

Statistic Name	Description
NumOrderInvoicesCreated	Number of order invoices created.

Pending Job Count

For this transaction the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table.

Events Raised

This transaction raises events as specified under the `createOrderInvoice()` API in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

A.2.16 Create Shipment Invoice

Invoicing is mandatory if an order requires payment processing. Invoicing occurs if the following conditions are met:

- Invoicing is enabled at the document parameter level.
- The Seller requires payment processing.

This transaction creates one or more invoices for the shipment whose ShipmentKey is stored in the task queue object. The `createShipmentInvoice()` API is called for the ShipmentHeaderKey.

This transaction should be configured in the shipment pipeline only after the shipment has reached a shipped status.

Note: Both the Create Order Invoice and Create Shipment Invoice can create invoices for an order. When configuring your pipeline, ensure that only *one* of these two transactions is configured to create invoices for a particular order line. See Section A.2.15, "Create Order Invoice".

Attributes

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

Table A–54 Create Shipment Invoice Attributes

Attribute	Value
Base Transaction ID	CREATE_SHIPMENT_INVOICE
Base Document Type	Order
Base Process Type	Order Delivery
Abstract Transaction	Yes
APIs Called	`createShipmentInvoice()`

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–55 Create Shipment Invoice Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–56 Create Shipment Invoice Statistics

Statistic Name	Description
NumShipmentInvoicesCreated	Number of shipment invoices created.

Pending Job Count

For this transaction the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table.

Events Raised

This transaction raises events as specified under the `createShipmentInvoice()` API in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

A.2.17 ESP Evaluator

The ESP Evaluator time-triggered transaction verifies whether a shipment meets certain economic shipping parameters (ESP). ESP can be configured either for buyer or enterprise, with the freight terms on the shipment determining which one is used.

If the configuration is defined to hold shipment for ESP, the shipment when created is held for ESP (with status *On ESP Hold*). This task queue based time-triggered transaction evaluates the shipment for ESP, and passes it on to the next step in the shipment pipeline if the criteria (weight and volume limits, plus maximum days of hold up) are met. The shipment status is now set to *Released from ESP hold*, and routing processing begins.

Attributes

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

Table A–57 ESP Evaluator Attributes

Attribute	Value
Base Transaction ID	ESP_EVALUATOR.0001
Base Document Type	Order
Base Process Type	Outbound Shipment
Abstract Transaction	No
APIs Called	None
User Exits Called	getNodeMinimumNotificationTime

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–58 ESP Evaluator Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
EnterpriseCode	Optional. Enterprise for which the ESP Evaluator needs to be run. If not passed, then all enterprises are monitored.
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.
Next Task Queue Interval	Optional. Specifies in hours how long a failed task should be suspended before it is considered for reprocessing. Defaults to 5 hours.
Node	Required. The warehouse management ship node for which records are being processed.
AgentCriteriaGroup	Optional. Used to classify nodes. This value can be accepted by WMS time-triggered transactions that only perform their tasks on the nodes with a matching node transactional velocity value. Valid values are: LOW, HIGH, and any additional values defined by the Hub from Platform > System Administration > Agent Criteria Groups.

Statistics Tracked

None.

Pending Job Count

For this transaction the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table.

Events Raised

The following events are raised by this time-triggered transaction:

Table A–59 Events Raised by ESP Evaluator Transaction

Transaction/Event	Key Data	Data Published	Template Support?
ON_SUCCESS	shipment_dbd.txt	ESP_EVALUATOR.ON_SUCCESS.xml	Yes

A.2.18 Item Based Allocation

The Item Based Allocation transaction allocates unpromised and promised demands of existing orders to more suitable supplies based upon inventory items and nodes which have been triggered for the Item Based Allocation process in the YFS_IBA_TRIGGER table.

The Item Based Allocation agent obtains and processes all Item Based Allocation triggers from the YFS_IBA_TRIGGER table that meet the following conditions:

- IBA_RUN_REQUIRED = "Y"
- LAST_IBA_PROCESSED_TS was 'x' hours before current time, where 'x' is from the 'Item Based Allocation Agent Execution Interval (in hours)' rule in the Installation rules. For more information about installation rules, refer to the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*. This rule is used to indicate the interval that the Item Based Allocation agent should not reprocess the triggers in the YFS_IBA_TRIGGER table, which were processed earlier. This prevents the IBA agent from over-processing

the item and node combination in the given time interval to avoid any high loads on the system.

- PROCESSING_BY_AGENT="N" or PROCESS_OVER_BY_TS is before the current timestamp. The PROCESSING_BY_AGENT field is used to prevent the picking up of the IBA trigger which is being processed by another instance of the agent.

If InventoryOrganizationCode is specified in the agent criteria, only the IBA trigger with inventory items of that inventory organization is retrieved.

For each triggered item and node combination, the agent finds all of the applicable order lines or order line reservations that contain the item and node and tries to move their un-promised and promised demands to more suitable available supplies in the FIFO (First-In-First-Out) order. The Sterling Multi-Channel Fulfillment Solution creates new positive order line reservations with the matched supply's first ship date and negative order line reservations for the existing demand ship date. Once all orders are processed, they are placed on hold to be rescheduled if changes are detected in the order line reservations.

Note: The following configuration is required for the Item Based Allocation process:

- The Use Item Based Allocation rule needs to be enabled.
- Item and node need to have Item Based Allocation Allowed enabled.
- A hold type is required to be set up for the change order line reservations modification type so that the order can be placed on hold for rescheduling. For more information, refer to the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

Note: The 'When a line is backordered, backorder against the highest priority ship node' rule should be checked in order to reallocate backordered demand. For more information, see the Fulfillment Rules section in the *Sterling Distributed Order Management Configuration Guide*.

Before processing the Item Based Allocation logic, the Item Based Allocation agent updates the following fields on the Item Based Allocation trigger:

- PROCESSING_BY_AGENT = "Y". This indicates that an instance of the agent is currently processing this trigger.
- PROCESS_OVER_BY_TS = current time + 1 hr. This indicates the expected time that the agent should finish with processing this IBA trigger. One hour is the fixed window and cannot be changed. The Sterling Multi-Channel Fulfillment Solution treats the PROCESSING_BY_AGENT flag as "N" regardless of the actual value when current timestamp is after this timestamp.
- IBA_RUN_REQUIRED = "N". This resets the IBA_RUN_REQUIRED flag back to "N".

Obtaining a List of Demands Based on Applicable Order Release Statuses and Order Line Reservations to be Allocated

A list of demands is derived from applicable order release statuses and order line reservations, which have the item and node in the IBA trigger. The following types of demands are retrieved:

- Demands of chained orders
- Demands of orders with chained order already created
- Demands of orders with procurement node but chained order creation is not yet created
- Demands of orders without procurement node
- Demands from order line reservations

The demand quantity is derived based on the order release status quantity with the status from the Status Inventory Type configuration that has a demand type, which considers the supply type with 'Use Consider Demand Type for Item Based Allocation' enabled. For more information, refer to the *Sterling Global Inventory Visibility Configuration Guide*.

Obtaining a List of Available Supplies for Allocation

The Sterling Multi-Channel Fulfillment Solution obtains the available supply based on the availability of the item at the node by ignoring unpromised and promised demands. If the inventory organization maintains its inventory externally, the external availability can be read by the `YFSGetExternalInventoryUE` user exit. Only the availability of supplies that consider the 'Demand Type Look for Availability during Item Based Allocation' are used in the allocation logic. For more information, refer to the *Sterling Global Inventory Visibility Configuration Guide*.

Note: Allocated demands should be matched with the same supplies as "Demand to look for during release".

Matching Demands Against Supplies in FIFO (First-In-First-Out) Order

The Sterling Multi-Channel Fulfillment Solution sorts the list of available supplies in the order of the first shippable date (ETA), and matches the obtained list of demands using the top-down logic (unlike the normal matching logic for obtaining availability, where matches are based on the closest ETA). Demands are allocated in the following orders:

- Demands of chained orders in ascending order of order creation date. (These types of demands are matched based on the closest ETA to avoid any changes in the chained orders).
- Demands of orders with chained order already created in ascending order of product availability date. (These types of demands are matched based on the closest ETA to avoid any changes in the orders).
- Demands of orders with procurement node and chained order creation is imminent (within the advanced notification time window) in order of order creation date.
- Demands of orders without a procurement node and within the release window (advanced notification time window) in order of order creation date.
- Demands from order line reservations on the order lines in the order of requested reservation date.
- Left over demands (outside of the advanced notification time window) of orders with or without a procurement node in the order of order creation date.
- Demands from inventory reservations in the order of ship date.

Notice that different types of demands are given different priorities based on their significance. The demands of chained orders or orders related to chained orders are treated with a higher priority than the demands of normal orders. Furthermore, the demands with a ship date within the advanced notification time window also have a higher priority than the demands with a date outside of the advanced notification time window.

Updating Order Reservations for the Matched Demands

After matching the available supply and demand in the FIFO order, the system builds up a list of order line reservation changes and inventory demand changes (corresponding to the order line reservation changes) and summarize them to optimize the number of order reservation updates and inventory updates. Negative order line reservations are added for the matched demands. Positive order reservations are added for the matched demands with the product availability date set to the matched supplies' first ship date.

After the Item Based Allocation agent completes its tasks for an Item Based Allocation trigger, it updates the fields of the trigger with the following values:

- IBA_REQUIRED = "N"
- LAST_IBA_PROCESSED_TS = current timestamp.
- PROCESS_OVER_BY_TS = current timestamp.
- PROCESSING_BY_AGENT = "N"

The Item Based Allocation agent should be used in conjunction with the rescheduling process as the rescheduling process reschedules the affected orders by utilizing the order line reservations created by the Item Based Allocation process.

Attributes

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

Table A–60 Item Based Allocation Attributes

Attribute	Value
Base Transaction ID	ITEM_BASED_ALLOCATION
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	changeOrder – for updating the order line reservations created as part of the Item Based Allocation process.
User Exits Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–61 Item Based Allocation Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
InventoryOrganizationCode	The inventory organization code of the inventory items which are processed by the Item Based Allocation agent. If provided, only the IBA triggers with the inventory item that belongs to this inventory organization are processed.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–62 Item Based Allocation Statistics

Statistic Name	Description
NumOrdersProcessed	Number of orders processed by the Item Based Allocation agent.
NumOrdersRequiredReschedule	Number of orders required rescheduling as the result of Item Based Allocation process.

Pending Job Count

None.

Events Raised

This transaction raises events as specified under the changeOrder API in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

A.2.19 Mark Load as Trailer Loaded

This is a time-triggered transaction which works on “Load pipeline”.

This time-triggered transaction gets records from the Task Q. This transaction is used to mark the load as trailer loaded when all containers for the load are on the trailer.

Attributes

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

Table A–63 Mark Load As Trailer Loaded Attributes

Attribute	Value
Base Transaction ID	MARK_AS_TRAILER_LOADED
Base Document Type	Load
Base Process Type	Load Execution
Abstract Transaction	No
APIs Called	None
User Exits Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–64 Mark Load As Trailer Loaded Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
ReprocessInterval	Optional. Reprocess Interval is the time taken to reprocess the load.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–65 Mark Load As Trailer Loaded Statistics

Statistic Name	Description
NumLoadsChanged	Number of trailer loads changed.

Pending Job Count

For this transaction the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table.

Events Raised

None.

A.2.20 Match Inventory

Match Inventory processes all pending records in the YFS_INVENTORY_SHIPMENT table. Pending records have a smaller number in POSTED_QUANTITY than in QUANTITY.

Each pending record is matched against the receipt records in YFS_INVENTORY_RECEIPT table by applying the inventory cost determination logic. The unit cost at which the sales and receipt data are matched is also posted in YFS_INVENTORY_MATCH table.

Use this transaction if any of the configured ship nodes maintain inventory cost.

Attributes

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

Table A–66 Match Inventory Attributes

Attribute	Value
Base Transaction ID	INVENTORY_MATCH
Base Document Type	General
Base Process Type	General

Table A–66 Match Inventory Attributes

Attribute	Value
Abstract Transaction	No
APIs Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–67 Match Inventory Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
InventoryOrganizationCode	Optional. Valid inventory owner organization. Organization to process in this run. If not passed, all inventory organizations are processed.
CutOffDate	Optional. If passed, records are matched up to this date. Defaults to all unmatched records in Database.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–68 Match Inventory Statistics

Statistic Name	Description
NumInventoryShipmentsProcessed	Number of inventory shipments processed.
NumInventoryMatchesInserted	Number of inventory matches inserted.

Pending Job Count

For this transaction the pending job count is the number of distinct inventory items that exist in the YFS_INVENTORY_SHIPMENT table where the QUANTITY value is not equal to the POSTED_QUANTITY value.

Events Raised

None.

A.2.21 Payment Collection

This transaction requests credit validation for orders that are pending authorization or charging.

Use this transaction for creating authorization and charge requests.

> **Note:** This transaction works in combination with the Payment Execution transaction. Although this transaction can run independent of that transaction, authorization and collection occurs *only* after the Payment Execution dependencies are met. For more details, see Section A.2.22, "Payment Execution".

Attributes

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

Table A–69 Payment Collection Attributes for Sales Orders

Attribute	Value
Base Transaction ID	PAYMENT_COLLECTION
Base Document Type	Order
Base Process Type	Order Fulfillment
Abstract Transaction	No
APIs Called	`requestCollection()`

Table A–70 Payment Collection Attributes for Return Orders

Attribute	Value
Base Transaction ID	PAYMENT_COLLECTION.0003
Base Document Type	Order
Base Process Type	Reverse Logistics
Abstract Transaction	No
APIs Called	`requestCollection()`

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–71 Payment Collection Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
EnterpriseCode	Optional. The enterprise for which the transaction needs to be run. If left blank, orders for all enterprises are processed. If specified, only orders for that enterprise are processed.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–72 Payment Collection Statistics

Statistic Name	Description
NumOrdersProcessed	Number of orders processed.
NumChargeReqsCreated	Number of charge requests created.
NumAuthorizationReqsCreated	Number of authorization requests created.

Pending Job Count

For this transaction the pending job count is the number of orders in the appropriate payment statuses with the value of the AUTHORIZATION_EXPIRATION_DATE is less than or equal to (<=) the current date. The appropriate payment statuses for such orders are:

- AWAIT_PAY_INFO
- AWAIT_AUTH
- REQUESTED_AUTH
- REQUEST_CHARGE
- AUTHORIZED, INVOICED
- PAID
- RELEASE_HOLD
- FAILED_AUTH
- FAILED_CHARGE
- VERIFY
- FAILED

Events Raised

The following events are raised by this time-triggered transaction:

Table A–73 Events Raised by the Payment Collection Transaction

Transaction/Event	Key Data	Data Published	Template Support?
INCOMPLETE_PAYMENT_INFORMATION	modifyOrder_dbd.txt	YFS_PAYMENT_COLLECTON.INCOMPLETE_PAYMENT_INFORMATION.xml	Yes
PAYMENT_STATUS	YFS_PAYMENT_COLLECTION.PAYMENT_STATUS_dtd.txt	YFS_PAYMENT_COLLECTION.PAYMENT_STATUS.xml	Yes

Table A–73 Events Raised by the Payment Collection Transaction

Transaction/Event	Key Data	Data Published	Template Support?
ON_LIABILITY_ TRANSFER	modifyOrde r_dbd.txt	YFS_PAYMENT_ COLLECTION.ON_ LIABILITY_ TRANSFER.xml	Yes
ON_INVOICE_ COLLECTION	order_ dbd/txt	YFS_CREATE_ORDER_ INVOICE.ON_INVOICE_ COLLECTION.xml	Yes

A.2.22 Payment Execution

This transaction processes all requests that are pending authorization and charging.

> **Note:** Use this time-triggered transaction for processing all authorization and charge requests.
>
> This transaction requires interfacing with a product that provides financial services.

Attributes

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

Table A–74 Payment Execution Attributes for Sales Orders

Attribute	Value
Base Transaction ID	PAYMENT_EXECUTION
Base Document Type	Order
Base Process Type	Order Fulfillment
Abstract Transaction	No
APIs Called	`executeCollection()`
User Exits Called	collectionCreditCard, collectionOthers, collectionCustomerAcct

Table A–75 Payment Execution Attributes for Return Orders

Attribute	Value
Base Transaction ID	PAYMENT_EXECUTION.0003
Base Document Type	Order
Base Process Type	Reverse Logistics
Abstract Transaction	No
APIs Called	`executeCollection()`
User Exits Called	collectionCreditCard, collectionOthers, collectionCustomerAcct

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–76 Payment Execution Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
ChargeType	Type of credit card process. Valid values are: • AUTHORIZATION - Validates the credit card account • CHARGE - Applies the charge to the credit card

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–77 Payment Execution Statistics

Statistic Name	Description
NumAuthTransProcessed	Number of authorization transaction processed.
NumAuthTransSuccessfullyProcessed	Number of successful returns from user exit for authorization transaction processed.
NumChargeTransProcessed	Number of charge transaction processed.
NumChargeTransSuccessfullyProcessed	Number of successful returns from user exit for charge transaction processed.
NumCollectionValidations	Number of successful returns from the invoked validate collection user exits.
NumCreditCardCollections	Number of credit card collections.
NumCustomerAccountCollections	Number of successful returns from the customer account collection user exits.
NumOtherCollections	Number of successful returns from the other collection user exits.

