

Sterling Call Center and Sterling Store: Implementation Guide

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Contents

Preface

Intended Audience	xxxv
Structure	xxxv
Documentation	xxxvi
Conventions	xxxix

1 Introduction

2 Navigating in the Channel Applications Manager

2.1 Starting the Channel Applications Manager	3
2.2 The Channel Applications Manager Layout	4
2.2.1 Using the Online Help	5
2.2.2 Troubleshooting Errors.....	5
2.2.3 Using Special Characters	6

3 Process Types

3.1 Order Fulfillment	7
3.1.1 Create	8
3.1.2 Schedule.....	8
3.1.3 Release.....	9
3.1.4 Ship	9
3.1.5 Return	10
3.1.6 Close	10
3.1.7 Purge	11

3.2	Outbound Shipment.....	11
3.2.1	Create	11
3.2.2	Backroom Pick	11
3.2.3	Confirm	12
3.2.4	Create Invoice	12
3.2.5	Close	12
3.3	Reverse Logistics	12
3.3.1	Create	13
3.3.2	Authorize	13
3.3.3	Schedule.....	13
3.3.4	Receive.....	13
3.3.5	Close	14
3.3.6	Purge	14

4 Reference Implementation

4.1	Application Platform.....	15
4.1.1	Teams for a Call Center.....	18
4.1.2	User Groups for a Call Center.....	19
4.1.3	Teams for a Store	19
4.1.4	User Groups for a Store	20
4.1.5	Exception Types and Queue Types	20
4.1.6	Application User Interface Themes.....	21
4.2	Catalog Management	22
4.3	Pricing Management	25
4.4	Distributed Order Management	26
4.4.1	Common Configuration Data for Call Center and Store Scenarios	27
4.4.2	Additional Configuration Data for a Call Center Scenario	36
4.4.3	Additional Configuration Data for a Sterling Store Scenario	37
4.4.4	Sample Payment Methods	38
4.4.5	Sample Promotion Codes.....	38
4.5	Inventory Synchronization.....	39
4.5.1	Resource Pools.....	39

5 Common Configurations

5.1	Creating a New Enterprise Organization	41
5.2	Configuring Initial System Setup	42
5.2.1	Defining Units of Measure for Quantity	42
5.2.2	Defining Units of Measure for Service Quantity	42
5.2.3	Defining Units of Measure for Dimension	42
5.2.4	Defining Units of Measure for Volume.....	42
5.2.5	Defining Units of Measure for Weight	42
5.2.6	Defining Units of Measure for Time	43
5.2.7	Configuring Installation Rules	43
5.2.8	Defining Locales.....	43
5.2.9	Defining Countries.....	43
5.2.10	Defining Languages	43
5.2.11	Defining Date Formats	43
5.2.12	Defining Time Formats.....	44
5.2.13	Defining Date and Time Formats	44
5.2.14	Defining Currencies	44
5.2.15	Configuring Currency Conversions	44
5.3	Configuring an Enterprise Profile	44
5.4	Managing the Supply Chain Network Model.....	45
5.4.1	Defining Shipping Nodes and Stores	45
5.4.2	Defining Carriers.....	45
5.4.3	Defining Vendors.....	46
5.4.4	Configuring the Fulfillment Network Model	46
5.4.5	Defining Region Match Preferences	46
5.4.6	Configuring Region Levels	46
5.4.7	Configuring Region Schemas.....	46
5.4.8	Defining Node Types.....	47
5.5	Managing Products and Categories	47
5.5.1	Configuring Units of Measure	47
5.5.2	Managing Products	47
5.5.3	Defining Product Categories.....	47
5.5.4	Defining Types of Product Classifications	48
5.5.5	Defining Classification Values.....	48
5.5.6	Defining Alternate Identifications for an Item	48

5.5.7	Defining Association Types for an Item.....	48
5.5.8	Configuring Display of Model Items.....	48
5.5.9	Configuring Item Search Options.....	49
5.5.10	Configuring the Display of a Product Web Page for an Item.....	50
5.6	Configuring Delivery and Installation.....	51
5.6.1	Defining Slot Groups.....	51
5.6.2	Defining Service Skills.....	51
5.6.3	Defining Delivery Service UOM Master.....	52
5.6.4	Defining Delivery Service Types.....	52
5.6.5	Defining Options Offered with Delivery Services.....	52
5.6.6	Defining Delivery Services.....	52
5.6.7	Defining Installation Service UOM Master.....	52
5.6.8	Defining Installation Service Types.....	53
5.6.9	Configuring Options Offered with Installation Services.....	53
5.6.10	Defining Installation Services.....	53
5.6.11	Defining Address-Related Questions.....	53
5.6.12	Defining Types of Capacity and Service Classifications.....	53
5.6.13	Configuring Sourcing Rules for Delivery.....	54
5.6.14	Defining Node Groups for Installation Services.....	54
5.6.15	Defining Sourcing Rules for Installation.....	54
5.6.16	Defining Resource Pools.....	54
5.6.17	Configuring Service Supervisors.....	54
5.6.18	Configuring Capacity Rules.....	55
5.6.19	Defining Service Complexity Levels.....	55
5.6.20	Configuring Additional Capacity.....	55
5.6.21	Selecting Region Usage for Resource Pools.....	55
5.6.22	Configuring the Service Appointment Calendar View.....	55
5.7	Defining Customers.....	57
5.7.1	Configuring Customer Rules.....	57
5.7.2	Configuring Contact Types.....	57
5.7.3	Defining Customer Definitions.....	58
5.7.4	Defining Titles.....	58
5.7.5	Configuring Customer Search Rules.....	59
5.7.6	Configuring Customer Payment Method Rules.....	60
5.7.7	Configuring Consumer Rules.....	61

5.8	Configuring Order Promising Rules.....	61
5.8.1	Selecting Complexity Level Required for Sourcing Rules.....	61
5.8.2	Defining Fulfillment Types	62
5.8.3	Defining Order Sourcing Classifications.....	62
5.8.4	Defining Types of Sourcing and Procurement Classifications	62
5.8.5	Defining Scheduling Rules	62
5.8.6	Configuring Landed Cost Computation Rules	62
5.8.7	Configuring Rules for Determining Forwarding/Transfers.....	63
5.8.8	Defining Node Groups	63
5.8.9	Configuring Sourcing Rules.....	63
5.8.10	Defining Node Groups for Transfers or Procurement.....	63
5.8.11	Configuring Sourcing Rules for Transfers or Procurement.....	63
5.8.12	Configuring Transit Time Computation Rules	64
5.8.13	Configuring Miscellaneous Scheduling and Reservation Rules.....	64
5.8.14	Selecting Region Schema used for Order Promising.....	64
5.8.15	Overriding Promising Parameters for Individual Items	64
5.8.16	Overriding Promising Parameters for Individual Nodes.....	64
5.9	Configuring Payment Handling	65
5.9.1	Configuring Basic Rules for Payment Handling	65
5.9.2	Configuring Payment Rules	65
5.9.3	Defining Payment Types.....	65
5.9.4	Defining Credit Card Types	65
5.9.5	Configuring Payment Failure Rules.....	66
5.9.6	Payment Processing Rules Determination	67
5.9.7	Configuring Advanced Credit Card Rules	67
5.10	Configuring Order Administration	68
5.10.1	Configuring Order Entry Rules.....	69
5.10.2	Defining Hold Types.....	81
5.10.3	Configuring Price Match Rules	81
5.10.4	Configuring Price Match Statuses.....	83
5.10.5	Configuring Competitor Statuses	84
5.10.6	Configuring Order Modification Rules.....	85
5.10.7	Configuring Work Order Modification Rules	85
5.10.8	Defining Appeasement Reasons.....	86
5.10.9	Defining Cancellation Reasons.....	86

5.10.10	Defining Reship Reasons	87
5.10.11	Defining Price Override Reasons	88
5.10.12	Defining Charge Override Reasons	89
5.10.13	Configuring Open Box Options.....	90
5.10.14	Defining Order Note Types and Configuring Automatic Note Logging....	91
5.10.15	Defining Order Types and Line Types	100
5.10.16	Configuring Order Validations Required	101
5.10.17	Configuring Alternate Item Identifier Display	101
5.10.18	Configuring Add Line Rules	102
5.10.19	Configuring Available Gift Options.....	103
5.10.20	Configuring Address Verification Rules.....	104
5.10.21	Configuring Country and State Display Rules.....	105
5.10.22	Defining Instruction Types	107
5.10.23	Defining Custom Modification Types	107
5.10.24	Configuring which Modifications Trigger Re-pricing	108
5.10.25	Defining Charge Categories and Names	108
5.10.26	Configuring Transaction Specific Rules.....	108
5.10.27	Configuring Availability Check and Reservation Options	108
5.10.28	Defining Unit of Measure Display Rules.....	110
5.10.29	Configuring Print Options.....	111
5.10.30	Configuring User Interface Payment Handling.....	112
5.10.31	Configuring Special Order Modification Rules	113
5.10.32	Configuring Information Recorded During Level of Service Selection...	115
5.10.33	Configuring Line Relationship Types	116
5.10.34	Configuring FTC Compliance	116
5.10.35	Configuring External User Interface Rules	117
5.10.36	Configuring Bundle Components Display	118
5.10.37	Configuring Display of Fulfillment Summary Screen.....	119
5.10.38	Configuring Order Tags for Sales Orders	120
5.11	Configuring Store Pickup Administration	120
5.11.1	Configuring Store Pickup Rules	120
5.11.2	Configuring Verification Criteria	122
5.12	Configuring Outbound Logistics	123
5.12.1	Defining Carriers	124
5.12.2	Defining Carrier Services	124

5.12.3	Defining Types of Routing Guide Classifications	124
5.12.4	Configuring Outbound Constraints	124
5.12.5	Defining Shipment Modes	125
5.12.6	Configuring Outbound Shipment Modification Rules	125
5.13	Configuring Business Process Models and Monitoring Rules	125
5.13.1	Configuring Order Fulfillment Process	125
5.13.2	Configuring Shipping Process	126
5.13.3	Configuring Delivery and Installation Process	126
5.13.4	Configuring Return Fulfillment Process	126
5.13.5	Configuring Receipt Process	126
5.13.6	Defining Order Milestones.....	126
5.13.7	Defining Order Monitoring Events	126
5.13.8	Defining Milestones for Returns	127
5.13.9	Defining Monitoring Events for Returns.....	127
5.13.10	Configuring Transactions and Events for Inventory, Item, and UI.....	127
5.13.11	Configuring Document and Process Types.....	127
5.14	Configuring Inventory Synchronization	127
5.14.1	Configuring Inventory Related Rules	128
5.14.2	Configuring Supply and Demand Types	128
5.14.3	Configuring Availability Safety Factors.....	128
5.14.4	Configuring how Supply and Demand are Changed with Order Status.	128
5.14.5	Configuring Inventory Node Type Rules	128
5.15	Configuring Pricing	129
5.15.1	Defining Price Lists	129
5.15.2	Defining Price Programs	129
5.15.3	Selecting Region Schema for Pricing Definition	129
5.16	Configuring Returns Administration.....	129
5.16.1	Configuring Return Order Modification Rules	130
5.16.2	Defining Return Reasons	130
5.16.3	Defining Charge Override Reasons.....	131
5.16.4	Defining Receiving Disposition Codes	132
5.16.5	Configuring Rules for Wrongly Shipped Items.....	133
5.16.6	Configuring Return Entry Rules	134
5.16.7	Defining Return Note Reasons.....	135
5.16.8	Defining Return Cancellation Reasons	136

5.16.9	Defining Return Types and Return Line Types.....	137
5.16.10	Configuring Return Receipt Handling	137
5.16.11	Defining Charge Categories and Names	138
5.16.12	Configuring Extraneous Item/Wrong Item Rules	138
5.17	Configuring Alert Management	139
5.17.1	Defining Alert Types	139
5.17.2	Defining Alert Queues	139
5.17.3	Configuring User Alert Notifications.....	139
5.18	Configuring User Security	141
5.18.1	Defining User Roles	141
5.18.2	Defining Users	141
5.18.3	Configuring Teams	142
5.18.4	Defining Rules for Password Policies.....	142
5.18.5	Configuring Policy Parameters.....	142
5.18.6	Defining Password Authentication Questions	142
5.18.7	Configure Password Policy Rules.....	143
5.19	Configuring System Administration	143
5.19.1	Configuring System Purge Criteria	143
5.19.2	Configuring Sales Order Purge Criteria	143
5.19.3	Configuring Work Order Purge Criteria	144
5.19.4	Configuring Return Order Purge Criteria	144
5.19.5	Defining Agent Criteria Groups	144
5.19.6	Defining Initial Context Factory Codes	144
5.19.7	Defining View Servers.....	144
5.19.8	Configuring Health Monitor Rules.....	144
5.19.9	Configuring Pagination Rules.....	145
5.19.10	Configuring Announcement Rules	146
5.19.11	Defining Qualified Tag Type	147
5.19.12	Defining Qualified Tags	147
5.19.13	Configuring Qualified Tag and Application Compatibility	147
5.19.14	Configuring Version-Specific Rules	148
5.19.15	Configuring Version-Specific Common Codes for Sales Orders	149
5.19.16	Configuring Version-Specific Common Codes for Return Orders	150
5.20	Extending and Customizing the Application	151
5.20.1	Configuring User Exit Management	151

5.20.2	Customizing the Application Menus	151
5.20.3	Defining Extended Application Resources	151
5.20.4	Defining Themes	152
5.20.5	Defining Custom Common Code Types	152
5.20.6	Defining Custom Common Codes	152
5.20.7	Defining Custom Error Codes	152
5.21	Configuring Store-Specific Tasks	153
5.21.1	Defining Store Users	153
5.21.2	Configuring Store Devices	153
5.21.3	Configuring Store Print Documents	153
5.21.4	Configuring Return Order Receiving Preferences	153
5.21.5	Configuring Data Security	153
5.21.6	Configuring Barcodes	154
5.21.7	Configuring Backroom Pick Rules	154

6 Extending and Customizing the Application

6.1	Order Entry Screens Customization	155
6.2	Add Lines To Order Screens Customization	157
6.3	Extending Actions	157
6.4	Shared Tasks	158
6.4.1	Address Panel Shared Task	158
6.4.2	Order Notes Shared Task	159
6.4.3	Service Appointment Calendar Shared Task	159
6.4.4	Add Payment Method Shared Task	160
6.4.5	Order Summary Shared Task	161
6.4.6	Return Search Shared Task	161
6.4.7	Cancel Order Shared Task	162
6.4.8	Create Alert Shared Task	162
6.4.9	Alert List Shared Task	163
6.4.10	Message Dialog Box Shared Task	163
6.4.11	Item Details Shared Tasks	164
6.4.12	Add Modify Charges Shared Task	166
6.4.13	Customer Details Shared Task	167
6.4.14	Override Item Price Shared Task	172
6.4.15	Advanced Sales Order Search Shared Task	173

6.4.16	Alternate Stores Shared Task.....	174
6.5	User Interface Customization	179
6.5.1	Special Themes.....	179
6.5.1.1	Mandatory Fields	179
6.5.1.2	Smileys.....	179
6.5.2	Display of Day Panels in the Service Appointment Calendar.....	179
6.6	Address Panel Customization	180
6.7	Opening New Related Tasks in the Order Editor	180
6.8	Opening the Screens of the Sterling Call Center and Sterling Store Application in an Editor	181
6.8.1	Opening the Order Summary Screen in an Editor.....	181
6.8.2	Opening the Return Search Screen in an Editor	182
6.8.3	Opening the Cancel Order Screen in an Editor	182
6.8.4	Opening the Create Alert Screen in an Editor.....	183
6.8.5	Opening the Alert List Screen in an Editor.....	183
6.8.6	Opening the Alert Details Screen in an Editor	184
6.8.7	Opening the Item Details Screen in an Editor	184
6.8.8	Opening the Customer Details Screen in an Editor	186
6.8.9	Opening the Return Order Summary Screen in an Editor.....	191
6.8.10	Opening the Advanced Sales Order Search Screen in an Editor	192

7 Implementing the Sterling Call Center Features

7.1	Item Inquiry	195
7.1.1	Searching and Viewing the Details of an Item.....	195
7.1.1.1	Solution	195
7.1.1.2	End-User Impact	198
7.1.1.3	Implementation	199
7.1.1.4	Reference Implementation.....	200
7.1.2	Handling Styles for an Item	201
7.1.2.1	Solution	201
7.1.2.2	End-User Impact	203
7.1.2.3	Implementation	204
7.1.2.4	Reference Implementation.....	208
7.2	Configured Items	209
7.2.1	Solution	209

7.2.2	End-User Impact	210
7.2.3	Implementation	210
7.2.4	Reference Implementation.....	211
7.3	Alternate Item Identifier	211
7.3.1	Solution	211
7.3.2	End-User Impact	212
7.3.3	Implementation	212
7.3.4	Reference Implementation.....	213
7.4	Item Display Options Configuration.....	213
7.4.1	Solution	213
7.4.2	End-User Impact	213
7.4.3	Implementation	214
7.4.4	Reference Implementation.....	217
7.5	Alternate Store Pickup Locations Search	217
7.5.1	Solution	217
7.5.2	End-User Impact	218
7.5.3	Implementation	218
7.5.4	Reference Implementation.....	219
7.6	Order Capture	219
7.6.1	Order Creation	219
7.6.1.1	Solution	220
7.6.1.2	End-User Impact	240
7.6.1.3	Implementation	241
7.6.1.4	Reference Implementation.....	242
7.6.2	Capturing Orders through Other Channels	243
7.6.2.1	Solution	243
7.6.2.2	End-User Impact	247
7.6.2.3	Implementation	247
7.6.2.4	Reference Implementation.....	248
7.6.3	Order Delay.....	248
7.6.3.1	Solution	248
7.6.3.2	End-User Impact	248
7.6.3.3	Implementation	248
7.6.3.4	Reference Implementation.....	248
7.6.4	Order Validation	249

7.6.4.1	Duplicate Order Validation	249
7.6.4.2	Address Verification	254
7.6.4.3	Fraud Check	262
7.6.4.4	Item Validation	266
7.6.4.5	Credit Limit Exceeded	268
7.7	Order Inquiry.....	269
7.7.1	Solution	269
7.7.2	End-User Impact	273
7.7.3	Implementation	273
7.7.4	Reference Implementation.....	274
7.8	Order Monitoring	274
7.8.1	Federal Trade Commission Compliance.....	275
7.8.1.1	Solution	276
7.8.1.2	End-User Impact	281
7.8.1.3	Implementation	282
7.8.2	Shipment Notification.....	292
7.8.2.1	Solution	292
7.8.2.2	End-User Impact	294
7.8.2.3	Implementation	294
7.8.3	Order Cancellation Notification	295
7.8.3.1	Solution	295
7.8.3.2	End-User Impact	297
7.8.3.3	Implementation	297
7.9	Order Maintenance	298
7.9.1	Apply Hold	299
7.9.1.1	Solution	299
7.9.1.2	End-User Impact	299
7.9.1.3	Implementation	300
7.9.1.4	Reference Implementation.....	300
7.9.2	Remove Holds.....	300
7.9.2.1	Solution	301
7.9.2.2	End-User Impact	301
7.9.2.3	Implementation	301
7.9.2.4	Reference Implementation.....	301
7.9.3	Change Payment Method.....	302

7.9.3.1	Solution	302
7.9.3.2	End-User Impact	310
7.9.3.3	Implementation	311
7.9.3.4	Reference Implementation.....	311
7.9.4	Add Line	313
7.9.4.1	Solution	313
7.9.4.2	End-User Impact	315
7.9.4.3	Implementation	315
7.9.4.4	Reference Implementation.....	316
7.9.5	Add Multiple Items to an Order	316
7.9.5.1	Solution	317
7.9.5.2	End-User Impact	318
7.9.5.3	Implementation	319
7.9.5.4	Reference Implementation.....	320
7.9.6	Change Gift Options	321
7.9.6.1	Solution	321
7.9.6.2	End-User Impact	322
7.9.6.3	Implementation	322
7.9.6.4	Reference Implementation.....	323
7.9.7	Customer Appeasement	324
7.9.7.1	Solution	324
7.9.7.2	End-User Impact	325
7.9.7.3	Implementation	325
7.9.7.4	Reference Implementation.....	325
7.9.8	Price Match	326
7.9.8.1	Solution	326
7.9.8.2	End-User Impact	331
7.9.8.3	Implementation	331
7.9.8.4	Reference Implementation.....	332
7.9.9	Competitor Search	333
7.9.9.1	Solution	333
7.9.9.2	End-User Impact	334
7.9.9.3	Implementation	334
7.9.9.4	Reference Implementation.....	335
7.9.10	Price Match Search	335

7.9.10.1	Solution	335
7.9.10.2	End-User Impact	336
7.9.10.3	Implementation	336
7.9.10.4	Reference Implementation.....	337
7.9.11	Create or Modify a Competitor Record	337
7.9.11.1	Solution	337
7.9.11.2	End-User Impact	337
7.9.11.3	Implementation	338
7.9.11.4	Reference Implementation.....	338
7.9.12	Create or Modify a Price Match Record.....	338
7.9.12.1	Solution	338
7.9.12.2	End-User Impact	339
7.9.12.3	Implementation	339
7.9.12.4	Reference Implementation.....	340
7.9.13	Reship an Item	340
7.9.13.1	Solution	340
7.9.13.2	End-User Impact	342
7.9.13.3	Implementation	342
7.9.13.4	Reference Implementation.....	342
7.9.14	Add or Modify Charges	343
7.9.14.1	Solution	343
7.9.14.2	End-User Impact	343
7.9.14.3	Implementation	344
7.9.14.4	Reference Implementation.....	344
7.9.15	Add Coupon.....	345
7.9.15.1	Solution	345
7.9.15.2	End-User Impact	346
7.9.15.3	Implementation	346
7.9.15.4	Reference Implementation.....	346
7.9.16	Cancel Order	346
7.9.16.1	Solution	347
7.9.16.2	End-User Impact	349
7.9.16.3	Implementation	349
7.9.16.4	Reference Implementation.....	350
7.9.17	Track an Item	351

7.9.17.1	Solution	351
7.9.17.2	End-User Impact	354
7.9.17.3	Implementation	355
7.9.17.4	Reference Implementation.....	355
7.9.18	Order Notes.....	355
7.9.18.1	Solution	355
7.9.18.2	End-User Impact	357
7.9.18.3	Implementation	358
7.9.18.4	Reference Implementation.....	359
7.9.19	Change Fulfillment Options	361
7.9.19.1	Solution	361
7.9.19.2	End-User Impact	365
7.9.19.3	Implementation	366
7.9.19.4	Reference Implementation.....	366
7.9.20	Fulfillment Summary	367
7.9.20.1	Solution	367
7.9.20.2	End-User Impact	373
7.9.20.3	Implementation	373
7.9.20.4	Reference Implementation.....	374
7.9.21	Delivery and Service Grouping	374
7.9.21.1	Solution	374
7.9.21.2	End-User Impact	375
7.9.21.3	Implementation	376
7.9.21.4	Reference Implementation.....	376
7.9.22	Change Service Instructions	376
7.9.22.1	Solution	376
7.9.22.2	End-User Impact	376
7.9.22.3	Implementation	376
7.9.22.4	Reference Implementation.....	377
7.9.23	Change Service Appointment	377
7.9.23.1	Solution	377
7.9.23.2	End-User Impact	379
7.9.23.3	Implementation	379
7.9.23.4	Reference Implementation.....	380
7.9.24	Service Fulfillment Summary	380

7.9.24.1	Solution	380
7.9.24.2	End-User Impact	382
7.9.24.3	Implementation	382
7.9.24.4	Reference Implementation.....	382
7.9.25	Reservations.....	382
7.9.25.1	Solution	382
7.9.25.2	Implementation	383
7.9.25.3	End-User Impact	384
7.9.25.4	Reference Implementation.....	384
7.9.26	Increase Order Line Quantity	384
7.9.26.1	Solution	384
7.9.26.2	End-User Impact	386
7.9.26.3	Implementation	386
7.9.26.4	Reference Implementation.....	386
7.9.27	Schedule and Release an Order	387
7.9.27.1	Solution	387
7.9.27.2	End-User Impact	387
7.9.27.3	Implementation	388
7.9.27.4	Reference Implementation.....	388
7.9.28	View Procurement Orders	388
7.9.28.1	Solution	388
7.9.28.2	End-User Impact	388
7.9.28.3	Implementation	388
7.9.28.4	Reference Implementation.....	389
7.9.29	Change Order Address	389
7.9.29.1	Solution	389
7.9.29.2	End-User Impact	390
7.9.29.3	Implementation	390
7.9.29.4	Reference Implementation.....	391
7.9.30	Launch Application Console.....	391
7.9.30.1	Solution	391
7.9.30.2	End-User Impact	391
7.9.30.3	Implementation	392
7.9.30.4	Reference Implementation.....	393
7.9.31	Change an Item's Style	393

7.9.31.1	Solution	393
7.9.31.2	End-User Impact	394
7.9.31.3	Implementation	394
7.9.31.4	Reference Implementation.....	394
7.9.32	Change Tax Options	394
7.9.32.1	Solution	394
7.9.32.2	End-User Impact	394
7.9.32.3	Implementation	394
7.9.32.4	Reference Implementation.....	395
7.9.33	Copy Order	395
7.9.33.1	Solution	395
7.9.33.2	End-User Impact	396
7.9.33.3	Implementation	396
7.9.33.4	Reference Implementation.....	396
7.9.34	E-Mail Order Information.....	396
7.9.34.1	Solution	396
7.9.34.2	End-User Impact	399
7.9.34.3	Implementation	399
7.9.34.4	Reference Implementation.....	399
7.10	Payment Processing	399
7.10.1	Solution	399
7.10.1.1	Credit Card.....	402
7.10.1.2	Stored Value Card	403
7.10.1.3	Pre-paid.....	404
7.10.1.4	Check.....	404
7.10.1.5	Customer Account.....	404
7.10.1.6	Refund Check	405
7.10.2	End-User Impact.....	406
7.10.3	Implementation	406
7.10.3.1	Credit Card Implementation.....	408
7.10.3.2	Stored Value Card Implementation	411
7.10.3.3	Return Check Implementation.....	413
7.10.3.4	Payment Processing Error Handling.....	415
7.10.3.5	Strike Limit Configuration	418
7.10.4	Reference Implementation.....	418

7.11	Payment Inquiry	420
7.11.1	Solution	420
7.11.2	End-User Impact	421
7.11.3	Implementation	421
7.11.4	Reference Implementation.....	421
7.12	Real-Time Credit Card Authorization	421
7.12.1	Solution	421
7.12.2	End-User Impact	423
7.12.3	Implementation	423
7.12.4	Reference Implementation.....	424
7.13	Return Order Capture	424
7.13.1	Solution	424
7.13.1.1	Return Line Selection	425
7.13.1.2	Identifying the Person Returning an Item.	425
7.13.1.3	Adding Lines to a Return	426
7.13.1.4	Validating Lines and Addresses.....	426
7.13.1.5	Entering Return Reason.....	426
7.13.1.6	Return Reason Rule	426
7.13.1.7	Overriding the Return Policy	426
7.13.1.8	Customer Identification Required	426
7.13.1.9	Is Customer Info Present Rule.....	427
7.13.1.10	Modifying an Exchange.....	427
7.13.1.11	Default Exchange Type Rules	427
7.13.1.12	Needs Appointments Rule	427
7.13.1.13	Address Info Needed Rule.....	428
7.13.1.14	Create Reservation Rule	428
7.13.1.15	Exchange Fulfillment Options	428
7.13.1.16	Needs Appointment Rule	428
7.13.1.17	Is Customer Info Present Rule.....	428
7.13.1.18	Address Info Needed Rule.....	429
7.13.1.19	Create Reservation Rule	429
7.13.1.20	Fulfillment Summary.....	429
7.13.1.21	Select Appointment	429
7.13.1.22	Payment Summary	429
7.13.2	End-User Impact	429

7.13.2.1	Line Selection	429
7.13.2.2	Exchange Fulfillment Options	430
7.13.3	Implementation	430
7.13.3.1	Line Selection	430
7.13.3.2	Return Reason	430
7.13.3.3	Modify an Exchange.....	431
7.13.3.4	Exchange Fulfillment Options	431
7.13.3.5	Fulfillment Summary	431
7.13.3.6	Status Changes to a Return or Exchange Order	432
7.13.3.7	Select Appointment	432
7.13.4	Reference Implementation.....	432
7.13.4.1	Return Reason	433
7.13.4.2	Exchange Fulfillment Options	433
7.13.4.3	Select Appointment	433
7.14	Return Order Inquiry	434
7.14.1	Solution	434
7.14.2	End-User Impact.....	435
7.14.3	Implementation	435
7.14.4	Reference Implementation.....	435
7.15	Return Order Maintenance.....	435
7.15.1	Return Line Selection.....	436
7.15.1.1	Solution	436
7.15.1.2	End User Impact	440
7.15.1.3	Implementation	440
7.15.1.4	Reference Implementation.....	441
7.15.2	Entering Return Reason	441
7.15.2.1	Solution	441
7.15.2.2	End User Impact	443
7.15.2.3	Implementation	443
7.15.2.4	Reference Implementation.....	443
7.15.3	Modifying an Exchange	443
7.15.3.1	Solution	444
7.15.3.2	End User Impact	444
7.15.3.3	Implementation	444
7.15.3.4	Reference Implementation.....	444

7.15.4	Exchange Fulfillment Options	445
7.15.5	Fulfillment Summary.....	445
7.15.6	Select Appointment	445
7.15.7	Payment Summary	445
7.15.7.1	Solution	445
7.15.7.2	End User Impact	447
7.15.7.3	Implementation	447
7.15.7.4	Reference Implementation.....	447
7.15.8	Create Exchange Order	447
7.15.8.1	Solution	447
7.15.8.2	End User Impact	448
7.15.8.3	Implementation	448
7.15.8.4	Reference Implementation.....	448
7.15.9	Report Extra Items	449
7.15.9.1	Solution	449
7.15.9.2	End-User Impact	450
7.15.9.3	Implementation	450
7.15.9.4	Reference Implementation.....	450
7.15.10	Report Wrong Items	451
7.15.10.1	Solution	451
7.15.10.2	End-User Impact	452
7.15.10.3	Implementation	452
7.15.10.4	Reference Implementation.....	452
7.15.11	Report Unexpected Items	453
7.15.11.1	Solution	453
7.15.11.2	End-User Impact	456
7.15.11.3	Implementation	456
7.15.11.4	Reference Implementation.....	457
7.15.12	Issue Refund Now	457
7.15.12.1	Solution	457
7.15.12.2	End-User Impact	458
7.15.12.3	Implementation	458
7.15.12.4	Reference Implementation.....	458
7.15.13	Change Return Address.....	458
7.15.13.1	Solution	458

7.15.13.2	End-User Impact	459
7.15.13.3	Implementation	459
7.15.13.4	Reference Implementation.....	459
7.15.14	Change Service Appointment	459
7.15.14.1	Solution	460
7.15.14.2	End-User Impact	461
7.15.14.3	Implementation	461
7.15.14.4	Reference Implementation.....	461
7.15.15	Change Return Method	462
7.15.15.1	Solution	462
7.15.15.2	End User Impact	463
7.15.15.3	Implementation	464
7.15.15.4	Reference Implementation.....	464
7.15.16	Cancel Return Order	464
7.15.16.1	Solution	465
7.15.16.2	End-User Impact	466
7.15.16.3	Implementation	466
7.15.16.4	Reference Implementation.....	466
7.15.17	Payment Confirmation	467
7.15.17.1	Solution	467
7.15.17.2	End User Impact	467
7.15.17.3	Implementation	467
7.15.17.4	Reference Implementation.....	468
7.16	Customer Creation	468
7.16.1	Create Consumer Customer	468
7.16.1.1	Solution	468
7.16.1.2	End-User Impact	471
7.16.1.3	Implementation	471
7.16.1.4	Reference Implementation.....	472
7.16.2	Create Business Customer	472
7.16.2.1	Solution	472
7.16.2.2	End-User Impact	475
7.16.2.3	Implementation	476
7.16.2.4	Reference Implementation.....	476
7.17	Customer Details	477

7.17.1	Solution	477
7.17.2	End-User Impact	480
7.17.3	Implementation	480
7.17.4	Reference Implementation.....	480
7.18	Customer Inquiry	480
7.18.1	Solution	480
7.18.2	End-User Impact	481
7.18.3	Implementation	481
7.18.4	Reference Implementation.....	482
7.19	Customer Maintenance.....	482
7.19.1	Manage Contacts.....	482
7.19.1.1	Solution	482
7.19.1.2	End-User Impact	486
7.19.1.3	Implementation	486
7.19.1.4	Reference Implementation.....	486
7.19.2	Manage Business Customer Information	486
7.19.2.1	Solution	486
7.19.2.2	End-User Impact	487
7.19.2.3	Implementation	487
7.19.2.4	Reference Implementation.....	487
7.19.3	Manage Customer Addresses	487
7.19.3.1	Solution	487
7.19.3.2	End-User Impact	488
7.19.3.3	Implementation	488
7.19.3.4	Reference Implementation.....	488
7.19.4	Manage Payment Methods	488
7.19.4.1	Solution	488
7.19.4.2	End-User Impact	489
7.19.4.3	Implementation	489
7.19.4.4	Reference Implementation.....	490
7.19.5	Reset User Passwords	490
7.19.5.1	Solution	490
7.19.5.2	End-User Impact	491
7.19.5.3	Implementation	491
7.19.5.4	Reference Implementation.....	491