Pending Job Count

For this transaction the pending job count is the number of open charge and authorization transactions.

Events Raised

The following events are raised by this time-triggered transaction:

Table A–78 Events Raised by Payment Execution Transaction

Transaction/Event	Key Data	Data Published	Template Support?
CHARGE_FAILED	modifyOrder dbd.txt	PAYMENT_EXECUTION_ CHARGE_FAILED_ dbd.txt	No

This transaction raises events as specified under the `executeCollection()` API in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

A.2.23 Post Inventory Match

This transaction processes all open records in YFS_INVENTORY_MATCH table and posts the records to a financial system. An open record in the YFS_INVENTORY_MATCH table has the status of `01`. After posting, the status is changed to `02`.

Use this transaction if any of the configured ship nodes maintain inventory cost.

Attributes

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

Table A–79 Post Inventory Match Attributes

Attribute	Value
Base Transaction ID	POST_INVENTORY_MATCH
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 A–80 Post Inventory Match Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–81 Post Inventory Match Statistics

Statistic Name	Description
NumInventoryMatchPosted	Number of inventory match records posted.

Pending Job Count

For this transaction the pending job count is the number of inventory matches with an open status.

Events Raised

The following events are raised by this time-triggered transaction:

Table A–82 Events Raised by the Post Inventory Match Transaction

Transaction/Event	Key Data	Data Published	Template Support?
POST_INVENTORY_MATCH	POST_INVENTORY_MATCH_dbd.txt	YFS_postInventoryMatch_output.xml	No

A.2.24 Process Order Hold Type

You can create a time-triggered transaction, derived from the PROCESS_ORDER_HOLD_TYPE abstract transaction. It can be configured as the processing transaction for one or more hold types. If an order is associated with a hold type that has a transaction configured as the processing transaction, a record is created in the YFS_TASK_Q table for processing that transaction.

When the processing transaction is triggered, it checks the hold types that it can process based on the hold type configuration. If no hold types can be processed, the YFS_TASK_Q record is deleted. If some hold types can be processed, the processOrderHoldType user exit is invoked with the list of hold types to be processed. The processOrderHoldType user exit returns the list of hold types that can be removed from the order.

The transaction then modifies the order and updates the order hold type list based on the output returned by the processOrderHoldType user exit. If now no hold types can be processed, the YFS_TASK_Q record is deleted. If some hold types can still be processed, YFS_TASK_Q is updated with the next available date.

You can also call the processOrderHoldType user exit to add new hold types or change the status of a hold type that is already applied to an order. For more information about the processOrderHoldType user exit, see the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

Attributes

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

Table A–83 Process Order Hold Type Attributes

Attribute	Value
Base Transaction ID	PROCESS_ORDER_HOLD_TYPE
Base Document Type	Order
Base Process Type	Order Fulfillment
Abstract Transaction	Yes
APIs Called	changeOrder

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–84 Process Order Hold Type Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Next Task Queue Interval	Optional. Specifies in hours how long a failed task should be suspended before it is considered for reprocessing. Defaults to 5 hours.

Statistics Tracked

None.

Pending Job Count

None

Events Raised

The following events are raised by this time-triggered transaction:

Table A–85 Events Raised by Process Order Hold Type Transaction

Transaction/Event	Raised when...	Key Data	Data Published	Template Support?
ON_SUCCESS	On success	modifyOrder_dbd.txt	YFS_ORDER_CHANGE.ON_SUCCESS.xml	Yes *
ON_HOLD_TYPE_STATUS_CHANGE	The status of a hold type is changed.	modifyOrder_dbd.txt	YFS_ON_HOLD_TYPE_STATUS_CHANGE.xml	Yes
ON_ORDER_LINE_HOLD_TYPE_STATUS_CHANGE	The status of a hold type is changed.	modifyOrder_dbd.txt	YFS_ON_ORDER_LINE_HOLD_TYPE_STATUS_CHANGE.xml	Yes
* **Note**: Some of the elements and attributes are not template-driven. Refer to the xml for element level details.				

A.2.25 Process Work Order Hold Type

This time-triggered transaction is identical to the Process Order Hold Type transaction, but it is used for work orders instead.

Attributes

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

Table A–86 Process Work Order Hold Type Attributes

Attribute	Value
Base Transaction ID	PROCESS_WO_ORDER_HOLD_TYPE
Base Document Type	Work Order
Base Process Type	VAS Process
Abstract Transaction	Yes
APIs Called	`modifyWorkOrder`

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–87 Process Work Order Hold Type Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Next Task Queue Interval	Optional. Specifies in hours how long a failed task should be suspended before it is considered for reprocessing. Defaults to 5 hours.

Statistics Tracked

None.

Pending Job Count

None

Events Raised

The following events are raised by this time-triggered transaction:

Table A–88 Events Raised by Process Work Order Hold Type Transaction

Transaction/Event	Raised when...	Key Data	Data Published	Template Support?
ON_SUCCESS	On success	workOrder_dbd.txt	VAS_MODIFY_WORK_ORDER.ON_SUCCESS.xml	Yes *
ON_HOLD_TYPE_STATUS_CHANGE	The status of a hold type is changed.	workOrder_dbd.txt	VAS_ON_HOLD_TYPE_STATUS_CHANGE.xml	Yes
* **Note**: Some of the elements and attributes are not template driven. Refer to the xml for elements level details.				

A.2.26 Publish Negotiation Results

This transaction publishes the negotiated terms to the order.

Use this transaction in environments where an order must go through a negotiation phase.

> **Note:** This transaction needs to be run after negotiation is completed.

Attributes

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

Table A–89 Publish Negotiation Results Attributes

Attribute	Value
Base Transaction ID	PUBLISH_ORD_NEGOTIATION
Base Document Type	Order
Base Process Type	Order Negotiation
Abstract Transaction	No
APIs Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–90 Publish Negotiation Results Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Next Task Queue Interval	Optional. Specifies in hours how long a failed task should be suspended before it is considered for reprocessing. Defaults to 5 hours.

Statistics Tracked

The following statistics are tracked for this transaction:

Pending Job Count

Table A–91 Publish Negotiation Results Statistics

Statistic Name	Description
NumNegotiationsProcessed	Number of negotiations processed.
NumNegotiationsPublished	Number of negotiations published.

For this transaction the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table.

Events Raised

The following events are raised by this time-triggered transaction:

Table A–92 Events Raised by Publish Negotiation Results Transaction

Base Transaction	Raised when...	Key Data	Data Published	Template Support?
PUBLISH_ ORD_ NEGOTIATION/ ON_SUCCESS	On success	Negotiation _dbd.txt	YCP_ getNegotiatio nDetails_ output.xml	Yes *
RECEIVE_ ORD_ NEGOTIATION/ ON_SUCCESS	On success, when DocumentTyp e is 0001, EntityType is ORDER.	Number of concurrent time-trigger ed transactions running.	receiveOrder Negotiation_ dbd.txt	No
* **Note**: Template used for this event is the same template used by the `getNegotiationDetails()` API to form the output XML.				

A.2.27 Release

This transaction releases orders to specific ship nodes, making sure that the scheduled ship nodes have enough inventory to process the order.

This transaction should be invoked after the scheduling process.

For more details, see the information provided under the `releaseOrder()` API in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

> **Important:** Sterling Commerce recommends that if you run the combined 'Schedule and Release' agent, you do not also run the individual Schedule or the individual Release agents.

Attributes

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

Table A–93 Release Attributes

Attribute	Value
Base Transaction ID	RELEASE
Base Document Type	Order
Base Process Type	Order Fulfillment
APIs Called	`releaseOrder()`

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–94 Release Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
IgnoreReleaseDate	Optional. Determines whether the schedule process should ignore line release date criteria. Valid values are: • Y - Releases line quantities regardless of release date criteria • N - Default value. Releases line quantities only after release date criteria have been met.
CheckInventory	Optional. Determine whether inventory should be checked. Valid values are: • Y - Default value. Inventory needs to be checked. • N - Inventory does not need to be checked.
Next Task Queue Interval	Optional. Specifies in hours how long a failed task should be suspended before it is considered for reprocessing. Defaults to 5 hours.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–95 Release Criteria Statistics

Statistic Name	Description
NumFutureDateFailures	Number of orders did not attempt to release because of future date failures.
NumOrdersAttempted	Number of orders attempted to release.
NumOrdersCannotBeProcessedFailures	Number of orders did not attempt to release because of cannot be processed failures.
NumOrdersProcessed	Number of orders processed.
NumOrdersReleased	Number of orders released.
NumOrdersBackordered	Number of orders backordered.
NumOrderLinesReleased	Number of order lines released.
NumOrderLinesBackordered	Number of order lines backordered.
NumReleasesCreated	Number of order releases created.
NumOrdersCannotBeProcessedFailures	Number of orders that were not released due to process failure.

Note: If the release process results in splitting of an order line, NumOrderLinesReleased, NumOrderLinesBackordered, and NumOfReleasesCreated may result in more than one count.

Pending Job Count

For this transaction the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table, if tasks on hold are not ready to be processed.

Events Raised

This transaction raises events as specified under the `releaseOrder()` API in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

A.2.28 Route Shipment

This time-triggered transaction is used to route shipments and belongs to the Outbound Shipment pipeline. It assigns the Carrier and Carrier Service codes for the shipment based on the Routing Guide configured.

The Route Shipment transaction either includes shipments in an existing load or creates a new load and includes the shipments in it.

Shipments can be consolidated to a load, only if the following conditions are met:

- Expected Ship Date - The expected ship date of the shipments must be less than or equal to the must ship before date of the load.
- Expected Load Departure Date - The expected load departure date must be less than or equal to the must ship before date of the shipments in the load.

  The must ship before date is a date computed for the load, based on all shipments present in the load. For example, if a load has three shipments with their must ship before dates as 12.22.2005, 12.12.2005, and 12.19.2005 respectively, then the must ship before date of the load is computed as 12.12.2005, as it is the earliest of the three dates.

Attributes

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

Table A–96 Route Shipment

Attribute	Value
Base Transaction ID	ROUTE_SHIPMENT.0001
Base Document Type	Order
Base Process Type	ORDER_DELIVERY
Abstract Transaction	No
APIs Called	None
User Exits Called	`com.yantra.ydm.japi.ue.YDMOverrideDetermineRoutingUE` `com.yantra.ydm.japi.ue.YDMBeforeDetermineRoutingUE`

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–97 Route Shipment Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
EnterpriseCode	Optional. Enterprise for which the Route Shipment transaction needs to be run. If not passed, then all enterprises are monitored.
Next Task Queue Interval	Optional. Specifies in hours how long a failed task should be suspended before it is considered for reprocessing. Defaults to 5 hours.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–98 Route Shipment Statistics

Statistic Name	Description
NumRouted	Number of shipments routed.

Pending Job Count

For this transaction the pending job count is the number of records representing the unheld orders that are available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table.

Events Raised

The following events are raised by this time-triggered transaction:

Table A–99 Events Raised by the Route Shipment Transaction

Transaction/Event	Key Data	Data Published	Template Support?
ON_SUCCESS	shipment_dbd.txt	YDM_ROUTE_SHIPMENT.ON_SUCCESS.xml	Yes
ON_FAILURE	shipment_dbd.txt	YDM_ROUTE_SHIPMENT.ON_FAILURE.xml	Yes

However, note that the template name would read <TransactionId>.ON_SUCCESS.xml.

A.2.29 Schedule

This transaction schedules orders to specific ship nodes making sure that the scheduled ship nodes have enough inventory to process the order.

Run this transaction after order creation.

Important: Sterling Commerce recommends that if you run the combined 'Schedule and Release' agent, you do not also run the individual Schedule or the individual Release agents.

Attributes

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

Table A–100 Schedule Attributes

Attribute	Value
Base Transaction ID	SCHEDULE
Base Document Type	Order
Base Process Type	Order Fulfillment
APIs Called	`scheduleOrder()`

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–101 Schedule Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
OptimizationType	Optional. Determines the optimization rules to apply to the scheduling process. Valid values are: • 01 - Optimize on date (Default) • 02 - Optimize on ship node priority • 03 - Optimize on number of shipments
OrderFilter	Optional. Determines the types of orders to filter. Possible values are: • A - All orders (Default) • B - Backorders only • N - New orders only
ScheduleAndRelease	Optional. Notify the schedule process to release all releasable line quantities. Valid values are: • Y - Releases successfully scheduled line quantities. • N - Default value. Only schedules line quantities. **Note:** Enabling this parameter does not validate hold types configured for the release transaction.

Table A–101 Schedule Criteria Parameters

Parameter	Description
IgnoreReleaseDate	Optional. Determines whether the schedule process should ignore line release date criteria. Valid values are: • Y - Releases line quantities regardless of release date criteria. • N - Releases lines quantities only after release date criteria have been met. Default.
Next Task Queue Interval	Not used. This agent updates a failed task so that it is suspended for the back order retry interval setup in the appropriately scheduled rule.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–102 Schedule Statistics

Statistic Name	Description
NumFutureDateFailures	Number of orders that the Sterling Multi-Channel Fulfillment Solution did not attempt to schedule because of future date failures. Failures can be caused by any of the following: • If the OrderFilter is “B” (Backorders Only) and there are no backordered or unscheduled lines. • If the OrderFilter is “N” (New orders Only) and there are some backordered or unscheduled lines. • If order has order lines within only backordered or unscheduled status and the status modify timestamp is after the current time - the back order wait period specified in the scheduling rule.
NumOrdersAttempted	Number of orders attempted to schedule. This statistic does not include the values for NumFutureDateFailures and NumOrdersCannotBeProcessedFailures statistics.
NumOrderLinesReleased	Number of order lines that have been released.

Table A–102 Schedule Statistics

Statistic Name	Description
NumOrdersCannotBeProcessedFailures	Number of orders that the Sterling Multi-Channel Fulfillment Solution did not attempt to schedule because of cannot be processed failures. Failures can be caused by any of the following: • The result of the YFSCheckOrderBeforeProcessingUE user exit returns as false. • The Order has the HoldFlag attribute set to 'Y'. • The Order has the SaleVoided attribute set to 'Y'. • The Order does not have PaymentStatus as AUTHORIZED, INVOICED, PAID, nor NOT_APPLICABLE.
NumOrdersCreated	Number of orders created. This also includes the number of procurement orders created.
NumOrderLinesCreated	Number of order lines created.
NumOrdersProcessed	Number of orders processed.
NumOrdersScheduled	Number of orders that have at least one line that was scheduled. **Note:** This includes scheduled lines in any status except BACKORDER.
NumOrdersProcOrdersCreated	Number of procurement orders created.
NumWorkOrdersCreated	Number of work orders created.
NumOrdersBackordered	Number of orders backordered.
NumOrderLinesScheduled	Number of order lines scheduled.
NumOrderLinesBackordered	Number of order lines backordered.
NumReleasesCreated	Number of order releases created.

Pending Job Count

For this transaction the pending job count is the number of records representing the unheld orders that are available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table, if tasks on hold are not ready to be processed.

Events Raised

This transaction raises events as specified under the `scheduleOrder()` API in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

A.2.30 Send Invoice

This transaction publishes invoice data that can be directed to an external accounts receivable system.

In environments that require an interface with accounts receivable systems, this transaction needs to be scheduled. This transaction raises an event for an invoice based on the following configuration at the following times in the order lifecycle:

- Publish invoice at shipment creation - This implies that your accounts payable system takes care of payment collection. Invoices can be published as soon as they are created.
- Publish invoice after payment collection - This implies that the Sterling Multi-Channel Fulfillment Solution Consoles take care of the payment collection. When payment is in the AT_COLLECT status and the payment is not from an external system, an invoice is published only if the entire payment amount is collected. If the payment is in the AT_CREATE status or the payment is from an external system, the invoice is published unconditionally.

> **Note:** Many of this transaction's elements and attributes are template driven. Refer to the XML for element level details.

Attributes

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

Table A–103 Send Invoice Attributes

Attribute	Value
Base Transaction ID	SEND_INVOICE
Base Document Type	Order
Base Process Type	Order Fulfillment
Abstract Transaction	No
APIs Called	`getOrderInvoiceDetails()`

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–104 Send Invoice Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–105 Send Invoice Statistics

Statistic Name	Description
NumInvoicesSent	Number of invoices sent.

Pending Job Count

For this transaction the pending job count is the number of order invoices in created (“00”) status.

Events Raised

The following events are raised by this time-triggered transaction:

Table A–106 Events Raised by the Send Invoice Transaction

Transaction/Event	Key Data	Data Published	Template Support?
PUBLISH_INVOICE_DETAIL	modifyOrder_dbd.txt and sendInvoice_dbd.txt	YFS_getOrderInvoiceDetails_output.xml	Yes

Additional events may be raised by the `getOrderInvoiceDetails()` API. For detailed information about the events, see the details provided under this API in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

A.2.31 Send Item Changes

In integrated environments, this transaction publishes item data changes that are directed to the Sterling Multi-Channel Selling Solution.

When item changes occur in the Sterling Multi-Channel Fulfillment Solution, they need to be communicated to the Sterling Multi-Channel Selling Solution.

The business process may require the synchronization of items all at once in a batch. For example, at the end of each business day, the sendItemChanges agent can be configured to synchronize items based on the synchronization logic. This transaction retrieves all items that are not logical kit or dynamic physical kit items and whose SyncTS is null or MaxModifyTS is greater than the SyncTS.

Note: The MaxModifyTS of an item is updated with the current timestamp whenever an item is modified. The transaction then retrieves detailed information about those items and raises the ON_SUCCESS event. This event should be configured to invoke the Send Item Changes action.

For more information about how this integration is implemented, see the *Sterling Selling and Fulfillment Suite Integration Guide*.

Attributes

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

Table A–107 Send Item Changes Attributes

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

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–108 Send Item Changes Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Organization Code	Optional. The organization from which items are synchronized. This field is blank by default.

Statistics Tracked

None.

Pending Job Count

For this transaction the pending job count is the number of items requiring synchronization. This is determined for product items that are not logical kit or dynamic physical kit items and whose SyncTS is null or MaxModifyTS is greater than the SyncTS.

Events Raised

The following events are raised by this time-triggered transaction:

Table A–109 Events Raised by the Send Item Changes Transaction

Transaction/Event	Key Data	Data Published	Template Support?
ON_SUCCESS	None	YCM_SEND_ITEM_CHANGES_ON_SUCCESS.XML	Yes

A.2.32 Send Customer Changes

In integrated environments, this transaction publishes customer data changes that are directed to the Sterling Multi-Channel Selling Solution.

When customer changes occur in the Sterling Multi-Channel Fulfillment Solution, they need to be communicated to the Sterling Multi-Channel Selling Solution.

The business process may require the synchronization of customers all at once in a batch. For example, at the end of each business day, the sendItemChanges agent can be configured to synchronize items based on the synchronization logic. This transaction retrieves all customers that are consumers, have a user ID present, and are required to synchronize. This transaction can also be used to complete the initial synchronization of users between the two systems. For example, if the Sterling Multi-Channel Selling Solution is already in place, and the Sterling Multi-Channel Fulfillment Solution is then added, the SendCustomerChanges agent synchronizes the users from the Sterling Multi-Channel Selling Solution.

The sendCustomerChanges agent also serves as a backup mechanism. If a customer synchronization event fails, the agent automatically retries the synchronization after a specified amount of time.

Note: The MaxModifyTS of an customer is updated with the current timestamp whenever an customer is modified, whenever syncTS is less than MaxModifyTS, or when syncTS is null. The transaction then retrieves detailed information about those customers and raises the ON_SUCCESS event. This event should be configured to invoke the Send Customer Changes action.

For more information about how this integration is implemented, see the *Sterling Selling and Fulfillment Suite Integration Guide*.

Attributes

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

Table A–110 Send Customer Changes Attributes

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

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–111 Send Customer Changes Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.

Table A–111 Send Customer Changes Criteria Parameters

Parameter	Description
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.
Organization Code	Optional. The organization from which customers are synchronized. This field is blank by default.

Statistics Tracked

None.

Pending Job Count

For this transaction the pending job count is the number of customers requiring synchronization. This is determined for customers that are consumers, have a user ID present, and are required to synchronize.

Events Raised

The following events are raised by this time-triggered transaction:

Table A–112 Events Raised by the Send Customer Changes Transaction

Transaction/Event	Key Data	Data Published	Template Support?
SEND_CUSTOMER_CHANGES.ON_SUCCESS	None	YSC_SEND_CUSTOMER_CHANGES.ON_SUCCESS.XML	Yes

A.2.33 Send Order

This transaction tries to raise the ON_SUCCESS event for an order whose OrderHeaderKey is stored in the task queue object. The event is raised only if all of the order lines of the order reach particular status(es) completely. That is, the entire ORDERED_QTY of each line must be in the particular status(es). In addition to raising the event, the line statuses are also changed to the drop statuses, corresponding to the pickup statuses. The SendOrder transaction, derived from the abstract transaction SEND_ORDER, should have the event, pickup, and drop statuses configured. For more information, see the details provided under

the sendOrder() API in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

If an order needs to be communicated to a third party, use this transaction.

> **Note:** The TransactionKey posted in the task object must be an instance of the Abstract Transaction SEND_ORDER for the ProcessType associated with the Order. Otherwise, an exception is thrown.

Attributes

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

Table A–113 Send Order Attributes

Attribute	Value
Base Transaction ID	SEND_ORDER
Base Document Type	Order
Base Process Type	Order Fulfillment
Abstract Transaction	Yes
APIs Called	sendOrder()

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–114 Send Order Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Next Task Queue Interval	Optional. Specifies in hours how long a failed task should be suspended before it is considered for reprocessing. Defaults to 5 hours.

Statistics Tracked

None.

Pending Job Count

For this transaction the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table.

Events Raised

This transaction raises events as specified under the sendOrder() API in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

A.2.34 Send Release

The Send Release Agent dispatches releases to ship nodes.

Attributes

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

Table A–115 Send Release Attributes

Attribute	Value
Transaction Name	Send Release
Transaction ID	SHIP_ADVICE
Base Process Type	Order Fulfillment
Abstract Transaction	No
APIs Called	com.yantra.yfs.agent.YFSWMSShipAdviceAgent

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–116 Send Release Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Next Task Queue Interval	Optional. Specifies in hours how long a failed task should be suspended before it is considered for reprocessing. Defaults to 5 hours.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–117 Send Release Statistics

Statistic Name	Description
NumReleasesProcessed	Number of order releases processed.
NumReleasesSent	Number of order releases sent.

Pending Job Count

For this transaction the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table.

Events Raised

The following events are raised by this time-triggered transaction:

Table A–118 Events Raised by the Send Release Transaction

Transaction/Event	Data Published
PUBLISH_SHIP_ADVICE	YFS_publishShipAdvice.xml

A.2.35 Start Order Negotiation

This transaction creates the negotiations for orders that are configured to go through the negotiation process.

Use this transaction in environments where an Order needs to go through a Negotiation phase before it is released.

Attributes

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

Table A–119 Start Order Negotiation Attributes

Attribute	Value
Base Transaction ID	START_ORD_NEGOTIATION
Base Document Type	Order
Base Process Type	Order Fulfillment
Abstract Transaction	No
APIs Called	`createNegotiation()`
User Exits Called	YCPBeforeCreateNegotiationUE, YCPGetNegotiationNoUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–120 Start Order Negotiation Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Next Task Queue Interval	Optional. Specifies in hours how long a failed task should be suspended before it is considered for reprocessing. Defaults to 5 hours.
Node	Required. The warehouse management ship node for which records are being processed.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–121 Start Order Negotiation Statistics

Statistic Name	Description
NumOrdersProcessed	Number of orders processed.
NumNegotiationsCreated	Number of negotiations created.

Pending Job Count

For this transaction the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table.

Events Raised

This transaction raises events as specified under the `createNegotiation()` API in the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

A.2.36 PopulateOwnershipTransferSummary

This method updates the YFS_OWNERSHIP_TRANSFER_SUMMARY table.

This transaction updates the YFS_OWNERSHIP_TRANSFER_SUMMARY table by checking the records in YFS_INV_OWN_TRANSFER_RCD table.

It also updates the IS_STATISTICS_UPDATED to 'Y' in YFS_INV_OWN_TRANSFER_RCD table after the record has been used by the transaction.

Attributes

Following are the attributes for this time-triggered transaction:

Criteria Parameters

Table A–122 YFSPopulateOwnershipTransfer Attributes

Attribute	Value
Base Transaction ID	POPULATE_OWN_TRANS_SUMM
Base Document Type	General
Base Process Type	General

Table A–122 YFSPopulateOwnershipTransfer Attributes

Attribute	Value
Abstract Transaction	No
APIs Called	None

Criteria Parameters

Following are the criteria parameters for this transaction:

Table A–123 YFSPopulateOwnershipTransfer Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, which is the only valid value.
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.

Statistics Tracked

None

Pending Job Count

None

Events Raised

None

A.3 Time-Triggered Purge Transactions

There are several transactions that you can use to purge your database tables at specific time intervals.

Purge transactions determine when a table should be purged by determining the current date and subtracting the retention days specified by the purge. If the timestamp on the table is less than or equal to (current day - retention days) the table is purged.

Note: In some cases, a purge may look at another field other than the table's timestamp. These are pointed out in the documentation.

Note: When an entity is being purged, the related or dependent information that is present in other tables should be taken into consideration for purging along with it. For example, if a sales order with live shipments is being purged, any cross reference to that order is not accurate in the Order Shipment Console.

Note: Some of the statistics collected and tracked in Release 8.0 for time-triggered transactions, monitors, and integration and application servers may change with the next release of the Sterling Multi-Channel Fulfillment Solution.

Note: All Time-Triggered Purge Transactions have a `CollectPendingJobs` criteria parameter. If this parameter is set to `N`, the agent does not collect information on the pending jobs for that time-triggered transaction. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console.

By default, `CollectPendingJobs` is set to `Y`. It can be helpful to set it to `N` if one particular time-triggered transaction is performing a significant amount of `getPendingJobs` queries, and the overhead cost is too high.

A.3.1 Purge Strategy

The following recommendations should be taken into consideration when planning a purge strategy for each purge transaction:

- Test purges by setting Live to 'N'.
- Turn on logging to test what is purged.
- Set up purge traces in the System Management Console and analyze the information.

A.3.2 Configuring Purge Transaction Log Files

You can configure purges to write log files to a directory you specify. Each time you run a particular purge, new data is appended to this file. If no file exists, one is created.

To specify a purge log file directory:

1. Configure the `yfs.purge.path` property in the `<INSTALL_DIR>/properties/customer_overrides.properties` file. For example, on UNIX you might specify the log files to be written to the `/app/yfs/logs/purges` directory.

   For additional information about modifying properties and the `customer_overrides.properties` file, see the *Sterling Multi-Channel Fulfillment Solution Installation Guide*.

2. Run the `<INSTALL_DIR>/bin/setupfiles.sh` script on UNIX, or the `<INSTALL_DIR>/bin/setupfiles.cmd` script on Windows.

A.3.3 Available Purges

This section contains details of all purge transactions in alphabetical order. The time-triggered purge transactions are:

- Alert Purge
- Capacity Purge
- Delivery Plan Purge
- Export Table Purge
- Import Table Purge
- Inventory Audit Purge
- Inventory Purge
- Inventory Supply Temp Purge
- Item Audit Purge

- Load History Purge
- Load Purge
- Manifest Purge
- Negotiation History Purge
- Negotiation Purge
- Order History Purge
- Order Purge
- Order Status Audit Purge
- Organization Audit Purge
- Person Info Purge
- Person Info History Purge
- Picklist Purge
- Price List Purge
- Receipt History Purge
- Receipt Purge
- Reprocess Error Purge
- Reservation Purge
- Shipment History Purge
- Shipment Purge
- Shipment Statistics Purge
- Statistics Purge
- User Activity Purge
- User Activity Audit Purge
- Work Order History Purge
- Work Order Purge
- YFS Audit Purge
- YFSInventoryOwnershipAudit Purge

A.3.3.1 Alert Purge

This purge removes alert data from the system. This reduces the load on frequently accessed tables. The alert should be marked as CLOSED.

Any enterprise that uses the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

You can use purge codes pseudo-logic to analyze purges. If the following conditions are met, an alert is picked up for purge:

- The alert should be in "Closed" status.
- An inactive alert should have the resolution date earlier than or equal to the current date minus the purge criteria's retention days.
- If the alert is in "Open" status, the number of expiration days should be greater than 0, and the modified timestamp should be less than the current date minus the number of expiration days.

Attributes

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

Table A–124 Alert Console Purge Attributes

Attribute	Value
Base Transaction ID	INBOXPRG
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–125 Alert Console Purge Criteria Parameters

Criteria Parameters	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 does not collect information on the pending jobs for this monitor. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console.
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.
EnterpriseCode	Optional. The organization for which the Alert Purge needs to be run. If not passed, then all enterprises are monitored.
ExceptionsWithBlank EnterpriseOnly	Optional. If the parameter is set to Y, the agent purges only those exceptions that has blank enterprise code. In this case, the value set for the EnterpriseCode criteria parameter is ignored.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–126 Alert Console Purge Statistics

Statistic Name	Description
NumInboxPurged	Number of inbox records purged.

Pending Job Count

For this transaction the pending job count is the number of records that can be purged from the YFS_INBOX table.

Events Raised

None.

Tables Purged

YFS_INBOX

YFS_INBOX_NOTES

YFS_INBOX_AUDIT

YFS_INBOX_REFERENCES

A.3.3.2 Capacity Purge

This purge removes capacity data from the system. This reduces the load on frequently accessed tables.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

You can use purge codes pseudo-logic to analyze purges. If the following conditions are met, a capacity data gets picked up for purge:

- All resource pool standard capacity periods with effective to date earlier than or equal to the current date minus the purge criteria's retention days.
- All resource pool overridden capacity with the capacity date earlier than or equal to the current date minus the purge criteria’s retention days.
- All resource pool capacity consumption with consumption date less than or equal to the current date minus the purge criteria’s retention days.

- All resource pool capacity consumption details where appointment date is earlier than the system date minus the purge criteria's retention days (or ManualReservationPurgeLeadDays for manually created reservations).
- All resource pool capacity consumption details where expiration date has passed and reservation Id is not blank.

Attributes

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

Table A–127 Capacity Purge Attributes

Attribute	Value
Base Transaction ID	CAPACITYPRG
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–128 Capacity Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.

Table A–128 Capacity Purge Criteria Parameters

Parameter	Description
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–129 Capacity Purge Statistics

Statistic Name	Description
NumStdCapacityPeriodsPurged	Number of standard capacity periods purged.
NumCapacityOverridesPurged	Number of capacity overrides purged.
NumCapacityConsumptionsPurged	Number of capacity consumptions purged.

Pending Job Count

For this transaction the pending job count is the total number of records that can be purged from the YFS_RES_POOL_STD_CAPCTY_PERD, YFS_RES_POOL_CAPCTY_OVERRIDE, YFS_RES_POOL_CONSMPTN_DTLS and YFS_RES_POOL_CAPCTY_CONSMPTN tables.

Events Raised

None.

Tables Purged

The YFS_RES_POOL_STD_CAPCTY_PERD table is purged when EFFECTIVE_TO_DATE <= (CurrentDate - LeadDays)

The YFS_RES_POOL_CAPCTY_OVERRIDE table is purged when CAPACITY_DATE <= (CurrentDate - LeadDays)

The YFS_RES_POOL_CAPCTY_CONSMPTN table is purged when CONSUMPTION_DATE <= (CurrentDate - LeadDays), or if a manual reservation is taken, when CONSUMPTION_DATE <= (CurrentDate - Manual Reservation Retention Days). When this table is purged, YFS_RES_POOL_CONSMPTN_DTLS is also purged.

The YFS_RES_POOL_CONSMPTN_DTLS table is purged when RESERVATION_EXPIRATION_DATE <= (CurrentDate - LeadDays)

A.3.3.3 Delivery Plan Purge

This purge deletes delivery plans after they have completed their typical life-cycle. It purges all the delivery plans that have been marked as 'Closed' for a period greater than the retention days specified in the criteria parameters and those that do not have any shipments or loads. The order should have been moved to history before the lead time setup.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

You can use purge codes pseudo-logic to analyze purges. If the following conditions are met, a delivery plan is picked up for purge:

- The delivery plan should be in the "Closed" status.
- The delivery plan should not be associated with any load or shipment.
- All orders associated with the delivery plan should be purged.
- The last modification performed on the delivery plan should fall before the lead time setup.

Note: All the loads and shipments that are associated with the delivery plans should have been purged before running this purge agent.

Attributes

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

Table A–130 Delivery Plan Purge Attributes

Attribute	Value
Base Transaction ID	DELIVERYPLANPRG
Base Document Type	Load
Base Process Type	Load Execution
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–131 Delivery Plan Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
EnterpriseCode	Optional. Enterprise for which the Delivery Plan Purge needs to be run. If not passed, then all enterprises are monitored.

Table A–131 Delivery Plan Purge Criteria Parameters

Parameter	Description
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.
BatchDelete	Required. The method by which all records are deleted from the table. Valid values are: • Y - Default value. Records are deleted in batches. • N - Records are deleted one by one.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–132 Delivery Plan Purge Statistics

Statistic Name	Description
NumDeliveryPlansPurged	Number of delivery plans purged.

Pending Job Count

For this transaction the pending job count is the number of records that can be purged from the YFS_Delivery_Plan table.

Events Raised

None.

Tables Purged

YFS_DELIVERY_PLAN

A.3.3.4 Export Table Purge

This purge removes export table data from the system. This reduces the load on frequently accessed tables.

You can use purge codes pseudo-logic to analyze purges. If the following conditions are met, a YFS_EXPORT table is picked up for purge:

- YFS_EXPORT records should be marked as processed (Status = 10).
- The last modified time should fall before the lead time setup.

> **Note:** This purge only reads the rules defined by the hub. Enterprise overridden rules are not considered. This purge should be single threaded when you run it in batch delete mode(BatchDelete=Y).

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

Attributes

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

Table A–133 Export Table Purge Attributes

Attribute	Value
Base Transaction ID	EXPORTTBLPRG
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–134 Export Table Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
BatchDelete	Required. The method by which all records are deleted from the table. Valid values are: • Y - Default value. Records are deleted in batches. • N - Records are deleted one by one.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.
CollectPendingJobs	If this parameter is set to "N", the agent does not collect information on the pending jobs for this monitor. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–135 Export Table Purge Statistics

Statistic Name	Description
NumExportsPurged	Number of exports purged.