7.19.6	Customer Team Assignments	492
7.19.6.1	Solution	492
7.19.6.2	End-User Impact	492
7.19.6.3	Implementation	492
7.19.6.4	Reference Implementation.....	493
7.19.7	Customer User Assignments	493
7.19.7.1	Solution	493
7.19.7.2	End-User Impact	493
7.19.7.3	Implementation	494
7.19.7.4	Reference Implementation.....	494
7.19.8	Customer Self Assignments	494
7.19.8.1	Solution	494
7.19.8.2	End-User Impact	495
7.19.8.3	Implementation	495
7.19.8.4	Reference Implementation.....	495
7.19.9	Customer Notes	495
7.19.9.1	Solution	495
7.19.9.2	End-User Impact	497
7.19.9.3	Implementation	497
7.19.9.4	Reference Implementation.....	497
7.20	User Creation	497
7.20.1	Create a User	497
7.20.1.1	Solution	497
7.20.1.2	End-User Impact	499
7.20.1.3	Implementation	499
7.20.1.4	Reference Implementation.....	499
7.20.2	Modify a User	499
7.20.2.1	Solution	500
7.20.2.2	End-User Impact	500
7.20.2.3	Implementation	500
7.20.2.4	Reference Implementation.....	501
7.21	User Team Creation	501
7.21.1	Create a User Team.....	501
7.21.1.1	Solution	501
7.21.1.2	End-User Impact	502

7.21.1.3	Implementation	503
7.21.1.4	Reference Implementation.....	503
7.21.2	Manage a User Team	503
7.21.2.1	Solution	503
7.21.2.2	End-User Impact	504
7.21.2.3	Implementation	504
7.21.2.4	Reference Implementation.....	504
7.22	Pagination	504
7.22.1	Solution	505
7.22.2	End-User Impact	505
7.22.3	Implementation	506
7.22.4	Reference Implementation.....	506
7.23	Alert and Queue Management.....	507
7.23.1	Solution	507
7.23.2	End-User Impact	509
7.23.3	Implementation	509
7.23.4	Reference Implementation.....	510
7.24	Announcements	511
7.24.1	Solution	511
7.24.2	End-User Impact	513
7.24.3	Implementation	513
7.24.4	Reference Implementation.....	514
7.25	User Preferences	514
7.25.1	Solution	514
7.25.2	End-User Impact	515
7.25.3	Implementation	515
7.25.4	Reference Implementation.....	515
7.26	Viewing the Documentation Library.....	516
7.26.1	Solution	516
7.26.2	End-User Impact	517
7.26.3	Implementation	517
7.26.4	Reference Implementation.....	517
7.27	Deploying the Sterling Call Center Clients in Phases	517
7.27.1	Solution	517
7.27.2	End-User Impact	519

7.27.3	Implementation	519
7.27.4	Reference Implementation.....	520
7.28	Helpful Text Messages	520
7.28.1	Solution	520
7.28.2	End-User Impact.....	522
7.28.3	Implementation	522
7.28.4	Reference Implementation.....	522
7.29	Integrating with Business Center	523
7.29.1	Solution	523
7.29.2	End-User Impact.....	523
7.29.3	Implementation	523
7.29.4	Reference Implementation.....	524

8 Implementing the Sterling Store Features

8.1	Item Inquiry	525
8.2	Configured Items	525
8.3	Alternate Item Identifier	526
8.4	Item Display Options Configuration.....	526
8.5	Alternate Store Pickup Locations Search	526
8.6	Order Capture	526
8.7	Order Inquiry	526
8.8	Order Monitoring.....	527
8.9	Order Maintenance	527
8.9.1	Apply Hold	528
8.9.2	Resolve Holds	528
8.9.3	Change Payment Method.....	528
8.9.4	Add Multiple Items to an Order	529
8.9.5	Change Gift Options	529
8.9.6	Customer Appeasement	529
8.9.7	Open Box Items	529
8.9.7.1	Solution	529
8.9.7.2	End-User Impact.....	530
8.9.7.3	Implementation	530
8.9.7.4	Reference Implementation.....	531
8.9.8	Add Coupon.....	531

8.9.9	Cancel Order	531
8.9.10	Track an Item	532
8.9.11	Order Notes.....	532
8.9.12	Change Fulfillment Options	533
8.9.13	Fulfillment Summary.....	533
8.9.14	Delivery and Service Grouping	533
8.9.15	Change Service Instructions	534
8.9.16	Change Service Appointments.....	534
8.9.17	Reservations.....	534
8.9.18	Price Match	534
8.9.19	Competitor Search	534
8.9.20	Price Match Search	535
8.9.21	Create or Modify a Competitor Record	535
8.9.22	Create or Modify a Price Match Record.....	535
8.9.23	Increase Order Line Quantity	535
8.9.24	Schedule and Release an Order	535
8.9.25	View Procurement Orders	536
8.9.26	Change Order Address	536
8.9.27	Launch Application Console.....	536
8.9.28	Change an Item's Style	536
8.9.29	Change Tax Options	536
8.9.30	Copy Order.....	537
8.9.31	E-Mail Order Information.....	537
8.10	Payment Processing.....	537
8.11	Payment Inquiry	537
8.12	Return Order Capture	537
8.12.1	Create Return	538
8.12.2	Return Reason	538
8.12.2.1	All Items Are In Hand Rule	539
8.12.3	Fulfillment Summary.....	539
8.12.4	Payment Processing.....	540
8.13	Return Order Inquiry	540
8.14	Return Order Maintenance.....	540
8.14.1	Report Extra Items	541
8.14.2	Report Wrong Items	541

8.14.3	Report Unexpected Items	541
8.14.4	Issue Refund Now	541
8.14.5	Change Return Address.....	542
8.14.6	Cancel Return Order	542
8.15	Customer Creation	542
8.15.1	Create Consumer Customer	542
8.15.2	Create Business Customer	542
8.16	Customer Details	543
8.17	Customer Inquiry	543
8.18	Customer Maintenance	543
8.18.1	Manage Contacts.....	543
8.18.2	Manage Business Customer Information	544
8.18.3	Manage Customer Addresses	544
8.18.4	Manage Payment Methods.....	544
8.18.5	Reset User Passwords	544
8.18.6	Customer Team Assignments	544
8.18.7	Customer User Assignments	545
8.18.8	Customer Self Assignments	545
8.18.9	Customer Notes	545
8.19	User Creation	545
8.20	User Team Creation.....	546
8.21	Pagination.....	546
8.22	Alert and Queue Management.....	546
8.22.1	Solution	546
8.22.2	End-User Impact.....	547
8.22.3	Implementation	547
8.22.4	Reference Implementation.....	547
8.23	Announcements	547
8.24	User Preferences.....	547
8.25	Viewing the Documentation Library	548
8.26	Deploying Sterling Store Clients in Phases	548
8.27	Helpful Text Messages	548
8.28	Order Print Tasks	549
8.28.1	Create Order and Order Summary Prints	549
8.28.1.1	Solution	549

8.28.1.2	End-User Impact	549
8.28.1.3	Implementation	549
8.28.1.4	Reference Implementation.....	550
8.28.2	Change Order Print.....	550
8.28.2.1	Solution	550
8.28.2.2	End-User Impact	550
8.28.2.3	Implementation	550
8.28.2.4	Reference Implementation.....	551
8.28.3	Return or Exchange Order Prints	551
8.28.3.1	Solution	551
8.28.3.2	End-User Impact	551
8.28.3.3	Implementation	552
8.28.3.4	Reference Implementation.....	552
8.29	User Security	552
8.29.1	Solution	552
8.29.2	End-User Impact	553
8.29.3	Implementation	553
8.29.4	Reference Implementation.....	553
8.30	In-Store Pick-up Tasks.....	554
8.30.1	Shipment Inquiry	554
8.30.1.1	Solution	554
8.30.1.2	End-User Impact	555
8.30.1.3	Implementation	555
8.30.1.4	Reference Implementation.....	555
8.30.2	Print Pick Ticket	555
8.30.2.1	Solution	555
8.30.2.2	End-User Impact	556
8.30.2.3	Implementation	556
8.30.2.4	Reference Implementation.....	557
8.30.3	Backroom Pick	557
8.30.3.1	Solution	557
8.30.3.2	End-User Impact	560
8.30.3.3	Implementation	560
8.30.3.4	Reference Implementation.....	561
8.30.4	Undo Backroom Pick	561

8.30.4.1	Solution	561
8.30.4.2	End-User Impact	562
8.30.4.3	Implementation	562
8.30.4.4	Reference Implementation.....	562
8.30.5	Customer Pick	562
8.30.5.1	Solution	562
8.30.5.2	End-User Impact	565
8.30.5.3	Implementation	565
8.30.5.4	Reference Implementation.....	566
8.31	Integrating with Business Center.....	566
8.31.1	Solution	567
8.31.2	End-User Impact	567
8.31.3	Implementation	567
8.31.4	Reference Implementation.....	568

9 Summary of Components

9.1	Database Extensions for Sterling Call Center and Sterling Store.....	569
9.2	APIs and User Exits	577
9.3	Services.....	580
9.3.1	Order Maintenance Services	581
9.3.2	Order Pricing Services.....	581
9.3.3	Customer Services	582
9.3.4	Order Capture Services	582
9.3.5	Payment Processing Services	583
9.3.6	Order Printing Services	583
9.3.7	FTC Compliance Services.....	584
9.4	Monitor Events.....	585
9.5	XSL Files.....	585
9.6	Hold Types	587
9.7	Transactions.....	587
9.8	Time-Triggered Purge Transactions.....	588
9.8.1	Price Match Purge	588
9.8.2	Price Match History Purge.....	590
9.9	Events	592
9.9.1	Event Call Back Handlers.....	592

9.10	Agents	593
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10 Performance Tuning

10.1	Database Management.....	595
10.2	Enabling Reference Data Caching	596
10.3	Cached Data	596

A Localizing the Application

A.1	User Interface Themes	599
A.2	Literals	599
A.2.1	Resource Bundles	600
A.3	Localizing Address and Store Node Information	602
A.4	Factory Setup Data.....	603

Index

Preface

This manual explains the Sterling Call Center™ and Sterling Store™ applications and the Reference Implementation provided along with them. This manual also contains information about the various processes and solutions offered by Sterling Call Center and Sterling Store.

Intended Audience

This manual is intended to provide assistance to individuals who need to configure Sterling Call Center and Sterling Store and implement the features relevant to their business needs.

Structure

This manual contains the following sections:

Chapter 1, "Introduction"

This chapter explains the customer order management business challenges and how Sterling Call Center and Sterling Store assists you in solving them.

Chapter 2, "Navigating in the Channel Applications Manager"

This chapter discusses how to navigate in the Channel Applications Manager.

Chapter 3, "Process Types"

This chapter explains the process types defined for Sterling Call Center and Sterling Store.

Chapter 4, "Reference Implementation"

This chapter discusses the Sterling Call Center and Sterling Store reference implementation.

Chapter 5, "Common Configurations"

This chapter provides a brief overview of the common configurations that are needed for Sterling Call Center and Sterling Store.

Chapter 6, "Extending and Customizing the Application"

This chapter explains the process of extending and customizing Sterling Call Center and Sterling Store.

Chapter 7, "Implementing the Sterling Call Center Features"

This chapter discusses how to implement the Sterling Call Center features.

Chapter 8, "Implementing the Sterling Store Features"

This chapter discusses how to implement the Sterling Store features.

Chapter 9, "Summary of Components"

This chapter discusses the new components available for the existing Selling and Fulfillment Foundation customers.

Chapter 10, "Performance Tuning"

This chapter explains the steps you need to take to fine-tune Sterling Call Center and Sterling Store for optimal performance.

Appendix A, "Localizing the Application"

This appendix explains the process of localization in Sterling Call Center and Sterling Store.

Documentation

For more information about the Sterling Call Center™ and Sterling Store™ components, see the following manuals:

- *Sterling Call Center and Sterling Store: Release Notes*
- *Sterling Call Center and Sterling Store: Installation Guide*
- *Sterling Call Center and Sterling Store: Concepts*

- *Sterling Call Center and Sterling Store: Implementation Guide*
- *Sterling Call Center and Sterling Store: User Guide*
- *Sterling Call Center and Sterling Store: Upgrade Guide*
- *Sterling Call Center and Sterling Store: Business Intelligence Guide*
- *Sterling Call Center and Sterling Store: Javadocs*

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

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

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

- *Selling and Fulfillment Foundation: Multitenant Enterprise Guide*
- *Selling and Fulfillment Foundation: Password Policy Management Guide*
- *Selling and Fulfillment Foundation: Properties Guide*
- *Selling and Fulfillment Foundation: Item Concepts Guide*
- *Selling and Fulfillment Foundation: Pricing Concepts Guide*
- *Business Center: Item Administration Guide*
- *Business Center: Pricing Administration Guide*
- *Business Center: Customization Guide*
- *Business Center: Localization Guide*

For a description of the various documents in the Sterling Call Center and Sterling Store documentation set, see the Sterling Call Center and Sterling Store documentation home page at:

`<INSTALL_DIR>/documentation/YCD_doc_home.html`

`<INSTALL_DIR>` is the directory where Sterling Call Center and Sterling Store and the Selling and Fulfillment Foundation are installed.

Conventions

The following conventions may be used in this manual:

Convention	Meaning
...	Ellipsis represents information that has been omitted.
< >	Angle brackets indicate user-supplied input.
mono-spaced text	Mono-spaced text indicates a file name, directory path, attribute name, or an inline code example or command.
/ or \	Slashes and backslashes are file separators for Windows, UNIX, and Linux operating systems. The file separator for the Windows operating system is "\" and the file separator for UNIX and Linux systems is "/". The UNIX convention is used unless otherwise mentioned.
<INSTALL_DIR>	User-supplied location of the Selling and Fulfillment Foundation installation directory and Sterling Call Center and Sterling Store installation directory. This is only applicable for Release 8.0.

Convention	Meaning
<ANALYTICS_HOME>	User-supplied location of the Sterling Call Center and Sterling Store: Business Intelligence installation directory. Note: This convention is used only in the <i>Sterling Call Center and Sterling Store: Business Intelligence Guide</i> .
<COGNOS_HOME>	User-supplied location of the Cognos installation directory. Note: This convention is used only in the <i>Sterling Call Center and Sterling Store: Business Intelligence Guide</i> .

Notes: The Sterling Call Center and Sterling Store documentation set uses the following conventions in the context of the product name:

- Sterling Customer Order Management PCA is used for Release 7.5 and earlier.
- Sterling Call Center and Sterling Store is used for Release 8.0.

The Selling and Fulfillment Foundation documentation set uses the following conventions in the context of the product name:

- Yantra is used for Release 7.7 and earlier.
- Sterling Supply Chain Applications is used for Releases 7.9 and 7.11.
- Sterling Multi-Channel Fulfillment Solution is used for Releases 8.0 and 8.2.
- Selling and Fulfillment Foundation for Release 8.5.

1

Introduction

Sterling Call Center and Sterling Store provides solutions to the challenges found in typical customer order management business scenarios.

Sterling Call Center and Sterling Store presents multi-channel order management solutions by providing:

- A user interface to handle call center order modifications.
- A user interface to handle store walk-in order modifications.

Navigating in the Channel Applications Manager

This chapter discusses the layout of the Channel Applications Manager, the various actions that you can perform throughout the application, and the important concepts you need to be aware of before using the application.

Note: It is recommended that you adjust the Java Console memory parameters based on your data set and usage in order to avoid runtime exceptions.

2.1 Starting the Channel Applications Manager

To access the Channel Applications Manager:

1. Point your browser to
`http://<hostname>:<portnumber>/smcfs/console/login.jsp`
Here,
 - `hostname` is the computer name or IP address of the computer where the Selling and Fulfillment Foundation is installed.
 - `portnumber` is the listening port of the computer where the Selling and Fulfillment Foundation is installed.

The browser displays the Sign In window.


2. Enter your login ID and password and click Sign In. The Application Console Home Page is displayed.

3. From the menu bar, choose Configuration > Launch Channel Applications Manager. The Channel Applications Manager opens in a new window.

2.2 The Channel Applications Manager Layout




The Channel Applications Manager is a graphical user interface that you can use to configure different aspects of the Selling and Fulfillment Foundation. The different configurations are defined by logical groupings that can be accessed from the Channel Applications Manager's main screen.

Each logical grouping focuses on a particular aspect of the Channel Applications Manager and contains rules, common codes, and settings necessary for the Sterling Call Center and Sterling Store to work in a real-world business setting.

The Channel Applications Manager displays groupings by way of an information tree. To expand each grouping, click  located next to the group's name. When a group expands, each specific configuration associated with that group is displayed.

Next to each specific configuration, there is an icon, which indicates the user as to the progress of the configuration. When the cursor is placed over the icon, the current status of the configuration is displayed in a pop-up window.

Table 2–1 Task Icons

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

When you select a group that you want to configure, the Channel Applications Manager tree expands to display the available configuration rules for the selected group. Select a configuration that is not yet completed or still in progress. For certain configurations, under applications you can tweak some advanced configurations. To tweak

these advanced configurations, select the Advanced Configuration hyperlink.

To view and change the configurations for a different enterprise organization, click the Load Configuration For Enterprise hyperlink. An organization may not be able to modify all the rules within the Channel Applications Manager based on the ownership of the individual configurations. For example, the installation level rules can be only modified by the Hub organization. Additionally, one Enterprise organization may inherit rules from another Enterprise. In such situations, the configuration can be only modified by the Enterprise that owns the organization, and not by the Enterprise that inherits the configuration. If the organization inherits a configuration from another organization, a hyperlink is displayed next to the configuration's name enabling the user to override the ownership of that configuration. If the organization has previously overridden the ownership, a hyperlink is displayed next to the configuration's name enabling the user to provide ownership back to the organization from where it was originally inheriting.



2.2.1 Using the Online Help

To access the Channel Applications Manager's Online Help, select Help > Online Help.

2.2.2 Troubleshooting Errors

You can view the description and cause of any error raised in the Channel Applications Manager, and the action to perform to overcome the error.

To view the Channel Applications Manager system error descriptions:

1. From the menu bar, select Help > Troubleshooting. The Error Search screen is displayed.
2. Enter the applicable search criteria and choose . A list of error codes and their descriptions is displayed.
3. Choose  to view the cause of the error and the action to perform to troubleshoot the error.

2.2.3 Using Special Characters

In the Channel Applications Manager, there may be instances where you need to use special characters during data entry. The Selling and Fulfillment Foundation reserves key words and special characters that can be used internally. For information about using and handling special characters, see the *Selling and Fulfillment Foundation: Customization Guide*.

3

Process Types

An order goes through a wide range of statuses throughout its fulfillment cycle. An order is processed by transactions that perform modifications to the order and its related entities such as shipments, invoices, and returns. These transactions also determine how an order moves from one status to the next. Additionally, an order that is in a particular status can go through a condition to determine which transaction should process it next.

An order's flow throughout its fulfillment cycle is represented graphically by a pipeline. The pipeline determines the statuses that an order can be in, the transactions that process it, and the conditions it must go through in order to be fulfilled. As part of the reference implementation, a pipeline condition is set up, utilizing the application's pipelines for the following process types:

- [Order Fulfillment](#)
- [Outbound Shipment](#)
- [Reverse Logistics](#)

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

3.1 Order Fulfillment

The Sterling Call Center and Sterling Store Sales Order Fulfillment pipeline is used to process orders of the Sales Order document type within Sterling Call Center and Sterling Store.

Orders in this pipeline go through the following stages:

- [Create](#)
- [Schedule](#)
- [Release](#)
- [Ship](#)
- [Return](#)
- [Close](#)
- [Purge](#)

3.1.1 Create

The first step in fulfilling an order is capturing it. Orders can be captured by using either the Create Order task of the Sterling Call Center and Sterling Store application, or from a Web portal or an external order entry system. The data of the order is passed to the createOrder API and processed through the Create Draft Order and Create Order transactions. Both transactions have the same end results because the order is moved to the Created, Reserved, or Back Ordered status before it is picked up by the Schedule transaction. However, using the Create Draft Order transaction places the order into either of the two intermediate statuses, Draft Order Created or Draft Order Reserved, where most of the order's attributes can still be modified.

After the order is ready to be processed, it can be confirmed through the Confirm Draft Order transaction.

The next step in fulfilling the order is scheduling it for delivery.

3.1.2 Schedule

The scheduling process schedules an order so that it can be delivered to the customer. Important shipment attributes such as delivery dates and ship nodes are determined at this point.

The Schedule transaction attempts to process orders that are in the Reserved, Back Ordered, Unscheduled, and Created statuses. If the orders that are in the Back Ordered or Reserved status cannot be processed by the `Schedule` transaction, they wait for a predefined time interval before being reprocessed. For more information about

transactions, see the *Sterling Distributed Order Management: Configuration Guide*.

If the orders that are in the Created status cannot be scheduled because of insufficient inventory, they are moved to the Back Ordered status and wait to be reprocessed.

If the Schedule transaction is successful, but the specified ship node on the order line does not have enough inventory for the shipment, and needs to procure its inventory from another node, the creation of a chained order is required. The order is moved to the Awaiting Chained Order Creation status, where after being processed by the Chained Order Create transaction, it waits to be processed for shipment.

If the ship node is a drop-ship node, the next step for the order is creating a chained order. If chained order creation is not required, the order is moved to the Scheduled status.

3.1.3 Release

After Sterling Call Center and Sterling Store has identified one or more ship nodes that can be utilized to ship the ordered merchandise, the corresponding nodes are notified with all the relevant information necessary to send the shipment. This is the Release process.

The Release transaction takes the orders that are in the Scheduled status and sends the notification to the nodes. Occasionally, the Schedule transaction's inventory picture and the actual inventory picture in the nodes can get out of synch. When this happens, the Release transaction sends a notification to a node asking for inventory that does not actually exist. The node then notifies Sterling Call Center and Sterling Store that it cannot fulfill the order because of insufficient inventory, and the order gets backordered from the node. The order is then moved to the Back Ordered From Node status, and waits to be reprocessed by the Schedule transaction at a later time.

If the node has successfully received the release and has the necessary inventory, the order can be shipped.

3.1.4 Ship

Shipment-related transactions use the information included in the release sent to the warehouse to plan for shipments as efficiently as possible.

When several shipments are going to the same location, and can be grouped within the same loads, they can be consolidated together to minimize the cost while still meeting the promised delivery dates. If shipment consolidation is required, shipments must be consolidated together before the actual shipment, as represented in the pipeline by the Consolidate To Shipment transaction.

Orders can be included in or removed from existing shipments before the actual shipment occurs using the Include Order In Shipment and Remove Order From Shipment transactions respectively.

At this point, an order can be considered complete, and, over time, is closed and purged from the system. However, if the customer decides to return the received merchandise, the order's life cycle continues.

3.1.5 Return

After a customer receives a shipment, they may find that there is something wrong with the merchandise. For example, some items in the order may be the wrong color, or may have been damaged in transit. The Include In Return transaction creates a return order that must be shipped back to a warehouse to be examined.

After a return order is created, it must be received and processed by the warehouse. The return order's life cycle is handled by the Reverse Logistics pipeline. Based on the status of the return order, the Sterling Call Center and Sterling Store Sales Order Fulfillment pipeline updates the status of the order.

Therefore, when a return order is received, the order moves to the Return Received status through the Receive Return listener transaction.

Similarly, if the return order is cancelled in the Reverse Logistics pipeline, the order moves back to the Shipped status through the Remove From Return listener transaction.

After the return order is received, if it is unreceived and sent back to the customer, the return order is placed back in the Return Created status through the Unreceive Return listener transaction.

3.1.6 Close

After an order moves to the Shipped, Cancelled, or Return Received status, the order can be closed by the Close Order transaction. By

default, closed orders cannot be searched for in the Application Console unless it is explicitly specified in the Search screen.

3.1.7 Purge

Purging is the process where the records pertaining to an order are moved from the regular database tables to the history tables. If orders have been in a final status such as Shipped, Return Received or Cancelled for a specific time, they are purged. History orders can be reopened at any time, but by default, cannot be searched for in the Application Console unless explicitly specified in the Search screen.

3.2 Outbound Shipment

The Sterling Call Center and Sterling Store Outbound Shipment pipeline is used to process the outbound shipments within Sterling Call Center and Sterling Store.

Shipments in this pipeline go through the following stages:

- [Create](#)
- [Backroom Pick](#)
- [Confirm](#)
- [Create Invoice](#)
- [Close](#)

3.2.1 Create

The outbound shipment process starts when an order line is released, and a shipment is created for the released order line. The Create Shipment transaction is used to create a shipment for the order lines that have been released.

3.2.2 Backroom Pick

After a shipment is created, the Process Shipment for Backroom Pick transaction picks up the shipment and moves it to either the Ready For Backroom Pick status or the Ready For Customer status depending on whether the store is configured for backroom pick. If the shipment line is in the Ready For Backroom Pick status, it is processed by the Store

Backroom Pick transaction and moved to the Ready For Customer status. The backroom pick process for a shipment line can be undone using the Undo Backroom Pick transaction, which moves the shipment line to the Ready For Backroom Pick status.

3.2.3 Confirm

After a shipment moves to the Ready For Customer status, the Confirm Shipment transaction processes the shipment and moves it to the Shipment Shipped status.

3.2.4 Create Invoice

After a shipment is shipped to a customer, an invoice must be created for the shipment. This is achieved by using the Create Shipment Invoice transaction, which processes the shipments that are in the Shipment Shipped status. After the invoice is created, the shipment is moved to the Shipment Invoiced status.

3.2.5 Close

After a shipment is moved to the Shipment Invoiced or the Shipment Cancelled status, it can be closed using the Close Shipment transaction.

3.3 Reverse Logistics

The Sterling Call Center and Sterling Store Reverse Logistics pipeline is used to process the return orders within Sterling Call Center and Sterling Store.

The return orders in this pipeline go through the following stages:

- [Create](#)
- [Authorize](#)
- [Schedule](#)
- [Receive](#)
- [Close](#)
- [Purge](#)

3.3.1 Create

The first step in fulfilling a return order is capturing it. Return orders can be captured either by using the Create Return task of the Sterling Call Center and Sterling Store application, or from a Web portal, or an external order entry system. The data of the return order is passed to the createOrder API and processed through the Create Draft Return and Create Return transactions. Both the transactions move the return order to the Created status before the return order is picked up by the Schedule transaction.

3.3.2 Authorize

After a return order is created, the Authorize Return transaction picks up the return order and moves it to either the Authorized status or the Not Authorized status. If the return order is moved to the Not Authorized status, it is purged using the Purge Return transaction. If the return order is moved to the Authorized status, it can be scheduled.

3.3.3 Schedule

After a return order is authorized, the Schedule transaction picks it up and moves it to the Released status. This is when the return order is released to the receiving node.

3.3.4 Receive

Receiving refers to the process of receiving returned items. Depending on the return fulfillment method, a return order that is in the Released status is processed by the Include Order in Shipment transaction, the Deliver Order transaction, or the Receive Return transaction.

If the return order is picked up by the Include Order in Shipment transaction, the order is moved to the Included in Shipment status, after which it is picked up by the Ship Shipment transaction and is passed through the Return Required? condition. If the value of the Return Required? condition is "true", the return order is moved to the Awaiting Invoice status. If the value of the Return Required? condition is "false", the return order is moved to the Shipped status, after which it is processed by the Deliver Order transaction, which moves the order to the Order Picked Up status. Finally, the return order is picked up by the

Receive Return transaction, which moves it to either the Received status or the Received As Components status.

3.3.5 Close

After a return order is received in the return node, it is processed by the Close Receipt transaction. This transaction moves the return order to the Receipt Closed status, after which the return order is invoiced, and finally closed, using the Close Return transaction.

Note: A return order that is in the Received As Components status can be closed using the Close Return transaction.

3.3.6 Purge

Purging is the process where the records pertaining to a return order are moved from the regular database tables to the history tables. After a return order has been in the Return Invoiced status or the Received As Components status for a specific time, it is purged.

Reference Implementation

The Reference Implementation installation scripts set up configuration data in order to demonstrate the Sterling Call Center and Sterling Store features.

The Selling and Fulfillment Foundation is configured by modules that reflect different aspects of the product. When configuring Sterling Call Center and Sterling Store for Reference Implementation, the following modules are impacted:

- [Application Platform](#)
- [Catalog Management](#)
- [Distributed Order Management](#)
- [Inventory Synchronization](#)

4.1 Application Platform

The Sterling Call Center and Sterling Store Reference Implementation includes sample organizations in a customer order scenario. In this example, there is a company called XYZ Corporation, which has a company called XYZ-Online serving as the online business channel. Additionally, XYZ-Online owns a node modeled as a basic distribution center. There is another company called XYZ-Retail serving as the retail business channel and having two stores, XYZ S1 and XYZ S11.

Table 4–1 describes the organization model.

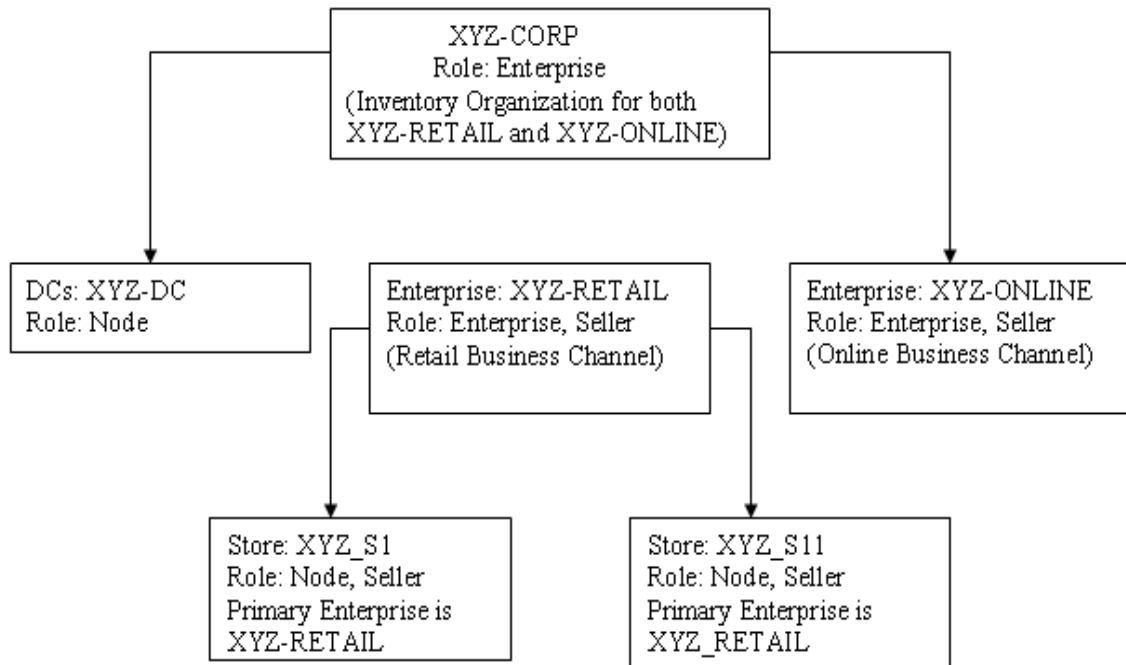
Table 4–1 Organizations

Organization Code	Organization Name	Role
XYZ-CORP	XYZ Corporation	Enterprise
XYZ-ONLINE (Inherited from XYZ-CORP)	XYZ Online	Enterprise, Seller
XYZ-DC	XYZ Distribution Center	Node
XYZ-RETAIL	XYZ Retail	Enterprise, Seller

XYZ-CORP has sourcing rules and Sales Order document Type rules configured.

XYZ-ONLINE is configured to inherit configuration from the XYZ-CORP organization. [Figure 4–1](#) illustrates the structure of Sterling Call Center and Sterling Store.

Figure 4–1 Participant Model



In this figure:

1. XYZ-CORP is the enterprise serving as the inventory organization for both XYZ-ONLINE and XYZ-RETAIL enterprises.
2. XYZ-ONLINE is the enterprise for online business.
DC is the Application Consoles node owned by XYZ-CORP.
3. XYZ-RETAIL is the enterprise for retail business.
 - DC is the Application Consoles node owned by XYZ-CORP.
 - XYZ_S1 and XYZ_S11 nodes are stores modeled as Seller organizations.

Organizations for the Sterling Call Center Application

When orders are created for the Sterling Call Center application, use the following organizations:

- Enterprise Code of the order must be XYZ-CORP
- Seller Organization Code must be XYZ-ONLINE

Organizations for the Sterling Store Application

When orders are created for the Sterling Store application, use the following organizations:

- Enterprise Code of the order must be XYZ-RETAIL
- Seller Organization Code for the order must be the store organization code

4.1.1 Teams for a Call Center

The Sterling Call Center and Sterling Store Reference Implementation includes the following sample teams for a customer order scenario.

Table 4–2 Teams for a Call Center

Team	Enterprise Access	Document Type Access	Ship Node Access
XYZ-CORP Team	XYZ-CORP, XYZ-RETAIL, XYZ-ONLINE	Default Document Type Access	All Nodes

4.1.2 User Groups for a Call Center

The Sterling Call Center and Sterling Store Reference Implementation includes the following sample user groups for a customer order scenario.

Table 4–3 User Groups for a Call Center

User Group	Users	Description	Team
CSR-GROUP	csr-XYZ	Call Center Representative	XYZ-CORP Team
	csrlead-XYZ	Call Center Representative Lead	XYZ-CORP Team
CSR-LEAD-GROUP	csrlead-XYZ	Call Center Representative Lead	XYZ-CORP Team

4.1.3 Teams for a Store

The Sterling Call Center and Sterling Store Reference Implementation includes the following sample teams for a store order scenario.

Table 4–4 Teams for a Store

Team	Enterprise Access	Document Type Access	Ship Node Access
XYZ_S1 Team	XYZ-RETAIL	Default Document Type Access	Restrict Access To Specific Nodes
XYZ_S11 Team	XYZ-RETAIL	Default Document Type Access	Restrict Access To Specific Nodes

4.1.4 User Groups for a Store

The Sterling Store application includes the following sample user groups for a store order scenario.

Table 4–5 User Groups for a Store

User Group	Users	Description	Team
STORE-MANAGER	xyzs1admin	Store Manager for XYZ_S1	XYZ_S1 Team
	xyzs11admin	Store Manager for XYZ_S11	XYZ_S11 Team
STORE-CSR	xyzs1csr	Store Customer Sales Representative for XYZ_S1	XYZ_S1 Team
	xyzs11csr	Store Customer Sales Representative for XYZ_S11	XYZ_S11 Team
	xyzs1admin	Store Manager for XYZ_S1	XYZ_S1 Team
	xyzs11admin	Store Manager for XYZ_S11	XYZ_S11 Team

4.1.5 Exception Types and Queue Types

The following exception types and queue types are provided:

Exception Types

- Verify Address
- Duplicate Order
- Payment Failure
- Order Cancel
- Price Match
- Reship
- Backorder Notice
- Fraud Check Notice

- FTC Notification
- UI Exception
- Agent Exception

Queue Types

- Verify Address
- Fraud Queue
- Duplicate Order
- Customer Notification
- Payment Declined
- Payment Hard Declined
- Payment Service Unavailable
- Payment Authorization Retry Limit Reached
- Validate Price Match
- Reship Items

4.1.6 Application User Interface Themes

Note: The Sapphire, Jade, and Earth themes described in this section have been deprecated from Sterling Call Center, Release 8.5, and Sterling Store, Release 8.5. It is recommended that you use the Ice theme.

The following user interface themes are provided:

- Sapphire
- Jade
- Earth
- Ice

4.2 Catalog Management

In this setup, XYZ-CORP is the inventory and catalog organization for XYZ-ONLINE and XYZ-RETAIL organizations.

Table 4-6 describes the inventory items defined by the XYZ-CORP organization.

Table 4-6 XYZ-CORP Items

Item ID	Description	Shipping Allowed	Pick up Allowed	Delivery Allowed
TV0001A5F21	34" Widescreen LCD HDTV	May be	Yes	Yes
DVP6723040	Progressive-Scan DVD Player	May be	No	Yes
SP5700BL	Home Theater Speaker System	Yes	Yes	Maybe
URV800CV	15-Device Universal Remote	Yes	Yes	Maybe
AOE4357	AOE Computer Game	No	Yes	Maybe
URV800CVCA	Universal Remote Case	Yes	Yes	Maybe
ALKAA15V	Alkaline Battery AA size 1.5 Volts	Yes	Yes	No
PSLS3C3S	Polo Short Sleeved Model Shirt	Yes	Yes	Yes

Note: The fulfillment methods for stylized items listed in Table 4-13 are the same as its model item PSL3C3S.

Table 4-7 provides a list of UOMs that are defined for XYZ-CORP.

Table 4–7 Item UOMs

UOM	Description
CASE	Case
EACH	Each

[Table 4–8](#) provides a list of delivery service items that are defined for XYZ-CORP. These delivery items are associated with the items mentioned in [Table 4–6](#).

Table 4–8 Delivery Service Items

Item ID	Description	Unit Of Measure
Home_Delivery	Home Delivery	UNIT
Home_Return	Home Return	UNIT

[Table 4–9](#) provides a list of delivery service units of measure that are defined for XYZ-CORP.

Table 4–9 Delivery Service Units Of Measure

Unit Of Measure	Description
HR	Hour
UNIT	Unit

[Table 4–10](#) provides a list of provided service items and their units of measure that are defined for XYZ-CORP.

Table 4–10 Provided Service Items

Item ID	Description	Unit Of Measure
PSTV0001A5F21	Installation for TV0001A5F21	HR
PSELECREP	Repair of Electronic Items	HR

[Table 4–11](#) provides a list of bundle items and fulfillment mode and [Table 4–12](#) provides the list of components for the bundle item DRF804SET that are defined for XYZ-CORP.

Table 4–11 Bundle Items

Item ID	Description	Bundle Fulfillment Mode
RDRF804SET	Black Round Dining Room Furniture Set	Ship Independent

Table 4–12 Component List for DRF804SET

Item ID	Description	UOM	Quantity
DTRND804	Black Round Dining Table	EACH	1
DFBDC804	Diamond Fossil Back Dining Chair	EACH	6
FSBR804	Fossil Stone Baker's Rack	EACH	1

Table 4–13 provides a list of stylized items that are defined for XYZ-CORP.

Table 4–13 Stylized Items for model item PSL3C3S

Item ID	Description
PSLS3C3SREGLB	Regular Large Black Polo Shirt
PSLS3C3SREGLG	Regular Large Grey Polo Shirt
PSLS3C3SREGLR	Regular Large Red Polo Shirt
PSLS3C3SREGMB	Regular Medium Black Polo Shirt
PSLS3C3SREGMG	Regular Medium Grey Polo Shirt
PSLS3C3SREGMR	Regular Medium Red Polo Shirt
PSLS3C3SREGSB	Regular Small Black Polo Shirt
PSLS3C3SREGSG	Regular Small Grey Polo Shirt
PSLS3C3SREGSR	Regular Small Red Polo Shirt
PSLS3C3STALXLB	Tall Extra Large Black Polo Shirt
PSLS3C3STALXLG	Tall Extra Large Grey Polo Shirt
PSLS3C3STALXLR	Tall Extra Large Red Polo Shirt

4.3 Pricing Management

The Sterling Call Center and Sterling Store Reference Implementation includes a Master Price List for XYZ-CORP. The Master Price List contains all the items described in [Section 4.2, "Catalog Management"](#), and is effective from 01/01/2009 through 01/01/2109.

Each item in the Master Price List has a list price associated with that item. The list price is the base price of the item. The list price does not consider volume discounts, special pricing rules, or any other criteria that may affect the price.

Note: For demonstration purposes, prices are set to two decimal places. You can change the precision to which prices are displayed by defining system-level rules in the Selling and Fulfillment Foundation.

You can manage prices using pricing rules and coupons. Pricing rules and coupons manage special offers, discounts, and charges at either the order level or the line level.

[Table 4-14](#) describes the pricing rules defined by XYZ-CORP. When the condition of a pricing rule is satisfied, for example, buy a TV, the pricing rule is automatically applied to the order, for example, get a free DVD player.

Table 4-14 XYZ-CORP Pricing Rules

Pricing Rule	Description
Save \$100.00 on 34" LCD TV	This Item Quantity rule applies an absolute discount of \$100.00 if you order a 34" LCD TV.
Buy a TV, Get a Free DVD Player	This Combination rule applies a 100% discount on the DVD player if you buy a TV and a DVD player.
Save 20% on 3 Speaker Systems	This Item Quantity rule applies a 20% discount on speaker systems if you buy three speaker systems.
Spend \$10,000.00 and Save 15% on the Order Total	This Order Total rule applies a 15% discount on the order total if the order total is more than \$10,000.00.
Get Free Shipping on All Orders Over \$100.00	This Shipping Charge Order Total rule applies a 100% discount on shipping charges when the order total is over \$100.00.

Table 4–15 describes the coupons defined by XYZ-CORP.

Note: Coupons modify the prices of items in orders only if the coupons are actively added to the orders.

Table 4–15 XYZ-CORP Coupons

Coupon	Validation Issue	Description
SAVE_10	None	Save 10% on the order total. Applies a 10% discount on the order total. This coupon can be successfully applied to all the orders. The remaining coupons in this table are provided to demonstrate validation issues.
The following coupons can trigger validation issues:		
SAVE_10_FUTURE	Coupon Not Available Yet	Save 10% on the order total. The effective dates of the coupon are in the future. Therefore, the coupon cannot be applied to an order at the current time.
SAVE_10_EXPIRED	Coupon Expired	Save 10% on the order total. The effective dates of the coupon are in the past. Therefore, the coupon cannot be applied to an order at the current time.
SAVE_10_INACTIVE	Inactive Coupon	Save 10% on the order total. The coupon is marked Inactive. Therefore, the coupon cannot be applied to an order.
SAVE_10_CONSUMER	Consumer Customer Only	Save 10% on the order total. The coupon is valid for consumer customers only. Therefore, the coupon cannot be applied to orders placed by business customers.

4.4 Distributed Order Management

XYZ-ONLINE has a scheduling rule inherited from XYZ-CORP, named SYSTEM, that does not assume infinite inventory after the lead time.

Under Financials, XYZ-ONLINE has a default Payment Rule configured, identical to the rule provided for the DEFAULT Enterprise. Additionally, the Credit Card, Pre-paid, Check, Refund Check, Customer Account, Other Payment Method, and Stored Value Card payment types are configured.

4.4.1 Common Configuration Data for Call Center and Store Scenarios

In addition to the data provided as part of the base Selling and Fulfillment Foundation installation, the following configurations are added for the XYZ-CORP and XYZ-RETAIL organizations:

Note Reasons

- Called Customer
- Wrong Item Received
- Customer Called
- Schedule and Release Information
- Issue Refund Now Information
- Increase Line Quantity Information
- Return Order Cancellation Information
- Change Return Address
- Change Return Method
- Change Service Appointment
- Called Issuing Bank
- Marketing Opt-In
- Cleared Held Order
- Return Policy Overridden
- Backorder Information
- Hold Information
- New Item Information
- Order Entry

- Fulfillment Options Change Information
- Delivery Appointment Change Information
- Delivery Instructions Change Information
- Order Cancellation Information
- Return Information
- Order Address Change Information
- Reship Information
- Price Match Information
- Customer Appeasement Information
- New Promotion Information
- Payment Change Information
- FTC Notification
- Shipment Confirmation Information
- Add Modify Charges
- Create Alert Information
- Add Lines to Order Information

Configuration for System Generated Notes

Refer [Table 4–16](#) for the system generated note configuration provided as part of reference implementation for XYZ-CORP and XYZ-RETAIL organizations.

Table 4–16 Reference Implementation for System Generated Notes

Event	Description	XSL File	Note Type
Hold Created	The system generates notes when a hold is created.	YCD_Log_Note_On_Hold_Status_Change_8.0.xsl.sample	YCD_HOLD_INFO
Hold Resolved	The system generates notes when a hold is resolved.	YCD_Log_Note_On_Hold_Status_Change_8.0.xsl.sample	YCD_HOLD_INFO

Table 4–16 Reference Implementation for System Generated Notes

Event	Description	XSL File	Note Type
Hold Rejected	The system generates notes when a hold is rejected.	YCD_Log_Note_On_Hold_Status_Change_8.0.xsl.sample	YCD_HOLD_INFO
Back Ordered	The system generates notes if an order is back ordered while scheduling or releasing.	YCD_Log_Note_On_Back_Order_8.0.xsl.sample	YCD_BACKORDER_INFO
On Shipment Confirmation	The system generates notes when a shipment is confirmed.	YCD_Log_Note_On_On_Shipment_Confirmation_8.0.xsl.sample	YCD_CONFIRM_SHIPMENT
Appointment Execution Failure	The system generates notes if an appointment fails.	YCD_Log_Note_On_On_Appointment_Failure_8.0.xsl.sample	YCD_DELIVERY_APPT
Appointment Execution Success	The system generates notes if an appointment is completed.	YCD_Log_Note_On_On_Appointment_Completion_8.0.xsl.sample	YCD_DELIVERY_APPT
Alert Created	The system generates notes when an alert is created.	YCD_Log_Note_On_Create_Exception_8.0.xsl.sample	YCD_CREATE_ALERT

Common Code Values

- Relationship Type – Distributor
- Relationship Type – Reseller
- Relationship Type – Dealer
- Relationship Type – Large Business Customer
- Relationship Type – Small to Medium Business Customer
- Relationship Type – Retailer
- Relationship Type – Not Assigned
- Customer Level – Silver

- Customer Level – Gold
- Customer Level – Platinum
- Customer Level – Not Assigned
- Vertical – General
- Vertical – Commercial
- Vertical – Education
- Vertical – Government
- Vertical – High Technology
- Vertical – Telecommunications

Modification Reasons

- Cancel – Address Undeliverable
- Cancel – Customer Requested
- Cancel – Duplicate Order
- Cancel – FTC Auto Cancel
- Cancel – Item No Longer Available
- Customer – Address Change
- Customer – Consent to Delay
- Customer – Level of Service Change
- Payment Change – Credit Card Over Limit
- Payment Change – Order Over Settled
- Payment Change – Order Under Settled
- Fulfillment – Alternate Ship Node

Hold Types

- Duplicate Order
- Fraud Check
- Address Verification
- Credit Limit Exceeded

Sales Order Charge Categories

- Discount
- Handling
- Personalization
- Shipping
- Customer Appeasement
- Price Match

Return Order Charge Categories

- Discount
- Handling
- Personalization
- Shipping

Sales Order Charge Names

- Discount
- Handling
- Personalization
- Shipping
- Customer Appeasement
- Price Match

Return Order Charge Names

- Discount
- Handling
- Personalization
- Shipping

Order Types

- Regular
- Gift Order
- Exchange Order

Fulfillment Types

- Fulfillment Type for Return
- Fulfillment Type for Product Sourcing
- Store Fulfillment
- More Store Search

Cancel Reasons

- Change of Mind
- Cheaper Price Found
- Late/Failed Delivery
- Unacceptable Delivery Time Promised
- Product No Longer Available
- Fraudulent Order
- Address Undeliverable
- Duplicate Order
- Other

Appeasement Reasons

- Late Shipment
- Damaged Item
- Bad Phone Experience
- Bad Delivery Experience
- Bad Online Experience

Instruction Types

- Delivery

Return Reasons

- Damaged Items
- Change Of Mind
- Lower Price Found

- Missing Parts
- Loose Parts
- Cargo Damaged
- Other

Scheduling Failure Reasons

- Parent line is not scheduled
- Shipment date of child line is before requested delivery date of the parent line
- Shipment date of child line is before appointment date of the parent line
- Line is constrained not to finish before a date
- Line must complete before date specified on post sequence line
- Line must complete before appointment date specified on post sequence line
- Line must complete before cancel date specified on post sequence line
- Constraining line is remaining to schedule
- Constraining line not ready for scheduling
- Line must wait for completion of constraining line
- Order level failure of dates
- Date beyond maximum allowed
- Fill quantity not remaining
- Fill quantity not available
- No more left to schedule
- Work order has multi appointment
- Service line can not be scheduled
- Product delivered as part of work order
- Line cannot be scheduled due to ship complete constraint
- Some quantity not available

- Quantity not available for scheduling yet
- Appointment before constraint date
- Appointment is in the past
- Cancel date is in the past
- Constraints do not allow scheduling
- An appointment date needed for scheduling
- No delivery service attached
- Not part of the work order
- parent line had failures hence child line cannot be scheduled
- Conflicting constraints
- Confirm assignment rejected
- Parent line not complete
- Parent line not scheduled
- There is no product line present for delivery
- Will wait for procurement
- Unmet transaction dependency
- Dependency constraint
- Delivery service constraint
- Inventory constraint
- Date constraint
- Capacity not available
- Other constraint
- Order line on hold

Price Match Statuses

- Price Match Approved
- Price Match Rejected
- Price Match Pending

Competitor Statuses

- Competitor Approved
- Competitor Rejected
- Competitor Pending

Return Note Reasons

- Return Order Cancellation Information
- Change Return Address
- Change Return Method
- Change Service Appointment
- Issue Refund Now Information
- Return Policy Overridden
- Wrong Item Received

Return Cancellation Reasons

- Change Of Mind
- Others

Scheduling Rules

The following configurations are provided for the CORP-SCH scheduling rule:

- If Product is Backordered, retry scheduling after this time (Hours): 5
- If scheduling fails for any other reason, retry scheduling for products after this time (Hours): 5
- If scheduling fails for any other reason, retry scheduling for delivery/provided services after this time (Hours): 5
- Always consider unplanned inventory after exhausting all sourcing options
- Apply On Hand Safety Factor To On Hand Inventory Availability
- Apply Future Safety Factor To Future Inventory Availability
- Maximum no. of days order can be shipped/delivered beyond its requested date: 30

- Maximum no. of days order can be scheduled before its ship date: 60
- Maximum no. of days to search service availability for: 60
- Reserve Bundle Out Of Ratio
- Ignore Fill Quantity (Ship Complete)
- Weightage given of Distance: 1
- Weightage given to Node: 1
- Optimize on Cost, Number of Shipments
- When Optimizing On Cost, Combine Shipments in 5 Day Intervals. This May Avoid Shipment Delay, But May Lead To Extra Cost
- Delay Shipment Against Current Inventory To Be Consolidated With Shipments Against Future Inventory
- Delay Procurements To Be Consolidated With Shipments Against Future Inventory
- Assume Infinite Inventory Availability Beyond Lead Time

4.4.2 Additional Configuration Data for a Call Center Scenario

In addition to the common configurations data, the following configurations are added for the call center scenario:

Reship Reasons

This set up is provided for the XYZ-CORP organization.

- Missing Item
- Missing Container
- Wrong Item
- Cargo Loss
- Damaged or Defective

Resource Pools

- XYZ-DC_RES_POOL: This resource pool is given for XYZ-DC node.

Payment Types

The set up is provided for XYZ-ONLINE enterprise.

- Credit Card
- Check
- Pre-paid
- Stored Valued Card
- Refund Check
- Customer Account
- Other Payment Method

Payment Rules

The set up is provided for XYZ-ONLINE enterprise.

- XYZ-ONLINE_DEFAULT

4.4.3 Additional Configuration Data for a Sterling Store Scenario

In addition to the common configuration data that is provided, the following configurations are added for the Sterling Store scenario:

Note Reasons

- Undo-Pick Information
- Backroom-Pick Shortage Information
- Customer Verification Information

Payment Type

The set up is provided for the XYZ-RETAIL organization and each store.

- Credit Card
- Check
- Pre-paid
- Stored Valued Card
- Refund Check
- Customer Account

- Other Payment Method

Payment Rules

The set up is provided for the XYZ-RETAIL organization and each store.

- XYZ-RETAIL_DEFAULT

Resource Pools

- XYZ_S1_RES_POOL: This resource pool is given for XYZ_S1 store.
- XYZ_S11_RES_POOL: This resource pool is given for XYZ_S11 store.

4.4.4 Sample Payment Methods

Table 4–17 provides a few sample credit card numbers supported in Sterling Call Center and Sterling Store.

Table 4–17 Sample Credit Card Numbers

Credit Card Type	Description	Sample Card Number
VISA	Visa	4561235642315415
AMEX	Amex	3471265413987218
CARTE_BLANCHE	Carte Blanche	36897541586340
DISCOVER	Discover	6011218943526543
JCB	JCB	213116874316851
MASTERCARD	Master Card	5421332132165462

4.4.5 Sample Promotion Codes

Sterling Call Center and Sterling Store supports the following reference implementation promotion codes:

- FREESHIP—This promotion is applied to an order if the order total is greater than \$100.
- SALEONTV—This promotion is applied to an order line that has the “TV0001A5F21” Item ID.

4.5 Inventory Synchronization

XYZ-CORP is configured as an Inventory Organization. Therefore, an ATP rule, named XYZ-CORP-DEFAULT, has been specified. This is identical to the rule supplied for the DEFAULT Enterprise.

4.5.1 Resource Pools

Sterling Call Center and Sterling Store provides the following resource pools as part of the reference implementation:

Table 4–18 Resource Pools

Resource Pool ID	Ship Node
XYZ-DC_RES_POOL	XYZ-DC
XYZ_S1_RES_POOL	XYZ_S1
XYZ_S11_RES_POOL	XYZ_S11
XYZ-DC_PS_RES_POOL	XYZ_DC
XYZ_S1_PS_RES_POOL	XYZ_S1
XYZ_S11_PS_RES_POOL	XYZ_S11

A service slot group, called A is defined for XYZ-CORP. The resource pools specified in [Table 4–18](#) use the service slot group A.

The following calendar names are provided as part of the Sterling Store reference implementation:

- Calendar_XYZ_S1—This is defined for the XYZ_S1 store.
- Calendar_XYZ_S11—This is defined for the XYZ_S11 store.

Common Configurations


This chapter provides a brief overview of the common configurations that are needed for Sterling Call Center and Sterling Store. For more information about configuring each of these components, references to the appropriate Selling and Fulfillment Foundation documents have been provided.

Note: One of the configurations that you can perform involves specifying the time limit for which a user can remain logged in to the Sterling Call Center and Sterling Store application. The time-out parameters can be defined in the application server.

5.1 Creating a New Enterprise Organization

An Enterprise represents an organization that owns and controls all the transactions in Sterling Call Center and Sterling Store. An Enterprise in Sterling Call Center and Sterling Store controls the flow of documents, such as a sales order, and is considered as the owner of the document.

To create a new Enterprise:

1. From the Channel Applications Manager screen, select the Create A New Enterprise hyperlink. The Create Organization pop-up screen is displayed.
2. Enter information in the applicable fields.
3. Click . The new Enterprise is created.
4. Click the Load Configuration For Enterprise hyperlink. The Organization pop-up screen is displayed.

5. Choose the Enterprise organization from the Organization drop-down list.

5.2 Configuring Initial System Setup

Sterling Call Center and Sterling Store provides advanced system setups that allow you to configure system-wide elements such as locales and units of measure. These will typically be configured once during the start of an implementation.

5.2.1 Defining Units of Measure for Quantity

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

5.2.2 Defining Units of Measure for Service Quantity

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

5.2.3 Defining Units of Measure for Dimension

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

5.2.4 Defining Units of Measure for Volume

You can define units of measure for volume. For more information about defining units of measure for volume, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.2.5 Defining Units of Measure for Weight

You can define units of measure for weight. For more information about defining units of measure for weight, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.2.6 Defining Units of Measure for Time

You can define units of measure for time. For more information about defining units of measure for time, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.2.7 Configuring Installation Rules

You can set up rules that need to be defined when the application is installed. This may include rules that determine how inventory items are identified and consolidated, provide flexibility in drop shipping orders, and provide capability to encrypt primary payment type attributes. For more information about defining installation rules, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.2.8 Defining Locales

You can define locales that enable businesses to associate them to multiple organizations and users. For more information about defining locales, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.2.9 Defining Countries

You can set up common codes for country codes used when setting up locales. This common code identifies the country that the locale is located in. For more information about defining country codes, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.2.10 Defining Languages

You can set up common codes for language definitions used when setting up locales. This common code identifies the language used in the locale. For more information about defining language codes, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.2.11 Defining Date Formats

You can set up common codes for date formats used when setting up locales. This common code format identifies the format how date is entered at a locale. For more information about defining date formats,

see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.2.12 Defining Time Formats

You can set up common code formats for time formats used when setting up locales. This common code format identifies how time is entered at a locale. For more information about defining time formats, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.2.13 Defining Date and Time Formats

You can set up common code formats for date and time formats used when setting up locales. This common code format identifies the format how dates with time are entered at a locale. For more information about defining date/time formats, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.2.14 Defining Currencies

Currency definitions define symbols of each currency and indicate Euro currency membership and expiration date, if applicable. For more information about defining currency definitions, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.2.15 Configuring Currency Conversions

Currency conversion enables you to set up exchange rates from one currency to another. These exchange rates are used to translate between currencies used by organizations as defined by their locale. For more information about defining currency conversions, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.3 Configuring an Enterprise Profile

An Enterprise represents the organization that owns and controls all the transactions in Sterling Call Center and Sterling Store. An Enterprise in Sterling Call Center and Sterling Store controls the flow of documents, such as a sales order, and is considered the owner of the document. Most business rules and fulfillment processes for an order are defined by the Enterprise. On a sales order, the Enterprise is also assigned the role of

the Seller organization in most cases. However, in some cases, if a higher level organizational unit wants to control and enforce business rules or document flow of all its subsidiaries, that organizational unit is assigned an Enterprise role and its subsidiary organizations are assigned Seller and Buyer roles.

Even though most business rules are controlled by the Enterprise, pricing rules are always controlled by the Seller organization in both sales and purchase situations. For more information about defining enterprise attributes, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

If implementing an enterprise to be used by the Sterling Multi-Channel Selling Solution integration, the Account with Hub attribute must be populated with the Sterling Multi-Channel Selling Solution application's StoreFront skin name. This is used when punching out to the Sterling Multi-Channel Selling Solution application from within the Sterling Call Center and Sterling Store applications. For more information, see ["Callback Mechanism to Login for Sterling Multi-Channel Selling Solution"](#) on page 576.

5.4 Managing the Supply Chain Network Model

You can define your complete catalog of product items including items, categories, and classifications. Use this configuration when the product items are maintained within the Selling and Fulfillment Foundation.

5.4.1 Defining Shipping Nodes and Stores

You can define ship nodes from where products are shipped and delivered. You can create node types and classify them. For more information about creating node types, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.4.2 Defining Carriers

You can define carriers for your business. To define a carrier, create a carrier as the role for an organization and define the carrier attributes. For more information about defining carrier attributes, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.4.3 Defining Vendors

You can define vendors for your business. A vendor can be a seller organization, shipping node, or both. To define a vendor, choose Seller as the role for an organization and configure the seller attributes. For more information about defining seller attributes, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.4.4 Configuring the Fulfillment Network Model

You can configure the fulfillment network model to describe the relationship between various supply chain participants. For more information about configuring the fulfillment network model, see the *Sterling Distributed Order Management: Configuration Guide*.

5.4.5 Defining Region Match Preferences

As an advanced configuration, you can specify the level at which addresses can be matched with regions for each country. For more information about defining region match preferences, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.4.6 Configuring Region Levels

A region level classifies regions into distinct categories. As an advanced configuration, you can specify region levels such as Country, State, County, City, and so forth, based on the levels at which you want to aggregate your regions, and define the address field that corresponds to a region level. Region levels also provide the capability to create a region hierarchy. For more information about defining region levels, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.4.7 Configuring Region Schemas

A region schema is the complete hierarchical set of regions that define a given geography. As an advanced configuration, you can configure a region as a specific territory. For example, you can define a region for a state, city, or town. For more information about defining region schemas, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.4.8 Defining Node Types

As an advanced configuration, you can define node types to allow a user to classify nodes into various categories. For more information about defining node types, see the *Sterling Distributed Order Management: Configuration Guide*.

5.5 Managing Products and Categories

Sterling Call Center and Sterling Store provides you with the capability to manage all products and services through catalogs and catalog organizations.

5.5.1 Configuring Units of Measure

You can configure standard units of measure to associate with your items and locales. For more information about configuring units of measure, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.5.2 Managing Products

You can define product items that you sell. For more information about defining product items, see the *Sterling Catalog Management: Configuration Guide*.

5.5.3 Defining Product Categories

Important: The functionality of defining a product category explained in this section has been deleted from Sterling Call Center and Sterling Store, Release 8.5. From Release 8.5, this functionality is available in Business Center. For more information about defining product categories, see the *Selling and Fulfillment Foundation: Item Concepts Guide* and the *Business Center: Item Administration Guide*.

You can use product categories to browse for similar products.

5.5.4 Defining Types of Product Classifications

You can define the types of product classification that you require. To define the types of product classification, define a classification definition and associate an item attribute with it. For more information about defining classification definitions, see the *Sterling Catalog Management: Configuration Guide*.

5.5.5 Defining Classification Values

You can define various values for a classification type in a classification hierarchy. For more information about defining a classification hierarchy, see the *Sterling Catalog Management: Configuration Guide*.

5.5.6 Defining Alternate Identifications for an Item

As an advanced configuration, you can specify the types of alternate identification for an item. For more information about defining item alias types, see the *Sterling Catalog Management: Configuration Guide*.

5.5.7 Defining Association Types for an Item

As an advanced configuration, you can specify the association types for an item. For more information about defining item association types, see the *Sterling Catalog Management: Configuration Guide*.

5.5.8 Configuring Display of Model Items

As an advanced configuration, you can configure the display of model item attributes.

To configure display of model items:


1. From the Channel Applications Manager, select Manage Products and Categories.
2. Select the Advanced Configurations link.
3. Select Configure Display of Model Items.
4. Select the appropriate option. For field value descriptions, see [Table 5-1](#).
5. Click  to save your changes.

Figure 5–1 Configure Display of Model Items

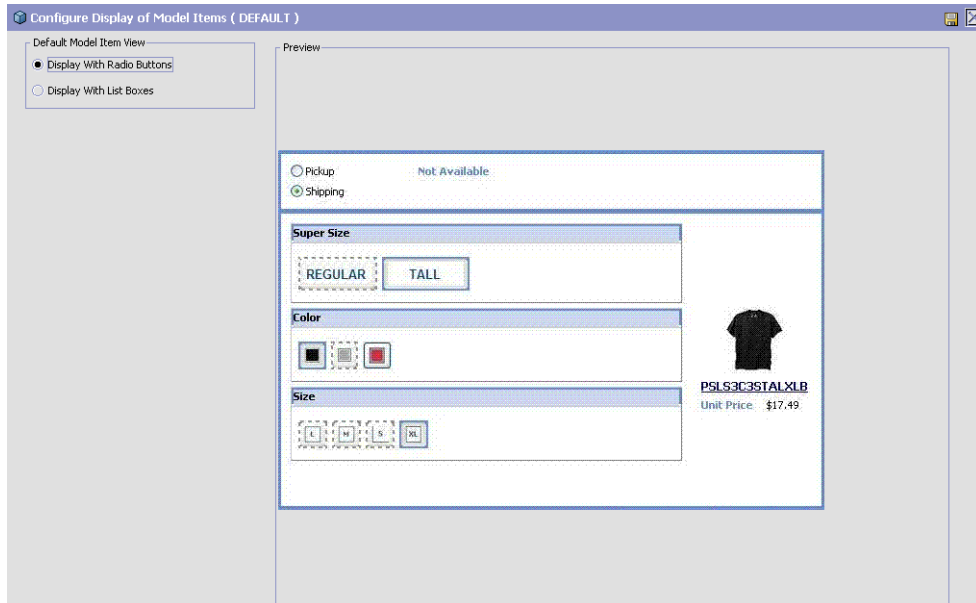


Table 5–1 Display of Style Items

Field	Description
Display With Radio Buttons	Select this option to display the attributes of the model item with radio buttons.
Display With List Boxes	Select this option to display the attributes of the model item with list boxes.
Preview	Based on the option chosen, a preview of the Style Items pop-up is displayed.

5.5.9 Configuring Item Search Options

As an advanced configuration, you can configure the item search options. This configuration enables you to integrate the Item Search screen with the Sterling Multi-Channel Selling Solution’s Item Search screen.

To configure item search options:

1. From the Channel Applications Manager, select Manage Products and Categories.


2. Select the Advanced Configurations link.
3. Select Configure Item Search Option.
4. Select Enable Scanning Of Items Using Barcode to enable users to search for an item using the alternate item identifiers (see [Table 5-2](#)).
5. Click  to save your changes.

Figure 5-2 Configure Item Search Options

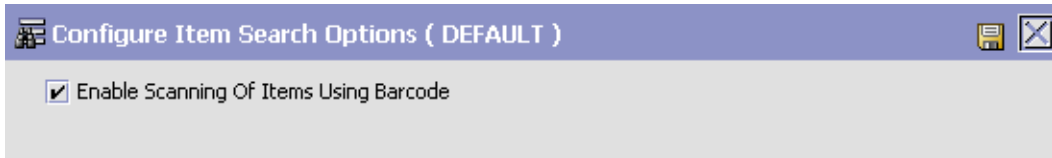


Table 5-2 Item Search Options

Field	Description
Enable Scanning Of Items Using Barcode	Select this option to enable users to search for an item using the alternate item identifiers.

5.5.10 Configuring the Display of a Product Web Page for an Item

This is an advanced configuration that allows you to configure the Sterling Call Center and Sterling Store application to display the URL of the product Web page pertaining to an item in the Item Details screen and the Line Summary screen.

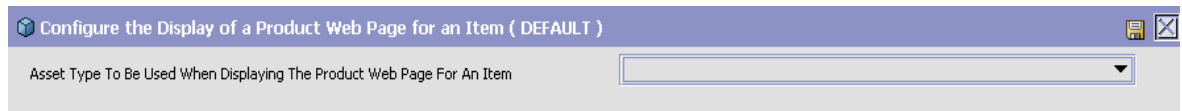
To configure the Sterling Call Center and Sterling Store application to display the URL of the product Web page pertaining to an item:

1. In the Channel Applications Manager, click Manage Products and Categories.
2. Click the Advanced Configurations link.
3. Click Configure Display of a Product Web Page for an Item.
4. Select an asset type from the Asset Type To Be Used When Displaying The Product Web Page For An Item drop-down list. The asset type

you select will be used to display the URL of the product Web page pertaining to an item.

5. Click  to save your changes.

Figure 5–3 Configure Display of URL for Items



5.6 Configuring Delivery and Installation

In addition to shipped products, Sterling Call Center and Sterling Store provides the capability to manage the execution of delivery services and provided services.

Delivery Services are billable services that are directly associated with a product on a sales order or a return order. For example, the delivery of a high-definition television.

Provided Services are billable services that are offered to enhance the life or usability of a product associated with a sales order. For example, the application of fabric protection on a sofa or installation service for a home theater system.

Delivery Services and provided services are also defined as items by the Catalog Organization and are available to all organizations that share that Catalog Organization.