Pending Job Count

For this transaction the pending job count is the number of records that can be purged from the YFS_Export table.

Events Raised

None.

Tables Purged

YFS_EXPORT

A.3.3.5 Import Table Purge

This purge removes import table data from the system. This reduces the load on frequently accessed tables.

You can use purge codes pseudo-logic to analyze purges. If the following conditions are met, a YFS_IMPORT table is picked up for purge:

- YFS_IMPORT records should be marked as processed (Status = "10").
- The "last modified time" should fall before the lead time setup.

> **Note:** This purge only reads the rules defined by the hub. Enterprise overridden rules are not considered. This purge should be single threaded when you run it in batch delete mode(BatchDelete=Y).

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

Attributes

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

Table A–136 Import Table Purge Attributes

Attribute	Value
Base Transaction ID	IMPORTTBLPRG
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–137 Import Table Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
BatchDelete	Required. The method by which all records are deleted from the table. Valid values are: • Y - Default value. Records are deleted in batches. • N - Records are deleted one by one.

Table A–137 Import Table Purge Criteria Parameters

Parameter	Description
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.
CollectPendingJobs	If this parameter is set to "N", the agent does not collect information on the pending jobs for this monitor. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–138 Import Table Purge Statistics

Statistic Name	Description
NumImportsPurged	Number of import tables purged.

Pending Job Count

For this transaction the pending job count is the number of records that can be purged from the YFS_Import table.

Events Raised

None.

Tables Purged

YFS_IMPORT

A.3.3.6 Inventory Audit Purge

This purge removes inventory audit data from the system. This reduces the load on frequently accessed tables.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

All inventory audits of the provided organization with modify timestamp earlier than the current date minus the purge criteria's retention days can be configured to be picked up by the Inventory Audit Purge.

You can use purge codes pseudo-logic to analyze purges. If the following condition is met, an inventory audit record is picked up for purge:

- The inventory audit record's last modification is earlier than the current timestamp minus the retention days.

Note: Number of threads for this purge's agent criteria details must be set to 1. For more information about agent criteria, see the *Sterling Multi-Channel Fulfillment Solution Platform Configuration Guide*.

Important: The Inventory Audit purge does not purge any records under 60 days old, even if configured to do so.

Attributes

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

Table A–139 Inventory Audit Purge Attributes

Attribute	Value
Base Transaction ID	INVENTORYAUDITPRG
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–140 Inventory Audit Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
EnterpriseCode	Optional. The inventory organization for which the Inventory Audit Purge needs to be run. If not passed, then all enterprises are monitored.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Table Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–141 Inventory Audit Statistics

Statistic Name	Description
NumInventoryAuditsPurged	Number of inventory audits purged.

Pending Job Count

For this transaction the pending job count is the number of records that can be purged from the YFS_Inventory_Audit table.

Events Raised

None.

Table Purged

YFS_INVENTORY_AUDIT

A.3.3.7 Inventory Purge

This purge removes inventory data from the system. This reduces the load on frequently accessed tables.This purge does not take retention days into account when purging.

You can use purge codes pseudo-logic to analyze purges.

For YFS_INVENTORY_SUPPLY, if the following conditions are met, an inventory supply is picked up for purge:

- Supply record has the same availability type as the node. For example, TRACK or INFINITE.
- Supply record has 0 quantity.
- Supply record does not contain the supply type “INFO”.

For YFS_INVENTORY_DEMAND, if the following conditions are met, an inventory demand is picked up for purge:

- Demand record has 0 quantity or lesser.
- Demand record does not have demand details as well as matching demand record in YFS_INVENTORY_DEMAND_ADDNL tables.

For YFS_INVENTORY_TAG, it is purged if the INVENTORY_TAG_KEY is not used by any of the existing supply and demand.

For YFS_INVENTORY_RESERVATION, an inventory reservation is picked up for purge if it meets the following conditions:

- Inventory reservation record has 0 quantity or ship date is earlier than the system date minus the purge criteria’s retention days.

For YFS_INVENTORY_NODE_CONTROL, it is purged if the INV_PIC_ INCORRECT_TILL_DATE is earlier than the current time stamp minus the purge criteria’s retention days.

For YFS_IBA_TRIGGER, it is purged if IBA_REQUIRED = 'N', IBA_RUN_REQUIRED = 'N', and LAST_IBA_PROCESSED_TS is earlier than the current time stamp minus the purge criteria's retention days.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

Attributes

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

Table A–142 Inventory Purge Attributes

Attribute	Value
Base Transaction ID	INVENTORYPRG
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–143 Inventory Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.

Table A–143 Inventory Purge Criteria Parameters

Parameter	Description
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–144 Inventory Purge Statistics

Statistic Name	Description
NumInventoryDemandsPurged	Number of inventory demands purged.
NumInventoryNodeControlsPurged	Number of inventory node controls purged.
NumInventoryReservationsPurged	Number of inventory reservations purged.
NumInventoryTagsPurged	Number of inventory tags purged.
NumItemBasedAllocationTriggersPurged	Number of item based allocation triggers purged.

Pending Job Count

For this transaction, the pending job count is the total number of records that can be purged from the YFS_Inventory_Supply, YFS_Inventory_Demand, YFS_Inventory_Tag, YFS_Inventory_Reservation, YFS_IBA_Trigger, and YFS_Inventory_Node_Control tables.

Events Raised

None.

Tables Purged

YFS_IBA_TRIGGER

YFS_INVENTORY_DEMAND

YFS_INVENTORY_TAG

YFS_INVENTORY_RESERVATION

YFS_INVENTORY_SUPPLY

YFS_INVENTORY_NODE_CONTROL

A.3.3.8 Inventory Supply Temp Purge

The Inventory Supply Temp purge agent cleans up the contents in the temporary inventory tables generated by the process of synchronizing the Sterling Multi-Channel Fulfillment Solution inventory picture with the actual inventory picture at the nodes.

The node inventory picture is stored during the loading process into the YFS_INVENTORY_SUPPLY_TEMP table. Once the synchronization phase is complete and the YFS_INVENTORY_SUPPLY table has been updated, the YFS_INVENTORY_SUPPLY_TEMP table needs to be purged, which is done through this agent.

For more information about configuring the synchronization with node inventory, see the appropriate section in this guide.

The Inventory Supply Temp purge agent is used to purge all records in the YFS_INVENTORY_SUPPLY_TEMP table whose modify timestamp is less then current time minus the purge criteria's retention days for a group of `YantraMessageGroupID`.

Attributes

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

Table A–145 Inventory Supply Temp Purge Attributes

Attribute	Value
Base Transaction ID	SUPPLYTEMPPRG
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	None
User Exits Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–146 Inventory Supply Temp Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
EnterpriseCode	Optional. The inventory organization for which the Inventory Supply Temp Purge needs to be run. If not passed, then all enterprises are monitored.organization.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–147 Inventory Supply Temp Purge Statistics

Statistic Name	Description
NumInventorySupplyTempsPurged	Number of entries in the YFS_INVENTORY_SUPPLY_TEMP table purged.

Pending Job Count

Number of unique YantraMessageGroupIDs from YFS_INVENTORY_SUPPLY_TEMP table whose maximum modify timestamp is less than current timestamp minus purge criteria's lead day.

Events Raised

None.

Tables Purged

YFS_INVENTORY_SUPPLY_TEMP

A.3.3.9 Item Audit Purge

This purge removes the YFS_AUDIT table data from the system, which reduces the load on frequently accessed tables. It purges records in the YFS_AUDIT and the YFS_AUDIT_HEADER tables that meet the following conditions:

- YFS_AUDIT records that have ‘modifyts’ greater than the retention days specified and the records have the table name as 'YFS_ITEM'.
- The last modified time is before the lead time setup.

When the enterprise modifies records in the YFS_ITEM table through the Sterling Multi-Channel Fulfillment Solution Configurator, the YFS_ITEM is audited and the audit records are inserted in the YFS_AUDIT table. In order to clean up the audit records, this purge transaction can be used.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions accordingly.

Attributes

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

Table A–148 Item Audit Purge Attributes

Attribute	Value
Base Transaction ID	YFS_ITEM_AUDIT_PURGE
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–149 Item Audit Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, the value defaults to Get, the only valid value.
Number of Records To Buffer	Optional. Number of records to retrieve and process at one time. If left blank or specified as 0 (zero), this value defaults to 5000.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Production mode. Deletes records from the regular tables. • N - Test mode.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–150 Item Audit Purge Statistics

Statistic Name	Description
NumItemAuditRecordsPurged	Number of item audit records purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_AUDIT table that match the criteria values.

Events Raised

None.

Tables Purged

YFS_AUDIT, YFS_AUDIT_HEADER

A.3.3.10 Load History Purge

This purge deletes the load data from history tables after it completes its typical lifecycle. This reduces the load on frequently accessed tables.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

You can use purge codes pseudo-logic to analyze purges. If the following condition is met, a load is picked up for purge:

- The last modification made to the load is before the lead time setup.

> **Note:** Before you run this transaction, ensure to purge loads and move them to history tables. For more information about purging loads, see Section A.3.3.11, "Load Purge".

Attributes

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

Table A–151 Load History Purge Attributes

Attribute	Value
Base Transaction ID	LOADHISTPRG
Base Document Type	Load
Base Process Type	Load Execution
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–152 Load History Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
EnterpriseCode	Optional. Enterprise for which the Load Purge needs to be run. If not passed, all enterprises are monitored.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
Purge Code	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–153 Load History Purge Statistics

Statistic Name	Description
NumLoadHistoriesPurged	Number of load histories purged.
NumLoadShipmentHistoriesPurged	Number of load shipment histories purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_Load_H table.

Events Raised

None.

Tables Purged

YFS_LOAD_H

YFS_LOAD_STOP_H

YFS_LOAD_SHIPMENT_CHARGE_H

YFS_LOAD_STATUS_AUDIT_H

YFS_SHIPMENT_CONTAINER_H

YFS_CONTAINER_ACTIVITY_H

YFS_LOADED_CONTAINER_H

YFS_LOAD_SHIPMENT_H

YFS_ADDITIONAL_DATE_H

YFS_LOAD_HOLD_TYPE_H

YFS_LOAD_HOLD_TYPE_LOG_H

A.3.3.11 Load Purge

This purge removes load data from the system. It picks up all loads that have been marked as ‘Closed’ and purges them. Empty Loads (for

example, loads with no shipments) are not considered for purge. As a part of this purge, the associated child tables are also purged.

This is not a pipeline transaction. It also does not work from the task queue.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

You can use purge codes pseudo-logic to analyze purges. If the following condition is met, a load is picked up for purge:

- The Load's last modification should fall before the lead time setup.

Attributes

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

Table A–154 Load Purge Attributes

Attribute	Value
Base Transaction ID	LOADPRG
Base Document Type	Load
Base Process Type	Load Execution
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–155 Load Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.

Table A–155 Load Purge Criteria Parameters

Parameter	Description
EnterpriseCode	Optional. Enterprise for which the Load Purge needs to be run. If not passed, then all enterprises are monitored.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–156 Load Purge Statistics

Statistic Name	Description
NumLoadShipmentsPurged	Number of load shipments purged.
NumLoadsPurged	Number of loads purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_Load table.

Events Raised

None.

Tables Purged

YFS_ADDITIONAL_DATE

YFS_LOAD

YFS_LOAD_HOLD_TYPE

YFS_LOAD_HOLD_TYPE_LOG

YFS_LOAD_STOP

YFS_LOAD_SHIPMENT

YFS_LOAD_SHIPMENT_CHARGES (charges that pertain to this load)

YFS_LOAD_STATUS_AUDIT

YFS_LOADED_CONTAINER

YFS_SHIPMENT_CONTAINER

YFS_CONTAINER_ACTIVITY

A.3.3.12 Manifest Purge

This purge picks up all the manifests that have been marked as "Closed" and purges them.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

All manifests which do not associate to any shipments and with modify timestamp less than the current date minus the purge criteria's retention days can be configured to be picked up by the Manifest Purge.

You can use purge codes pseudo-logic to analyze purges. If the following conditions are met, a manifest is picked up for purge:

- The manifest should be in the "Closed" status.
- The last modification performed on the manifest should fall before the lead time setup.
- The manifest should not be associated with any shipment and its last modification should be less than current date minus lead time.

> **Note:** All the shipments associated with the manifests should have been purged before running this purge agent.

Attributes

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

Table A–157 Manifest Purge Attributes

Attribute	Value
Base Transaction ID	MANIFESTPRG
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–158 Manifest Purge Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Table A–158 Manifest Purge Parameters

Parameter	Description
AgentCriteriaGroup	Optional. Used to classify nodes. This value can be accepted by WMS time-triggered transactions that only perform their tasks on the nodes with a matching node transactional velocity value. Valid values are: LOW, HIGH, and any additional values defined by the Hub from Platform > System Administration > Agent Criteria Groups.
ShipNode	Optional. Ship node for which the Manifest Purge needs to be run. If not passed, then all ship nodes are monitored.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–159 Manifest Purge Statistics

Statistic Name	Description
NumManifestsPurged	Number of manifests purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_Manifest table.

Events Raised

None.

Tables Purged

YFS_MANIFEST

Note: To purge Manifests, the Shipments related to the manifests should be purged by Shipment Purge, and the Manifests should be in 'Closed' status. For more information, see Section A.3.3.28, "Shipment Purge".

A.3.3.13 Negotiation History Purge

This purge deletes negotiation history data from the system. This reduces the load on frequently accessed tables. It purges data from the order negotiation history tables.

You can use purge codes pseudo-logic to analyze purges. If the following condition is met, a negotiation is picked up for history purge:

- The last modified date of the negotiation exceeds the retention day period.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

Attributes

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

Table A–160 Negotiation History Purge Attributes

Attribute	Value
Base Transaction ID	NEGOTIATIONHISTPRG
Base Document Type	Order
Base Process Type	Order Negotiation
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–161 Negotiation History Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.

Table A–161 Negotiation History Purge Criteria Parameters

Parameter	Description
EnterpriseCode	Optional. Enterprise for which the Negotiation History Purge needs to be run. If not passed, then all enterprises are monitored.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–162 Negotiation History Purge Statistics

Statistic Name	Description
NumNegotiationHistoriesPurged	Number of negotiation histories purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_Negotiation_Hdr_H table.

Events Raised

None.

Tables Purged

YFS_NEGOTIATION_HDR_H

YFS_NEGOTIATION_LINE_H

YFS_RESPONSE_H

YFS_RESPONSE_HDR_H

YFS_RESPONSE_LINE_H

YFS_RESPONSE_LINE_DTL_H

A.3.3.14 Negotiation Purge

This purge archives data into history tables after it completes its typical lifecycle. This reduces the load on frequently accessed tables. It works from the task queue (YFS_TASK_Q) table.

You can use purge codes pseudo-logic to analyze purges. If the following condition is met, a negotiation is picked up for purge:

- The last modification performed on the negotiation falls before the lead time setup.
- The negotiation is in pickable status.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

Attributes

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

Table A–163 Negotiation Purge Attributes

Attribute	Value
Base Transaction ID	ORD_NEGOTIATION_PURGE
Base Document Type	Order
Base Process Type	Order Negotiation
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–164 Negotiation Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
EnterpriseCode	Optional. Enterprise for which the Negotiation Purge needs to be run. If not passed, then all enterprises are monitored.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.
Next Task Queue Interval	Optional. Specifies in hours how long a failed task should be suspended before it is considered for reprocessing. Defaults to 5 hours.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–165 Negotiation Purge Statistics

Statistic Name	Description
NumOrderNegotiationsPurged	Number of order negotiations purged.

Pending Job Count

For this transaction, the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE

value less than or equal to (<=) the current date value in the YFS_Task_Q table.

Events Raised

None

Tables Purged

YFS_NEGOTIATION_HDR

YFS_NEGOTIATION_LINE

YFS_RESPONSE

YFS_RESPONSE_HDR

YFS_RESPONSE_LINE

YFS_RESPONSE_LINE_DTL

A.3.3.15 Order History Purge

This purge deletes data from history tables after it completes its typical lifecycle. This reduces the load on frequently accessed tables.

You can use purge codes pseudo-logic to analyze purges. If the following condition is met, an order is picked up for history purge:

- The last modified date of the order exceeds the retention day period.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

For more information about Additional Purge Criteria Based on Line Type, see the *Sterling Distributed Order Management Configuration Guide*.

> **Note:** The order should have been purged and moved into the history tables before you can run this transaction. See Section A.3.3.16, "Order Purge".

Attributes

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

Table A–166 Order History Purge Attributes

Attribute	Value
Base Transaction ID	ORDERHISTPRG
Base Document Type	Order
Base Process Type	Order Fulfillment
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–167 Order History Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
EnterpriseCode	Optional. Enterprise for which the Order History Purge needs to be run. If not passed, then all enterprises are monitored.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Removes qualifying records from the history tables listed under Tables Purged. • N- Test mode. Determines the rows that are removed without actually removing them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–168 Order History Purge Statistics

Statistic Name	Description
NumOrderHistoriesPurged	Number of order histories purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_Order_HEADER_H table.

Events Raised

None.