5.6.1 Defining Slot Groups

All delivery and installation promises are made against a time slot. You can define these slots against which appointment promises are made. For more information about defining slot groups, see the *Sterling Global Inventory Visibility: Configuration Guide*.

5.6.2 Defining Service Skills

You can define a master list of service skills that can be associated to services offered. For more information about defining service skills, see the *Sterling Catalog Management: Configuration Guide*.

5.6.3 Defining Delivery Service UOM Master

Units of measure are the various units a delivery service can be offered in. For more information about defining master units of measure, see the *Sterling Catalog Management: Configuration Guide*.

5.6.4 Defining Delivery Service Types

Delivery service types are used to determine the capacity UOM and complexity level of delivery services. For more information about defining delivery service types, see the *Sterling Catalog Management: Configuration Guide*.

5.6.5 Defining Options Offered with Delivery Services

You can define a master list of options that are offered with various delivery services. For more information about defining delivery service options, see the *Sterling Catalog Management: Configuration Guide*.

5.6.6 Defining Delivery Services

Important: The functionality of defining delivery services explained in this section has been deleted from Sterling Call Center and Sterling Store, Release 8.5. From Release 8.5, this functionality is available in Business Center. For more information about defining delivery services, see the *Selling and Fulfillment Foundation: Item Concepts Guide* and the *Business Center: Item Administration Guide*.

You can define the delivery services offered.

5.6.7 Defining Installation Service UOM Master

You can configure the units of measure an installation service can be offered in. For more information about defining master units of measure, see the *Sterling Catalog Management: Configuration Guide*.

5.6.8 Defining Installation Service Types

Provided service types are used to determine the capacity UOM and complexity level of provided services. For more information about defining service types, see the *Sterling Catalog Management: Configuration Guide*.

5.6.9 Configuring Options Offered with Installation Services

You can define a master list of options that are offered with various installation services. For more information about defining provided service options, see the *Sterling Catalog Management: Configuration Guide*.

5.6.10 Defining Installation Services

Important: The functionality of defining installation services explained in this section has been deleted from Sterling Call Center and Sterling Store, Release 8.5. From Release 8.5, this functionality is available in Business Center. For more information about defining installation or provided services, see the *Selling and Fulfillment Foundation: Item Concepts Guide* and the *Business Center: Item Administration Guide*.

You can define various installation services offered.

5.6.11 Defining Address-Related Questions

You can define a list of questions that helps in understanding the physical characteristics of a customer's location. For more information about configuring questions, see the *Sterling Distributed Order Management: Configuration Guide*.

5.6.12 Defining Types of Capacity and Service Classifications

You can configure product-level control parameters for setting up capacity and service association rules. You can choose the applicable

product classifications to use for the purpose of capacity and service association. For more information about defining classifications, see the *Sterling Catalog Management: Configuration Guide*.

5.6.13 Configuring Sourcing Rules for Delivery

You can configure a set of sourcing rules that helps identify the location from where deliveries should be made for a given customer address. For more information about defining sourcing rules for delivery service items, see the *Sterling Distributed Order Management: Configuration Guide*.

5.6.14 Defining Node Groups for Installation Services

You can create a group of nodes that can be used when determining sourcing for installation services. This configuration is similar to configuring node groups for shipping products. For more information about defining distribution groups, see the *Sterling Distributed Order Management: Configuration Guide*.

5.6.15 Defining Sourcing Rules for Installation

You can define a set of sourcing rules that helps identify the location from where installation services should be made for a given customer address. For more information about defining sourcing rules for provided service items, see the *Sterling Distributed Order Management: Configuration Guide*.

5.6.16 Defining Resource Pools

Resource pools represent sets of resources that provide the services. For more information about defining resource pools, see the *Sterling Global Inventory Visibility: Configuration Guide*.

5.6.17 Configuring Service Supervisors

You can configure the supervisor that is associated with a node for a given seller organization. For more information about configuring service supervisors, see the *Sterling Distributed Order Management: Configuration Guide*.

5.6.18 Configuring Capacity Rules

As an advanced configuration, you can configure rules that affect capacity like setting the default capacity reservation expiration time. For more information about defining capacity rules, see the *Sterling Global Inventory Visibility: Configuration Guide*.

5.6.19 Defining Service Complexity Levels

As an advanced configuration, you can define service complexity levels for provided service items and delivery service items. For more information about defining service complexity levels, see the *Sterling Catalog Management: Configuration Guide*.

5.6.20 Configuring Additional Capacity

As an advanced configuration, you can configure additional capacity for a delivery service type and region level combination. For more information about defining additional capacity, see the *Sterling Catalog Management: Configuration Guide*.

5.6.21 Selecting Region Usage for Resource Pools

As an advanced configuration, you can select the region schema that is used when defining the specific regions that a resource pool can service. For more information about defining region usage for resource pools, see the *Sterling Global Inventory Visibility: Configuration Guide*.

5.6.22 Configuring the Service Appointment Calendar View

You can configure the default view of the appointment calendar and display it.

To configure the default view of the appointment calendar:


1. From the Channel Applications Manager > Configure Delivery and Installation > Advanced Configuration, select Configure Delivery Appointment Calendar View.
2. Choose the appropriate options. For field value descriptions, see [Table 5-3](#).
3. Click  to save your changes.

Figure 5–4 Configure Delivery Appointment Calendar View

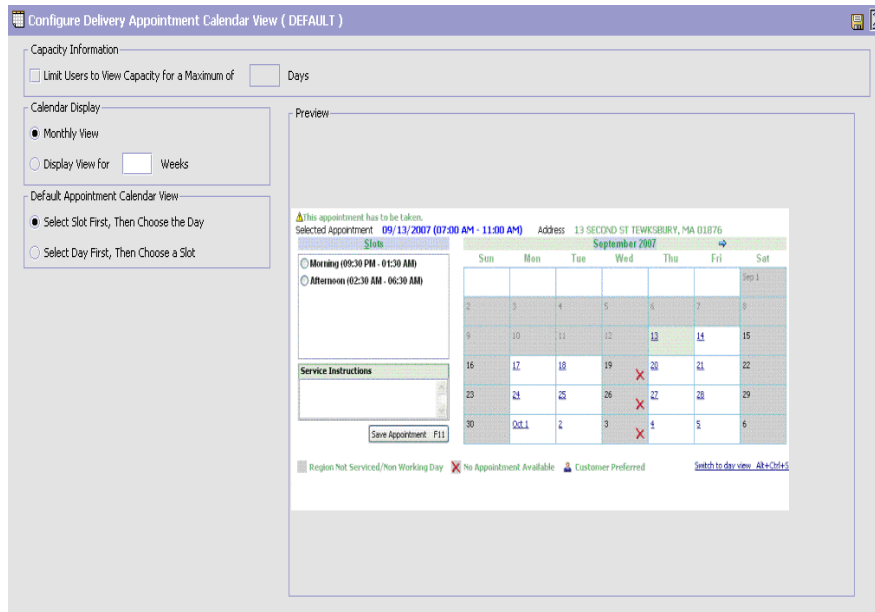


Table 5–3 Delivery Appointment Calendar View

Fields	Description
Capacity Information	
Limit Users to View Capacity for a Maximum of <number_of_days> Days	<p>Check this box and enter the maximum number of days you want to allow the users to view the capacity information.</p> <ul style="list-style-type: none"> If you check this box, the user can view the capacity information for the specified number of days. If you uncheck this box, the user can view the capacity information for an infinite number of days or until the future capacity is unavailable.
Calendar Display	
Monthly View	Choose this option if you want the calendar to display the monthly view.

Table 5–3 Delivery Appointment Calendar View

Fields	Description
Display View for <number_of_weeks> Weeks	Choose this option and enter the number of weeks to display in the calendar. You may enter any number between 1 and 6. The default value is 0.
Default Appointment Calendar View	
Select Slot First, Then Choose the Day	Choose this option if you want to select the slot before selecting the day for service appointments.
Select Day First, Then Choose a Slot	Choose this option if you want to select the day before selecting a slot for service appointments.
Preview	
Based on the option chosen, a preview of the appointment calendar displays.	

5.7 Defining Customers

This configuration allows you to define B2B customers and consumers. These customers and consumers place orders with your business. This configuration provides additional information about the customers such as their appointment slot preferences, additional contact information, and answers to address questions, and so forth.

5.7.1 Configuring Customer Rules

You can configure customer classifications that can be associated to customers as well as the slot group to use for defining customer slot preferences. For more information about defining customer rules, see the *Sterling Distributed Order Management: Configuration Guide*.

5.7.2 Configuring Contact Types

You can configure the contact types when specifying the contact information of a customer on work order notes. For more information about defining contact types, see the *Sterling Distributed Order Management: Configuration Guide*.



5.7.3 Defining Customer Definitions

You can define the B2B customers and consumers that place orders with your business. For more information about defining customer definitions, see the *Sterling Distributed Order Management: Configuration Guide*.

5.7.4 Defining Titles

You can define the titles to be displayed in the Title drop-down on Address user interface screens.

To define titles:

1. From the Channel Applications Manager, select Define Customers.
2. Select Define Titles. The Title window is displayed.
3. Click  to add a new title. The Title Details pop-up window is displayed.
4. Enter information in the applicable fields. For field value descriptions, see [Table 5-4](#).
5. Click  to save your changes.

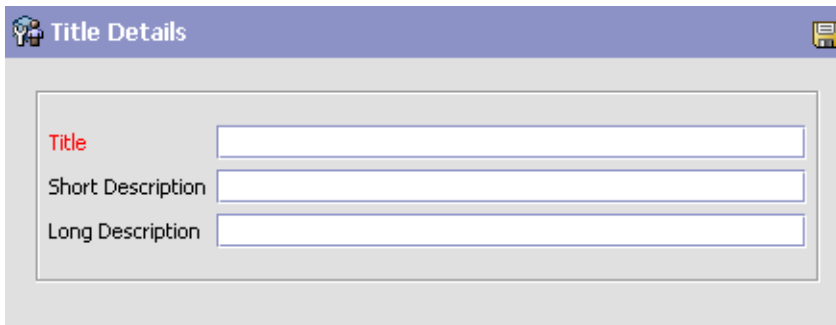


Table 5-4 Title Details

Field	Description
Title	Enter the title.
Short Description	Enter a short description of the title.
Long Description	Enter a long description of the title.

5.7.5 Configuring Customer Search Rules

You can configure the default customer search screen to be used while identifying a customer.

To configure customer type rules:


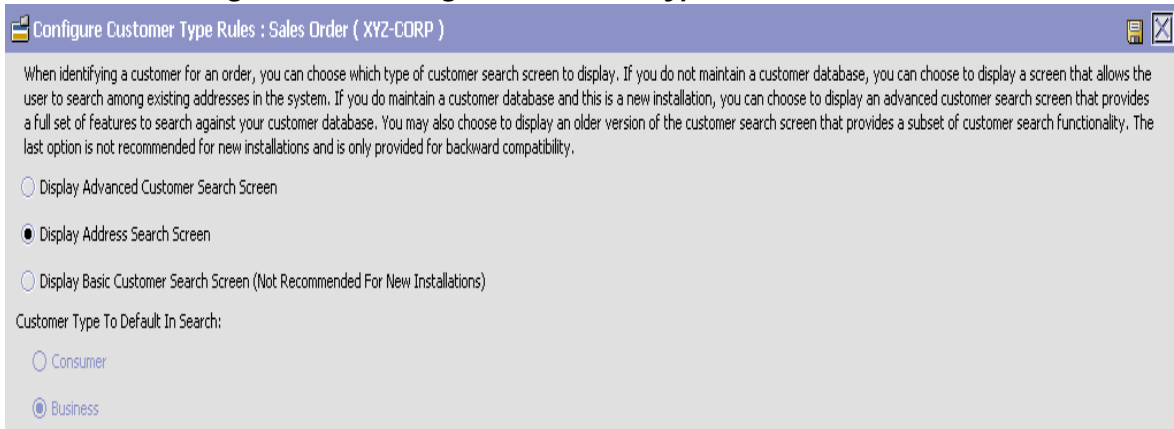
1. From the Channel Applications Manager, select Define Customers.
2. Under Define Customers, select Advanced Configuration.
3. Select Configure Customer Search Rules.
4. Enter information in the applicable fields. For field value descriptions, see [Table 5–5](#).
5. Click  to save your changes.

Figure 5–5 Configure Customer Type Rules



Configure Customer Type Rules : Sales Order (XYZ-CORP)

When identifying a customer for an order, you can choose which type of customer search screen to display. If you do not maintain a customer database, you can choose to display a screen that allows the user to search among existing addresses in the system. If you do maintain a customer database and this is a new installation, you can choose to display an advanced customer search screen that provides a full set of features to search against your customer database. You may also choose to display an older version of the customer search screen that provides a subset of customer search functionality. The last option is not recommended for new installations and is only provided for backward compatibility.

Display Advanced Customer Search Screen
 Display Address Search Screen
 Display Basic Customer Search Screen (Not Recommended For New Installations)

Customer Type To Default In Search:

Consumer
 Business

Table 5–5 Customer Type Rules

Field	Description
Display screen which performs advanced customer search	Select this option to use the advanced customer search screen.
Display screen which performs address search	Select this option to use the address search screen.

Table 5–5 Customer Type Rules

Field	Description
Display screen which performs basic customer search	Select this option to use the basic customer search screen.
Customer Type to Default in Search	Select one of the following as default customer type: Consumer or Business. This option is enabled only if you select the basic or advanced customer search screens.

5.7.6 Configuring Customer Payment Method Rules

As an advanced configuration, you can configure customer display rules. This configuration provides a user with the option of storing the payment method information pertaining to a customer and display it on the application interface.

To configure customer display rules:

1. From the Channel Applications Manager, click Define Customers.
2. Click the Advanced Configurations link.
3. Click Configure Customer Payment Method Rules.
4. Select the Allow Customer Payment Method Information To Be Stored And Used Through The Interface check box to store the payment method information pertaining to a customer and to display it on the application interface.

Figure 5–6 Configure Customer Payment Method Rules




5. Click  to save your changes.

5.7.7 Configuring Consumer Rules

You can configure a rule that defines a default user role to be assigned when creating consumer customers. User roles define the permissions that the user will have when accessing any of the Sterling applications.

To define a default consumer user role:

1. From the Channel Applications Manager, click Define Customers.
2. Click the Advanced Configurations link.
3. Click Configure Consumer Rules.
4. Select a user role from the Select A Default Consumer User Role drop-down list.
5. Click  to save your changes.

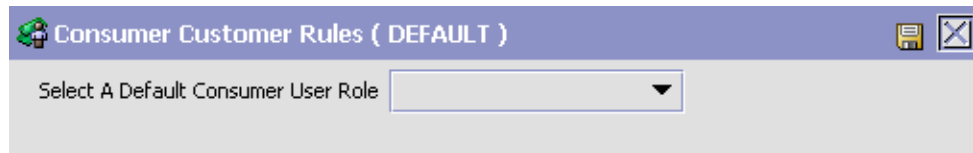


Table 5–6 Consumer Customer Rules

Field	Description
Select A Default Consumer User Role	Select a default user role that you want to assign to consumer customers.

5.8 Configuring Order Promising Rules

To ensure that all customer orders are fulfilled accurately and efficiently, Sterling Call Center and Sterling Store provides rich order promising functionality.

5.8.1 Selecting Complexity Level Required for Sourcing Rules

You can determine how to make sourcing decisions at a high level. For more information about defining basic sourcing configuration, see the *Sterling Distributed Order Management: Configuration Guide*.

5.8.2 Defining Fulfillment Types

Fulfillment types define the rules for making accurate customer order promises. For more information about defining fulfillment types, see the *Sterling Distributed Order Management: Configuration Guide*.

5.8.3 Defining Order Sourcing Classifications

This provides another control parameter that can be used when setting up sourcing rules. For more information about defining order sourcing classifications, see the *Sterling Distributed Order Management: Configuration Guide*.

5.8.4 Defining Types of Sourcing and Procurement Classifications

You can configure product-level control parameters for setting up sourcing and procurement rules. In this configuration, you choose which product classifications should be used for the purposes of sourcing and procurement. For more information about defining classifications, see the *Sterling Catalog Management: Configuration Guide*.

5.8.5 Defining Scheduling Rules

Scheduling rules control when an order is scheduled and what constraints should be applied when scheduling an order. For more information about defining scheduling rules, see the *Sterling Distributed Order Management: Configuration Guide*.

5.8.6 Configuring Landed Cost Computation Rules

Sterling Call Center and Sterling Store provides highly advanced optimization algorithms that can use landed cost computations to select shipping nodes that minimize the cost. For more information about configuring landed cost optimization, see the *Sterling Distributed Order Management: Configuration Guide*.

5.8.7 Configuring Rules for Determining Forwarding/Transfers

You can set up rules that control how product transfers should be handled between two nodes. For more information about defining forwarding/transfer rules, see the *Sterling Distributed Order Management: Configuration Guide*.

5.8.8 Defining Node Groups

You can define sets of nodes that represent a logical group. The logical group can then be used in your sourcing rules. For more information about defining distribution groups, see the *Sterling Distributed Order Management: Configuration Guide*.

5.8.9 Configuring Sourcing Rules

You can configure sourcing rules to determine the node, external organization, or group of nodes to use to ship a product. For more information about defining sourcing rules for product items, see the *Sterling Distributed Order Management: Configuration Guide*.

5.8.10 Defining Node Groups for Transfers or Procurement

You can create a group of nodes that can be used when determining sourcing for transfers or procurements. This configuration is similar to configuring node groups for shipping products. For more information about defining distribution groups, see the *Sterling Distributed Order Management: Configuration Guide*.

5.8.11 Configuring Sourcing Rules for Transfers or Procurement

You can configure rules to determine the nodes from where a transfer or procurement can be made to a given shipping node when enough inventory is not available in the shipping node. For more information about defining procurement rules, see the *Sterling Distributed Order Management: Configuration Guide*.

5.8.12 Configuring Transit Time Computation Rules

You can specify how transit time is calculated for the order scheduling operation. For more information about defining logistics attributes, see the *Sterling Distributed Order Management: Configuration Guide*.

5.8.13 Configuring Miscellaneous Scheduling and Reservation Rules

As an advanced configuration, you can configure miscellaneous scheduling and reservation rules. These rules control the behavior of order reservation and scheduling. For more information about defining fulfillment rules, see the *Sterling Distributed Order Management: Configuration Guide*.

5.8.14 Selecting Region Schema used for Order Promising

As an advanced configuration, you can select the region schema used for order promising. Regions provide a geography level control parameter in sourcing rules. For more information about defining sourcing region selection, see the *Sterling Distributed Order Management: Configuration Guide*.

5.8.15 Overriding Promising Parameters for Individual Items

As an advanced configuration, you can override promising parameters for individual items, such as minimum notification time. For more information about defining item level controls, see the *Sterling Distributed Order Management: Configuration Guide*.

5.8.16 Overriding Promising Parameters for Individual Nodes

As an advanced configuration, you can override promising parameters, such as minimum notification time, at the ship node level. For more information about defining node level controls, see the *Sterling Distributed Order Management: Configuration Guide*.

5.9 Configuring Payment Handling

Sterling Call Center and Sterling Store can be used to carry out critical payment-related processes during order management processing, and enables you to integrate with external payment processing systems such as CyberSource® or Chase™ Paymentech. Payment processing involves payment authorization, settlement, and invoicing.

5.9.1 Configuring Basic Rules for Payment Handling

You can configure general rules for payment handling. For more information about defining additional payment rules, see the *Sterling Distributed Order Management: Configuration Guide*.

5.9.2 Configuring Payment Rules

You can configure payment rules to determine how authorizations and charges are handled at a high level. For more information about defining payment rules, see the *Sterling Distributed Order Management: Configuration Guide*.

5.9.3 Defining Payment Types

You can define various tender types that your business accepts. For more information about defining payment types, see the *Sterling Distributed Order Management: Configuration Guide*.

5.9.4 Defining Credit Card Types

This configuration allows the configuring of different credit card types.

To configure credit card types:



1. From the Channel Applications Manager, select Configure Payment Handling.
2. Under Configure Payment Handling, select Define Credit Card Types.
3. Click  to add new credit card types.
4. Enter information in the applicable fields. For field value descriptions, see [Table 5-7](#).
5. Click  to save your changes.

Figure 5–7 Credit Card Type Details

Table 5–7 Credit Card Type Details

Field	Description
Credit Card Type	Enter the type of the credit card.
Short Description	Enter a short description of the credit card type.
Long Description	Enter a long description of the credit card type.

5.9.5 Configuring Payment Failure Rules

This is an advanced configuration that allows you to configure payment failure rules.

To configure payment failure rules:


1. From the Channel Applications Manager screen, select Configure Payment Handling.
2. Under Configure Payment Handling, select the Advanced Configurations link under Configure Payment Rules.
3. Select Configure Payment Failure Rules.
4. Enter information in the applicable fields. For field value descriptions, see [Table 5–8](#).
5. Click  to save your changes.

Figure 5–8 Payment Failure Rules

Table 5–8 Payment Failure Rules

Field	Description
Send notification when number of payment failures reach <n> due to hard decline	Enter the number of payment failures to be reached before notification is sent out.

5.9.6 Payment Processing Rules Determination

This is an advanced configuration that allows you to configure the payment processing rules at the enterprise level or seller organization. For more information about payment processing rules determination, see the *Sterling Distributed Order Management: Configuration Guide*.

5.9.7 Configuring Advanced Credit Card Rules

This configuration allows the configuring of different credit card rules.

To configure credit card rules:


1. From the Channel Applications Manager, select Configure Payment Handling.
2. Under Configure Payment Handling, select the Advanced Configurations link.
3. Select Configure Advanced Credit Card Rules.
4. Enter information in the applicable fields. For field value descriptions, see [Table 5–9](#).
5. Click  to save your changes.

Figure 5–9 Advanced Credit Card Rules

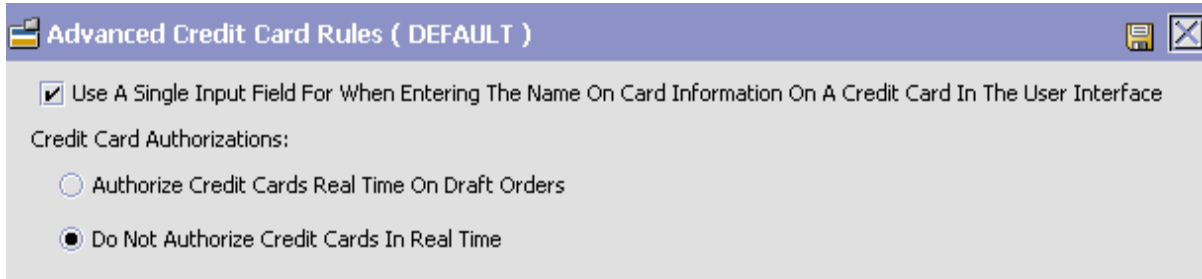


Table 5–9 Credit Card Rules

Field	Description
Use A Single Input Field For When Entering The Name On Card Information On A Credit Card In the User Interface	Check this box to use a single field for displaying or entering card name.
Authorize Credit Cards Real Time On Draft Orders	Select Authorize Credit Cards Real Time On Draft Orders to process real time credit card authorizations before confirming draft orders.
Do not Authorize Credit Cards In Real Time	Select Do not Authorize Credit Cards In Real Time to process credit card authorization at a later time, using payment collection and payment execution agents.

5.10 Configuring Order Administration

Once an order is captured it needs to be modified at various points throughout its life-cycle. For example, the customers may decide to have their order shipped to their work address instead of their home address, or a payment method that was declined could be replaced with another method. Also, if an order encounters a processing error, a CSR Lead may need to give a credit to a customer in order to keep the customer satisfied.

Sterling Call Center and Sterling Store understands the typical modifications that are frequently made to the orders, and provides a task-based call center user interface to perform these modifications.

Sterling Call Center and Sterling Store also provides configurable rules to control how and when modifications can be performed.

The following tasks are available under Configure Order Administration:

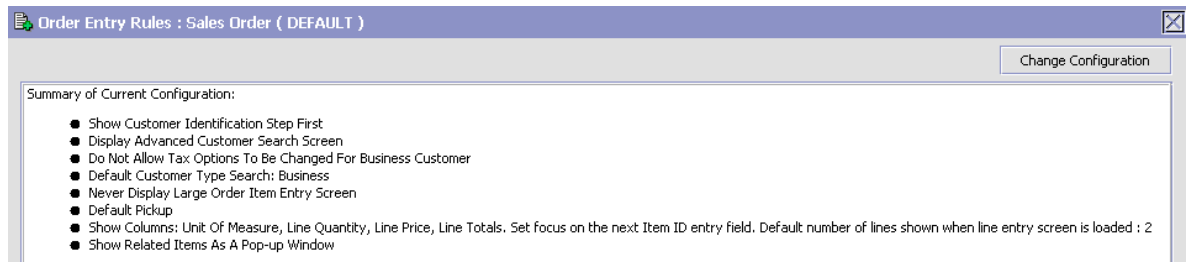
5.10.1 Configuring Order Entry Rules

Sterling Call Center and Sterling Store provides an Order Entry Controller Wizard that enables you to configure the Order Entry user interface and the configuration choices for your order entry process.

To access the Order Entry Controller Wizard:

1. From the Channel Applications Manager, select Configure Order Administration.
2. Under Configure Order Administration, select Configure Order Entry Rules. The Order Entry Rules screen displays the current configuration choices for order entry.

Figure 5–10 Order Entry Rules, Summary



3. To change the current or default order entry configuration, click Change Configuration. As you make decisions, the wizard displays information in two panels: the left panel displays the current decision choices you can make and the right panel displays a summary of all of the configuration choices you have made.

Figure 5–11 Order Entry Rules, Display First Screen

The screenshot shows a window titled "Order Entry Controller Wizard". The main content area contains the following text: "When the order entry task is started, you may choose to have the customer identification or item entry step appear first. It is still possible to perform these steps in any order no matter which screen appears first. During return creation, if a customer is not identified this rule would be used to determine if customer identification screen is to be shown before or after item entry screen for the exchange order." Below this text are two radio button options: "Show Customer Identification Step First" (which is selected) and "Show Item Entry Step First". Underneath these options is a text field labeled "Provide a default name to be used during order creation" with the value "SterlingOrder" entered. At the bottom of the window are three buttons: "Back", "Next", and "Finish".

4. Select the screen on which you want to start the order entry task. To display the Customer Identification screen first during order entry, select the Show Customer Identification Step First option. To display the Item Entry screen first during order entry, select the Show Item Entry Step First option.

(This rule can also be used during return creation. If the customer details are not available when creating the exchange order, this rule can be used to determine whether the Customer Identification screen should be displayed before or after the Item Entry screen.)

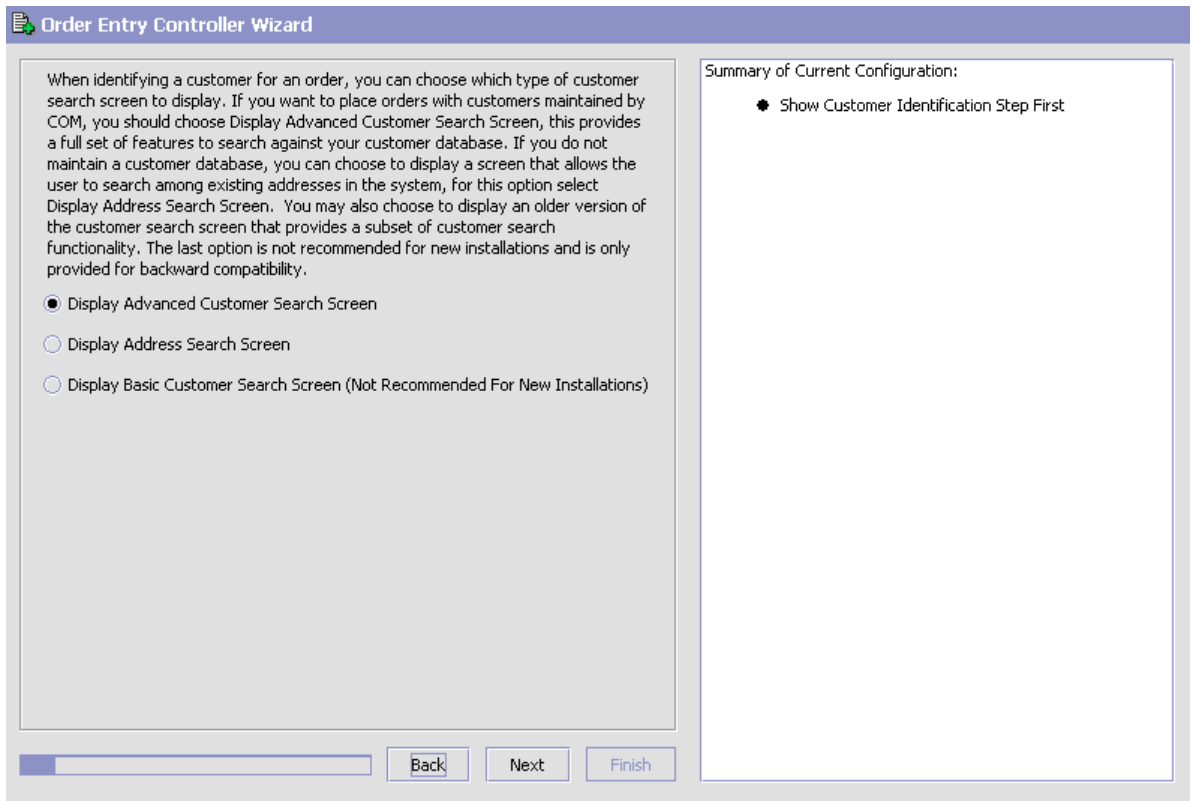
5. In the Provide a default name to be used during order creation field, enter a name for the draft order. This name is automatically populated in the Confirm pop-up window that is displayed when a

user attempts to close the Order Entry screen before completing the process of order creation.

6. Click Next.

You are then prompted to indicate the type of Customer Search screen that should be displayed when identifying customers.

Figure 5–12 Order Entry Rules, Display Customer Search



7. Select the Display Advanced Customer Search Screen option to display the advanced customer search screen.
8. Select the Display Address Search Screen option to display the address search screen.
9. Select the Display Basic Customer Search Screen option to display the basic customer search screen.

10. Click Next.

You are then prompted to indicate whether you want to allow users to enter tax options for a business customer. This screen is displayed only if the Display Advanced Customer Search Screen option is selected.

Figure 5–13 *Order Entry Rules, Change Tax Options*

The screenshot shows a dialog box titled "Order Entry Controller Wizard". The main area contains the following text: "When creating an order for a business customer, you may allow the user to change the tax options defined on the business customer." Below this text is a single checkbox labeled "Change Tax Options for a business customer", which is currently unchecked. To the right of the main area is a "Summary of Current Configuration:" section with two bullet points: "Show Customer Identification Step First" and "Display Advanced Customer Search Screen". At the bottom of the dialog box are three buttons: "Back", "Next", and "Finish". The "Next" button is highlighted with a blue border, indicating it is the active button.

11. Select the Change Tax Options for a business customer check box to enable a user to enter tax options for a business customer.

12. Click Next.

You are then prompted to indicate the type of customer search you want to perform when identifying customers.

Figure 5–14 Order Entry Rules, Enable Customer Type Search

Order Entry Controller Wizard

When searching a customer master database, you may allow the user to select the customer type during the search (consumer or business). If you only model one type of customer in your customer database, you may choose to hide these search criteria. You may also choose to default the appropriate customer type for the search.

Enable Customer Type Search

Customer Type To Default In Search:

Consumer

Business

Summary of Current Configuration:

- Show Customer Identification Step First
- Display Advanced Customer Search Screen

Progress bar: []

Buttons: Back, Next, Finish

By default, Sterling Call Center and Sterling Store searches for both consumer customers and business customers when performing a search using the existing addresses. On this screen, you can indicate whether you want to include or exclude business customers from searches using the existing addresses.

13. Select the Enable Business Customer Search box, to enable search for business customers.
14. Select Consumer to search for consumer customers by default. Select Business to search for business customers by default.
15. Click Next.

Figure 5–15 Order Entry Rules, Display Item Entry

Order Entry Controller Wizard

If you fulfill orders that have a very large number of order lines, you may choose to display a large order item entry screen that is designed to handle a large number of items. This will ensure optimal performance for any sized order. You may select the number of order lines at which to switch to the large order item entry view. If you want to always display the large order entry view, set the number of order lines to 1.

Always display large order entry screen
 Display large order entry screen when number of order lines is
 Never display large order entry screen

Summary of Current Configuration:

- Show Customer Identification Step First
- Display Advanced Customer Search Screen
- Default Customer Type Search: Business

Back Next Finish

In this screen, you can choose to display the large order entry screen. It is designed to handle large numbers of order lines.

16. Select the Always display large order entry screen option to display the large order entry screen always.
17. Select the Display large order entry screen when the number of order lines is option and enter the number of order lines after which the large order entry screen needs to be displayed. If the number of order lines exceeds the preconfigured number and if more order lines are added to the order, the large order entry screen is displayed.
18. Select Never display large order entry screen, to not display the large order entry screen.

19. Click Next.

You are then prompted to indicate the fulfillment methods that need to be displayed and also the default fulfillment method for items on the order.

Figure 5–16 *Order Entry Rules, Delivery and Shipping Fulfillment Options*

Order Entry Controller Wizard

When specifying the delivery method on an order line, you can allow the user to see separate options for shipping and delivery or allow the user to see a single option for shipping. When a single option displayed, the system will determine if a shipped item should be actually be shipped or delivered based on the item configuration and other items on the same order. When both options are displayed, the user must select the appropriate option. Note that an option will only appear for an item if that item supports that type of delivery method based on the item configuration

Display Shipping and Delivery Fulfillment Options Separately

When an item supports multiple delivery methods, you can control which option is selected by default when the user enters items on an order.

Default Pickup

Default Shipping

Default Delivery

Summary of Current Configuration:

- Show Customer Identification Step First
- Display Advanced Customer Search Screen
- Default Customer Type Search: Business
- Display Large Order Item Entry Screen When Number Of Order Lines Is 20

Back Next Finish

20. Select the Display Shipping and Delivery Fulfillment Options Separately box to display delivery and shipping as separate fulfillment options in the Sterling Call Center and Sterling Store screens.

21. Select any one of the following options when entering items on an order:
 - If you want to enable pickup as the default option, choose the 'Default Pickup' option.
 - If you want to enable shipping as the default option, choose the 'Default Shipping' option.
 - If you want to enable delivery as the default option, choose the 'Default Delivery' option. This option is enabled only if you check the Show Delivery as Separate Fulfillment Method box.
22. Click Next.

You are then prompted to choose the columns to be displayed in the line entry screens.

Figure 5–17 Order Entry Rules, Display of Columns

Order Entry Controller Wizard

You can configure which columns to display in the line entry step. Check the columns you want to display.

Unit Of Measure

Line Quantity

Line Price

Line Totals

You can configure how screen navigation is handled when items are added to an order on the line entry screen.

Focus on the next Item ID entry field

Focus on the next enterable field (usually quantity)

This configuration allows you to configure the number of line panels to be shown when the line entry screen is loaded.

Set number of line panels to 3 (Default).

Set number of line panels to

Summary of Current Configuration:

- Show Customer Identification Step First
- Display Advanced Customer Search Screen
- Do Not Allow Tax Options To Be Changed For Business Customer
- Default Customer Type Search: Business
- Always Display Large Order Item Entry Screen
- Default Pickup

Back Next Finish

23. Select the check boxes against the columns that you want to be displayed in the user interface for order line entries.
24. You can also configure where the focus of the cursor should shift to after adding an item to an order in the Add Item screen:
 - Select the Focus on the next Item ID entry field option to shift the focus of the cursor to the next Item ID field. This option should be selected when most of the order lines have a single unit per order line.
 - Select the Focus on the next enterable field (usually Quantity) option to shift the focus of the cursor to the next editable field. This option should be selected if you want to force the call center and store representatives to enter the quantity for each of the

items entered in the order. This option is useful when the order lines have multiple quantities.

Note: If you have configured the screen to shift the focus of the cursor to the next editable field (usually Quantity) after adding an item to the order, and also configured the screen to not display the Line Quantity column in the line entry step, the Quantity is defaulted to one, but is not displayed to the user.

25. Select any of the following options to configure the number of blank order line panels to be displayed in the Add Items screen.
 - Select the Set number of line panels to 3 (Default) option if you want three blank order line panels to be displayed in the Add Items screen.
 - Select an appropriate value from the Set number of line panels to drop-down list if you want to display one or more blank order lines to be displayed in the Add Items screen. The values available in the drop-down list are 1, 2, 3, 4, and 5.
26. Click Next.

Figure 5–18 Order Entry Rules, Display Related Items

Order Entry Controller Wizard

When items are added to an order, related items can be displayed automatically on the same screen as a panel at the bottom of the screen or as a popup that appears when an icon for that item is selected. Displaying related items as a popup can be used when you have many related items to display because the popup can display more items without the need to scroll.

Display Related Items As:

A Panel On The Line Entry Screen

A Pop-up Window

Summary of Current Configuration:

- Show Customer Identification Step First
- Display Advanced Customer Search Screen
- Do Not Allow Tax Options To Be Changed For Business Customer
- Default Customer Type Search: Business
- Always Display Large Order Item Entry Screen
- Default Delivery
- Show Columns: Unit Of Measure, Line Quantity, Line Price, Line Totals. Set focus on the next Item ID entry field. Default number of lines shown when line entry screen is loaded : 3.

Back Next Finish

27. You can now configure to display the related items as a panel on the line entry screen or as a separate pop-up.

- Select A Panel On The Line Entry Screen option to display the related items as a panel.
- Select A Pop-up Window option to display the related items as a pop-up window.

28. Click Next.

You are then prompted to configure the item association types that you want to display on the Order Entry screen.

Figure 5–19 Order Entry Rules, Configure Relationship Type For An Item Association

Order Entry Controller Wizard

You can configure the item association types to appear in the order entry screen as accessories available to add to the item. You must configure the item association for the selected item association types. The item association determines whether the accessory item will replace the item or be related to the item. If the accessory item is related to the item then you must identify the type of relationship that needs to be created when an accessory is added to an order. The relationship type determines how the accessory item is related to the item. Only relationship types which support sorting are displayed. Also, you can specify whether inventory checks should be performed when displaying associated items.

Item Associations Rules and Relationship Types				
Association T...	Show In UI	Item Associat...	Check Invent...	Relationship ...
CrossSell	<input checked="" type="checkbox"/>	Relate Item	<input type="checkbox"/>	Line Accessory
Preferred Su...	<input type="checkbox"/>		<input type="checkbox"/>	
UpSell	<input type="checkbox"/>		<input type="checkbox"/>	
Alternative	<input type="checkbox"/>		<input type="checkbox"/>	

Relationship Type for a Service Association

Provided Service Relationship Type:

Back Next Finish

Summary of Current Configuration:

- Show Customer Identification Step First
- Display Advanced Customer Search Screen
- Do Not Allow Tax Options To Be Changed For Business Customer
- Default Customer Type Search: Business
- Always Display Large Order Item Entry Screen
- Default Delivery
- Show Columns: Unit Of Measure, Line Quantity, Line Price, Line Totals. Set focus on the next Item ID entry screen is loaded : 3.
- Show Related Items As A Panel On The Line Entry Screen

29. To configure item association rules and relationship types:

- Select the Show in UI check box to display the product items for that association type in the related items panel or pop-up.
- From the Item Association drop-down list, select one of the following options:
 - Relate Item: In the Related Items pop-up window or the Related Items panel in the Add Items screen, if the user selects an item with the corresponding association type, the item will be added as an associated item of the original item in the order.

- Replace Item: In the Related Items pop-up window or the Related Items panel in the Order Entry screen, if the user selects an item with the corresponding association type, the original item will be replaced with the associated item.
- Select the Check Inventory check box to perform availability checks for the associated product item. If the inventory for the associated item is not available, the associated item will not be displayed in the related items panel or pop-up. If the check box is not selected, the associated item will be displayed in the panel or popup regardless of whether the inventory is available or not.
- Select the relationship type to be used when adding product items as related items.

To configure relationship type for a service association, select the relationship type to be used when adding provided services as related services.

30. Click the Finish button to close the Order Entry Controller wizard and save your settings.

5.10.2 Defining Hold Types

An order can be put on hold for multiple reasons. In this configuration, a user can define various types of holds that can be associated to an order. For more information about defining hold types, see the *Sterling Distributed Order Management: Configuration Guide*.

When a new hold type is defined, an exception type with the same name as the hold type should be created. This enables the Remove Hold screen in the Sterling Call Center and Sterling Store user interface to display links to the associated alerts that have been raised when an order goes on hold if there are any associated alerts for that event.

5.10.3 Configuring Price Match Rules

This configuration allows you to control the criteria that determines when a price match can be performed on an item in an order.

To configure price match rules:

1. From the Channel Applications Manager, select Configure Order Administration.


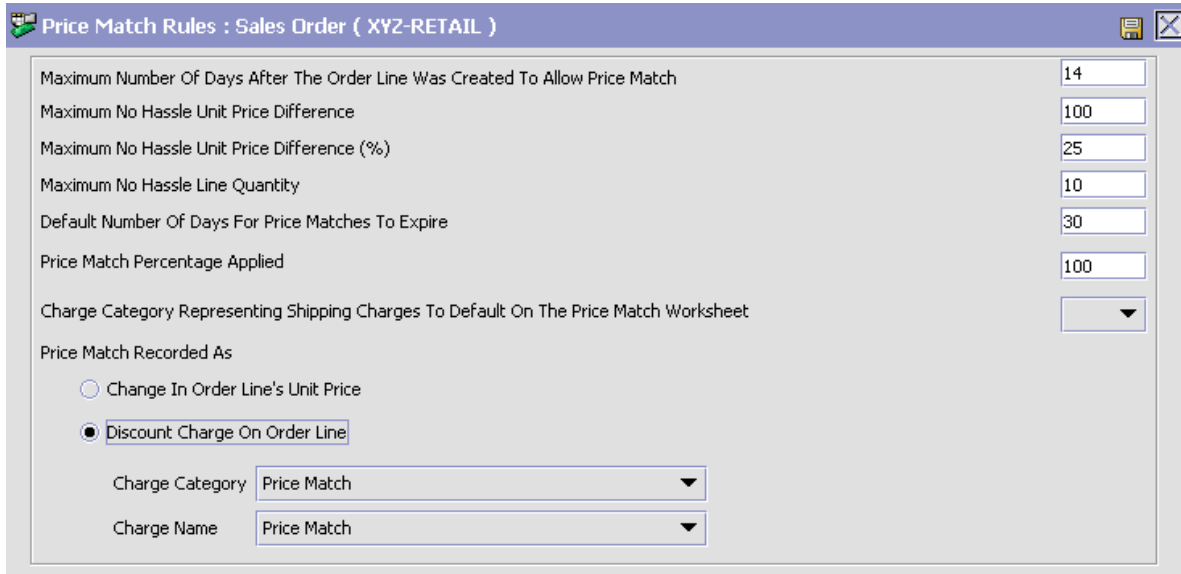
2. Under Configure Order Administration, select Price Match Rules.
3. Enter information in the applicable fields. For field value descriptions, see [Table 5-10](#).
4. Click  to save your changes.

Figure 5-20 Price Match Rules



Price Match Rules : Sales Order (XYZ-RETAIL)

Maximum Number Of Days After The Order Line Was Created To Allow Price Match: 14

Maximum No Hassle Unit Price Difference: 100

Maximum No Hassle Unit Price Difference (%): 25

Maximum No Hassle Line Quantity: 10

Default Number Of Days For Price Matches To Expire: 30

Price Match Percentage Applied: 100

Charge Category Representing Shipping Charges To Default On The Price Match Worksheet: [Dropdown]

Price Match Recorded As:

Change In Order Line's Unit Price

Discount Charge On Order Line

Charge Category: Price Match [Dropdown]

Charge Name: Price Match [Dropdown]

Table 5-10 Price Match Rules Details

Field	Description
Maximum Number Of Days After The Order Line Was Created To Allow Price Match	Enter the maximum number of days after an order date to allow price matching of an item.
Maximum No Hassle Unit Price Difference	Enter the maximum unit price difference for an order to qualify for no hassle price matching.
Maximum No Hassle Unit Price Difference (%)	Enter the maximum unit price difference percentage for an order to qualify for no hassle price matching.
Maximum No Hassle Line Quantity	Enter the maximum item quantity for an order to qualify for no hassle price matching.

Table 5–10 Price Match Rules Details

Field	Description
Default Number Of Days For Price Matches To Expire	Enter the default number days allowed to pass before a price match expires.
Price Match Percentage Applied	Enter the price match percentage applied to an order.
Charge Category Representing Shipping Charges To Default On The Price Match Worksheet	Select the default charge category to be used in the price match work sheet from the drop-down list.
Price Match Recorded As	Select one of the following: Change in Order Line's Unit Price or Discount Charge on Order Line.
Charge Category	Select the charge category as Price Match from the drop-down list.
Charge Name	Select the charge name from the drop-down list.

5.10.4 Configuring Price Match Statuses

You can configure the list of statuses allowed for price match.

To configure price match status:


1. From the Channel Applications Manager, select Configure Order Administration.
2. Under Configure Order Administration, select Advanced Configuration.
3. Select Configure Price Match Statuses.
4. Enter information in the applicable fields. For field value descriptions, see [Table 5-11](#).
5. Click  to save your changes.

Figure 5–21 Price Match Status Details

The screenshot shows a configuration window titled "Price Match Status Details". It contains three text input fields:

- Price Match Status: APPROVED
- Short Description: Approved
- Long Description: Price Match Approved

Table 5–11 Price Match Status

Field	Description
Price Match Status	Indicates the status for the price match.
Short Description	Enter a short description of the price match status.
Long Description	Enter a more detailed description of the price match status.

Note: The statuses available for a price match record are APPROVED, REJECTED and PENDING. You cannot add a new status for a price match record.

5.10.5 Configuring Competitor Statuses

You can configure the list of statuses allowed for a competitor.

To configure competitor status:


1. From the Channel Applications Manager, select Configure Order Administration.
2. Under Configure Order Administration, select Advanced Configuration.
3. Select Configure Competitor Statuses.
4. Enter information in the applicable fields. For field value descriptions, see [Table 5–12](#).
5. Click  to save your changes.

Figure 5–22 *Competitor Status Details*
Table 5–12 *Competitor Status*

Field	Description
Competitor Status	Indicates the status of the competitor.
Short Description	Enter a short description of the competitor status.
Long Description	Enter a more detailed description of the competitor status.

Note: The statuses available for a competitor record are APPROVED, REJECTED and PENDING. You cannot add a new status for a competitor record.

5.10.6 Configuring Order Modification Rules

You can configure the types of modifications allowed on an order or an order line when it is in a given status. For more information about defining modification rules, see the *Sterling Distributed Order Management: Configuration Guide*.

5.10.7 Configuring Work Order Modification Rules

Work orders are created for performing delivery and installation services. For more information about defining modification rules, see the *Sterling Distributed Order Management: Configuration Guide*.

5.10.8 Defining Appeasement Reasons

This configuration provides a list of reason codes that are available during the customer appeasement process.

To configure appeasement reasons:


1. From the Channel Applications Manager, select Configure Order Administration.
2. Under Configure Order Administration, select Define Appeasement Reasons.
3. Enter information in the applicable fields. For field value descriptions, see [Table 5-13](#).
4. Click  to save your changes.

Figure 5-23 Appeasement Reason Details

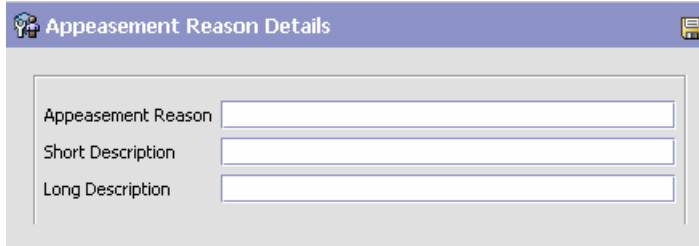


Table 5-13 Appeasement Reason Details

Field	Description
Appeasement Reason	Enter a name for the appeasement reason.
Short Description	Enter a short description of the appeasement reason.
Long Description	Enter a more detailed description of the appeasement reason.

5.10.9 Defining Cancellation Reasons

This configuration provides a list of reason codes that are available during the cancellation process.

To configure cancellation reasons:


1. From the Channel Applications Manager, select Configure Order Administration.
2. Under Configure Order Administration, select Cancellation Reasons.
3. Enter information in the applicable fields. For field value descriptions, see [Table 5-14](#).
4. Click  to save your changes.

Figure 5-24 *Cancel Reason Details*

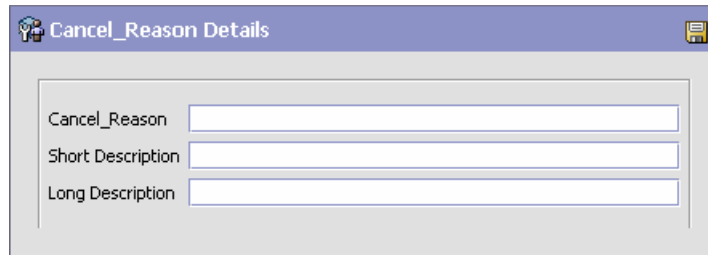


Table 5-14 *Cancellation Reason Details*

Field	Description
Cancellation Reason	Enter a name for the cancellation reason.
Short Description	Enter a short description of the cancellation reason.s
Long Description	Enter a more detailed description of the cancellation reason.

5.10.10 Defining Reship Reasons

This configuration provides a list of reason codes that are available during the reship process.

To configure reship reasons:

1. From the Channel Applications Manager, select Configure Order Administration.
2. Under Configure Order Administration, select Reship Reasons.
3. Enter information in the applicable fields. For field value descriptions, see [Table 5-15](#).

4. Click  to save your changes.

Figure 5–25 Reship Reason Details

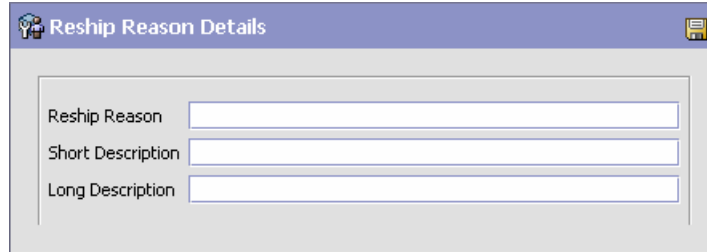


Table 5–15 Reship Reason Details

Field	Description
Reship Reason	Enter a name for the reship reason.
Short Description	Enter a short description of the reship reason.
Long Description	Enter a more detailed description of the reship reason.

5.10.11 Defining Price Override Reasons

This configuration provides a list of reason codes that are available for price override.

To configure price override reasons:


1. From the Channel Applications Manager, select Configure Order Administration.
2. Under Configure Order Administration, select Define Price Override Reasons.
3. Enter information in the applicable fields. For field value descriptions, see [Table 5–16](#).
4. Click  to save your changes.

Figure 5–26 Price Override Reasons Details
Table 5–16 Price Override Reasons Details

Field	Description
Price Override Reasons	Enter a name for the price override reason.
Short Description	Enter a short description of the price override reason.
Long Description	Enter a more detailed description of the price override reason.

5.10.12 Defining Charge Override Reasons

This configuration provides a list of reason codes that are available for charge override.

To configure charge override reasons:


1. From the Channel Applications Manager, select Configure Order Administration.
2. Under Configure Order Administration, select Define Charge Override Reasons.
3. Enter information in the applicable fields. For field value descriptions, see [Table 5–17](#).
4. Click  to save your changes.

Figure 5–27 Charge Override Reasons Details

Table 5–17 Charge Override Reason Details

Field	Description
Charge Override Reasons	Enter a name for the charge override reason.
Short Description	Enter a short description of the charge override reason.
Long Description	Enter a more detailed description of the price override reason.

5.10.13 Configuring Open Box Options

The open box items are defect items that were returned by the customers. Such items are put on display and sold at a discounted price. You can define how an enterprise handles open box items.

To configure the handling options for open box items:


1. From the Channel Applications Manager, select Configure Order Administration.
2. Select Configure Open Box Options.
3. Enter information in the applicable fields. For field value descriptions, see [Table 5–18](#).
4. Click  to save your changes.

Figure 5–28 Configure Open Box Options



Table 5–18 Configure Open Box Handling Options

Fields	Description
Allow Addition of Open Box Items to Orders	Check this box if you want to allow users to add open box items to an order.
Tag Identifier for Open Box ID	Select the appropriate tag attribute from the drop-down list that identifies the open box items. Note: This option is available only if you check the 'Allow Addition of Open Box Items to Orders' box.
Product Class for Open Box Items	Select the appropriate product class from the drop-down list for the open box items.
Fulfillment Methods Supported for Open Box Items:	Check the boxes of the appropriate fulfillment method for open box items. <ul style="list-style-type: none"> • Pickup—indicates to pick up open box items at a store. • Shipping—indicates to ship open box items. • Delivery—indicates to deliver open box items.

5.10.14 Defining Order Note Types and Configuring Automatic Note Logging

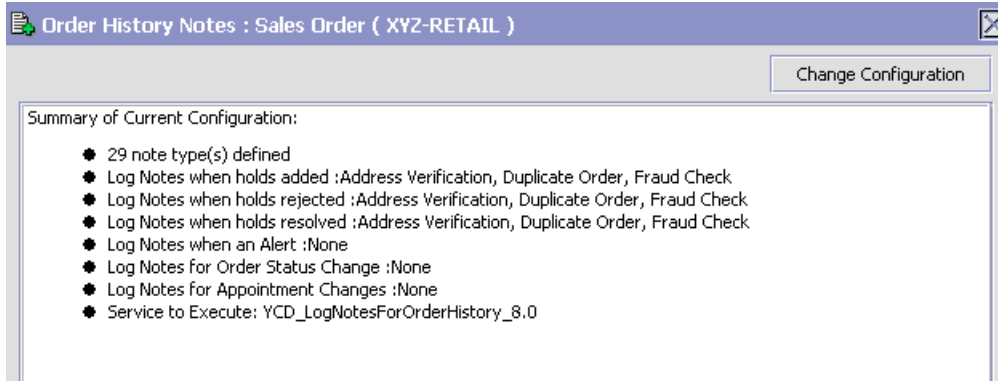
Sterling Call Center and Sterling Store provides an Order Notes Wizard that enables you to define note types and configure automatic note logging.

To access this wizard:

1. From the Channel Applications Manager, select Configure Order Administration.

2. Select Define Note Types and Configure Automatic Note Logging. The Order History Notes Wizard screen displays the current configuration choices for order notes.

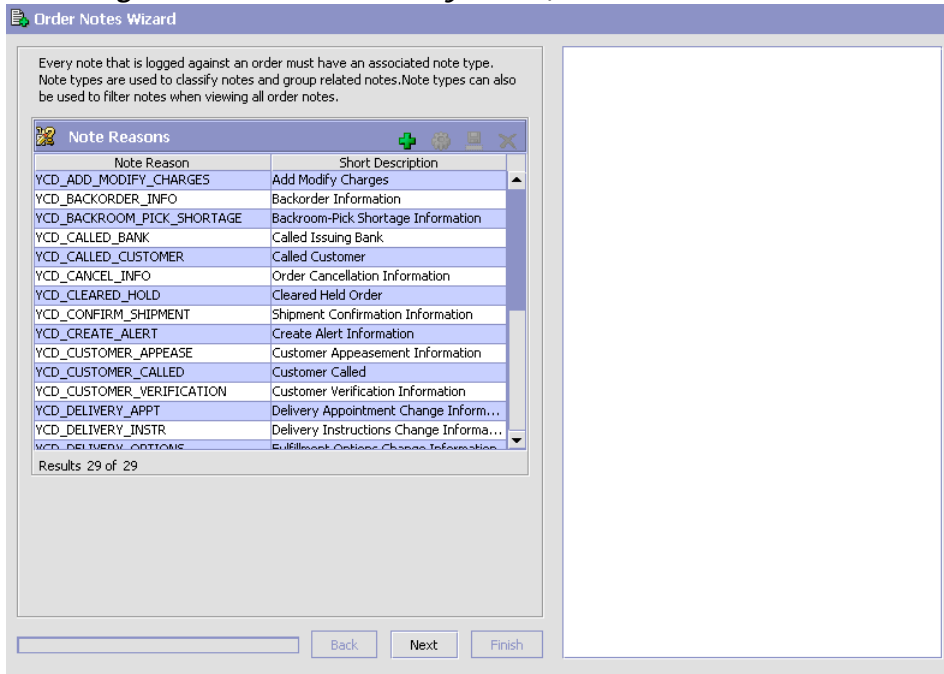
Figure 5–29 Order History Notes, Summary



3. To change the current or default order entry configuration, click Change Configuration. As you make decisions, the wizard displays information in two panels: the left panel displays the current decision

choices you can make and the right panel displays a summary of all of the configuration choices you have made.

Figure 5–30 Order History Notes, Note Reasons





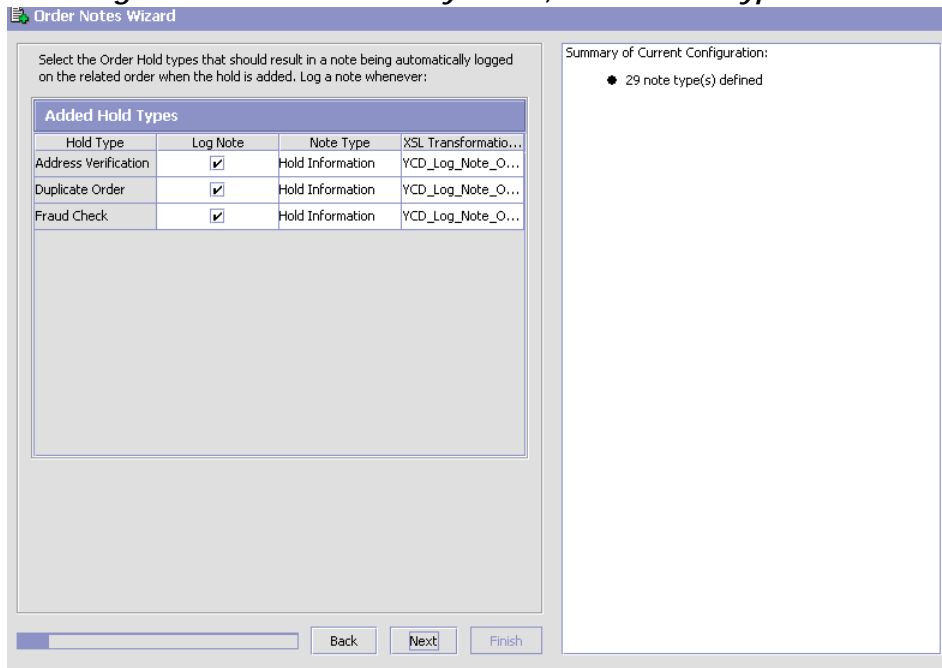
4. This screen displays all the note types that have been configured. To add a note type:
 - Click  to add a new note type.
 - Enter information in the applicable fields. For field value descriptions, see [Table 5–19](#).
 - Click  to save your changes.

Table 5–19 Note Types

Field	Description
Note Reason	Enter a name for the Note Reason.
Short Description	Enter a short description of the Note Reason.
Long Description	Enter a more detailed description of the Note Reason.

After configuring the note types, you are prompted to choose when you want notes to be automatically logged.

Figure 5–31 Order History Notes, Added Hold Types



5. Check the boxes of the hold types for which the note has to be automatically logged when the hold is added. Select the note type from the drop-down list. Enter the XSL translation file to be used.

Figure 5–32 Order History Notes, Resolved Hold Types

Order Notes Wizard

Select the Order Hold types that should result in a note being automatically logged on the related order when the hold is resolved. Log a note whenever:

Resolved Hold Types	Hold Type	Log Note	Note Type	XSL Transformatio...
	Address Verification	<input checked="" type="checkbox"/>	Hold Information	YCD_Log_Note_O...
	Duplicate Order	<input checked="" type="checkbox"/>	Hold Information	YCD_Log_Note_O...
	Fraud Check	<input checked="" type="checkbox"/>	Hold Information	YCD_Log_Note_O...

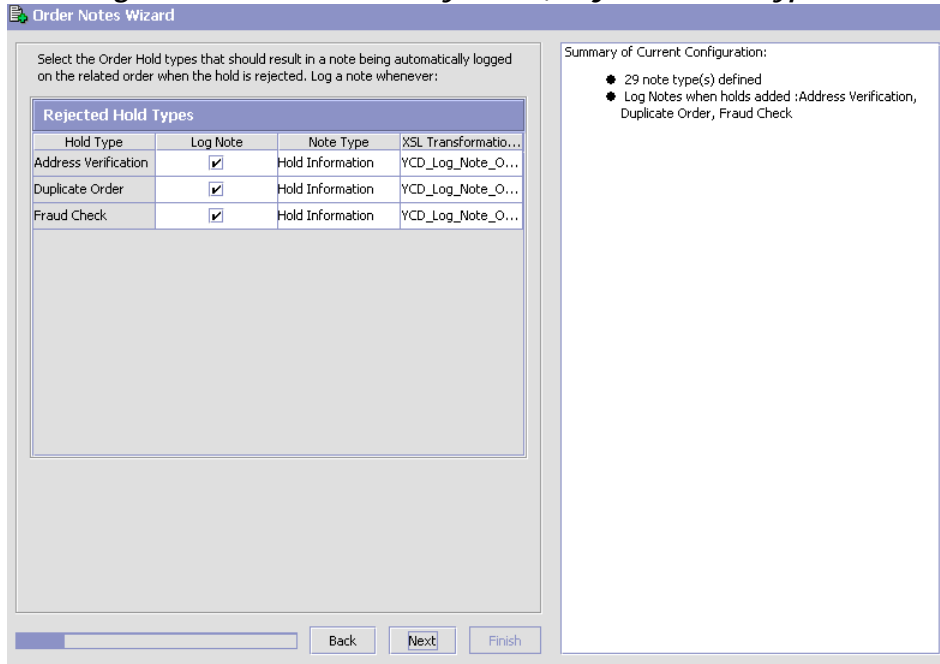
Summary of Current Configuration:

- 29 note type(s) defined
- Log Notes when holds added :Address Verification, Duplicate Order, Fraud Check
- Log Notes when holds rejected :Address Verification, Duplicate Order, Fraud Check

Back Next Finish

6. Check the boxes of the hold types for which the note has to be automatically logged when the hold is resolved. Select the note type from the drop-down list. Enter the XSL translation file to be used.

Figure 5–33 Order History Notes, Rejected Hold Types



7. Check the boxes of the hold types for which the note has to be automatically logged when the hold is rejected. Select the note type from the drop-down list. Enter the XSL translation file to be used.

Figure 5–34 Order History Notes, Alert Related Logging

The screenshot shows the 'Order Notes Wizard' window. The main area is titled 'Alert related Logging' and contains the following elements:

- Instruction: 'Select the alert related actions that should result in a note being automatically logged on the related order. Log a note whenever:'
- Checkbox: A new alert is raised against an order
- Note Type: A drop-down menu with 'Create Alert Information' selected.
- XSL Transformation File: A text box containing 'YCD_Log_Note_On_Create_Exception_8.0.xsl'.

On the right side, there is a 'Summary of Current Configuration:' box with a bulleted list:

- 29 note type(s) defined
- Log Notes when holds added :Address Verification, Duplicate Order, Fraud Check
- Log Notes when holds rejected :Address Verification, Duplicate Order, Fraud Check
- Log Notes when holds resolved :Address Verification, Duplicate Order, Fraud Check

At the bottom of the wizard, there are three buttons: 'Back', 'Next', and 'Finish'. A progress bar is visible on the left side of the bottom bar.

8. On this screen you can enable notes to be automatically logged when an alert is raised against an order by checking the A new alert is raised against an order box. Select the note type from the drop-down list. Enter the XSL translation file to be used.

Figure 5–35 Order History Notes, Order Status Change

Select the Order status change related actions that should result in a note being automatically logged on the related order. Log a note whenever:

Backordered Order Status Logging

Any order line quantity is backordered

Note Type: Backorder Information

XSL Transformation File: YCD_Log_Note_On_Back_Order_8.0.xsl

Shipment Confirmation Logging

Any order line quantity is shipped

Note Type: Shipment Confirmation Information

XSL Transformation File: YCD_Log_Note_On_Confirm_Shipment_8.0.xsl

Summary of Current Configuration:

- 29 note type(s) defined
- Log Notes when holds added :Address Verification, Duplicate Order, Fraud Check
- Log Notes when holds rejected :Address Verification, Duplicate Order, Fraud Check
- Log Notes when holds resolved :Address Verification, Duplicate Order, Fraud Check
- Log Notes when an Alert :Created

Back Next Finish

You can configure to log notes automatically when the status of an order is changed.

9. Check the Any order line quantity is backordered box to log notes automatically when the order status is changed to backorder. Select the note type from the drop-down list. Enter the XSL translation file to be used.
10. Check the Any order line quantity is shipped box to log notes automatically when the order status is changed to shipped. Select the note type from the drop-down list. Enter the XSL translation file to be used.

Figure 5–36 Order History Notes, Appointment Related Action

Select the appointment related actions that should result in a note being automatically logged on the related order. Log a note whenever:

Appointment Completed Logging

An appointment is completed

Note Type:

XSL Transformation File:

Appointment Failed Logging

An appointment is failed

Note Type:

XSL Transformation File:

Summary of Current Configuration:

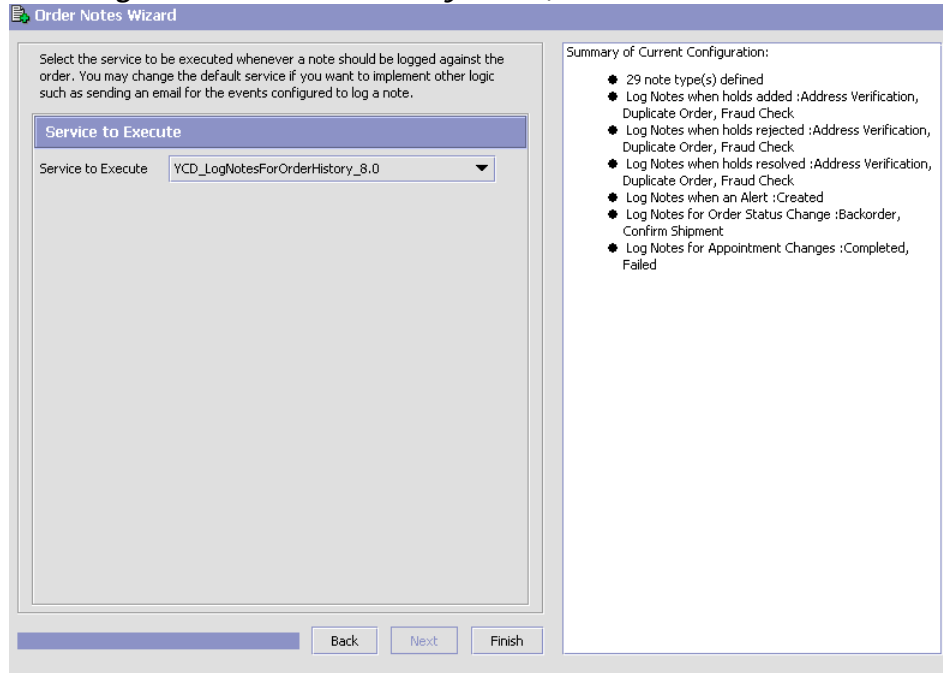
- 29 note type(s) defined
- Log Notes when holds added :Address Verification, Duplicate Order, Fraud Check
- Log Notes when holds rejected :Address Verification, Duplicate Order, Fraud Check
- Log Notes when holds resolved :Address Verification, Duplicate Order, Fraud Check
- Log Notes when an Alert :Created
- Log Notes for Order Status Change :Backorder, Confirm Shipment

Back Next Finish

You can configure to log notes automatically when an appointment related action takes place.