Tables Purged

YFS_ANSWER_SET_TRAN_H

YFS_ANSWER_TRAN_H

YFS_CHARGE_TRAN_DIST_H

YFS_CHARGE_TRANSACTION_H

YFS_CREDIT_CARD_TRANSACTION_H

YFS_ENTITY_ADDRESS_H

YFS_HEADER_CHARGES_H

YFS_INSTRUCTION_DETAIL_H

YFS_INVOICE_COLLECTION_H

YFS_LINE_CHARGES_H

YFS_NOTES_H

YFS_ORDER_AUDIT_DETAIL_H

YFS_ORDER_AUDIT_H

YFS_ORDER_AUDIT_LEVEL_H

YFS_ORDER_DATE_H

YFS_ORDER_HEADER_H

YFS_ORDER_HOLD_TYPE_H

YFS_ORDER_HOLD_TYPE_LOG_H

YFS_ORDER_INVOICE_DETAIL_H

YFS_ORDER_INVOICE_H

YFS_ORDER_KIT_LINE_H

YFS_ORDER_KIT_LINE_SCHEDULE_H

YFS_ORDER_LINE_H

YFS_ORDER_LINE_OPTION_H

YFS_ORDER_LINE_REQ_TAG_H

YFS_ORDER_LINE_SCHEDULE_H

YFS_ORDER_PROD_SER_ASSOC_H

YFS_ORDER_RELEASE_H

YFS_ORDER_RELEASE_STATUS_H

YFS_ORDER_SER_PROD_ITEM_H

YFS_PAYMENT_H

YFS_PROMOTION_AWARD_H

YFS_PROMOTION_H

YFS_RECEIVING_DISCREPANCY_DTL_H

YFS_RECEIVING_DISCREPANCY_H

YFS_REFERENCE_TABLE_H

YFS_TAX_BREAKUP_H

A.3.3.16 Order Purge

This purge archives data into history tables after it completes its typical lifecycle. To purge orders from history tables, see Section A.3.3.15, "Order History Purge". This reduces the load on frequently accessed tables. It works on a task queue. It picks up the orders from YFS_TASK_Q table that are available for the transaction PURGE.

Note: This transaction depends on all lines of an order being in a status pickable by the Purge transaction.

The following statuses are available for configuration to be picked up by Order Purge:

- Draft Created (1000) and all extended Draft Created Statuses.
- Created (1100) and all extended Created statuses. These statuses are available only for document types Sales Order, Purchase Order and Transfer Order.
- Released (3200) and all extended Released statuses.
- Shipped (3700) and all extended Shipped statuses.
- Received (3900) and all extended Received statuses.
- Cancelled (9000) and all extended Cancelled statuses.
- Shorted (9020) and all extended Shorted statuses.

You can use purge codes pseudo-logic to analyze purges. If the following conditions are met, an order is picked up for purge:

- All open child orders (derived, chained, return, exchange, procurement, or refund fulfillment) for the order must already be purged.
- No pending transfer-out charges to another order exceeding the transfer-ins.
- No pending adjustment invoices.

An order is purged immediately if it meets the above three criteria and is completely cancelled with payment collection complete.

Note: In order for the purge agent to pick up a cancelled order, the payment status of the order must be one of the following:

- Paid
- Cancelled
- Not Applicable

If an order does not meet any of the above criteria, continue checking for the criteria given below:

- No order release status record that does not meet the retention days.
- It should be in the correct status for purge. For example,
  - All service requests for the order should have Shipped or extended Shipped status.
  - The payment status for the order should be Paid, Cancelled, or Not Applicable.
  - It must not have any unpurged negotiations.
- For all order lines other than service request lines:
  - If the Seller inventory update is required, the Status Inventory Type has the “Update Seller Supply” option turned on, and the Seller Supply Type is “Onhand”, or blank. (The Seller Supply Type can also be a custom seller supply type with the “Onhand Supply” checkbox enabled.)
  - If the Seller Demand Type is blank.
  - If the Buyer inventory update is required and the Buyer Supply Type is “Onhand”, or blank.
- The order's last modification should fall before the lead time setup.
- Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.
- The order must not have a undelivered service line.

- In the case of an exchange order for processing a return order, the exchange order should be purged from history before the return order can be purged.

> **Note:** With no change to status inventory type, a sales order in Shipped (3700) status or its extended status is purged if the Buyer is not passed.
>
> An order in Shipped status or extended Shipped status in the default pipeline is not purged if the Buyer passed on the sales order is tracking inventory. This prevents the purging of the order relating to the pending supply for the Buyer tracking inventory.
>
> To purge such orders, the status inventory type for the Shipped or extended Shipped status should be configured such that the Buyer Supply Type is ONHAND for the status inventory type.
>
> When the purge agent is run, the draft order without lines are purged to the order history table. Once the purge history agent is run, the draft orders without lines gets deleted permanently.

Attributes

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

Table A–169 Order Purge Attributes

Attribute	Value
Base Transaction ID	PURGE
Base Document Type	Order
Base Process Type	Order Fulfillment
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–170 Order Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Next Task Queue Interval	Optional. Specifies in hours how long a failed task should be suspended before it is considered for reprocessing. Defaults to 5 hours.
EnterpriseCode	Optional. Enterprise for which the Order Purge needs to be run. If not passed, then all enterprises are monitored. **Note**: When the EnterpriseCode is blank, the purge criteria configured for the DEFAULT enterprise is used; not the purge criteria configured for the order's enterprise.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–171 Order Purge Statistics

Statistic Name	Description
NumOrdersProcessed	Number of order processed.
NumOrdersPurged	Number of orders purged.

Pending Job Count

For this transaction, the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table.

Events Raised

None.

Tables Purged

YFS_ACTIVITY_DEMAND

YFS_ANSWER_SET_TRAN

YFS_ANSWER_TRAN

YFS_CHARGE_TRANSACTION

YFS_CHARGE_TRAN_DIST

YFS_CREDIT_CARD_TRANSACTION

YFS_ENTITY_ADDRESS

YFS_HEADER_CHARGES

YFS_INSTRUCTION_DETAIL

YFS_INVOICE_COLLECTION

YFS_LINE_CHARGES

YFS_MONITOR_ALERT

YFS_NOTES

YFS_ORDER_AUDIT

YFS_ORDER_AUDIT_DETAIL

YFS_ORDER_AUDIT_LEVEL

YFS_ORDER_HEADER

YFS_ORDER_HOLD_TYPE

YFS_ORDER_HOLD_TYPE_LOG

YFS_ORDER_INVOICE

YFS_ORDER_INVOICE_DETAIL

YFS_ORDER_KIT_LINE

YFS_ORDER_KIT_LINE_SCHEDULE

YFS_ORDER_LINE

YFS_ORDER_LINE_OPTION

YFS_ORDER_LINE_REQ_TAG

YFS_ORDER_LINE_RESERVATION

YFS_ORDER_LINE_SCHEDULE

YFS_ORDER_LINE_SRC_CNTRL

YFS_ORDER_PROD_SER_ASSOC

YFS_ORDER_RELEASE

YFS_ORDER_RELEASE_STATUS

YFS_ORDER_SER_PROD_ITEM

YFS_ORDER_DATE

YFS_PAYMENT

YFS_PROMOTION

YFS_PROMOTION_AWARD

YFS_RECEIVING_DISCREPANCY

YFS_RECEIVING_DISCREPANCY_DTL

YFS_REFERENCE_TABLE

YFS_TAX_BREAKUP

A.3.3.17 Order Status Audit Purge

This purge removes order status audit data from the system. This reduces the load on frequently accessed tables.

You can use purge codes pseudo-logic to analyze purges. If the following condition is met, an order status audit is picked up for history purge:

- The last modified time falls before the lead time setup.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

> **Note:** This transaction needs to be run after negotiation is completed.

Attributes

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

Table A–172 Order Status Audit Purge Attributes

Attribute	Value
Base Transaction ID	STATUSAUDITPRG
Base Document Type	Order
Base Process Type	Order Fulfillment
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–173 Order Status Audit Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
EnterpriseCode	Optional. Enterprise for which the Order Status Audit Purge needs to be run. If not passed, then all enterprises are monitored.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Pending Job Count

Table A–174 Order Status Audit Purge Statistics

Statistic Name	Description
NumStatusAuditsPurged	Number of status audits purged.

For this transaction, the pending job count is the number of records that can be purged from the YFS_Status_Audit table.

Events Raised

None.

Tables Purged

YFS_STATUS_AUDIT

A.3.3.18 Organization Audit Purge

This purge removes the YFS_AUDIT table data from the system, which reduces the load on frequently accessed tables. It purges records in the YFS_AUDIT and the YFS_AUDIT_HEADER tables that meet the following conditions:

- The YFS_AUDIT records that have ‘modifyts’ greater than the retention days specified and the records have the table name as 'YFS_ORGANIZATION'.
- The last modified time is before the lead time setup.

When the enterprise modifies records in the YFS_ORGANIZATION table through the Sterling Multi-Channel Fulfillment Solution Configurator, the YFS_ ORGANIZATION is audited and the audit records are inserted in the YFS_AUDIT table. In order to clean up the audit records, this purge transaction can be used.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

Attributes

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

Table A–175 Organization Audit Purge Attributes

Attribute	Value
Base Transaction ID	YFS_ORGANIZATION_AUDIT_PURGE
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–176 Organization Audit Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, the value defaults to Get, the only valid value.
Number of Records To Buffer	Optional. Number of records to retrieve and process at one time. If left blank or specified as 0 (zero), this value defaults to 5000.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Production mode. Deletes records from the regular tables. • N - Test mode.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds to the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–177 Organization Audit Purge Statistics

Statistic Name	Description
NumOrganizationAuditRecordsPurged	Number of organization audit records purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_AUDIT table that match the criteria values.

Events Raised

None.

Tables Purged

YFS_AUDIT, YFS_AUDIT_HEADER

A.3.3.19 Person Info Purge

This purge gets a list of dates with the person info record count and sorts them by date in ascending order. Then, based on the specified number of records to buffer and the modify timestamp, it purges the applicable records and places them in the YFS_PERSON_INFO_H table.

Attributes

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

Table A–178 PersonInfo Purge Attributes

Attribute	Value
Base Transaction ID	PERSONINFOPRG
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	None
User Exits Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–179 Picklist Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
Number of Records To Buffer	Optional. Number of records to retrieve and process at one time. • If left blank or the number specified is less than 10000, it defaults to 10000. • If the number specified is greater than 10000, then that value is used.

Table A–179 Picklist Purge Criteria Parameters

Parameter	Description
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.
CollectPendingJobs	If this parameter is set to "N", the agent does not collect information on the pending jobs for this monitor. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console.
EnterpriseCode	Optional. Enterprise for which the PersonInfo Purge needs to be run. If not passed, then all enterprises are monitored.

Statistics Tracked

The following statistics are tracked for this transaction:

If it is left blank or any number less than 10,000 is specified, then it defaults to 10,000. But if any number > 10,000 is specified, then that value would be used.

Table A–180 PersonInfo Purge Statistics

Statistic Name	Description
NumPersonInfoPurged	Number of person info records purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_PERSON_INFO table.

Events Raised

None.

Tables Purged

YFS_PERSON_INFO

A.3.3.20 Person Info History Purge

This purge deletes records from the YFS_PERSON_INFO_H table based on the purge criteria.

Attributes

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

Table A–181 PersonInfo Purge Attributes

Attribute	Value
Base Transaction ID	PERSONINFOHISTPRG
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	None
User Exits Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–182 Picklist Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
Number of Records To Buffer	Optional. Number of records to retrieve and process at one time. • If left blank or the number specified is less than 10000, it defaults to 10000. • If the number specified is greater than 10000, then that value is used.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.
CollectPendingJobs	If this parameter is set to "N", the agent does not collect information on the pending jobs for this monitor. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console.
EnterpriseCode	Optional. Enterprise for which the PersonInfo Purge needs to be run. If not passed, then all enterprises are monitored.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–183 PersonInfo Purge Statistics

Statistic Name	Description
NumPersonInfoHIstoryRecordsPurged	Number of person info history records purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_PERSON_INFO_H table.

Events Raised

None.

Tables Purged

YFS_PERSON_INFO_H

A.3.3.21 Picklist Purge

This purge picks up all picklists that have been existing for a period greater than the retention days specified in the criteria parameters and those that do not have any shipments.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

You can use purge codes pseudo-logic to analyze purges. If the following conditions are met, a picklist is picked up for purge:

- The picklist should exist for more than the specified retention period.
- The picklist should not be associated with any shipment.

Attributes

Note: All shipments associated with the picklists should have been purged before running this purge agent.

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

Table A–184 Picklist Purge Attributes

Attribute	Value
Base Transaction ID	PICKLISTPRG
Base Document Type	Order
Base Process Type	Order Delivery
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–185 Picklist Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–186 Picklist Purge Statistics

Statistic Name	Description
NumPickListsPurged	Number of picklists purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_Pick_List table.

Events Raised

None.

Tables Purged

YFS_PICK_LIST

A.3.3.22 Price List Purge

This purge removes price list data from the system. This reduces the load on frequently accessed tables.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

You can use purge codes pseudo-logic to analyze purges. If the following condition is met, a price list is picked up for purge:

- The price list has valid date less than the current date minus the purge criteria's retention days.

Attributes

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

Table A–187 Price List Purge Attributes

Attribute	Value
Base Transaction ID	PRICELISTPRG
Base Document Type	General
Base Process Type	General
Abstract Transaction	No

Table A–187 Price List Purge Attributes

Attribute	Value
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–188 Price List Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–189 Price List Purge Statistics

Statistic Name	Description
NumPriceSetsPurged	Number of price sets purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_Price_Set table.

Events Raised

None.

Tables Purged

YFS_PRICE_SET table with VALID_TILL_DATE less than or equal to (CurrentDate - LeadDays)

YFS_PRICE_PROGRAM_DEFN

YFS_ITEM_PRICE_SET

YFS_ITEM_PRICE_SET_DTL

A.3.3.23 Receipt History Purge

This transaction deletes receipts previously archived by the Receipt Purge. See Section A.3.3.24, "Receipt Purge".

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

You can use purge codes pseudo-logic to analyze purges. If the following conditions are met, a receipt that is previously purged by the receipt purge agent is picked up for history purge:

- The last modified date of the receipt should exceed the retention day period.
- The shipment associated with the receipt should be purged from the history table.

> **Note:** To purge a receipt history, ensure that the Receipts are closed and Shipments are purged.

Attributes

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

Table A–190 Receipt History Purge Attributes

Attribute	Value
Base Transaction ID	RECEIPTHISTPRG
Base Document Type	Order
Base Process Type	Order Fulfillment
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–191 Receipt History Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the 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.
EnterpriseCode	Optional. Enterprise for which the Receipt History Purge needs to be run. If not passed, then all enterprises are monitored.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Removes qualifying records from the history tables listed under Tables Purged. • N- Test mode. Determines the rows that are removed without actually removing them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–192 Receipt History Purge Statistics

Statistic Name	Description
NumReceiptLineHistoriesPurged	Number of receipt line histories purged.
NumReceiptHistoriesPurged	Number of receipt histories purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_Receipt_Header_H table.

Events Raised

None.

Tables Purged

YFS_RECEIPT_HEADER_H

YFS_RECEIPT_LINE_H

YFS_RECEIPT_STATUS_AUDIT_H

YFS_INSTRUCTION_DETAIL_H

A.3.3.24 Receipt Purge

This purge removes receipt data from the system. This reduces the load on frequently accessed tables. This transaction picks up all receipts that are not open and not pending inspection and archives them into their history tables. See Section A.3.3.23, "Receipt History Purge". It also archives and purges the receipt's child tables.

This is a pipeline transaction and works from a task queue.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

You can use purge codes pseudo-logic to analyze purges. If the following conditions are met, a receipt is picked up for purge:

- The last modified date of the receipt should exceed the retention day period.
- The shipment associated with the receipt should be purged.
- The receipt should be in pickable status for the purge transaction.
- The value of the OpenReceiptFlag field should be set to "N".
- The receipt should not have pending inspections.

Note: To purge a receipt, ensure that the receipts are closed and Shipments are purged.

Attributes

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

Table A–193 Receipt Purge Attributes

Attribute	Value
Base Transaction ID	RECEIPTPRG
Base Document Type	Order
Base Process Type	Order Fulfillment
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–194 Receipt Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the 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.

Table A–194 Receipt Purge Criteria Parameters

Parameter	Description
EnterpriseCode	Optional. Enterprise for which the Receipt Purge needs to be run. If not passed, then all enterprises are monitored.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–195 Receipt Purge Statistics

Statistic Name	Description
NumReceiptLinesPurged	Number of Receipt Lines purged.
NumReceiptsPurged	Number of receipts purged.

Pending Job Count

For this transaction, the pending job count is the number of records available to be processed by the transaction with the AVAILABLE_DATE value less than or equal to (<=) the current date value in the YFS_Task_Q table.

Events Raised

None.

Tables Purged

YFS_RECEIPT_HEADER

YFS_RECEIPT_LINE

YFS_RECEIPT_STATUS_AUDIT

YFS_INSTRUCTION_DETAIL

A.3.3.25 Reprocess Error Purge

This purge deletes reprocess errors from the system. This reduces the load on frequently accessed tables.

You can use purge codes pseudo-logic to analyze purges. If the following conditions are met, a YFS_REPROCESS_ERROR table is picked up for purge:

- YFS_REPROCESS_ERROR records with State = Fixed or Ignored is processed.
- The last modified time is earlier than the lead time setup.