11. Check the An appointment is completed box to log notes automatically when an appointment is completed. Select the note type from the drop-down list. Enter the XSL translation file to be used.
12. Check the An appointment is failed box to log notes automatically when an appointment fails. Select the note type from the drop-down list. Enter the XSL translation file to be used.

Figure 5–37 Order History Notes, Service To Execute



13. On this screen you can select a service that will be executed when a note is logged against an order. Choose the service to be executed from the drop-down list.
14. Click the Finish button to close the Order Notes Wizard and save your settings.

5.10.15 Defining Order Types and Line Types

As an advanced configuration, you can define order types and line types. Orders and order lines can be categorized into multiple types such as urgent, high priority, or normal.

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

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

5.10.16 Configuring Order Validations Required

You can control the levels of validation required for an order. For more information about configuring a document's order validation, see the *Sterling Distributed Order Management: Configuration Guide*.

5.10.17 Configuring Alternate Item Identifier Display

As a part of advanced configuration, you can configure to use alternate item identifiers for the same item.

To configure alternate item identifier display:


1. From the Channel Applications Manager, select Configure Order Administration.
2. Select Advanced Configurations.
3. Select Configure Alternate Item Identifier Display.
4. Enter information in the applicable fields. For field value descriptions, see [Table 5-20](#).
5. Click  to save your changes.

Figure 5–38 Configure Alternate Item Identifier

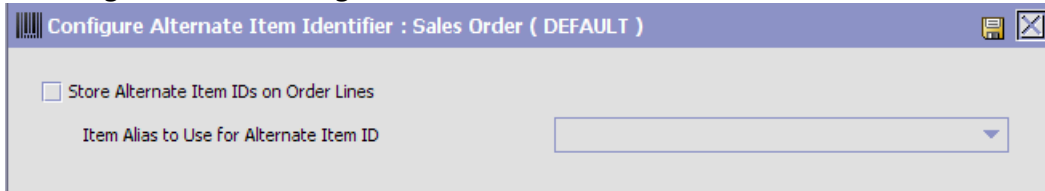


Table 5–20 Configure Alternate Item Identifier Display

Field	Description
Store Alternate Item IDs on Order Lines	Select this box if you want to store the alternate item identifiers on the Sterling Call Center and Sterling Store user interface. This will allow you to scan the alternate item identifier and enhance the system to store and display.
Item Alias to Use for Alternate Item ID	Select the appropriate item alias for the alternate item ID that identifies the original item from the drop down list. For more information about defining item alias types, see the <i>Sterling Catalog Management: Configuration Guide</i> . You can select the item alias only if the 'Store Alternate Item IDs on Order Lines' in the Sterling Call Center and Sterling Store user interface rule is enabled.

5.10.18 Configuring Add Line Rules

This is an advanced configuration that allows you to control the number of days (post order creation) after which line additions are not allowed.

To add line rules:


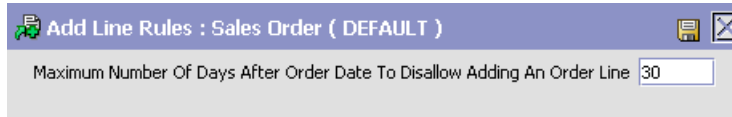
1. From the Channel Applications Manager, select Configure Order Administration.
2. Select the Advanced Configurations link.
3. Select Add Line Rules.
4. Enter information in the applicable fields. For field value descriptions, see [Table 5-21](#).
5. Click  to save your changes.

Figure 5–39 Add Line Rules**Table 5–21 Add Line Rules**

Field	Description
Maximum number of days after order date to allow adding an order line	Enter the maximum number of days after an order date to allow the adding of an order line.

5.10.19 Configuring Available Gift Options

This is an advanced configuration which enables you to configure the gift options provided in the Sterling Call Center and Sterling Store screens.

To configure the gift options:


1. In the Channel Applications Manager, select Configure Order Administration.
2. Click the Advanced Configurations link.
3. Click Configure Available Gift Options.
4. Select the Items Being Shipped check box to indicate that the items that have a fulfillment method of Shipment can be gift items.
5. Select the Items Being Picked Up check box to indicate that the items that have a fulfillment method of Pickup can be gift items.
6. Select the Items Being Delivered check box to indicate that the items that have a fulfillment method of Delivery can be gift items
 - To set the gift options for delivery items at the work order level, select the Work Order Level option.
 - To set the gift options for delivery items at the order line level, select the Order Line Level option.
7. To enable gift wrapping for items, select the Allow Gift Wrapping Of Items check box.
8. Click  to save your changes.

Figure 5–40 Configure Available Gift Options

Configure Available Gift Options : Sales Order (DEFAULT)

Allow Gift Information For

- Items Being Shipped
- Items Being Picked Up
- Items Being Delivered

Set Gift Options For Delivery Items At:

- Work Order Level
- Work Order Line Level

Allow Gift Wrapping Of Items

Note: When configuring gift options, ensure that you configure the "Change Mark For" and "Gift Flag Modifications" modification types in the Applications Manager.

5.10.20 Configuring Address Verification Rules

This is an advanced configuration that allows you to control the system behavior when the address verification system is not available.

To configure address verification rules:


1. From the Channel Applications Manager, select Configure Order Administration.
2. Select the Advanced Configurations link.
3. Select Address Verification Rules.
4. Check the Keep the order on hold when the address verification system is down box.
5. Click  to save your changes.

Figure 5–41 Address Verification Rules

5.10.21 Configuring Country and State Display Rules

You can configure the way the Country and State entry fields are displayed in certain screens in the Sterling Call Center and Sterling Store application.

Figure 5–42 Configure Country and State Display Options


Deriving City and State Names using Country and Postal Code

In the Sterling Call Center and Sterling Store application, the Country and Postal Code provided when entering an address are used to derive the names of the City and State. To populate the City and State fields using the information provided in the Country and Postal Code fields, create a region schema that adheres to the following standards:

- The first level of the region schema must be Countries.
- The second level of the region schema must be States.
- The third level of the region schema must be Cities.
- The region-level names must be Country, State, and City.

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

To select the region schema to use for deriving the City and State names using the Postal Code and Country:

1. From the Channel Applications Manager, click Configure Order Administration.
2. Click the Advanced Configurations link.
3. Click Configure Country and State Display Options.
4. Select the appropriate region schema from the Region Schema To Use For Defaulting City and State from Postal Codes drop-down list. For field value descriptions, see [Table 5-22](#).
5. Click  to save your changes.

Configuring the State Drop-Down Menu

In Sterling Call Center and Sterling Store, the Country drop-down list contains a list of all the countries. This drop-down list can be hidden if your enterprise accommodates only one country.

If you want a drop-down list of States to be displayed in Sterling Call Center and Sterling Store, create a region schema that adheres to the following standards:

- The first level of the region schema must be Countries.
- The second level of the region schema must be States.
- The region-level names must be Country and State.

In Sterling Call Center and Sterling Store, when a country is selected from the Country drop-down list the system finds the corresponding region within the configured region schema representing that country. All child regions with a region level of State are shown in the State drop-down menu. If no region level of State is found, the State drop-down list changes to a text field to enable you to type the name of the state manually.

To configure the State drop-down list:

1. From the Channel Applications Manager, click Configure Order Administration.
2. Click the Advanced Configurations link.
3. Click Configure Country and State Display Options.


4. Select the appropriate region schema from the Region Schema To Use For State Selection drop-down list. For field value descriptions, see [Table 5-22](#).
5. Click  to save your changes.

Table 5-22 Configure Country and State Display Options

Field	Description
Region Schema To Use For Defaulting City and State from Postal Codes	Select the region schema to be used to derive the City and State fields using the Country and Postal Codes.
Region Schema to Use for State Selection	Select a region schema to be used for the State drop-down list.
Allow Country to be Entered for Screens that Check Item Availability	Select this check box to facilitate the Country drop-down list to be displayed on the screens that check for item availability. Note: The Country drop-down list is always displayed in the Address panel.

Note: Ensure that the states configured in the Region Schema to Use for State Selection are same as the states configured in the Region Schema To Use For Defaulting City and State from Postal Codes.

5.10.22 Defining Instruction Types

As an advanced configuration, you can define a master list of instruction types. For more information about configuring a document's instruction types, see the *Sterling Distributed Order Management: Configuration Guide*.

5.10.23 Defining Custom Modification Types

As an advanced configuration, the system categorizes all order modifications into modification type. All rules for controlling modifications are associated to these modification types. For more information about defining custom modification types, see the *Sterling Distributed Order Management: Configuration Guide*.

5.10.24 Configuring which Modifications Trigger Re-pricing

As an advanced configuration, you can identify modification types that must trigger order re-pricing. For more information about defining modifications impacting pricing, see the *Sterling Distributed Order Management: Configuration Guide*.

5.10.25 Defining Charge Categories and Names

As an advanced configuration, you can define various charge categories and names that are associated to an order. For more information about defining charge definitions, see the *Sterling Distributed Order Management: Configuration Guide*.

As part of the Sterling Multi-Channel Selling Solution integration, to use the Order Pricing rules, you must configure the OSDISCOUNT and UPLIFT charge categories.

Note: For the Sterling Multi-Channel Selling Solution integration, it is recommended that the Charge Name validation be disabled. Otherwise, all the Coupon Names created in the application will need a corresponding Charge Name in Sterling Call Center and Sterling Store.

5.10.26 Configuring Transaction Specific Rules

As an advanced configuration, you can configure transaction specific rules. This is a miscellaneous set of rules that are associated to specific business transaction. For more information about defining transaction rules, see the *Sterling Distributed Order Management: Configuration Guide*.

5.10.27 Configuring Availability Check and Reservation Options

You can specify when availability checks and item reservations occur.

To configure the availability check and reservation options:

1. From the Channel Applications Manager, select Order Administration.


2. Select Advanced Configurations.
3. Select Configure Availability Check and Reservation Options.
4. Check the appropriate box to configure the availability check and reservation options. For field value descriptions, see [Table 5-23](#).
5. Click  to save your changes.

Figure 5-43 Configure Availability Check and Reservation Options

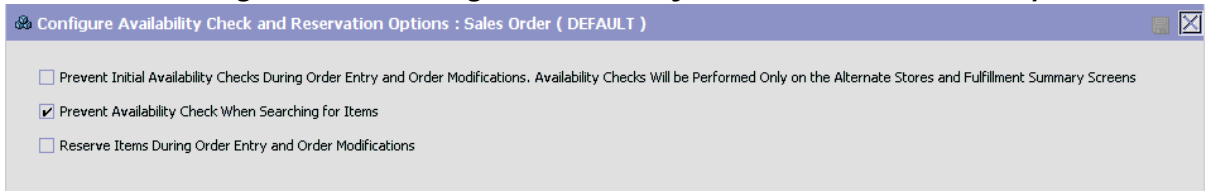


Table 5-23 Availability Check and Reservation Options

Field	Description
Prevent Initial Availability Checks During Order Entry and Order Modifications. Availability Checks Will Be Performed Only on the Alternate Stores and Fulfillment Summary Screens	Check this box to perform an availability check in the Alternate Stores and Fulfillment Summary screens.
Prevent Availability Check When Searching for Items	Check this box to prevent an availability check when searching for an item.
Reserve Items During Order Entry and Order Modifications	Check this box to reserve items when entering or modifying an order.

Note: The Inventory Check Required Rule is independent of the Prevent Initial Availability Checks During Order Entry Configuration. For more information about the Inventory Check Required Rule, see [Section 5.10.1, "Configuring Order Entry Rules"](#).

5.10.28 Defining Unit of Measure Display Rules

This is an advanced configuration that enables you to define which units of measure should be displayed in the Sterling Call Center and Sterling Store screens. Based on this configuration, either the transaction UOM or the inventory UOM is displayed.

To define the unit of measure display values:


1. From the Channel Applications Manager, select Configure Order Administration.
2. Select the Advanced Configurations link.
3. Select Define Sterling Call Center and Sterling Store Unit Of Measure Display Rules.
4. Choose the applicable Unit Of Measure display rules. For field value descriptions, see [Table 5-24](#).
5. Click  to save your changes.

Figure 5–44 Unit of Measure Display Rules

Unit of Measure Display Rules (DEFAULT)

Display The Order Line Unit Of Measure In User Interface As:

The Unit Of Measure In Which The Order Was Placed

The Unit Of Measure In Which Inventory Is Stored

Do Not Show Unit of Measure

Table 5–24 Unit of Measure Display Rules

Field	Description
The Unit Of Measure In Which The Order Was Placed	Choose this option to display the order line UOM in the Sterling Call Center and Sterling Store user interface as it is specified on the order.
The Unit Of Measure In Which Inventory Is Stored	Choose this option to display the order line UOM in the Sterling Call Center and Sterling Store user interface as it is maintained for the item in inventory.
Do Not Show Unit of Measure	Choose this option to not display the UOM of an order line in Sterling Call Center and Sterling Store.

5.10.29 Configuring Print Options

You can specify when an order invoice is printed.

To configure order invoice print options:


1. From the Channel Applications Manager, select Order Administration.
2. Select Advanced Configurations.
3. Select Configure Print Options.
4. Select the appropriate radio button to configure when an order is printed. For field value descriptions, see [Table 5–25](#).
5. Click  to save your changes.

Figure 5–45 Configure Print Options

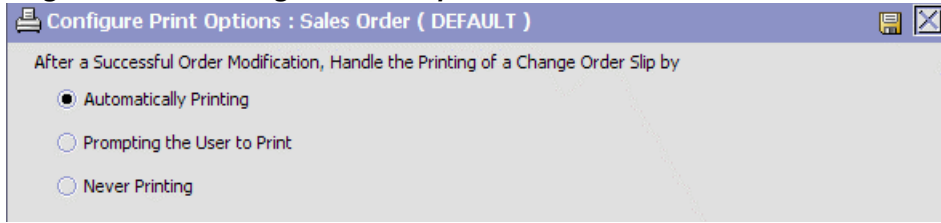


Table 5–25 Configure Print Options

Field	Description
Automatically Printing	Choose this option to automatically print a change order slip after each order.
Prompting the User to Print	Choose this option to prompt the user to print a change order slip after every order modification.
Never Printing	Choose this option to never prompt the user and never automatically print a change order slip.

5.10.30 Configuring User Interface Payment Handling

You can specify whether external payments are external to the call center, store, or external to both.

To configure external payment options:


1. From the Channel Applications Manager, select Order Administration.
2. Select Advanced Configurations.
3. Select Configure User Interface Payment Handling.
4. Check the appropriate box to specify if payment is handled externally to the call center or the store user interface. For field value descriptions, see [Table 5–26](#).
5. Click  to save your changes.

Figure 5–46 Configure Payment Options

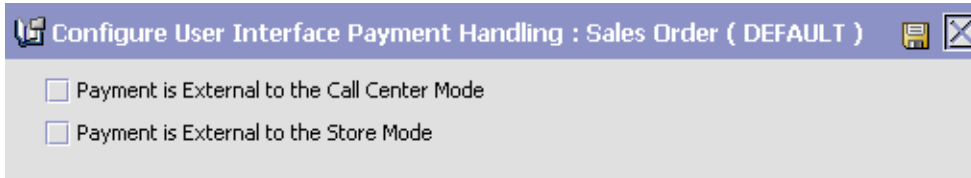


Table 5–26 Payment Handling Options

Field	Description
Payment is External to the Call Center	<p>Select this box to specify that Sterling Call Center and Sterling Store handles payments externally to the Call Center.</p> <p>When this option is selected, Sterling Call Center and Sterling Store does not prompt the user to enter payment information when creating or modifying an order at the call center. It is assumed that the payment is handled in the store or by an external system such as a point-of-sale system.</p> <p>Note: If you check this box, ensure to check the "Payment is External to the Store" box.</p>
Payment is External to the Store	<p>Select this box to specify that Sterling Call Center and Sterling Store handles payments externally to the Store.</p> <p>When this option is selected, Sterling Call Center and Sterling Store does not prompt the user to enter payment information when creating or modifying an order in the store. It is assumed that the payment is handled at the call center or by an external system such as a point-of-sale system.</p>

Note: If payment is handled externally, ensure to remove permissions for the Add Payment, View Payment Details, and Change Payment Method tasks.

5.10.31 Configuring Special Order Modification Rules

You can configure to allow cancellation or modification of fulfillment options for delivery and pickup order lines that are beyond the released status.

To configure the modification rules for delivery and pickup lines that are released:


1. From the Channel Applications Manager, select Order Administration.
2. Under Order Administration, select Advanced Configurations.
3. Select Configure Special Order Modification Rules.
4. Check the appropriate box to allow modification or cancellation. For more field value descriptions, see [Table 5–27](#).
5. Click  to save your changes.

Figure 5–47 Configure Special Order Modification Rules



Configure Special Order Modification Rules : Sales Order (DEFAULT)

Order Lines Being Picked Up

Allow Modification Of Fulfillment Options For Pickup Lines After Release

Allow Cancellation Of Pickup Lines After Release

Order Lines Being Delivered

Allow Modification Of Fulfillment Options For Delivery Lines After Release

Allow Cancellation Of Delivery Lines After Release

Table 5–27 Configure Special Order Modification Rules

Field	Description
Order Lines Being Picked Up	
Allow Modification of Fulfillment Options For Pickup Lines after Release	Check this box to enable the modification of fulfillment options for pickup lines after they are released.
Allow Cancellation of Pickup Lines after Release	Check this box to enable the cancellation of pickup lines after they are released.
Order Lines Being Delivered	

Table 5–27 Configure Special Order Modification Rules

Field	Description
Allow Modification of Fulfillment Options for Delivery Lines after Release	Check this box to allow modification of fulfillment options for delivery lines that are released.
Allow Cancellation of Delivery Lines after Release	Check this box to allow cancellation of delivery lines that are released.

5.10.32 Configuring Information Recorded During Level of Service Selection

You can configure to enable users to record committed dates when the user selects the level of service.

To enable users to record committed dates:


1. From the Channel Applications Manager, select Order Administration.
2. Select Advanced Configurations.
3. Select Configure Information Recorded During Level of Service Selection. For field value descriptions, see [Table 5–28](#).
4. Click  to save your changes.

Figure 5–48 Configure Information Recorded During Level of Service Selection

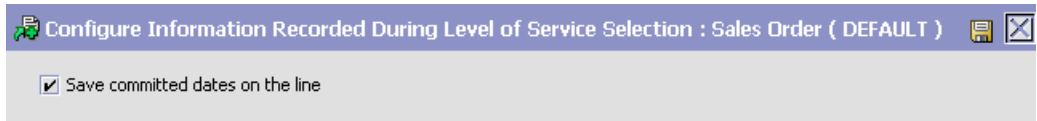


Table 5–28 Configure Information Recorded During Level of Service Selection

Field	Description
Save committed dates on the line	Check this box to use the committed date for the order.

5.10.33 Configuring Line Relationship Types

As an advanced configuration, you can define the line relationship types for an item. In the Selling and Fulfillment Foundation, ensure that you select the Consider For Sorting box available in the Line Relationship Type Details window. For more information about defining a line relationship type, see the *Sterling Distributed Order Management: Configuration Guide*.

5.10.34 Configuring FTC Compliance

You can tailor the FTC Compliance feature to meet the demands of your customized business processes.


1. From the Channel Applications Manager, select Configure Order Administration.
2. Under Order Administration, select Advanced Configuration.
3. Select Configure FTC Compliance Settings.
4. Enter information in the applicable fields. For field value descriptions, see [Table 5-29](#).
5. Click  to save your changes.

Figure 5–49 *FTC Compliance*

Table 5–29 *Configure FTC Compliance Settings*

Field	Description
Default First Promise Date (days)	Enter the number of days after the order date that the first promise date will be set to, if no promise date has been given to the customer. This value must be a positive integer that is less than 30.
Default Cancel Date (days)	Enter the number of days after first promise date to set the cancel date to, when a delay is found. This delay can be more than 30 days or an indefinite delay. The cancel date is the date when the order will be automatically cancelled if the customer does not respond. This value must be a positive integer that is less than 5.
Process Buffer Time (hours)	Enter the number of hours by which to extend the promise date in order to consider process constraints, such as small carrier or warehouse processing delays that cannot be taken into account in advance. If a shipment is delayed within this configured value of hours, no notification will be sent. If, at any time, the delay becomes greater than this configured value, a notification will be sent. This value must be less than 72 hours.
Cancel Reason Code	Enter the cancellation reason code that will be used when a line is cancelled in order to comply with FTC regulations.

5.10.35 Configuring External User Interface Rules

You can configure the default URL that should be used within the Sterling Call Center and Sterling Store user interface.


1. From the Channel Applications Manager, select Configure Order Administration.
2. Under Order Administration, select Advanced Configuration.
3. Select Configure External User Interface URL.
4. Enter the external user interface URL that should be used.
5. Click  to save your changes.

Figure 5–50 External User Interface Rules



5.10.36 Configuring Bundle Components Display

You can configure if the bundle components need to be displayed on the Order Summary, Return Summary, and Shipment Summary screens, and the Order Pricing Summary pop-up window.

To configure the display of bundle components:


1. From the Channel Applications Manager, select Configure Order Administration.
2. Select the Advanced Configurations link.
3. Select Configure Bundle Components Display.
4. Enter information in the applicable fields. For field value descriptions, see [Table 5-30](#).
5. Click  to save your changes.

Figure 5–51 Bundle Component Display



Table 5–30 Bundle Components Display

Field	Description
Display Component Items For Bundles In Summary Screens	Select this check box to display bundle components on the Order Summary, Return Summary, and Shipment Summary screens, and the Order Pricing Summary pop-up window. By default, this option is unchecked for all enterprises.

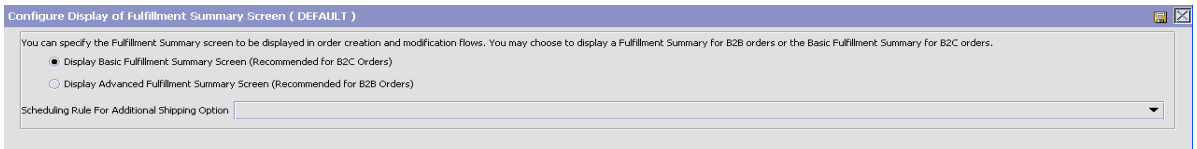
5.10.37 Configuring Display of Fulfillment Summary Screen

You can configure the type of fulfillment summary screen that should be displayed.


To configure the display of fulfillment summary screen:

1. From the Channel Applications Manager, select Order Administration.
2. Select Advanced Configurations.
3. Select Configure Display of Fulfillment Summary Screen.

Figure 5–52 Configure Display of Fulfillment Summary Screen



4. Select one of the following options:
 - Display Basic Fulfillment Summary Screen (Recommended for B2C Orders) to display the Basic Fulfillment Summary screen.

- Display Advanced Fulfillment Summary Screen (Recommended for B2B Orders) to display the Advanced Fulfillment Summary screen.
5. From the Scheduling Rule For Additional Shipping Option drop-down list, select the default scheduling rule to be used to display an additional shipping option in the Advanced Fulfillment Summary screen.
 6. Click 

5.10.38 Configuring Order Tags for Sales Orders

As an advanced configuration, you can configure order tags for sales orders. Order tags are used to determine the compatibility of an order with different versions of the Sterling Call Center and Sterling Store application. For more information about configuring order tags, see the *Sterling Distributed Order Management: Configuration Guide*.

5.11 Configuring Store Pickup Administration

This configuration enables you to indicate if your enterprise allows store pickup.

5.11.1 Configuring Store Pickup Rules

This configuration enables you to select the default settings when searching for alternate stores to fulfill an order.

To configure store pickup rules:


1. From the Channel Applications Manager, select Configure Store Pickup Administration.
2. Select Configure Store Pickup Rules.
3. Select the appropriate options for the store pickup rules. For field value descriptions, see [Table 5-31](#).
4. Click  to save your changes.

Figure 5–53 Store Pickup Rules

Table 5–31 Store Pickup Rules

Field	Description
Allow Pickup	Select this box to allow users to see store pickup options in Sterling Call Center and Sterling Store.
Distance Radius to Consider When Finding Nearby Stores	Enter a number to determine the radius to consider when finding nearby stores.
Distance Radius to Consider When Finding More Stores	Enter a number to determine the radius to consider when finding more stores.
Distance UOM	Select from the drop-down list the unit of measurement to use when defining the distance radius.

Table 5–31 Store Pickup Rules

Field	Description
Standard Search Fulfillment Type	Select the standard search fulfillment type from the drop-down list. When this option is selected, Sterling Call Center and Sterling Store will use this fulfillment type when searching for item availability in the Alternate Stores Search screen. This fulfillment type is used in a sourcing rule that determines the correct set of nodes to consider. For example, you may specify a fulfillment type that corresponds to a sourcing rule representing all nodes of the type 'store'. This ensures that all store nodes are considered when searching for alternate stores.
Extended Search Fulfillment Type	Select the extended search fulfillment type from the drop-down list. When this option is selected, Sterling Call Center and Sterling Store will use this fulfillment type when performing an extended stores search in the Alternate Store Search screen. This fulfillment type is used in a sourcing rule that determines the correct set of nodes to consider for an extended store search. For example, you may specify a fulfillment type that corresponds to a sourcing rule representing all nodes of type 'store', including distribution centers that allow customer pickup.

5.11.2 Configuring Verification Criteria

This configuration enables you to specify the customer verification criteria in the Customer Pick task.

To configure verification criteria:


1. From the Channel Applications Manager, select Configure Store Pickup Administration.
2. Select Advanced Configurations.
3. Select Configure Verification Criteria.
4. Enter information in the applicable fields. For field value descriptions, see [Table 5–31](#).
5. Click  to save your changes.

Figure 5–54 Customer Verification Type Details

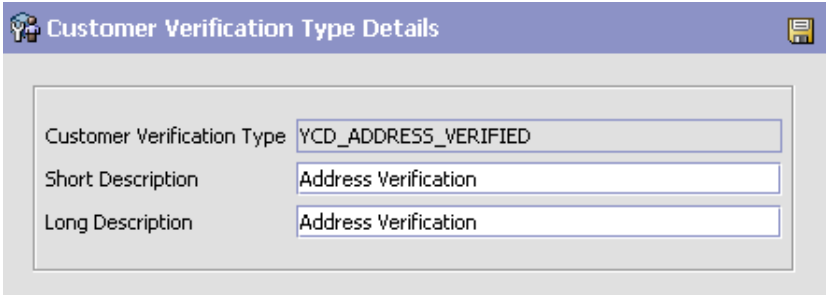


Table 5–32 Store Pickup Rules

Field	Description
Customer Verification Type	Indicates the customer verification type.
Short Description	Enter a short description of the customer verification type. This literal will be displayed on the customer pick and backroom pick screens. If you want mnemonics to appear for these literals when displayed on the screen, prefix the character which should appear as a mnemonic with the "&".
Long Description	Enter a more detailed description of the customer verification type.

5.12 Configuring Outbound Logistics

Sterling Call Center and Sterling Store Logistics Management provides the capabilities for managing and executing inbound and outbound delivery processes. It accepts, stores and then manages the execution of a delivery plan accounting for complex, multi-step, multi-leg, and multi-mode movement of goods, including practices such as merge-in-transit, continuous movement, lane optimization and cross-docking. It coordinates all activities among all parties in the delivery chain, and pro-actively monitors events and notifies participants when deviations have occurred. Shipment and delivery records are tied to the original sales or purchase orders for management of dependencies among orders and shipments. It provides post-delivery reconciliation of

performance, comparing actual vs. promised, SLA metric analysis, participant performance, and so forth.

5.12.1 Defining Carriers

You can define carriers that control logistics for your business. To define a carrier, you have to choose Carrier as the role for an organization and configure the carrier attributes.

For more information about assigning the organization's roles and participant associations, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

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

5.12.2 Defining Carrier Services

You can set up codes to identify different carrier services a carrier uses to ship orders. For more information about configuring cross application carrier services, see the *Sterling Logistics Management: Configuration Guide*.

5.12.3 Defining Types of Routing Guide Classifications

You can configure product-level control parameters for setting up routing rules. You can choose which product classifications to use for the purpose of routing guides. For more information about defining classification definitions, see the *Sterling Catalog Management: Configuration Guide*.

5.12.4 Configuring Outbound Constraints

You can configure outbound constraints that describe conditions that control how shipping is done. These include whether certain items can be shipped together, whether to use Economic Shipping Parameters, and how routing is performed. For more information about defining outbound constraints, see the *Sterling Distributed Order Management: Configuration Guide*.

5.12.5 Defining Shipment Modes

You can define shipment modes to indicate how an order is being shipped. For more information about defining shipment modes, see the *Sterling Distributed Order Management: Configuration Guide*.

5.12.6 Configuring Outbound Shipment Modification Rules

You can configure the types of modifications allowed on a shipment or shipment line when it is in a given status. For more information about configuring outbound shipment modification rules, see the *Sterling Logistics Management: Configuration Guide*.

5.13 Configuring Business Process Models and Monitoring Rules

The life-cycle of an order is long and complex. It starts with accurately capturing the customer's order into a system and then accurately fulfilling the order through delivery. After the customer receives their shipment, the order may need to be returned and the merchandise inspected to determine whether or not it can be repaired and placed back into inventory.

Orders go through a wide range of statuses throughout their fulfillment cycles. Orders are processed by transactions that perform modifications to the orders and their related entities such as shipments, invoices, and returns. These transactions also determine how an order moves from one status to the next. Additionally, an order in a particular status can go through a condition to determine which transaction should process it next.

An order's flow throughout its fulfillment cycle is represented graphically by a pipeline. The pipeline determines the statuses that an order can be in, which transactions process it, and which conditions it must go through in order to be fulfilled.

5.13.1 Configuring Order Fulfillment Process

You can configure transactions, statuses, pipelines, and services associated with the order fulfillment process. For more information about defining process type pipelines, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.13.2 Configuring Shipping Process

You can configure transactions, statuses, pipelines, and services associated with the shipping process for an order. For more information about configuring an order document's shipment-specific components, see the *Sterling Distributed Order Management: Configuration Guide*.

5.13.3 Configuring Delivery and Installation Process

You can configure transactions, statuses, pipelines, and services associated with the delivery and installation process for an order. For more information about defining a value-added services process model, see the *Sterling Distributed Order Management: Configuration Guide*.

5.13.4 Configuring Return Fulfillment Process

You can configure transactions, statuses, pipelines, and services associated with the return fulfillment process. For more information about defining process type details, see the *Sterling Reverse Logistics: Configuration Guide*.

5.13.5 Configuring Receipt Process

You can configure transactions, statuses, pipelines, and services associated with the receipt process. For more information about defining process type details, see the *Sterling Reverse Logistics: Configuration Guide*.

5.13.6 Defining Order Milestones

You can define milestones for the fulfillment process of a sales order. For more information about defining milestones, see the *Sterling Distributed Order Management: Configuration Guide*.

5.13.7 Defining Order Monitoring Events

You can define your own monitoring events for the fulfillment process of a sales order. You can also control which event to raise when an alert is detected by the order monitor. For more information about defining monitoring events, see the *Sterling Distributed Order Management: Configuration Guide*.

5.13.8 Defining Milestones for Returns

You can define milestones for the fulfillment process of a return order. For more information about defining milestones, see the *Sterling Reverse Logistics: Configuration Guide*.

5.13.9 Defining Monitoring Events for Returns

You can define monitoring events for the fulfillment process of a return order. You can also control which event to raise when an alert is detected by the return order monitor. For more information about defining monitoring events, see the *Sterling Reverse Logistics: Configuration Guide*.

5.13.10 Configuring Transactions and Events for Inventory, Item, and UI

As an advanced configuration, you can configure transactions, events, and services associated to miscellaneous processes in Sterling Call Center and Sterling Store, including inventory, item, and UI related processes. For more information about defining transactions, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.13.11 Configuring Document and Process Types

As an advanced configuration, you can configure document types and their corresponding process types. You can create new document types, document template definitions, item validation rules, and document type parameters. For more information about configuring process models, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.14 Configuring Inventory Synchronization

When promising orders to customers, it can be challenging to offer them an exact inventory picture across all nodes. The inventory that is used to promise orders is not necessarily on-hand. It could be in transit or a purchase order could have just been placed and the retailer may feel comfortable with using a certain percentage of that future supply to fulfill the future demand.

5.14.1 Configuring Inventory Related Rules

You can configure rules associated with inventory availability, monitoring, and costing. For more information about configuring inventory rules, see the *Sterling Global Inventory Visibility: Configuration Guide*.

5.14.2 Configuring Supply and Demand Types

As an advanced configuration, you can define various supply and demand types. For more information about defining supply types, demand types, and considerations, see the *Sterling Global Inventory Visibility: Configuration Guide*.

5.14.3 Configuring Availability Safety Factors

As an advanced configuration, you can specify safety factors to apply to each supply type when using them for answering availability questions. For more information about the inventory availability safety factor, see the *Sterling Global Inventory Visibility: Configuration Guide*.

5.14.4 Configuring how Supply and Demand are Changed with Order Status

As an advanced configuration, you can control the movement of quantity in different supply and demand types as an order progresses through its life-cycle. The status inventory types are used to associate statuses with specific supply and demand types according to the organization. For more information about defining status inventory types, see the *Sterling Distributed Order Management: Configuration Guide*.

5.14.5 Configuring Inventory Node Type Rules

As an advanced configuration, you can configure inventory node type rules. These rules allow for the configuration of inventory level node type rules to determine whether to apply on-hand and future safety factors to inventory. For more information about configuring inventory node type rules, see the *Sterling Global Inventory Visibility: Configuration Guide*.

5.15 Configuring Pricing

Important: The pricing functionality explained in this section and the corresponding sub-sections have been deleted from Sterling Call Center and Sterling Store, Release 8.5. From Release 8.5, the functionality is available in Business Center. For more information about the new pricing functionality, see the *Selling and Fulfillment Foundation: Pricing Concepts Guide* and the *Business Center: Pricing Administration Guide*.

This configuration allows you to define price lists. If you use an external pricing engine, you can skip this configuration entirely.

5.15.1 Defining Price Lists

You can specify the prices of your items. Pricing can be defined based on quantity ordered and/or region.

5.15.2 Defining Price Programs

Price programs are sets of price lists with effective start and end dates. An order is associated to a price program and when the system is pricing an order, it looks through the price lists associated to the order's price program and calculates the appropriate price.

5.15.3 Selecting Region Schema for Pricing Definition

As an advanced configuration, you can select the region schema for pricing. Sterling Call Center and Sterling Store supports pricing based on geography.

5.16 Configuring Returns Administration

Sterling Call Center and Sterling Store Reverse Logistics delivers condition-based returns processing, including execution and management of associated processes, such as exchange orders, refurbishment and repair requests, and return disposition. With chained order capability, Reverse Logistics can link multiple returns or repair requests to original sales orders, providing repair life-cycle tracking. It

manages reverse inventory tracking back to the appropriate node based upon appropriate business rules. It handles return receipts, disposition, and initiates the crediting process.

5.16.1 Configuring Return Order Modification Rules

You can configure the modification rules for a return order to allow users to perform modifications on a return order that is in a particular status. For more information about defining modification rules, see the *Sterling Reverse Logistics: Configuration Guide*.

5.16.2 Defining Return Reasons

This configuration provides a list of reason codes that are available during the return process.

To configure return reasons:


1. From the Channel Applications Manager, select Configure Return Administration.
2. Under Configure Return Administration, select Define Return Reasons.
3. Enter information in the applicable fields. For field value descriptions, see [Table 5-33](#).
4. Click  to save your changes.

Figure 5–55 Return Reasons Details
Table 5–33 Return Reason Details

Field	Description
Return Reasons	Enter a name for the return reason.
Short Description	Enter a short description of the return reason.
Long Description	Enter a more detailed description of the return reason.
RE-price Sales Order	Check this to reprice the sales order with the reduced qty.

5.16.3 Defining Charge Override Reasons

This configuration allows the users to define charge override reasons.

To configure charge override reasons:


1. From the Channel Applications Manager, select Configure Return Administration.
2. Under Configure Return Administration, select Define Charge Override Reasons. For field value descriptions, see [Table 5–34](#).
3. Enter information in the applicable fields.
4. Click  to save your changes.

Figure 5–56 Charge Override Reasons Details

Table 5–34 Charge Override Reasons Details

Field	Description
Charge Override Reasons	Enter the name of the charge override reasons.
Short Description	Enter a short description of the charge override reason.
Long Description	Enter a more detailed description of the charge override reason.

5.16.4 Defining Receiving Disposition Codes

This configuration provides a list of receiving disposition codes that are available during the return process.

To configure receiving disposition codes:


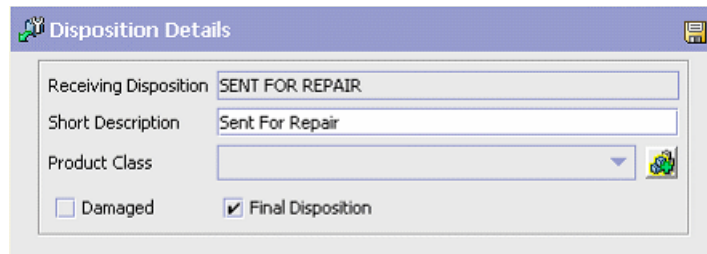
1. From the Channel Applications Manager, select Configure Return Administration.
2. Under Configure Return Administration, select Define Return Reasons.
3. Enter information in the applicable fields. For field value descriptions, see [Table 5–35](#).
4. Click  to save your changes.

Figure 5–57 *Disposition Details*

Table 5–35 *Disposition Details*

Field	Description
Receiving Disposition	Enter a name for the receiving disposition.
Short Description	Enter a short description of the receiving disposition.
Product Class	Select a product class for the receiving disposition.
Damaged	Check this box to indicate that the disposition is for damaged items.
Final Disposition	Check this box to indicate that the disposition is a final disposition.

5.16.5 Configuring Rules for Wrongly Shipped Items

This configuration enables you to define reship reasons for wrongly shipped items and whether a customer can return unknown items that were wrongly shipped.

To configure rules for wrongly shipped items:


1. From the Channel Applications Manager, select Configure Return Administration.
2. Under Configure Return Administration, select Configure Rules for Wrongly Shipped Items.
3. Enter Information in the applicable fields. For field value descriptions, see [Table 5–36](#).
4. Click  to save your changes.

Figure 5–58 Rules for Wrongly Shipped Items

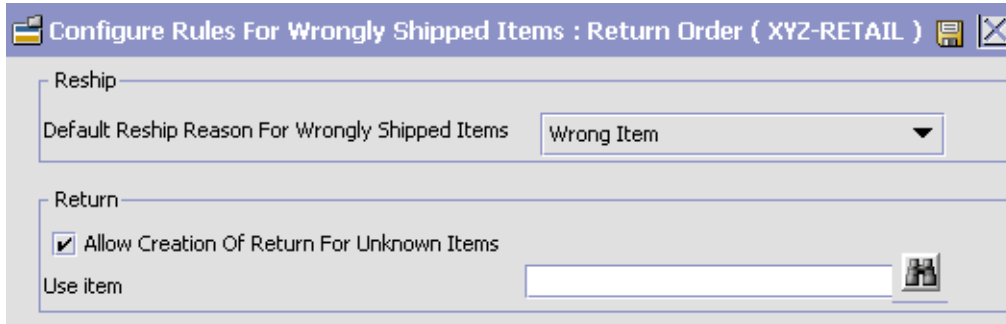


Table 5–36 Wrongly Shipped Items Details

Field	Description
Drop-down list for Default Reship Reason for Wrongly Shipped Items	Select among the reship reasons displayed in the drop-down list. See Section 5.10.10, "Defining Reship Reasons" for more information.
Check box for Allow Creation of Return for Unknown Items	Select this check box to enable a CSR to return unknown items.
Use Item field	Enter the temporary item ID that will be used to identify unknown items until these items can be identified during receiving.

5.16.6 Configuring Return Entry Rules

This configuration provides a list of return entry rules that are available during the return process.

To configure return entry rules:


1. From the Channel Applications Manager, select Configure Return Administration.
2. Under Configure Return Administration, select Configure Return Entry Rules.
3. Select the applicable fields or check boxes. For descriptions, see [Table 5–37](#).
4. Click  to save your changes.

Figure 5–59 Return Entry Rules

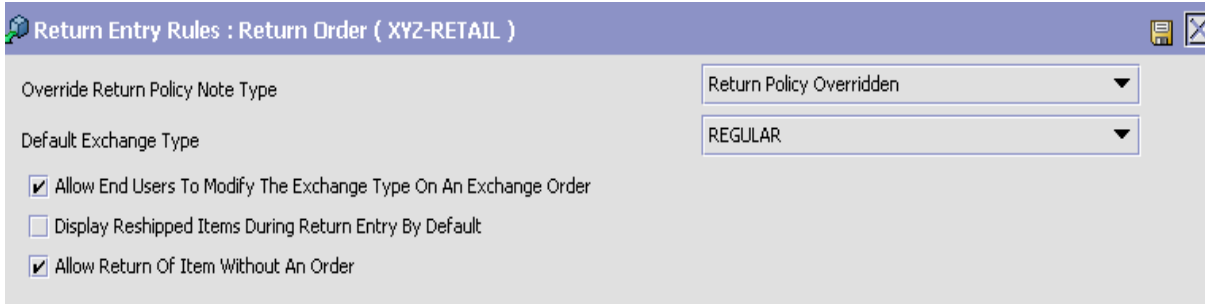


Table 5–37 Return Entry Rules Details

Field/Check Box	Description
Override Return Policy Note Type	The note type used when overriding the return policy. The default is Return Policy Overridden, which, when enabled, allows users to override the return policy. For more information about configuring return note reasons, see Section 5.16.7, "Defining Return Note Reasons" .
Default Exchange Type	This specifies what your enterprise defaults to as the exchange type: REGULAR, ADVANCED, or PREPAID. The default exchange type for the enterprise is REGULAR.
Allow End Users to Modify the Exchange Type on an Exchange Order	Enables users to access and change the Exchange Type.
Display Reshipped Items During Return Entry by Default	When this check box is selected, reshipped lines are displayed when the screen loads.
Allow Return of Items without an Order	Enables customers to return items without an order. When this check box is selected, the Items without an order tab is displayed on the line selection screen.

5.16.7 Defining Return Note Reasons

This configuration provides a list of note reasons that are available during the return process.

To define return notes reasons:


1. From the Channel Applications Manager, select Configure Return Administration.
2. Under Configure Return Administration, select Define Return Note Reasons.
3. Enter information in the applicable fields. For field value descriptions, see [Table 5–38](#).
4. Click  to save your changes.

Figure 5–60 Note Reason Details

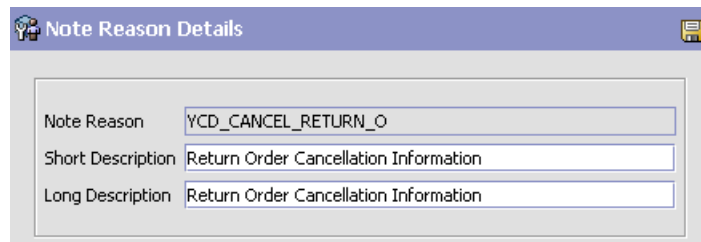


Table 5–38 Return Note Reasons

Field	Description
Note Reason	Enter a name for the note reason.
Short Description	Enter a short description of the note reason
Long Description	Enter a more detailed description of the note reason.

5.16.8 Defining Return Cancellation Reasons

This configuration provides a list of cancellation reasons that are available during the return process.

To configure return cancellation reasons:

1. From the Channel Applications Manager, select Configure Return Administration.
2. Under Configure Return Administration, select Define Return Cancellation Reasons.


3. Enter information in the applicable fields. For field value descriptions, see [Table 5–39](#).
4. Click  to save your changes.

Figure 5–61 Cancellation Reason Details

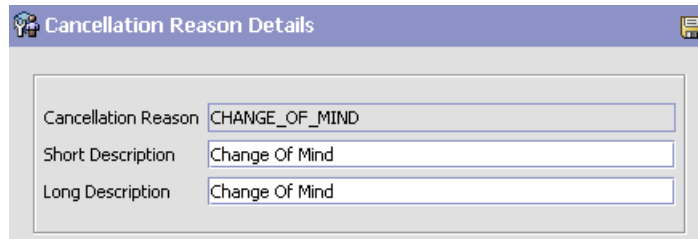


Table 5–39 Return Cancellation Reasons

Field	Description
Cancellation Reason	Enter a name for the cancellation reason.
Short Description	Enter a short description of the cancellation reason
Long Description	Enter a more detailed description of the cancellation reason.

5.16.9 Defining Return Types and Return Line Types

As an advanced configuration, you can define return types and return line types. Return orders and lines can be categorized into multiple types such as exchange and credit. This configuration allows you to define a valid list of return types, line types, and other codes that help in this categorization. For more information about configuring a document’s attributes, see the *Sterling Distributed Order Management: Configuration Guide*.

5.16.10 Configuring Return Receipt Handling

As an advanced configuration, you can define rules to determine how return receipts must be handled. For more information about defining receipt preferences, see the *Sterling Reverse Logistics: Configuration Guide*.

5.16.11 Defining Charge Categories and Names

As an advanced configuration, you can define charge definitions that can be associated with orders and invoices by creating charge categories. For more information about defining charge definitions, see the *Sterling Reverse Logistics: Configuration Guide*.

5.16.12 Configuring Extraneous Item/Wrong Item Rules

This configuration provides line types for extraneous items and for wrongly shipped items.

To configure extraneous and wrong item rules:


1. From the Channel Applications Manager, select Configure Return Administration.
2. Under Configure Return Administration, select Advanced Configurations.
3. Select Configure Extraneous Item/Wrong Item Rules.
4. Enter information in the applicable fields. For field value descriptions, see [Table 5-40](#).
5. Click  to save your changes.

Figure 5-62 Extraneous Item/Wrong Item Line Type

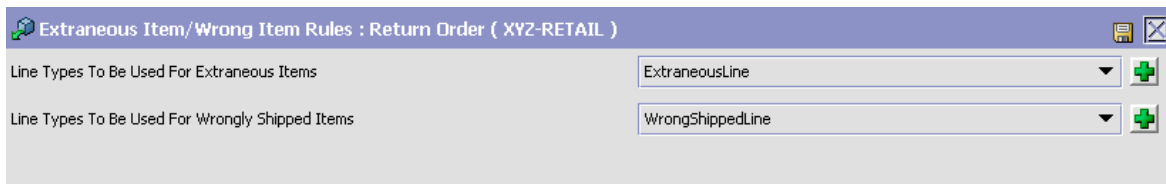


Table 5-40 Extraneous Item/Wrong Item Line Type Details

Field	Description
Line Types to Be Used For Extraneous Items	Define a line type for extraneous returns, as shown in Figure 5-62 .
Line Types to Be Used For Wrongly Shipped Items	Define a line type for wrongly shipped items in the pop-up window similar to the one shown in Figure 5-62 .

5.17 Configuring Alert Management

Sterling Call Center and Sterling Store's Supply Chain Event Management provides fully integrated event configuration, status and event monitoring, and alert handling capabilities. It provides the underlying mechanism for setting and monitoring conditions or events that drive transactional activity within the critical supply chain processes such as fulfillment, inventory management, and purchasing. The event engine enables processes to be modeled and managed based upon events occurring rather than within a pre-defined, hard-coded application procedure. Exceptions can be handled automatically as well as through configurable exception consoles with full tracking, automatic escalation and resolution with complete audit history.


5.17.1 Defining Alert Types

You can classify the different alerts or exceptions that are raised by the system. For more information about defining exception types, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.17.2 Defining Alert Queues

You can define alert queues that can be used to group related alerts. Users can subscribe to one or more queues and can process alerts from their subscribed queues. For more information about configuring alert queues, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.17.3 Configuring User Alert Notifications

This configuration enables you to notify users about an alert. An  (alerts) icon is displayed with the current number of open alerts.

Note: To notify users about the alerts raised in their respective queues, ensure that the queues to which the users are subscribed to are audited.

To configure the user alert notifications:


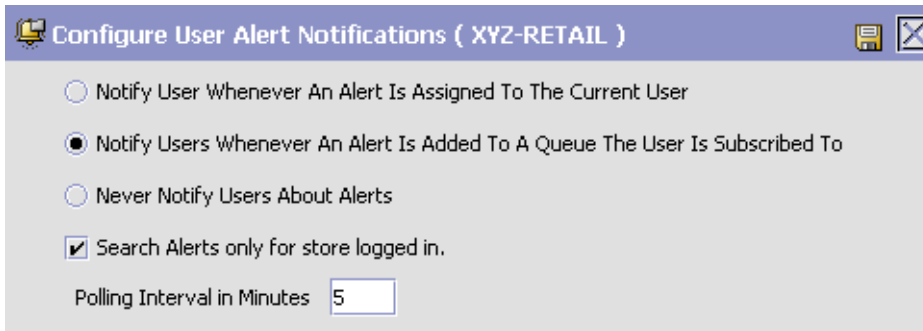
1. From the Channel Applications Manager, select Configure Alert Management.
2. Under Configure Alert Management, select Configure User Alert Notifications.
3. Choose the appropriate button to indicate users about alert notifications. For field value descriptions, see [Table 5-41](#).
4. Click  to save your changes.

Figure 5-63 Configure User Alert Notifications



Configure User Alert Notifications (XYZ-RETAIL)

Notify User Whenever An Alert Is Assigned To The Current User
 Notify Users Whenever An Alert Is Added To A Queue The User Is Subscribed To
 Never Notify Users About Alerts

Search Alerts only for store logged in.

Polling Interval in Minutes

Table 5-41 User Alert Notifications

Field	Description
Notify User Whenever an Alert is Assigned to the Current User	<p>Select this to notify the current user that an alert assigned.</p> <p>If this option is chosen, you must set the time interval (in minutes) for Sterling Call Center and Sterling Store to search for new alerts. The default time is set to 5 minutes.</p>
Notify Users Whenever an Alert is Added to a Queue the User is Subscribed To	<p>Select this to notify users about an alert added to a queue to which that user is subscribed.</p> <p>If this option is chosen, you must set the time interval (in minutes) for Sterling Call Center and Sterling Store to search for new alerts. The default time is set to 5 minutes.</p> <p>By default, this option is selected.</p>

Table 5–41 User Alert Notifications

Field	Description
Never Notify Users About Alerts	Select this if you do not want to notify users about alerts.
Search Alerts only for store logged in	Select this option to search alerts only for the store logged in
Polling Interval in Minutes	Enter the polling interval in minutes to poll for new alerts for which users need to be notified. The polling interval should be a valid number between 1 and 99,999.

5.18 Configuring User Security

Security Management enables you to ensure that each user accesses only the information that is appropriate for carrying out their tasks. A user is limited to access only those resources to which they have permission.

5.18.1 Defining User Roles

You can define different user roles or user groups for your organization. For more information about defining user groups, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.18.2 Defining Users

This configuration enables you to define users for your organization.

Defining Users for a Call Center

[Table 5–42](#) provides the menu description for call center users.

Table 5–42 Menus for Call Center Users

Users	Menu Description
All Users	Default Menu

Defining Users for a Store

[Table 5–43](#) provides the menu description for store users.

Table 5–43 *Menus for Store Users*

Users	Menu Description
All Users	Default Store Menu

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

5.18.3 Configuring Teams

As an advanced configuration, you can define teams and associate users to them. You cannot associate one user to multiple teams. When defining a team, ensure that it has access to the enterprise to which it belongs.

Sterling Call Center and Sterling Store enables users to log in from one store to another store. To provide this capability, configure the team, which provides access to specific nodes and adds users to that team. For more information about defining teams, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.18.4 Defining Rules for Password Policies

As an advanced configuration, you can define and configure rules that govern the password policies. Rules can be created based on pre-defined rule types. For more information about defining rules, see the *Selling and Fulfillment Foundation: Password Policy Management Guide*.

5.18.5 Configuring Policy Parameters

As an advanced configuration, you can configure a password policy parameter once the rules have been defined. While rule definition specifies the framework, password policy parameters allow you to specify the actual values required for the rules. These values are used for rule validation. For more information about configuring policy parameters, see the *Selling and Fulfillment Foundation: Password Policy Management Guide*.

5.18.6 Defining Password Authentication Questions

As an advanced configuration, you can define a set of questions for user authentication during a new password request, password expiry, forgot

password or password reset. These questions are set at the enterprise level. For more information about defining questions, see the *Selling and Fulfillment Foundation: Password Policy Management Guide*.

5.18.7 Configure Password Policy Rules

As an advanced configuration, you can define a password policy rule to send a confirmation to the user when the user's password is reset. For more information about configuring the rule to send confirmation to users on password reset, see the *Selling and Fulfillment Foundation: Password Policy Management Guide*.

5.19 Configuring System Administration

The System Management module enables you to manage integration and agent servers, view the properties of your application servers, enable database caching, and increase trace log output for APIs, user exits, services, and agents.

The System Management module provides features to administer and monitor various components that make up Sterling Call Center and Sterling Store. The System Management Console provides a complete picture of Sterling Call Center and Sterling Store while it is running. Additionally, the health monitor agent can alert system administrators when a problem happens such as an application server going down or an agent server not processing tasks.

5.19.1 Configuring System Purge Criteria

You can define the parameters to be used when purging system-related records from Sterling Call Center and Sterling Store. For more information about defining purge criteria, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.19.2 Configuring Sales Order Purge Criteria

You can define the parameters to be used when purging sales order-related records from Sterling Call Center and Sterling Store. For more information about configuring a document's purge criteria, see the *Sterling Distributed Order Management: Configuration Guide*.

5.19.3 Configuring Work Order Purge Criteria

You can define the parameters to be used when purging work order-related records from Sterling Call Center and Sterling Store. For more information about defining purge criteria, see the *Sterling Warehouse Management System: Configuration Guide*.

5.19.4 Configuring Return Order Purge Criteria

You can define the parameters to be used when purging return order-related records from Sterling Call Center and Sterling Store. For more information about configuring a document's purge criteria, see the *Sterling Reverse Logistics: Configuration Guide*.

5.19.5 Defining Agent Criteria Groups

You can configure the agent criteria groups that classify the nodes. This is a node level configuration that indicates whether the agent is handling high or low volume data. For more information about defining agent criteria groups, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.19.6 Defining Initial Context Factory Codes

You can configure additional initial context factory codes to define the class providing an initial context implementation for the application server to enable remote java clients to connect. For more information about defining initial context factory codes, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.19.7 Defining View Servers

You can view a list of configured servers for agents and services. You can specify server parameters like monitor start time and idle wait time. For more information about viewing the list of configured servers, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.19.8 Configuring Health Monitor Rules

You can configure parameters for monitoring the health of your Sterling Call Center and Sterling Store. For more information about defining

health monitor rules, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.19.9 Configuring Pagination Rules

As an advanced configuration, you can configure rules that determine the display of the pagination panel. You can configure to allow search on history records and also if the total number of records for a search criteria should be displayed.

To configure the pagination rules:


1. From the Channel Applications Manager, select System Administration.
2. Select the Advanced Configurations link.
3. Select Configure Pagination Rules.
4. Choose the appropriate options. For field value descriptions, see [Table 5-44](#).
5. Click  to save your changes.

Figure 5–64 *Pagination Rules*

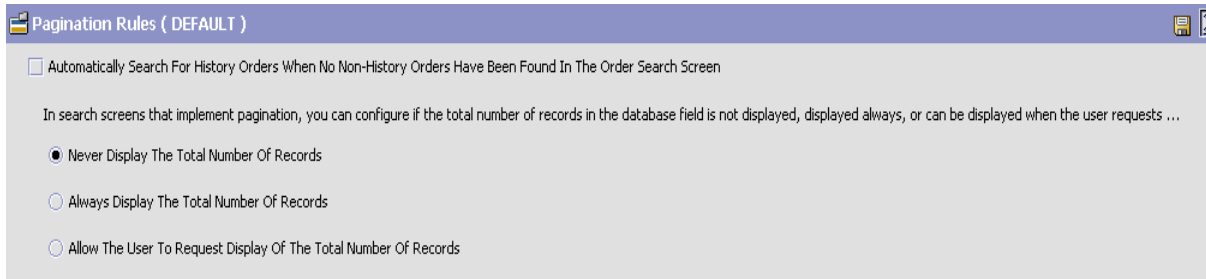


Table 5–44 *Pagination Rules*

Field	Description
Automatically Search For History Orders When No Non-History Orders Have Been Found In the Order Search Screen	Select this option to search for history records when non-history records are not found in the Order Search screen.
Never Display The Total Number Of Records	Select this option not to display the total number of records.
Always Display The Total Number Of Records	Select this option to display the total number of records.
Allow The User To Request The Display The Total Number Of Records	Select this option to allow to user to request for the display the total number of records.

5.19.10 Configuring Announcement Rules

As an advanced configuration, you can configure the exception type and the polling interval for announcements.

To configure the announcement rules:

1. In the Channel Applications Manager, click System Administration.
2. Click the Advanced Configurations link.
3. Click Configure Announcement Rules.


4. Select an alert type from the Alert Type To Be Used For Announcement drop-down list.
5. Enter the Polling Interval in Minutes to specify the intervals at which the Sterling Call Center and Sterling Store application must search for new announcements. By default, the polling interval is set to 10 minutes.
6. Click  to save your changes

Figure 5–65 Configure Announcement Rules



Configure Announcement Rules (DEFAULT)	
Alert Type To Be Used For Announcement	Announcement
Announcement Polling Interval in Minutes	10

5.19.11 Defining Qualified Tag Type

As an advanced configuration, you can define qualified tag type details. For more information about defining qualified tag types, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.19.12 Defining Qualified Tags

As an advanced configuration, you can define a list of Qualified Tags for the rules and common codes pertaining to a particular version of the Sterling Call Center and Sterling Store application. You can associate one or more qualified tags with a particular Qualified Tag Type. For more information about defining Qualified Tags, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.19.13 Configuring Qualified Tag and Application Compatibility

As an advanced configuration, you can associate the Installed Application Code and Application Version with a particular Qualified Tag. For more information about configuring the qualified tag and application compatibility, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.19.14 Configuring Version-Specific Rules


As an advanced configuration, you can specify different values for rules based on the version of the application that is accessing the rule.


To configure version-specific rules:

1. In the Channel Applications Manager, select System Administration.
2. Select Advanced Configurations.
3. Click Configure Version-Specific Rules.

4. To configure the rules with the default values, select the Default Value option.

To configure the rules based on a version-specific qualifier, select the Version-Specific Rule For Qualified Tag option and select a qualifier from the Qualifier drop-down list.

5. In the Rules For Displaying Fulfillment Summary Screens panel, select the type of Fulfillment Summary screen to be displayed, and select a scheduling rule from the Scheduling Rule For Additional Shipping Option drop-down list. Click .


- In the Rule For Enabling Tax Options For Business Customers panel, select the Change Tax Options for a business customer check box to enable users to change the tax options defined for a business customer. Click .

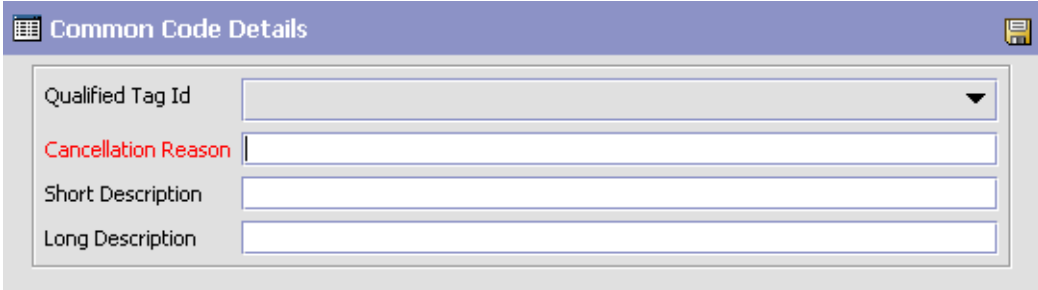
Note: If you have selected a qualifier, but have not configured any of the rule values, a message is displayed, indicating that the rule values are not configured for the qualifier.

5.19.15 Configuring Version-Specific Common Codes for Sales Orders

As an advanced configuration, you can specify different values for the common codes based on the version of the application.

To configure version-specific common codes:

- In the Channel Applications Manager, select System Administration.
- Select Advanced Configurations.
- Click Configure Version-Specific Common Codes for Sales Orders.
- Click  to add a new cancellation reason.



Common Code Details

Qualified Tag Id

Cancellation Reason

Short Description

Long Description

5. Enter information in the applicable fields. For field value descriptions, see [Table 5-45](#).

Table 5-45 Cancellation Reason Details


Field	Description
Qualified Tag Id	Select a Qualifier Tag ID from the drop-down list.
Cancellation Reason	Enter a cancellation reason.
Short Description	Enter a short description for the cancellation reason.
Long Description	Enter a long description for the cancellation reason.

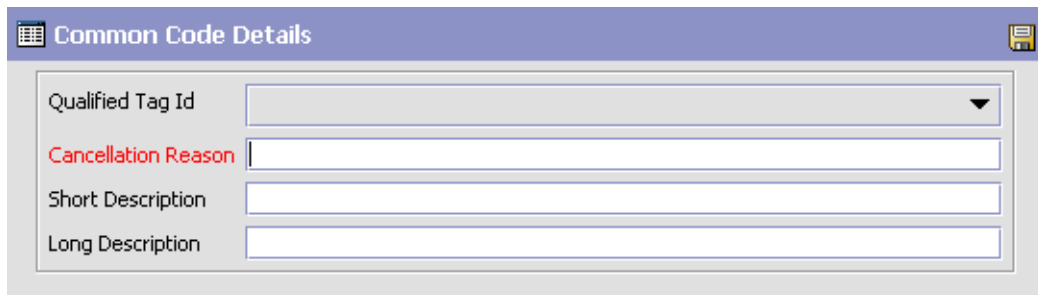
6. Click .

5.19.16 Configuring Version-Specific Common Codes for Return Orders

As an advanced configuration, you can specify different values for the common codes based on the version of the application.

To configure version-specific common codes:

1. In the Channel Applications Manager, select System Administration.
2. Select Advanced Configurations.
3. Click Configure Version-Specific Common Codes for Return Orders.
4. Click  to add a new cancellation reason.



Common Code Details

Qualified Tag Id

Cancellation Reason

Short Description

Long Description

5. Enter information in the applicable fields. For field value descriptions, see [Table 5-46](#).

Table 5-46 Cancellation Reason Details

Field	Description
Qualified Tag Id	Select a Qualifier Tag ID from the drop-down list.
Cancellation Reason	Enter a cancellation reason.
Short Description	Enter a short description for the cancellation reason.
Long Description	Enter a long description for the cancellation reason.

6. Click 

5.20 Extending and Customizing the Application

The user interfaces within Sterling Call Center and Sterling Store can be customized to meet your specific business needs. For more information about customizing the application, see [Chapter 6, "Extending and Customizing the Application"](#).

5.20.1 Configuring User Exit Management

You can configure user exits to enable business logic extensions to the various transactions. The transactions invoke user exits so that you may plug-in custom logic by implementing these pre-defined user exits. For more information about defining user exit implementations, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.20.2 Customizing the Application Menus

You can define menus to allow users to view them after logging into the application. For more information about defining menus, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.20.3 Defining Extended Application Resources

You can define new resources that you can use to enable your extended components that are permission-controlled. When you create a resource, you can grant or revoke permission to this resource through the user role

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

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

5.20.4 Defining Themes

You can define new color themes that are used in the Selling and Fulfillment Foundation Console and the Applications Manager screens. For more information about defining themes, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.20.5 Defining Custom Common Code Types

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

5.20.6 Defining Custom Common Codes

You can configure common code values for the custom common code types for your application. For more information about defining custom common code values, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.20.7 Defining Custom Error Codes

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

5.21 Configuring Store-Specific Tasks

Sterling Call Center and Sterling Store enables you to configure specific tasks for a store belonging to a particular Enterprise.

5.21.1 Defining Store Users

You can define the user of a store belonging to the Enterprise. A user is a single person assigned with a certain task, such as Hub Administrator or store manager, depending on what role the user plays in the organization. For more information about defining users, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.21.2 Configuring Store Devices

You can configure store devices such as printers, weighing scale, and so forth. For more information about defining a device type, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.21.3 Configuring Store Print Documents

You can configure the print documents pertaining to a store such as receiving worksheet, cycle count worksheet, and so forth. For more information about defining print documents, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.21.4 Configuring Return Order Receiving Preferences

You can configure the return order receiving preferences pertaining to a store. For more information about defining receiving preferences, see the *Sterling Warehouse Management System: Configuration Guide*.

5.21.5 Configuring Data Security

As an advanced configuration, you can control access to data by the users. If a user is not associated with a data security group, the user is considered to have default access. For more information about defining data security groups, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

5.21.6 Configuring Barcodes

As an advanced configuration, you can configure barcodes which are machine-readable symbols comprising black-and-white patterns of bars and stripes, or in some cases checkerboard-like grids. Bits of information are encoded within barcodes. This data is read by barcode scanners, and is often used in conjunction with databases. For more information about defining barcodes, see the *Sterling Warehouse Management System: Configuration Guide*.

5.21.7 Configuring Backroom Pick Rules

As an advanced configuration, you can specify if the shipment should move to the `Ready for Backroom Pick` status in the shipment pipeline.

To configure a backroom pick rule:


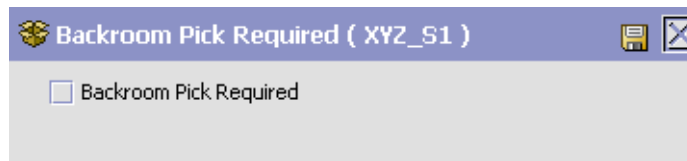
1. From the Channel Applications Manager, select Store-Specific Tasks.
2. Select the Advanced Configuration link.
3. Select Configure Backroom Pick Rules. The Load Store Configuration pop-up screen is displayed. Select the store from the drop-down list and click OK. The Backroom Pick Required screen is displayed.
4. Select the Backroom Pick Required check box if the shipment should move to `Ready for Backroom Pick` status in the shipment pipeline.
5. Click  to save your changes.