> **Note:** This purge only reads the rules defined by the hub. Enterprise overridden rules are not considered.

Any enterprise using the must schedule purge transactions.

Attributes

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

Table A–196 Reprocess Error Purge Attributes

Attribute	Value
Base Transaction ID	REPROCESSPRG
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–197 Reprocess Error Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–198 Reprocess Error Purge Statistics

Statistic Name	Description
NumReprocessErrorsPurged	Number of reprocess errors purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_REPROCESS_ERROR table.

Events Raised

None.

Tables Purged

YFS_REPROCESS_ERROR

A.3.3.26 Reservation Purge

This purge deletes expired inventory reservations from the system. This reduces the load on frequently accessed tables as well as free up demands that are consumed by expired reservations.

You can use purge codes pseudo-logic to analyze purges. If the following condition is met, all records in the YFS_INVENTORY_RESERVATION tables are picked up for purge:

- EXPIRATION_DATE is earlier than the current date or quantity is less than or equal to 0

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

Attributes

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

Table A–199 Reservation Purge Attributes

Attribute	Value
Base Transaction ID	RESERVATIONPRG
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	None
User Exits Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–200 Reservation Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–201 Reservation Purge Statistics

Statistic Name	Description
NumReservationsPurged	Number of reservations purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_INVENTORY_RESERVATION table.

Events Raised

None.

Tables Purged

YFS_INVENTORY_RESERVATION

A.3.3.27 Shipment History Purge

This transaction deletes shipments previously archived by the Shipment Purge. See Section A.3.3.28, "Shipment Purge".

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

You can use purge codes pseudo-logic to analyze purges. If the following condition is met, all records archived in the history table are picked up for purge:

- The last modification performed on the shipment falls before the lead time setup.

> **Note:** Orders related to the shipments should have been purged by order purge. Shipments should have been closed by the Close Shipment transaction. See Section A.2.8, "Close Shipment".

Attributes

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

Table A–202 Shipment History Purge Attributes

Attribute	Value
Base Transaction ID	SHIPMENTHISTPRG
Base Document Type	Order
Base Process Type	Order Delivery
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–203 Shipment History Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the 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.
EnterpriseCode	Optional. Enterprise for which the Shipment History Purge needs to be run. If not passed, then all enterprises are monitored.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Removes qualifying records from the history tables listed under Tables Purged. • N- Test mode. Determines the rows that are removed without actually removing them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–204 Shipment History Purge Statistics

Statistic Name	Description
NumShipmentHistoriesPurged	Number of shipment histories purged.
NumShipmentLineHistoriesPurged	Number of shipment line histories purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_Shipment_H table.

Events Raised

None.

Tables Purged

YFS_ADDITIONAL_ATTRIBUTE_H

YFS_ADDITIONAL_DATE_H

YFS_CONTAINER_DETAILS_H

YFS_CONTAINER_STS_AUDIT_H

YFS_INSTRUCTION_DETAIL_H

YFS_SHIPMENT_CONTAINER_H

YFS_SHIPMENT_H

YFS_SHIPMENT_LINE_H

YFS_SHIPMENT_LINE_REQ_TAG_H

YFS_SHIPMENT_STATUS_AUDIT_H

YFS_SHIPMENT_TAG_SERIAL_H

YFS_CONTAINER_ACTIVITY_H

A.3.3.28 Shipment Purge

This purge removes shipment data from the system. This reduces the load on frequently accessed tables. This transaction picks up all shipments that have been marked as ‘Closed’ and archives them into their history tables. See Section A.3.3.27, "Shipment History Purge". It also archives and purges the shipment's child tables.

This is not a pipeline transaction. It also does not work from the task queue.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

Note: Orders related to the shipments should have been purged by order purge. Shipments should have been closed by the Close Shipment transaction. See Section A.2.8, "Close Shipment".

You can use purge codes pseudo-logic to analyze purges. If the following conditions are met, a shipment is picked up for purge:

- The last modification performed on the shipment should fall before the lead time setup.
- The value of the ShipmentClosedFlag field should be set to "Y".
- The order record should already be purged for all shipment lines.

Attributes

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

Table A–205 Shipment Purge Attributes

Attribute	Value
Base Transaction ID	SHIPMENTPRG
Base Document Type	Order
Base Process Type	Order Delivery
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–206 Shipment Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the 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.
EnterpriseCode	Optional. Enterprise for which the Shipment Purge needs to be run. If not passed, then all enterprises are monitored.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–207 Shipment Purge Statistics

Statistic Name	Description
NumShipmentsPurged	Number of Shipments purged.
NumShipmentLinesPurged	Number of Shipment Lines purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_Shipment table.

Events Raised

None.

Tables Purged

YFS_ADDITIONAL_ATTRIBUTES

YFS_ADDITIONAL_DATE

YFS_CONTAINER_DETAILS

YFS_LOAD_SHIPMENT_CHARGE

YFS_MONITOR_ALERT

YFS_SHIPMENT_CONTAINER

YFS_SHIPMENT_STATUS_AUDIT

YFS_SHIPMENT

YFS_INSTRUCTION_DETAIL

YFS_SHIPMENT_MONITOR_ALERT

YFS_HEADER_CHARGES

YFS_LINE_CHARGES

YFS_TAX_BREAKUP

YFS_SHIPMENT_HOLD_TYPE

YFS_SHIPMENT_HOLD_TYPE_LOG

YFS_SHIPMENT_TAG_SERIALS

YFS_SHIPMENT_LINE

YFS_SHIPMENT_LINE_REQ_TAG

YFS_ACTIVITY_DEMAND

YFS_CONTAINER_STS_AUDIT

YFS_CONTAINER_ACTIVITY

A.3.3.29 Shipment Statistics Purge

This transaction deletes the shipment statistics from the table older than the specified retention days.

This agent should be used whenever shipment statistics records need to be removed, such as after application server restart.

You can use purge codes pseudo-logic to analyze purges. If the following condition is met, the shipment statistics are picked up for purge:

- The last modification performed on the shipment statistics should fall before the lead time setup.

Attributes

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

Table A–208 Shipment Statistics Purge Attributes

Attribute	Value
Base Transaction ID	PRG_SHIP_STATS
Base Document Type	Order
Base Process Type	Order Delivery
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–209 Shipment Statistics Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
EnterpriseCode	Optional. Enterprise for which the Shipment Statistics Purge needs to be run. If not passed, then all enterprises are monitored.

Table A–209 Shipment Statistics Purge Criteria Parameters

Parameter	Description
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.

Statistics Parameters

The following are the statistics parameters for this transaction:

Table A–210 Shipment Statistics Purge Statistics

Parameter	Description
NumShipmentStatisticsPurged	Number of shipment statistics purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_SHIPMENT_STATISTICS table.

Events Raised

None.

Tables Purged

YFS_SHIPMENT_STATISTICS

A.3.3.30 Statistics Purge

This purge removes statistics data from the system. It purges all records older than the specified retention days.

You can use purge codes pseudo-logic to analyze purges. If the following condition is met, the statistics detail is picked up for purge:

- The last modification performed on the statistics detail should fall before the lead time setup.

Note: This purge only reads the rules defined by the hub. Enterprise overridden rules are not considered. This purge should be single threaded when you run it in batch delete mode (BatchDelete=Y).

Note: Sterling Commerce recommends that this agent be run often. In a production environment, the YFS_STATISTICS_DETAIL table can grow very large, very quickly. It does not carry any old data, therefore it is a good practice to purge it aggressively, from once a day to once a week, depending on the table size.

Attributes

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

Table A–211 Statistics Purge Attributes

Attribute	Value
Base Transaction ID	STATTBLPRG
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–212 Statistics Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
BatchDelete	Required. The mode in which all records get deleted from the table. Valid values are: • Y - Default value. Records are deleted in batches. • N - Records are deleted one by one.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.
CollectPendingJobs	If this parameter is set to "N", the agent does not collect information on the pending jobs for this monitor. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–213 Statistics Purge Statistics

Statistic Name	Description
NumStatisticsPurged	Number of statistics purged

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_STATISTICS_DETAIL table.

Events Raised

None.

Tables Purged

YFS_STATISTICS_DETAIL

A.3.3.31 User Activity Purge

This purge deletes the user activity data from the system. It purges all records older than the specified retention days, and those records which have a logged out status. This purge must be single threaded when you run it in batch delete mode (BatchDelete=Y).

The following limitation is assumed when purging records:

This purge do not purge any record if the Application server goes down abruptly because the audit records of users connected to the application server at the time when the server went down cannot be updated. As a result, the last activity time or the logout time is not populated. The purge does not know whether the user has logged out or still logged in. Therefore, you need to manually delete these records.

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

Table A–214 User Activity Purge Attributes

Attribute	Value
Base Transaction ID	USERACTIVITYPRG
Base Document Type	None
Base Process Type	None
APIs Called	None
User Exits Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–215 User Activity Purge Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
CollectPendingJobs	If this parameter is set to "N", the agent does not collect information on the pending jobs for this monitor. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console.
Number of Records To Buffer	Required. Number of records to retrieve and process at one time. If left blank or specified as 0 (zero), it defaults to 100.
BatchDelete	Required. The method by which all records are deleted from the table. Valid values are: • Y - Default value. Records are deleted in batches. • N - Records are deleted one by one.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–216 Statistics Purge Statistics

Statistic Name	Description
NumStatisticsPurged	Number of statistics purged

Pending Job Count

None.

Events Raised

None.

Tables Purged

YFS_USER_ACTIVITY

A.3.3.32 User Activity Audit Purge

This purge removes user activity audit data from the system. It purges all records older than the specified retention days. It purges only those records which have a logged out status (records with a Login_Type of 'T' or 'N'). This purge should be single threaded when you run it in batch delete mode(BatchDelete=Y).

The following limitation is assumed when purging records:

- This purge does not purge any records if the Application server goes down abruptly because the audit records of users connected to application servers at the time the server went down cannot be updated. As a result, the last activity time or the logout time does not get populated and the purge does not know whether the user was logged out or was still logged in. These records have to be deleted manually.

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

Table A–217 User Activity Audit Purge Attributes

Attribute	Value
Base Transaction ID	USERACTAUDPURGE
Base Document Type	None

Table A–217 User Activity Audit Purge Attributes

Attribute	Value
Base Process Type	None
APIs Called	None
User Exits Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–218 User Activity Audit Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
CollectPendingJobs	If this parameter is set to "N", the agent does not collect information on the pending jobs for this monitor. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console.

Table A–218 User Activity Audit Purge Criteria Parameters

Parameter	Description
Number of Records To Buffer	Required. Number of records to retrieve and process at one time. If left blank or specified as 0 (zero), it defaults to 100.
BatchDelete	Required. The method by which all records are deleted from the table. Valid values are: • Y - Default value. Records are deleted in batches. • N - Records are deleted one by one.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–219 Statistics Purge Statistics

Statistic Name	Description
NumStatisticsPurged	Number of statistics purged

Pending Job Count

None.

Events Raised

None.

Tables Purged

YFS_USR_ACT_AUDIT

A.3.3.33 Work Order History Purge

This transaction deletes tasks previously archived by the Work Order Purge. See Section A.3.3.34, "Work Order Purge".

You can use purge codes pseudo-logic to analyze purges. If the following condition is met, a work order that is previously purged by the work order purge agent is picked up for history purge:

- The last modified date of the work order should exceed the retention day period.

Attributes

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

Table A–220 Work Order History Purge Attributes

Attribute	Value
Base Transaction ID	WORK_ORDER_HISTORY_PURGE
Base Document Type	Work Order
Base Process Type	VAS
Abstract Transaction	No
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–221 Work Order History Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.
Live	Optional. Mode in which to run. Defaults to N. • Y - Default value. Removes qualifying records from the history tables listed under Tables Purged. • N- Test mode. Determines the rows that are removed without actually removing them.
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.

Table A–221 Work Order History Purge Criteria Parameters

Parameter	Description
Node	Optional. Node for which the Work Order History Purge needs to be run. If not passed, then all nodes are monitored.
AgentCriteriaGroup	Optional. Used to classify nodes. This value can be accepted by WMS time-triggered transactions that only perform their tasks on the nodes with a matching node transactional velocity value. Valid values are: LOW, HIGH, and any additional values defined by the Hub from Platform > System Administration > Agent Criteria Groups.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–222 Work Order History Purge Statistics

Statistic Name	Description
NumWorkOrderHistoriesPurged	Number of work order histories purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_WORK_ORDER_H table.

Events Raised

None.

Tables Purged

YFS_WO_APPT_USER_H

YFS_WORK_ORDER_H

YFS_WORK_ORDER_APPT_H

YFS_WORK_ORDER_ACTIVITY_H

YFS_WORK_ORDER_ACTY_DTL_H

YFS_WORK_ORDER_AUDT_DTL_H

YFS_WORK_ORDER_COMPONENT_H

YFS_WORK_ORDER_COMP_TAG_H

YFS_WORK_ORDER_HOLD_TYPE_H

YFS_WORK_ORDER_HOLD_TYPE_LOG_H

YFS_WORK_ORDER_PROD_DEL_H

YFS_WORK_ORDER_SERVICE_LINE_H

YFS_WORK_ORDER_STS_AUDIT_H

YFS_WORK_ORDER_TAG_H

A.3.3.34 Work Order Purge

This time-triggered transaction purges all the work orders for a period greater than the retention days specified in the Work Order Purge criteria and those, which are either in the status of cancelled or completed.

You can use purge codes pseudo-logic to analyze purges. If the following conditions are met, a work order is picked up for purge:

- The last modified date of the work order should exceed the retention day period.
- The order associated with the work order should be purged.
- The work order should be in pickable status by the purge transaction.

Attributes

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

Table A–223 Work Order Purge Attributes

Attribute	Value
Base Transaction ID	WORK_ORDER_PURGE
Base Document Type	Work Order
Base Process Type	VAS
Abstract Transaction	No

Table A–223 Work Order Purge Attributes

Attribute	Value
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–224 Work Order Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.
Live	Optional. Mode in which to run. Defaults to Y. • Y - Default value. Moves qualifying records from the regular tables listed under Tables Purged to the corresponding history tables. • N - Test mode. Determines the rows that are moved to history tables without actually moving them.
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.
Node	Optional. Node for which the Work Order Purge needs to be run. If not passed, then all nodes are monitored.
AgentCriteriaGroup	Optional. Used to classify nodes. This value can be accepted by WMS time-triggered transactions that only perform their tasks on the nodes with a matching node transactional velocity value. Valid values are: LOW, HIGH, and any additional values defined by the Hub from Platform > System Administration > Agent Criteria Groups.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–225 Work Order Purge Statistics

Statistic Name	Description
NumWorkOrdersPurged	Number of work orders purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_WORK_ORDER table.

Events Raised

None.

Tables Purged

YFS_WO_APPT_USER

YFS_WORK_ORDER

YFS_WORK_ORDER_ACTIVITY

YFS_WORK_ORDER_ACTY_DTL

YFS_WORK_ORDER_HOLD_TYPE

YFS_WORK_ORDER_HOLD_TYPE_LOG

YFS_WORK_ORDER_APPT

YFS_WORK_ORDER_AUDT_DTL

YFS_WORK_ORDER_COMPONENT

YFS_WORK_ORDER_COMP_TAG

YFS_WORK_ORDER_PROD_DEL

YFS_WORK_ORDER_SERVICE_LINE

YFS_WORK_ORDER_STS_AUDIT

YFS_WORK_ORDER_TAG

A.3.3.35 YFS Audit Purge

This purge removes the YFS_AUDIT table data from the system, which reduces the load on frequently accessed tables. It purges records in the YFS_AUDIT and the YFS_AUDIT_HEADER tables that meet the following conditions:

- YFS_AUDIT records that have 'modifyts' greater than the retention days specified and the value of table name matches in the YFS_ AUDIT table.
- The last modified time is before the lead time setup.

> **Note:** The way you configure the YFS Audit Purge may have some effect on the functioning of the Configuration Data Versioning Tool. For more information about configuration of the Data Versioning Tool, see the *Sterling Multi-Channel Fulfillment Solution Configuration Deployment Tool Guide*.

When the enterprise extends the entities and sets the extended entities attribute AuditTable="Y", the extended tables are audited and the audit records are inserted in the YFS_AUDIT table. In order to clean up the audit records, this purge transaction can be used.

Any enterprise using the Sterling Multi-Channel Fulfillment Solution Consoles must schedule purge transactions.

Attributes

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

Table A–226 YFS Audit Purge Attributes

Attribute	Value
Base Transaction ID	YFS_AUDIT_PURGE
Base Document Type	General
Base Process Type	General
Abstract Transaction	No

Table A–226 YFS Audit Purge Attributes

Attribute	Value
APIs Called	None
User Exits Called	YFSBeforePurgeUE

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–227 YFS Audit Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, this value defaults to Get, the only valid value.
Number of Records To Buffer	Optional. Number of records to retrieve and process at one time. If left blank or specified as 0 (zero), this value defaults to 5000.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Production mode. Deletes records from the regular tables. • N - Test mode.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds with the PurgeCode used in Business Rules Purge Criteria.
Table Name	Required. The table name for which the audit records need to be purged.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–228 YFS Audit Purge Statistics

Statistic Name	Description
NumAuditRecordsPurged	Number of audit records purged.

Pending Job Count

For this transaction, the pending job count is the number of records that can be purged from the YFS_AUDIT table that match the criteria values.

Events Raised

None.

Tables Purged

YFS_AUDIT, YFS_AUDIT_HEADER

A.3.3.36 YFSInventoryOwnershipAudit Purge

This transaction purges all the records from YFS_INV_OWN_TRANSFER_RCD prior to the lead days specified in criteria parameters.

Attributes

Following are the attributes for this time-triggered transaction:

Table A–229 YFSInventoryOwnership Purge Attributes

Attribute	Value
Base Transaction ID	PURGE_INV_TRANSFR_RECORD
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	None
User Exits Called	None

Criteria Parameters

Following are the criteria parameters for this transaction:

Table A–230 YFSInventoryOwnership Purge Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, this value defaults to Get, which is the only valid value.
Number of Records To Buffer	Optional. Number of records to retrieve and process at one time. If left blank or specified as 0 (zero), this value defaults to 5000.
EnterpriseCode	Optional. The inventory organization for which the YFSInventoryOwnership Audit Purge needs to run. If not passed, all the enterprises are monitored.
Live	Optional. Mode in which to run. Valid values are: • Y - Default value. Production mode. Deletes records from the regular tables. • N - Test mode.
PurgeCode	Required. Cannot be modified. Used for internal calculations, such as determining retention days. Corresponds to the PurgeCode used in the Business Rules Purge Criteria.
Lead Days	Number of days before the present date, the agent will purge the records.

Statistics Tracked

None.

Pending Job Count

None.

Tables Purged

YFS_INV_OWN_TRANSFER_RCD

A.4 Task Queue Syncher Time-Triggered Transactions

Many transactions use the task queue as their work repository. The workflow manager automatically creates tasks for transactions to handle the next processing step, as configured in your pipeline.

In some situations, the task queue repository may become out of date. For example, when reconfiguring the processing pipeline while the pipeline is active, the queue may go out of synch with the new pipeline configuration.

Alerts that indicate a halt in the lifecycle of a business document may indicate an out-dated task queue repository.

The task queue syncher transactions are designed to update the task queue repository with the latest list of open tasks to be performed by each transaction, based on the latest pipeline configuration.

The available task queue synchers are:

- Load Execution Task Queue Syncher
- Order Delivery Task Queue Syncher
- Order Fulfillment Task Queue Syncher
- Order Negotiation Task Queue Syncher

Note: Some of the statistics collected and tracked in Release 8.0 for time-triggered transactions, monitors, and integration and application servers may change with the next release.

A.4.1 Load Execution Task Queue Syncher

This transaction synchronizes the task queue for the load execution process type.

You can use the following pseudo-logic to analyze this time-triggered transaction. If the following conditions are met, a task queue for the load execution process type is synchronized:

- LOAD_CLOSED_FLAG of Load should not be 'Y'.

- Load should be in a status that is pickable by a transaction in the pipeline.
- There should not be any Task Q record for the load, transaction combination in the Task Q table. In this case, the system inserts one Task Q record for this load, transaction combination with the current database time as the available date.

Attributes

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

Table A–231 Load Execution Task Queue Syncher Attributes

Attribute	Value
Base Transaction ID	TASK_QUEUE_SYNCHER_L_D
Base Document Type	Load
Base Process Type	Load Execution
Abstract Transaction	No
APIs Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–232 Load Execution Task Queue Syncher Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–233 Load Execution Task Queue Syncher Statistics

Statistic Name	Description
NumTasksCreated	Number of tasks created.

Pending Job Count

None.

Events Raised

None.

A.4.2 Order Delivery Task Queue Syncher

This transaction synchronizes the order delivery process type.

Attributes

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

Table A–234 Order Delivery Task Queue Syncher Attributes

Attribute	Value
Base Transaction ID	TASK_QUEUE_SYNCHER_O_D
Base Document Type	Order
Base Process Type	Order Delivery
Abstract Transaction	No
APIs Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–235 Order Delivery Task Queue Syncher Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–236 Order Delivery Task Queue Syncher Statistics

Statistic Name	Description
NumTasksCreated	Number of tasks created.

Pending Job Count

None.

Events Raised

None.

A.4.3 Order Fulfillment Task Queue Syncher

This transaction synchronizes the order fulfillment process type.

Attributes

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

Table A–237 Order Fulfillment Task Queue Syncher Attributes

Attribute	Value
Base Transaction ID	TASK_QUEUE_SYNCHER_O_F
Base Document Type	Order
Base Process Type	Order Fulfillment

Table A–237 Order Fulfillment Task Queue Syncher Attributes

Attribute	Value
Abstract Transaction	No
APIs Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–238 Order Fulfillment Task Queue Syncher Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–239 Order Fulfillment Task Queue Syncher Statistics

Statistic Name	Description
NumTasksCreated	Number of tasks created.

Pending Job Count

None.

Events Raised

None.

A.4.4 Order Negotiation Task Queue Syncher

This transaction synchronizes the order negotiation process type.

Attributes

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

Table A–240 Order Negotiation Task Queue Syncher Attributes

Attribute	Value
Base Transaction ID	TASK_QUEUE_SYNCHER_O_N
Base Document Type	Order
Base Process Type	Order Negotiation
Abstract Transaction	No
APIs Called	None

Criteria Parameters

The following are the criteria parameters for this transaction:

Table A–241 Order Negotiation Task Queue Syncher Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–242 Order Negotiation Task Queue Syncher Statistics

Statistic Name	Description
NumTasksCreated	Number of tasks created.

Pending Job Count

None.

Events Raised

None.

A.5 Monitors

Monitors are transactions that watch for processes or circumstances that are out of bounds and then raise alerts.

Note: Some of the statistics collected and tracked in Release 8.0 for time-triggered transactions, monitors, and integration and application servers may change with the next release of the Sterling Multi-Channel Fulfillment Solution.

Note: All Monitors have a CollectPendingJobs criteria parameter. If this parameter is set to N, the agent does not collect information on the pending jobs for that monitor. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console. By default, CollectPendingJobs is set to Y. It can be helpful to set it to N if one monitor is performing a significant amount of getPendingJobs queries and the overhead cost is too high.

A.5.1 Availability Monitor

This time-triggered transaction monitors inventory availability. The Availability Monitor raises global alerts when the available inventory falls below the configured quantities on the current day, on subsequent days within the ATP time frame, and on subsequent days outside of the ATP time frame. The quantities for the days outside of the ATP time frame are determined by the maximum monitoring days. Unlike the schedule and release transactions, the Availability Monitor calculates the actual availability beyond the ATP horizon and does not assume infinite inventory.

Attributes

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

Table A–243 Availability Monitor Attributes

Attribute	Value
Base Transaction ID	ATP_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 monitor:

Table A–244 Availability Monitor Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
MonitorOption	Optional. Specifies how to monitor inventory. Valid values are: • 1 - current inventory • 0 - inventory within and outside of the ATP time frame. This is the default value.
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.
InventoryOrganizationCode	Optional. Valid owner inventory organization. Organization to process in this run. If not passed, all inventory organizations are processed.

Table A–244 Availability Monitor Criteria Parameters

Parameter	Description
CollectPendingJobs	If this parameter is set to N, the agent does not collect information on the pending jobs for this monitor. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console.
Status	The negotiation status you are monitoring.

Statistics Tracked

None.

Pending Job Count

None.

Events Raised

No events are raised. Individual actions associated with the monitoring rule are run.

Data published to the actions is `AVAILABILITY_MONITOR_dbd.txt`.

A.5.2 Exception Monitor

This time-triggered transaction monitors exceptions in your system as noted below. It monitors the exceptions logged in the system and escalates these exceptions:

- If an exception has not been assigned to a user by a certain time
- If an exception has not been resolved by a certain time
- If the active size of the queue is more than a certain maximum size

In order to prevent re-alerts on exceptions during every run of the Exception Monitor, specify a re-alert interval through Alert Management in the Sterling Multi-Channel Fulfillment Solution Configurator. This attribute is associated with a queue and can be configured for each queue.

Attributes

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

Table A–245 Exception Monitor Attributes

Attribute	Value
Base Transaction ID	EXCEPTION_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 monitor:

Table A–246 Exception Monitor Criteria Parameters

Parameter	Description
Action	Required. Triggers the 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.
QueueID	Optional. Defines the Alert Queue into which exceptions from this monitor are stored.
OrganizationCode	Optional. Organization to process in this run. If not passed, all inventory organizations are processed.
CollectPendingJobs	If this parameter is set to N, the agent does not collect information on the pending jobs for this monitor. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–247 Exception Monitor Statistics

Statistic Name	Description
NumInboxProcessed	Number of alerts processed.
NumExceededQueueSizeAlerts	Number of actions raised when the number of unresolved alerts exceeds the queue's maximum active size.
NumUnResolvedAlerts	Number of actions raised when the unresolved alert time of an alert exceeds the queue's resolution time.
NumUnAssignedAlerts	Number of actions raised when the unassigned alert time of an alert exceeds the queue's assignment time.

Pending Job Count

None.

Events Raised

No events are raised. Individual actions associated with the monitoring rule are run.

A.5.3 Inventory Monitor

This time-triggered transaction monitors inventory availability at ship node level. It raises alerts at the ship node level when the available inventory exceeds or drops below the configured quantities.

This monitor uses the OPEN_ORDER demand type to calculate available inventory at a given node. All supplies assigned to a supply type that is considered by the OPEN_ORDER demand type are considered. For more information about configuring inventory supply and demand considerations, refer to the appropriate section in this guide.

Attributes

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

Table A–248 Inventory Monitor Attributes

Attribute	Value
Base Transaction ID	INVENTORY_MONITOR
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	`checkAvailability()`

Criteria Parameters

The following are the criteria parameters for this monitor:

Table A–249 Inventory Monitor Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
InventoryOrganizationCode	Optional. Valid inventory owner organization. Organization to process in this run. If not passed, all inventory organizations are processed.
CollectPendingJobs	If this parameter is set to N, the agent does not collect information on the pending jobs for this monitor. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console.

Statistics Tracked

None.

Pending Job Count

None.

Events Raised

No events are raised. Individual actions associated with the monitoring rule are run.

Data published to the actions is <INSTALL_DIR>/xapidocs/api_javadocs/dbd/INVENTORY_MONITOR_dbd.txt.

A.5.4 Negotiation Monitor

This time-triggered transaction alerts the Enterprise when a negotiation remains in a particular status for a specific amount of time. This also monitors the negotiation expiration date. This time-triggered transaction invokes the actions configured against the negotiation statuses. Configure status Expired (2000) to monitor negotiation expiration date.

Use this monitor in environments where Order or order release has to go through a negotiation phase and you want to monitor the negotiation.

Attributes

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

Table A–250 Negotiation Monitor Attributes

Attribute	Value
Base Transaction ID	ORD_NEGOTIATION_MONITOR
Base Document Type	Order
Base Process Type	Order Negotiation
Abstract Transaction	No
APIs Called	None

Criteria Parameters

The following are the criteria parameters for this monitor:

Table A–251 Negotiation Monitor Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
EnterpriseCode	Optional. Enterprise for which the Negotiation Monitor needs to be run. If not passed, then all enterprises are monitored.
CollectPendingJobs	If this parameter is set to N, the agent does not collect information on the pending jobs for this monitor. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console.
Status	The negotiation status you are monitoring.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–252 Negotiation Monitor Statistics

Statistic Name	Description
NumNegotiationsProcessed	Number of negotiations processed.
NumNegotiationsRequiringAlert	Number of negotiations which have at least one alert raised.

Pending Job Count

None.

Events Raised

This invokes the actions configured against the negotiation statuses.

Key Data - Not Applicable.

Data Published - `YCP_getNegotiationDetails_output.xml`

A.5.5 Order Monitor

This time-triggered transaction alerts the enterprise when an order remains in a particular status for a specific amount of time. For more information about time-triggered transaction, see Section 4.2.6, "Defining Transactions".

Use this monitor if you care to track how long orders stay in a particular state.

This transaction is deprecated as of Release 5.0. Use the Enhanced Order Monitor time-triggered transaction instead.

> **Note:** The same relog interval is used for all document types.

Attributes

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

Table A–253 Order Monitor Attributes

Attribute	Value
Base Transaction ID	ORDER_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 monitor:

Table A–254 Order Monitor Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
EnterpriseCode	Optional. Enterprise for which the Order Monitor needs to be run. If not passed, then all enterprises are monitored.
Status	Optional. The order status you want to monitor (if not monitoring a status range).
LeastAge1	This field is not used in this version.
FromStatus	Optional. Statuses to monitor that are greater than or equal to the passed status (if not monitoring a specific status).
ToStatus	Optional. Statuses to monitor that are less than or equal to the passed status (if not monitoring a specific status).

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–255 Order Monitor Statistics

Statistic Name	Description
NumOrdersProcessed	Number of orders processed.
NumOrdersRequiringAlert	Number of orders which have at least one alert raised.

Pending Job Count

None.

Events Raised

No events are raised. Individual actions associated with the monitoring rule are run.

Data published to the actions is ORDER_MONITOR_dbd.txt.

A.5.6 Enhanced Order Monitor

The enhanced order monitor enables you to monitor the following situations:

- Milestone x has not been reached y hours before a given date type.
- Milestone x has not been reached within y hours of a given date type.
- Milestone x has not been reached within y hours of milestone z.
- Milestone x has been reached y hours before a given date type.
- Milestone x has been reached within y hours of a given date type.
- Milestone x has been reached within y hours after milestone z.
- The order has been in status x for y hours.
- Date type x is y hours before date type z.
- Date type x is y hours after date type z.
- The order has been in hold type x for y hours.
- The order has been in hold type x for y hours before date type z.

The order monitor can be configured to monitor the following system date types for Sales Order and Purchase Order document types:

- Actual Order Date - Read from the ORDER_DATE column of the YFS_ORDER_HEADER table.
- Requested Ship Date - If there is an order release, read from the REQ_SHIP_DATE column of the YFS_ORDER_RELEASE table. Otherwise, read from the REQ_SHIP_DATE of the YFS_ORDER_LINE table.
- Expected Ship Date - Read from the EXPECTED_SHIPMENT_DATE column of the YFS_ORDER_LINE_SCHEDULE table. If it is null, uses the same logic as Requested Ship Date.
- Actual Ship Date - If the date is before 01/01/2500, read from he EXPECTED_SHIPMENT_DATE column of the YFS_ORDER_LINE_SCHEDULE table. If the date is on or after 01/01/2500, this date type is returned as null.

- Requested Delivery Date - If there is a release, read from the REQ_DELIVERY_DATE column of the YFS_ORDER_RELEASE table.
- Expected Delivery Date - Read from the EXPECTED_DELIVERY_DATE column of the YFS_ORDER_LINE_SCHEDULE table. If it is null, uses the same logic as Requested Delivery Date.
- Actual Delivery Date - If the date is before 01/01/2500, read from he EXPECTED_DELIVERY_DATE column of the YFS_ORDER_LINE_SCHEDULE table. If the date is on or after 01/01/2500, this date type is returned as null.

Note: For Order Fulfillment, Planned Order Execution, Reverse Logistics, and Purchase Order Execution pipelines, the system defined dates such as Shipment and Delivery are stored without a time component. Therefore when you configure a rule using these dates, all time computations are carried out assuming they are always 12:00:00 AM.

For more information about milestones, date types, and monitoring rules, refer to the *Sterling Supply Collaboration Configuration Guide*, the *Sterling Distributed Order Management Configuration Guide*, and the *Sterling Reverse Logistics Configuration Guide*.

Important: If you run the Enhanced Order Monitor, you must configure and run the Close Order time-triggered transaction in all applicable pipelines. For more information about the Close Order time-triggered transaction, see Section A.2.6, "Close Order".

Note: The same relog interval is used for all document types.

Attributes

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

Table A–256 Enhanced Order Monitor Attributes

Attribute	Value
Base Transaction ID	ORDER_MONITOR_EX
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 monitor:

Table A–257 Enhanced Order Monitor Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
EnterpriseCode	Optional. Enterprise for which the Order Monitor needs to be run. If not passed, then all enterprises are monitored.

Statistics Tracked

The following statistics are tracked for this monitor:

Table A–258 Enhanced Order Monitor Statistics

Statistic Name	Description
NumOrdersProcessed	Number of orders processed.
NumAlertsRaised	Number of alerts raised.

Pending Job Count

For this transaction the pending job count is the number of open orders with the value of NEXT_ALERT_TS less than or equal to (<=) the current date.

Events Raised

Table A–259 Events Raised by the Enhanced Order Monitor Transaction

Transaction/Event	Key Data	Data Published*	Template Support?
ON_AUTO_CANCEL	ORDER_MONITOR_dbd.txt	YFS_ORDER_MONITOR_EX.ON_AUTO_CANCEL.html	Yes
* These files are located in the following directory: <INSTALL_DIR>/xapidocs/api_javadocs/XSD/HTML			

Note: The Enhance Order Monitor transaction raises the ON_AUTO_CANCEL event, but does not cancel the order. A service on this event should be configured to cancel the order.

Monitor Rule's Condition Template

If a monitor rule contains a condition, the <INSTALL_DIR>/repository/xapi/template/source/sscap/monitor/ORDER_MONITOR_EX_CONDITION.xml template file is used to obtain both the order details and the evaluating monitor rule details. See the provided <INSTALL_DIR>/repository/xapi/template/source/sscap/monitor/ORDER_MONITOR_EX_CONDITION.xml.sample file for more details.

If the <INSTALL_DIR>/repository/xapi/template/source/sscap/monitor/ORDER_MONITOR_EX_CONDITION.xml template file does not exist, the MonitorConsolidation->Order element of the default monitor template, the <INSTALL_

DIR>/repository/xapi/template/source/sscap/monitor/ORDER_MONITOR_EX.xml file, is used.

> **Note:** Note: If the default monitor template is used, the MonitorConsolidation-> Order->OrderStatuses-> OrderStatus->MonitorRule element is ignored and is not passed into the condition.

A.5.7 Enhanced Return Monitor

The enhanced return monitor allows you to monitor the following situations:

- Milestone x has not been reached y hours before a given date type.
- Milestone x has not been reached within y hours of a given date type.
- Milestone x has not been reached within y hours of milestone z.
- Milestone x has been reached y hours before a given date type.
- Milestone x has been reached within y hours of a given date type.
- Milestone x has been reached within y hours after milestone z.
- The order has been in status x for y hours.
- Date type x is y hours before date type z.
- Date type x is y hours after date type z.

The enhanced return monitor can be configured to monitor the following system date types:

- Actual Order Date - Read from the ORDER_DATE column of the YFS_ORDER_HEADER table
- Requested Ship Date - If there is an order release, read from the REQ_SHIP_DATE column of the YFS_ORDER_RELEASE table. Otherwise, read from the REQ_SHIP_DATE of the YFS_ORDER_LINE table.
- Expected Ship Date - Read from the EXPECTED_SHIPMENT_DATE column of the YFS_ORDER_LINE_SCHEDULE table. If it is null, uses the same logic as Requested Ship Date.

- Actual Ship Date - If the date is before 01/01/2500, read from he EXPECTED_SHIPMENT_DATE column of the YFS_ORDER_LINE_ SCHEDULE table. If the date is on or after 01/01/2500, this date type is returned as null.
- Requested Delivery Date - If there is a release, read from the REQ_ DELIVERY_DATE column of the YFS_ORDER_RELEASE table. Otherwise, read from the REQ_DELIVERY_DATE of the YFS_ORDER_ LINE table.
- Expected Delivery Date - Read from the EXPECTED_DELIVERY_DATE column of the YFS_ORDER_LINE_SCHEDULE table. If it is null, uses the same logic as Requested Delivery Date.
- Actual Delivery Date - If the date is before 01/01/2500, read from he EXPECTED_DELIVERY_DATE column of the YFS_ORDER_LINE_ SCHEDULE table. If the date is on or after 01/01/2500, this date type is returned as null.

Note: For Order Fulfillment, Planned Order Execution, Reverse Logistics, and Purchase Order Execution pipelines, the system defined dates such as Shipment and Delivery are stored without a time component. Therefore when you configure a rule using these dates, all time computations are carried out assuming they are always 12:00:00 AM.

For more information about milestones, date types, and monitoring rules, refer to the *Sterling Supply Collaboration Configuration Guide*, the *Sterling Distributed Order Management Configuration Guide*, and the *Sterling Reverse Logistics Configuration Guide*.

Important: If you run the Enhanced Return Monitor, you must configure and run the Close Order time-triggered transaction in all applicable pipelines. For more information about the Close Order time-triggered transaction, see Section A.2.6, "Close Order".

Note: The same relog interval is used for all document types.

Attributes

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

Table A–260 Enhanced Order Monitor Attributes

Attribute	Value
Base Transaction ID	RETURN_MONITOR_EX
Base Document Type	Return Order
Base Process Type	Reverse Logistics
Abstract Transaction	No
APIs Called	None

Criteria Parameters

The following are the criteria parameters for this monitor:

Table A–261 Enhanced Order Monitor Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.

Table A–261 Enhanced Order Monitor Criteria Parameters

Parameter	Description
EnterpriseCode	Optional. Enterprise for which the Order Monitor needs to be run. If not passed, then all enterprises are monitored.
FromStatus	Optional. Statuses to monitor that are greater than or equal to the passed status.
ToStatus	Optional. Statuses to monitor that are less than or equal to the passed status.
CollectPendingJobs	If this parameter is set to N, the agent does not collect information on the pending jobs for this monitor. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console.

Statistics Tracked

The following statistics are tracked for this monitor:

Table A–262 Enhanced Order Monitor Statistics

Statistic Name	Description
NumOrdersProcessed	Number of orders processed.
NumAlertsRaised	Number of alerts raised.

Pending Job Count

For this transaction the pending job count is the number of open orders with the value of NEXT_ALERT_TS less than or equal to (<=) the current date.

Events Raised

No events are raised. Individual actions associated with the monitoring rule are run.

The data published is RETURN_MONITOR_EX.xml.

Monitor Rule's Condition Template

If a monitor rule contains a condition, the <INSTALL_DIR>/repository/xapi/template/source/sscap/monitor/ORDER_MONITOR_EX_CONDITION.xml template file is used to obtain both the order details and the evaluating monitor rule details. See the provided <INSTALL_DIR>/repository/xapi/template/source/sscap/monitor/ORDER_MONITOR_EX_CONDITION.xml.sample file for more details.

If the <INSTALL_DIR>/repository/xapi/template/source/sscap/monitor/ORDER_MONITOR_EX_CONDITION.xml template file does not exist, the MonitorConsolidation->Order element of the default monitor template, the <INSTALL_DIR>/repository/xapi/template/source/sscap/monitor/ORDER_MONITOR_EX.xml file, is used.

> **Note:** Note: If the default monitor template is used, the MonitorConsolidation-> Order->OrderStatuses-> OrderStatus->MonitorRule element is ignored and is not passed into the condition.

A.5.8 Real-time Availability Monitor

The Real-time Availability Monitor time-triggered transaction monitors the inventory availability of inventory items. It can be configured to raise the REALTIME_AVAILABILITY_CHANGE event when the inventory level for a given item changes between the thresholds defined in the Sterling Multi-Channel Fulfillment Solution Configurator in the Global Inventory Visibility module.

It can be run in three modes:

- Activity Based: Raises the event in real time every time an item goes above or below one of the thresholds.
- Quick Sync: Re-sends the most recently published inventory availability information.
- Full Sync: Monitors all of the items regardless of activity and publishes the inventory information for all of the items.

In all cases, the percentage of future inventory availability is used for considering inventory availability at retrieval time. For more information about future inventory availability, see the appropriate section in this guide.

Inventory available at the current date is considered as on-hand. The processing time in the ATP rules must be set to at least 1 day, or else past due supply is included as part of on-hand inventory. For more information about configuring ATP Rules, see the appropriate section in this guide.

Demand of type OPEN_ORDER is used in getting the inventory availability picture.

If sourcing is maintained, the Real-time Availability Monitor can either monitor the total availability across nodes or the availability at individual nodes.

When monitoring the total availability across nodes, the Real-time Availability Monitor monitors all nodes in the default distribution group of the inventory organization.

When monitoring the availability at individual nodes, the Real-time Availability Monitor monitors all nodes in a specified distribution group. For more information about configuring distribution groups and node-level inventory monitoring, see the appropriate section in this guide.

Inventory items without an Availability Monitor rule, or with a rule that is disabled, is unable to be processed by this time-triggered transaction.

If configured, the Real-time Availability Monitor also considers the onhand and future inventory availability safety factor during monitoring. For more information about the inventory availability safety factors and the `findInventory()` API, see the appropriate section in this guide and the *Sterling Multi-Channel Fulfillment Solution Javadocs*.

When the onhand quantity is greater than the configured low threshold, the `REALTIME_ONHAND` alert type is raised, and the alert level is based on the onhand quantity.

When the onhand quantity falls below the configured low threshold, the `REALTIME_FUTURE_MAX` alert type is raised, and the alert level is based on the total future supply (`FutureAvailableQuantity`) with `FirstFutureAvailableDate` set to the date on which the first future

supply is available, and FutureAvailableDate set to the date on which the maximum future supply is available.

> **Note:** When the Real-time Availability Monitor is run in activity based mode, changing one of the thresholds of an inventory item does not cause the agent to monitor it unless there is a change in activity. For example, if item I with available quantity 700 is being monitored with a low threshold of 600, and the low threshold is then changed to 1000, no event is published unless there is change in I's activity. In order to ensure that in such a scenario I is not left unmonitored, call the createInventoryActivity API when changing a monitoring rule for an item.

Attributes

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

Table A–263 Real-time Availability Monitor Attributes

Attribute	Value
Base Transaction ID	REALTIME_ATP_MONITOR
Base Document Type	General
Base Process Type	General
Abstract Transaction	No
APIs Called	FindInventory

Criteria Parameters

The following are the criteria parameters for this monitor:

Table A–264 Real-time Availability Monitor Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to `Get`, the only valid value.
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`.
InventoryOrganizationCode	Inventory organization code to use when `MonitorOption` is passed as `3`. The inventory organization has to be an enterprise. If this is not passed, the monitor runs for all inventory organizations.
MonitorOption	`1` - Activity Based (Monitor based on distinct inventory items in `YFS_INVENTORY_ACTIVITY` table). 2 – Quick Sync (Re-raise event to publish information from the YFS_INVENTORY_ALERT table). 3 – Full Sync (Monitor based on all inventory items maintained by the inventory organization provided. If no InventoryOrganizationCode is provided, all inventory item is monitored). If not provided, default value is `1`.
ItemStatuses	List of valid statuses of items to be processed. Statuses must be separated by a `,` for example `3000,2000`. This is only used when `MonitorOption` is passed as 2 or 3. If provided, only items with the matching statuses is monitored.

Table A–264 Real-time Availability Monitor Criteria Parameters

Parameter	Description
FromAlertTimestamp	This is only used when `MonitorOption` is passed as 2. If provided, the agent raises the REALTIME_AVAILABILITY_CHANGE event to re-publish inventory availability information which was published between the time that the agent started and FromAlertTimestamp. If not provided, all inventory availability information published before the time that the agent started is re-published.
AllowedOverriddenCriteria	If set to Y, the overridden value for the agent criteria parameters can be provided at the command line while triggering the agent in the following format: `<AgentCriteriaAttribute> <OverriddenValue>` For more information about passing these attributes, see the *Sterling Multi-Channel Fulfillment Solution Installation Guide*.
FromLastNumberOfHours	This is only used when MonitorOption is passed as 2 to calculate the FromAlertTimestamp parameter, if necessary. If the FromAlertTimestamp parameter is not provided, it is calculated as current timestamp minus FromLastNumberOfHours.

Table A–264 Real-time Availability Monitor Criteria Parameters

Parameter	Description
CollectPendingJobs	If this parameter is set to N, the agent does not collect information on the pending jobs for this monitor. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console.
RaiseEventsOnAllAvailability Changes	When set to Y, REALTIME_AVAILABILITY_CHANGE event is raised on all availability changes regardless of whether availability exceeds or falls below specified thresholds. This is only used when MonitorOption is passed as 1. Valid values: Y or N. Default value: N.

Statistics Tracked

None.

Pending Job Count

None.

Events Raised

The following events are raised by this time-triggered transaction:

Table A–265 Events Raised by the Realtime Availability Monitor Transaction

Transaction/Event	Key Data	Data Published*	Template Support?
REALTIME_AVAILABILITY_CHANGE	None	YFS_REALTIME_ATP_MONITOR.REALTIME_AVAILABILITY_CHANGE.html	Yes
* These files are located in the following directory: <INSTALL_DIR>/xapidocs/api_javadocs/XSD/HTML			

Note: Although described as 'real-time', availability changes may not be triggered immediately as inventory changes occur if the agent has a backlog of messages to process. Furthermore, this monitor exists as a time-triggered transaction, and thus monitors availability of inventory items only when the monitor is triggered based on the configured runtime properties.

A.5.9 Shipment Monitor

This time-triggered transaction reports the states of a shipment, based on rules in the YFS_MONITOR_RULE table. This transaction enables you to monitor the following situations:

- If the Shipment has been in a status for more than a specified amount of time.
- If a specified date that is associated with the shipment is:
  - n hours before another specified date
  - n hours after another specified date
  - n hours not before another specified date
  - n hours not after another specified date
- If the Shipment has been in a hold type for a specified amount of time.
- If the Shipment has been in a hold type for n hours before a specified date.

Monitoring rules can be configured for shipment's origin and destination points.

Monitoring rules cannot be configured for a shipment's intermediate pickup and drop off points. A shipment has intermediate pickup or drop off only if it has multiple pickup or drop off points. For example, a shipment has more than one loads carrying it. The shipment status on first load deposit, second load deposit, and so forth cannot be monitored. Once the last load deposits the shipment at its destination, then the shipment status can be marked and monitored.

This is not a pipeline transaction. It also does not work from the task queue.

For more information about milestones, date types, and monitoring rules, see the *Sterling Supply Collaboration Configuration Guide*, the *Sterling Distributed Order Management Configuration Guide*, and the *Sterling Reverse Logistics Configuration Guide*.

Attributes

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

Table A–266 Shipment Monitor Attributes

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

Criteria Parameters

The following are the criteria parameters for this monitor:

Table A–267 Shipment Monitor Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.

Table A–267 Shipment Monitor Criteria Parameters

Parameter	Description
EnterpriseCode	Optional. Enterprise for which the Shipment Monitor needs to be run. If not passed, then all enterprises are monitored.
CollectPendingJobs	If this parameter is set to N, the agent does not collect information on the pending jobs for this monitor. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–268 Shipment Monitor Statistics

Statistic Name	Description
NumShipmentsMonitored	Number of shipments monitored.

Pending Job Count

For this transaction the pending job count is the number of open shipments with the value of NEXT_ALERT_TS less than or equal to (<=) the current date.

Events Raised

This invokes the actions configured against shipment statuses.

Key Data - Not Applicable.

Data Published - `SHIPMENT_MONITOR.xml`

Monitor Rule's Condition Template

If a monitor rule contains a condition, the `<INSTALL_DIR>/repository/xapi/template/source/sscap/monitor/SHIPMENT_MONITOR_CONDITION.xml` template file is used to obtain the shipment details and the evaluating monitor rule details. See the provided `<INSTALL_`

DIR>/repository/xapi/template/source/sscap/monitor/SHIPMENT_MONITOR_CONDITION.xml.sample file for more details.

If the <INSTALL_DIR>/repository/xapi/template/source/sscap/monitor/SHIPMENT_MONITOR_CONDITION.xml template file does not exist, the MonitorConsolidation->Shipment element of the default monitor template, the <INSTALL_DIR>/repository/xapi/template/source/sscap/monitor/SHIPMENT_MONITOR.xml file, is used.

Note: Note: If the default monitor template is used, the MonitorConsolidation->Shipment->MonitorRule element is ignored and is not passed into the condition.

A.5.10 Work Order Monitor

This time-triggered transaction alerts the enterprise when a work order remains in a particular state or hold type for a specific amount of time.

Use this monitor to track how long work orders stay in a particular state or hold type.

Attributes

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

Table A–269 Work Order Monitor Attributes

Attribute	Value
Base Transaction ID	WORK_ORDER_MONITOR
Base Document Type	Work Order
Base Process Type	VAS Process
Abstract Transaction	No

Criteria Parameters

The following are the criteria parameters for this monitor:

Table A–270 Work Order Monitor Criteria Parameters

Parameter	Description
Action	Required. Triggers the transaction. If left blank it defaults to Get, the only valid value.
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.
EnterpriseCode	Optional. Enterprise for which the Work Order Monitor needs to be run. If not passed, then all enterprises are monitored.
Node	Optional. Node for which the Work Order Monitor needs to be run. If not passed, then all nodes are monitored.
CollectPendingJobs	If this parameter is set to N, the agent does not collect information on the pending jobs for this monitor. This pending job information is used for monitoring the monitor in the Sterling Multi-Channel Fulfillment Solution System Management Console.

Statistics Tracked

The following statistics are tracked for this transaction:

Table A–271 Work Order Monitor Statistics

Statistic Name	Description
NumWorkOrdersMonitored	Number of work orders monitored.

Pending Job Count

For this transaction the pending job count is the number of Work Orders that are monitored, where NEXT_ALERT_TS less than or equal to (<=) current date.

Events Raised

No events are raised. Individual actions associated with the monitoring rule are run. Data published to the actions is workOrder_dbd.txt.

Monitor Rule's Condition Template

If a monitor rule contains a condition, the <INSTALL_DIR>/repository/xapi/template/source/sscap/monitor/monitor/WORK_ORDER_MONITOR_CONDITION.xml template file is used to obtain the work order details and the evaluating monitor rule details. See the provided <INSTALL_DIR>/repository/xapi/template/source/sscap/monitor/WORK_ORDER_MONITOR_CONDITION.xml.sample file for more details.

If the <INSTALL_DIR>/repository/xapi/template/source/sscap/monitor/WORK_ORDER_MONITOR_CONDITION.xml template file does not exist, the MonitorConsolidation->WorkOrder element of the default monitor template, the <INSTALL_DIR>/repository/xapi/template/source/sscap/monitor/WORK_ORDER_MONITOR.xml file, is used.

Note: If the default monitor template is used, the MonitorConsolidation->WorkOrder->->MonitorRule element is ignored and is not passed into the condition.

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