Figure 5–66 Backroom Pick Required



6

Extending and Customizing the Application

The user interfaces within Sterling Call Center and Sterling Store can be customized to meet your specific business needs. Tools are provided to help you make customizations for the following:

- [Order Entry Screens Customization](#)
- [Add Lines To Order Screens Customization](#)
- [Extending Actions](#)
- [Shared Tasks](#)
- [User Interface Customization](#)
- [Address Panel Customization](#)
- [Opening New Related Tasks in the Order Editor](#)
- [Opening the Screens of the Sterling Call Center and Sterling Store Application in an Editor](#)
- [Populating Notes based on the Note Type](#)

6.1 Order Entry Screens Customization

This section explains how to:

- Replace the existing order entry screens with customized screens.
- Customize the create order navigation panel.

Replacement of the Existing Order Entry Screens with Customized Screens

You can replace the following order entry screens with customized screens:

- Customer Identification: Shipping Address screen—This screen creates or updates an order with the shipping address by calling the createOrder or changeOrder API respectively.
- Customer Identification: Billing Address screen—This screen updates an order with the billing address by calling the changeOrder API.
- Order Line Entry screen—This screen creates or updates an order with new order lines by calling the createOrder or changeOrder API respectively.
- Payment Confirmation: Simple Payment Confirmation screen—This screen updates the order with new payment methods and the amount to be charged against each payment method. You can confirm the order by calling the confirmDraftOrder API.
- Payment Confirmation: Return and Exchange Payment Confirmation screen—This screen updates an order with new payment methods and the amounts to be charged against each payment method for return and exchange orders. You can confirm the exchange order by calling the confirmDraftOrder API.

Navigation Panel (Create Order) Customization

Sterling Call Center and Sterling Store enables you to customize the Create Order Navigation panel in an extension plug-in. The extension plug-in must register a new metadata XML with the Sterling Call Center and Sterling Store plug-in.

Metadata XML Structure

The metadata XML must adhere to the following structure:

```
<?xml version="1.0" encoding="UTF-8"?>
<BreadCrums>
  <WizardEntity Sequence="" id="" Impl="" Category=""/>
</BreadCrums>
```

You can register the metadata XML during the start up of the extension plug-in by invoking the following static method:

```
YCDOrderEntryUtils.registerNavigationPanelMetaData(Element
navigationPanelMetaDataToRegister)
```

Note: The Category specified in the metadata XML is a bundle key, the value of which is displayed as a label for the bread crumb. If this bundle key value comprises of multiple words, it is recommended to use new line characters in the bundle key value in order to avoid the label from being truncated or blurred.

6.2 Add Lines To Order Screens Customization

This section explains how to customize the add lines to order navigation panel.

Navigation Panel (Add Lines To Order) Customization

Sterling Call Center and Sterling Store enables you to customize the Add Lines To Order Navigation panel in an extension plug-in. The extension plug-in must register a new metadata XML with the Sterling Call Center and Sterling Store plug-in.

You can register the metadata XML during the start up of the extension plug-in by invoking the following static method:

```
YCDOrderEntryUtils.registerNavigationPanelMetaDataForAddLinesT
ask(ElementnavigationPanelMetaDataToRegister)
```

The metadata XML must adhere to the structure specified in [Metadata XML Structure](#).

6.3 Extending Actions

In order to extend the actions in the Order Search, Item Search and Appointment screens, in Sterling Call Center and Sterling Store, the Rich Client Platform provides the following action classes:

- Order Search screen


```
com.yantra.pca.ycd.rcp.tasks.orderSearch.actions.YCDViewOrd
erDetailsAction
```
- Item Search screen

```
com.yantra.pca.ycd.rcp.tasks.itemSearch.actions.YCDItemView  
Details
```

- Appointment screen

```
com.yantra.pca.ycd.rcp.tasks.common.delivery.actions.YCDApp  
ointmentPageRefreshCalendarAction
```

On invoking the above action, the calendar on the Appointment screen is reloaded. This action considers the input namespace "WorkOrderAppointmentOptionsInput" when fetching the capacity information for the Appointment Calendar.

- Change Fulfillment Options

```
com.yantra.pca.ycd.rcp.tasks.common.deliveryOptions.actions  
.YCDChangeDeliveryOptionsApplyAction
```

Users must call this action after they have modified the orderlines using customization. This action assumes that all the changes have been applied, and no intrusive messages to apply the changes are displayed.

These action classes are not displayed on the Rich Client Platform Extensibility Tool. For more information about customizing screens, see the *Selling and Fulfillment Foundation: Customization Guide*.

6.4 Shared Tasks

This section explains the various shared tasks that are registered with Sterling Call Center and Sterling Store. For more information about shared tasks, see the *Selling and Fulfillment Foundation: Customization Guide*.

6.4.1 Address Panel Shared Task

Sterling Call Center and Sterling Store provides the Address Verification screen as a shared task. This shared task is used to open the Address Verification screen as a pop-up window or dialog box in any user interface (UI) that references Sterling Call Center and Sterling Store.

The following is the input XML for the Address Panel task:

```
<PersonInfo AVSMODE="" ADDRESSID="" ADDRESSLINE1="" ADDRESSLINE2=""  
ADDRESSLINE3="" ADDRESSLINE4="" ADDRESSLINE5="" ADDRESSLINE6=""
```

```
IsCommercialAddress="" AlternateEmailID="" Beeper="" City="" Company=""
Country="" DayFaxNo="" DayPhone="" Department="" EnterpriseCode="" EMailID=""
EveningFaxNo="" EveningPhone="" FirstName="" HttpUrl="" JobTitle="" LastName=""
Latitude="" Longitude="" MiddleName="" MobilePhone="" OtherPhone="" PersonID=""
PersonInfoKey="" State="" Suffix="" Title="" ZipCode="" />
```

The following is the output XML for the Address Panel task:

```
<PersonInfo AVSMode="" AddressID="" AddressLine1="" AddressLine2=""
AddressLine3="" AddressLine4="" AddressLine5="" AddressLine6=""
IsCommercialAddress="" AlternateEmailID="" Beeper="" City="" Company=""
Country="" DayFaxNo="" DayPhone="" Department="" EMailID="" EveningFaxNo=""
EveningPhone="" FirstName="" HttpUrl="" JobTitle="" LastName="" Latitude=""
Longitude="" MiddleName="" MobilePhone="" OtherPhone="" PersonID=""
PersonInfoKey="" State="" Suffix="" Title="" ZipCode="" />
```

The name space used for the output XML is "PersonInfo".

You can define the titles as common codes in the Channel Applications Manager by selecting Define Customers > Define Titles. The titles must be defined at the enterprise level. The `getCommonCodeList` API is called to retrieve the defined titles and populate the Title drop-down list. If titles are not defined, the Title drop-down list is not displayed.

6.4.2 Order Notes Shared Task

Sterling Call Center and Sterling Store provides the Order Notes screen as a shared task. This shared task is used to open the Order Notes screen as a pop-up window or dialog box in any UI that references Sterling Call Center and Sterling Store.

The following is the input XML for the Order Notes task:

```
<Order OrderHeaderKey="" Status="" />
```

The following is the output XML for the Order Notes task:

```
<Notes>
  <Note ContactReference="" ContactType="" ContactUser=""
    NoteText="" Priority="" ReasonCode="" />
</Notes>
```

The name space used for the output XML is "Note".

6.4.3 Service Appointment Calendar Shared Task

Sterling Call Center and Sterling Store provides the Service Appointment Calendar screen as a shared task. This shared task is used to view the calendar or select an appointment from the calendar.

The following is the input XML for the Service Appointment Calendar task:

```
<?xml version="1.0" encoding="UTF-8"?>
<!--Change Delivery Appointment Shared Task Input XML-->
<WorkOrder EnterpriseCode="" Timezone="" WorkOrderKey=""
PreferredResourcePoolId="" PreferredServiceResourceId="" CurrentApptSeq="">
  <WorkOrderAppointments>
    <WorkOrderAppointment PromisedApptStartDate="" PromisedApptEndDate=""
ApptSeq="" />
  </WorkOrderAppointments>
  <SuggestedAppointment ApptStartTimeStamp="" ApptEndTimeStamp="" />
</WorkOrder>
```

The following is the output XML for the Service Appointment Calendar task:

```
<?xml version="1.0" encoding="UTF-8"?>
<!--Change Delivery Appointment Shared Task Output XML-->
<SuggestedAppointment ApptEndTimestamp="" ApptStartTimestamp="" />
```

The name space used for the output XML is "CurrentAppointment".

6.4.4 Add Payment Method Shared Task

Sterling Call Center and Sterling Store provides the Add Payment Method screen as a shared task. This shared task is used to open the Add Payment Method screen as a pop-up window in any UI that references Sterling Call Center and Sterling Store.

Following is the input XML for the Add Payment Method task:

```
<PaymentMethod Currency="" OrganizationCode="">
  <OrderBillToAddress AddressLine1="" AddressLine2="" AddressLine3=""
AddressLine4="" AddressLine5="" AddressLine6=""
AlternateEmailID="" Beeper="" City="" Company="" Country=""
DayFaxNo="" DayPhone="" Department="" EMailID=""
EveningFaxNo="" EveningPhone="" FirstName="" JobTitle=""
LastName="" MiddleName="" MobilePhone="" OtherPhone=""
PersonID="" PersonInfoKey="" State="" Suffix="" Title="">
```



```

    ZipCode="" />
</PaymentMethod>

```

Following is the output XML for the Add Payment Method task:

```

<Event Action="">
  <PaymentMethod DisplayPaymentReference1="" PaymentType=""
    MaxChargeLimit="" PaymentReference1="" PaymentReference2=""
    PaymentReference3="" SaveToCustomer="" NewPaymentMethod=""
    CreditCardExpMonth="" CreditCardExpYear="" CreditCardName=""
    CreditCardNo="" CreditCardType="" FirstName="" LastName=""
    MiddleName="" UseDefaultAddress="" CreditCardExpDate=""
    AccountLimit="" AccountLimitCurrency="" CustomerAccountNo=""
    CustomerPONo="" DisplayCustomerAccountNo="" SvcNo=""
    TempPaymentReference1="" UnlimitedCharges="" DisplayCreditCardNo="">
    <PersonInfoBillTo AddressLine1="" AddressLine2="" AddressLine3=""
      AddressLine4="" AddressLine5="" AddressLine6="" AlternateEmailID=""
      Beeper="" City="" Company="" Country="" Createprogid="" Createts=""
      Createuserid="" DayFaxNo="" DayPhone="" Department="" EMailID=""
      ErrorTxt="" EveningFaxNo="" EveningPhone="" FirstName="" HttpUrl=""
      IsAddressVerified="" JobTitle="" LastName="" Lockid="" MiddleName=""
      MobilePhone="" Modifyprogid="" Modifyts="" Modifyuserid=""
      OtherPhone="" PersonID="" PersonInfoKey="" PreferredShipAddress=""
      State="" Suffix="" Title="" UseCount="" VerificationStatus=""
      ZipCode="" isHistory="" />
  </PaymentMethod>
</Event>

```

6.4.5 Order Summary Shared Task

Sterling Call Center and Sterling Store provides the Order Summary wizard as a shared task. This shared task is used to open the Order Summary screen as a pop-up window in any UI that references Sterling Call Center and Sterling Store.

Following is the input XML for the Order Summary task:

```

<Order BillToID="" BuyerOrganizationCode="" CustomerFirstName=""
  CustomerLastName="" DocumentType="" EnterpriseCode="" OrderHeaderKey=""
  OrderNo="" SellerOrganizationCode="" isHistory="">
  <PriceInfo Currency="" />
</Order>

```

The Order Summary task returns null as the output.

Note: Ensure that the OrderHeaderKey parameter is present in the input XML.

The Sterling Call Center and Sterling Store application enables you to open the Order Summary screen in an editor by using a utility method that is explained in [Section 6.8.1, "Opening the Order Summary Screen in an Editor"](#).

6.4.6 Return Search Shared Task

Sterling Call Center and Sterling Store provides the Return Search wizard as a shared task. This shared task is used to open the Return Search screen as a pop-up window in any UI that references Sterling Call Center and Sterling Store.

Following is the input XML for the Return Search task:

```
<ReturnOrder DocumentType="" />
```

The Return Search task returns null as the output.

The Sterling Call Center and Sterling Store application enables you to open the Return Search screen in an editor by using a utility method that is explained in [Section 6.8.2, "Opening the Return Search Screen in an Editor"](#).

6.4.7 Cancel Order Shared Task

Sterling Call Center and Sterling Store provides the Cancel Order wizard as a shared task. This shared task is used to open the Cancel Order screen as a pop-up window in any UI that references Sterling Call Center and Sterling Store.

Following is the input XML for the Cancel Order task:

```
<Order BillToID="" BuyerOrganizationCode="" ChangeTaskName=""
  CustomerFirstName="" CustomerLastName="" DocumentType="" EnterpriseCode=""
  OrderHeaderKey="" OrderNo="" SellerOrganizationCode="" isHistory="">
  <PriceInfo Currency="" />
</Order>
```

The Cancel Order task returns null as the output.

Note: Ensure that the OrderHeaderKey parameter is present in the input XML.

The Sterling Call Center and Sterling Store application enables you to open the Cancel Order screen in an editor by using a utility method that is explained in [Section 6.8.3, "Opening the Cancel Order Screen in an Editor"](#).

6.4.8 Create Alert Shared Task

Sterling Call Center and Sterling Store provides the Create Alert screen as a shared task. This shared task is used to open the Create Alert screen as a pop-up window in any UI that references Sterling Call Center and Sterling Store.

Following is the input XML for the Create Alert task:

```
<Inbox AlertCreate="" Title=""/>
```

The Create Alert task returns null as the output.

The Sterling Call Center and Sterling Store application enables you to open the Create Alert screen in an editor by using a utility method that is explained in [Section 6.8.4, "Opening the Create Alert Screen in an Editor"](#).

6.4.9 Alert List Shared Task

Sterling Call Center and Sterling Store provides the Alert List screen as a shared task. This shared task is used to open the Alert List screen as a pop-up window in any UI that references Sterling Call Center and Sterling Store.

Following is the input XML for the Alert List task:

```
<Inbox Status="" StatusQryType="" SubscribedQueues=""/>
```

Note: If a null input is passed to the Alert List task, this task opens a blank Alert List screen.

The Alert List task returns null as the output.

The Sterling Call Center and Sterling Store application enables you to open the Alert List screen in an editor by using a utility method that is explained in [Section 6.8.5, "Opening the Alert List Screen in an Editor"](#).

6.4.10 Message Dialog Box Shared Task

Sterling Call Center and Sterling Store provides the message dialog box as a shared task. This shared task is used to display error messages, warning messages, confirmation messages, and messages with appropriate buttons.

The following is the input XML for the message dialog box:

```
<OptionDialog TitleKey="" DescriptionKey="" DefaultOption="" DialogImage="">
  <OptionTextList>
    <OptionText OptionTextKey="" />
  </OptionTextList>
</OptionDialog>
```

The following is the output XML for the message dialog box:

```
<SelectedOption SelectedOptionKey="" SelectedOptionIndex="" />
```

6.4.11 Item Details Shared Tasks

Sterling Call Center and Sterling Store provides the Item Details wizard as a shared task. This shared task is used to open the Item Details screen as a pop-up window in any User Interface (UI) that references Sterling Call Center and Sterling Store.

The following is the input XML template for the Item Details task:

```
<Item AuthenticationKey="" CallingOrganizationCode=""
  CanUseAsServiceTool="" Currency="" DemandType=""
  DisplayLocalizedFieldInLocale="" ExcludeChildItemsOfModelItems=""
  ExcludeItemsInPriceList="" ExecuteQueries="" FulfillmentType=""
  GetAvailabilityFromCache="" GetUnpublishedItems="" GlobalItemID=""
  IgnoreInvalidItems="" IgnoreIsSoldSeparately="" IgnoreOrdering=""
  InheritAttributesFromClassification="" IsForOrdering=""
  ItemGroupCode="" ItemID="" MaximumRecords="" OrganizationCode=""
  PriceProgramKey="" PriceProgramName="" PricingDate=""
  PurposeForDisplayClassification=""
  ShowAttributesWithDifferentValuesOnly=""
  ShowFinalSupersededItemOnly="" ShowKeyItemAttributesOnly=""
```

```

    StartItemKey="" SubCatalogOrganizationCode="" UnitOfMeasure=""
UserOrganizationCode="">
  <Barcode BarcodeData="" BarcodeType="">
    <ContextualInfo OrganizationCode=""/>
  </Barcode>
  <CustomerInformation CustomerID="" CustomerLevel="" CustomerType=""
    Region="" RelationshipType="" Vertical=""/>
  <ShipToAddress AddressLine1="" AddressLine2="" AddressLine3=""
    AddressLine4="" AddressLine5="" AddressLine6=""
    AlternateEmailID="" Beeper="" City="" Company="" Country=""
    DayFaxNo="" DayPhone="" Department="" EMailID="" ErrorTxt=""
    EveningFaxNo="" EveningPhone="" FirstName="" HttpUrl=""
    IsCommercialAddress="" JobTitle="" LastName="" MiddleName=""
    MobilePhone="" OtherPhone="" PersonID="" PersonInfoKey=""
    PreferredShipAddress="" State="" Suffix="" TaxGeoCode=""
    Title="" UseCount="" VerificationStatus="" ZipCode=""/>
  <ShipNodes>
    <ShipNode Node=""/>
  </ShipNodes>
  <ItemAssociationTypeList>
    <ItemAssociationType Type=""/>
  </ItemAssociationTypeList>
  <PrimaryInformation AssumeInfiniteInventory="" ColorCode=""
    ConfiguredModelKey="" CostCurrency="" CountryOfOrigin=""
    DefaultProductClass="" Description="" IsAirShippingAllowed=""
    IsConfigurable="" IsDeliveryAllowed="" IsForwardingAllowed=""
    IsFreezerRequired="" IsHazmat="" IsModelItem=""
    IsParcelShippingAllowed="" IsPickupAllowed="" IsPreConfigured=""
    IsProcurementAllowed="" IsReturnService="" IsReturnable=""
    IsShippingAllowed="" IsStandaloneService=""
    IsSubOnOrderAllowed="" ItemType="" KitCode=""
    ManufacturerItem="" ManufacturerItemDesc="" ManufacturerName=""
    MasterCatalogID="" MaxOrderQuantity="" MinOrderQuantity=""
    MinimumCapacityQuantity="" ModelItemUnitOfMeasure=""
    NumSecondarySerials="" PricingQuantityConvFactor=""
    PricingQuantityStrategy="" PricingUOM="" PricingUOMStrategy=""
    ProductLine="" RequiresProdAssociation="" ServiceTypeID=""
    ShipmentConsolidationWindow="" ShortDescription="" SizeCode=""
    Status="" TaxableFlag="" UnitCost="" UnitHeight=""
    UnitHeightUOM="" UnitLength="" UnitLengthUOM="" UnitWeight=""
    UnitWeightUOM="" UnitWidth="" UnitWidthUOM=""/>
  <InventoryParameters ATPRule="" AdvanceNotificationTime=""
    CapacityQuantityStrategy="" DefaultExpirationDays=""
    FutureSafetyFactorPercentage="" InventoryMonitorRule=""
    IsFifoTracked="" IsItemBasedAllocationAllowed=""

```

```

        IsSerialTracked="" LeadTime="" MaximumNotificationTime=""
        MinNotificationTime="" NodeLevelInventoryMonitorRule=""
        OnhandSafetyFactorPercentage="" OnhandSafetyFactorQuantity=""
        ProcessingTime="" SerializedFlag="" TagControlFlag=""
        TimeSensitive="" UseUnplannedInventory=""/>
<ClassificationCodes CommodityCode="" ECCNNo="" HarmonizedCode=""
        HazmatClass="" Model="" NAICSCode="" NMFCClass="" NMFCCode=""
        OperationalConfigurationComplete="" PickingType=""
        PostingClassification="" Schedule_B_Code="" StorageType=""
        TaxProductCode="" UNSPSC=""/>
<ItemAliasList>
    <ItemAlias AliasName="" AliasValue=""/>
</ItemAliasList>
<ItemExclusionList>
    <ItemExclusion ExclusionCode=""/>
</ItemExclusionList>
<AdditionalAttributeList>
    <AdditionalAttribute DoubleValue="" IntegerValue="" Name="" Value=""/>
</AdditionalAttributeList>
<CategoryFilter CategoryPath="" OrganizationCode=""/>
<Components>
    <Component ComponentItemID="" ComponentItemKey=""
        ComponentOrganizationCode="" ComponentUnitOfMeasure=""/>
</Components>
<LanguageDescriptionList>
    <LanguageDescription LocaleCode=""/>
</LanguageDescriptionList>
<InventoryTagAttributes BatchNo="" ItemTagKey="" LotAttribute1=""
    LotAttribute2="" LotAttribute3="" LotKeyReference=""
    LotNumber="" ManufacturingDate="" RevisionNo=""/>
<ItemAttributeGroupTypeList>
    <ItemAttributeGroupType ClassificationPurposeCode=""
ItemAttributeGroupType=""/>
</ItemAttributeGroupTypeList>
<OrderBy>
    <Attribute Desc="" Name=""/>
</OrderBy>
</Item>

```

Item Details task returns null as the output.

6.4.12 Add Modify Charges Shared Task

Sterling Call Center and Sterling Store provides the Add Modify Charges wizard as a shared task. This shared task is used to open the Add Modify Charges screen as a pop-up window in any User Interface (UI) that references Sterling Call Center and Sterling Store.

The following is the input XML template for the Add Modify Charges task:

```
<Order ApplicationCode="" ApplicationVersion=""
  DisplayTransactionPrice="" DocumentType="" EnterpriseCode=""
  LastOrderLineKey="" LocalShipNode="" MaximumRecords=""
  OrderHeaderKey="" OrderNo="" SortingType="" StatusModificationType="">
  <Modifications>
    <Modification ModificationType=""/>
  </Modifications>
  <SpecificOrderLines>
    <OrderLine GetBundleComponents="" OrderLineKey="" PrimeLineNo=""
      SubLineNo="">
      <Modifications>
        <Modification ModificationType=""/>
      </Modifications>
    </OrderLine>
  </SpecificOrderLines>
  <OrderLines>
    <OrderLine>
      <Modifications>
        <Modification ModificationType=""/>
      </Modifications>
    </OrderLine>
  </OrderLines>
</Order>
```

Add Modify Charges task returns null as the output.

6.4.13 Customer Details Shared Task

Sterling Call Center and Sterling Store provides the Customer wizard as a shared task. This shared task is used to open the Customer Details screen as a pop-up window in any User Interface (UI) that references Sterling Call Center and Sterling Store. It can be used both for Consumers and Business Customers.

The following is the input XML template for the Customer Details task:

```

<Customer CustomerKey=" BuyerOrganizationCode=" CallingOrganizationCode="
  CanConsumeSupplementalCapacity=" CommitmentTime="
  CustomerAssignedVendorID=" CustomerClassificationCode="
  CustomerID=" CustomerLevel=" CustomerType=" ExternalCustomerID="
  FuncAckTime=" OrganizationCode=" ParentCustomerKey="
  RegisteredDate=" RelationshipType=" RootCustomerKey=" SendsAsn="
  SendsCommitment=" SendsFuncAck=" SlotPreferenceType=" Status="
Vertical=" ">
  <ParentCustomer CustomerID=" OrganizationCode=" />
  <BuyerOrganization AccountWithHub=" AuthorityType="
    BillingAddressKey=" CatalogOrganizationCode="
    ContactAddressKey=" CorporateAddressKey="
    CreatorOrganizationKey=" DunsNumber="
    InventoryOrganizationCode=" InventoryPublished=" IsBuyer="
    IsHubOrganization=" IsLegalEntity=" IsNode="
    IsSourcingKept=" IssuingAuthority=" ItemXrefRule="
    LocaleCode=" OrganizationCode=" OrganizationKey="
    OrganizationName=" ParentOrganizationCode="
    PaymentProcessingReqd=" PrimaryEnterpriseKey="
    PrimarySicCode=" PrimaryUrl=" TaxExemptFlag="
    TaxExemptionCertificate=" TaxJurisdiction=" TaxpayerId="
    XrefAliasType=" XrefOrganizationCode=" >
    <Node AcceptanceRequired=" ActivateFlag="
      AdvanceNotificationTime=" AgentCriteriaGroup="
      CurrentBolNumber=" DcmIntegrationRealTime="
      DefaultDeclaredValue=" ExportLicenseExpDate="
      ExportLicenseNo=" GLN=" GenerateBolNumber="
      IdentifiedByParentAs=" InheritConfigFromShipNode="
      InterfaceSubType=" InterfaceType=" InventoryTracked="
      Inventorytype=" IsItemBasedAllocationAllowed=" Latitude="
      Longitude=" MaintainInventoryCost="
      MaxDaysToScheduleBefore=" MinNotificationTime="
      OwnerType=" PicklistType=" ProcureToShipAllowed="
      ReceiptProcessingTime=" ReceivingCalendarKey="
      ReceivingNode=" RequiresChangeRequest="
      ReturnCenterFlag=" ReturnsNode=" SerialTracking="
      ShipNode=" ShipNodeClass=" ShipnodeType="
      ShippingCalendarKey=" ShippingNode=" SupplierKey="
      ThreePlNode=" TimeDiff=" UseEndOfShiftTime=" XDocNode=" />
    <CorporatePersonInfo AddressID=" AddressLine1="
      AddressLine2=" AddressLine3=" AddressLine4="
      AddressLine5=" AddressLine6=" AlternateEmailID="
      Beeper=" City=" Company=" Country=" DayFaxNo="
      DayPhone=" Department=" EMailID=" ErrorTxt="

```



```

        EveningFaxNo="" EveningPhone="" FirstName="" HttpUrl=""
        JobTitle="" LastName="" Latitude="" Longitude=""
        MiddleName="" MobilePhone="" OtherPhone="" PersonID=""
        PersonInfoKey="" PreferredShipAddress="" State="" Suffix=""
        Title="" UseCount="" VerificationStatus="" ZipCode=""/>
    <ContactPersonInfo AddressID="" AddressLine1="" AddressLine2=""
        AddressLine3="" AddressLine4="" AddressLine5=""
        AddressLine6="" AlternateEmailID="" Beeper="" City=""
        Company="" Country="" DayFaxNo="" DayPhone="" Department=""
        EMailID="" ErrorTxt="" EveningFaxNo="" EveningPhone=""
        FirstName="" HttpUrl="" JobTitle="" LastName="" Latitude=""
        Longitude="" MiddleName="" MobilePhone="" OtherPhone=""
        PersonID="" PersonInfoKey="" PreferredShipAddress=""
        State="" Suffix="" Title="" UseCount=""
        VerificationStatus="" ZipCode=""/>
    <BillingPersonInfo AddressID="" AddressLine1="" AddressLine2=""
        AddressLine3="" AddressLine4="" AddressLine5=""
        AddressLine6="" AlternateEmailID="" Beeper="" City=""
        Company="" Country="" DayFaxNo="" DayPhone="" Department=""
        EMailID="" ErrorTxt="" EveningFaxNo="" EveningPhone=""
        FirstName="" HttpUrl="" JobTitle="" LastName="" Latitude=""
        Longitude="" MiddleName="" MobilePhone="" OtherPhone=""
        PersonID="" PersonInfoKey="" PreferredShipAddress=""
        State="" Suffix="" Title="" UseCount=""
        VerificationStatus="" ZipCode=""/>
</BuyerOrganization>
<Consumer BillingAddressKey="">
    <BillingPersonInfo AddressID="" AddressLine1="" AddressLine2=""
        AddressLine3="" AddressLine4="" AddressLine5=""
        AddressLine6="" AlternateEmailID="" Beeper="" City=""
        Company="" Country="" DayFaxNo="" DayPhone="" Department=""
        EMailID="" ErrorTxt="" EveningFaxNo="" EveningPhone=""
        FirstName="" HttpUrl="" JobTitle="" LastName="" Latitude=""
        Longitude="" MiddleName="" MobilePhone="" OtherPhone=""
        PersonID="" PersonInfoKey="" PreferredShipAddress=""
        State="" Suffix="" Title="" UseCount=""
        VerificationStatus="" ZipCode=""/>
</Consumer>
<CustomerSlotPreferenceList>
    <CustomerSlotPreference EndTime="" FridayPreferred=""
        MondayPreferred="" SaturdayPreferred="" StartTime=""
        SundayPreferred="" ThursdayPreferred="" TuesdayPreferred=""
        WednesdayPreferred=""/>
</CustomerSlotPreferenceList>
<CustomerSchedulingPreferences CancelOrderOnBackorder="Y"

```

```

IsDropShipAllowed="Y" IsLineShipComplete="Y"
IsLineShipSingleNode="Y" IsShipComplete="Y" IsShipSingleNode="Y"
IsSubstitutionAllowed="Y" OptimizationType=""/>
<CustomerContactList>
  <CustomerContact ApproverProxyUserId="" ApproverUserId=""
    Company="" CustomerContactID="" DateOfBirth="" DayFaxNo=""
    DayPhone="" Department="" EmailID="" EveningFaxNo=""
    EveningPhone="" FirstName="" JobTitle="" LastName=""
    MiddleName="" MobilePhone="" SpendingLimit=""
    SpendingLimitCurrency="" SpouseDateOfBirth="" Status=""
    Title="" UserID="" WeddingAnniversaryDate="">
    <CustomerAdditionalAddressList>
      <CustomerAdditionalAddress AddressType=""
        CustomerAdditionalAddressID="" IsBillTo=""
        IsDefaultBillTo="" IsDefaultShipTo=""
        IsDefaultSoldTo="" IsShipTo="" IsSoldTo="">
        <PersonInfo AddressID="" AddressLine1=""
          AddressLine2="" AddressLine3="" AddressLine4=""
          AddressLine5="" AddressLine6=""
          AlternateEmailID="" Beeper="" City="" Company=""
          Country="" DayFaxNo="" DayPhone="" Department=""
          EMailID="" ErrorTxt="" EveningFaxNo=""
          EveningPhone="" FirstName="" HttpUrl=""
          JobTitle="" LastName="" Latitude="" Longitude=""
          MiddleName="" MobilePhone="" OtherPhone=""
          PersonID="" PersonInfoKey=""
          PreferredShipAddress="" State="" Suffix=""
          Title="" UseCount="" VerificationStatus="" ZipCode=""/>
        </CustomerAdditionalAddress>
      </CustomerAdditionalAddressList>
    <CustomerPaymentMethodList>
      <CustomerPaymentMethod AccountLimit=""
        AccountLimitCurrency="" CreditCardExpDate=""
        CreditCardName="" CreditCardNo="" CreditCardType=""
        CustomerAccountNo="" DisplayCreditCardNo=""
        DisplayCustomerAccountNo=""
        DisplayPaymentReferencel="" FirstName=""
        IsDefaultMethod="" LastName="" MiddleName=""
        PaymentReferencel="" PaymentReference2=""
        PaymentReference3="" PaymentType="">
        <PersonInfoBillTo AddressID="" AddressLine1=""
          AddressLine2="" AddressLine3="" AddressLine4=""
          AddressLine5="" AddressLine6=""
          AlternateEmailID="" Beeper="" City="" Company=""
          Country="" DayFaxNo="" DayPhone="" Department=""

```

```

        EMailID="" ErrorTxt="" EveningFaxNo=""
        EveningPhone="" FirstName="" HttpUrl=""
        JobTitle="" LastName="" Latitude="" Longitude=""
        MiddleName="" MobilePhone="" OtherPhone=""
        PersonID="" PersonInfoKey=""
        PreferredShipAddress="" State="" Suffix=""
        Title="" UseCount="" VerificationStatus="" ZipCode=""/>
    </CustomerPaymentMethod>
</CustomerPaymentMethodList>
<Note AuditTransactionId="" ContactReference=""
    ContactTime="" ContactType="" ContactUser=""
    CustomerSatIndicator="" NoteText="" Operation=""
    Priority="" ReasonCode="" SequenceNo="" Tranid=""
VisibleToAll=""/>
    </CustomerContact>
</CustomerContactList>
<CustomerAdditionalAddressList>
    <CustomerAdditionalAddress AddressType=""
        CustomerAdditionalAddressID="" IsBillTo=""
        IsDefaultBillTo="" IsDefaultShipTo="" IsDefaultSoldTo=""
        IsShipTo="" IsSoldTo="">
        <PersonInfo AddressID="" AddressLine1="" AddressLine2=""
            AddressLine3="" AddressLine4="" AddressLine5=""
            AddressLine6="" AlternateEmailID="" Beeper="" City=""
            Company="" Country="" DayFaxNo="" DayPhone=""
            Department="" EMailID="" ErrorTxt="" EveningFaxNo=""
            EveningPhone="" FirstName="" HttpUrl="" JobTitle=""
            LastName="" Latitude="" Longitude="" MiddleName=""
            MobilePhone="" OtherPhone="" PersonID=""
            PersonInfoKey="" PreferredShipAddress="" State=""
            Suffix="" Title="" UseCount="" VerificationStatus=""
ZipCode=""/>
    </CustomerAdditionalAddress>
</CustomerAdditionalAddressList>
<CustomerPaymentMethodList>
    <CustomerPaymentMethod AccountLimit="" AccountLimitCurrency=""
        CreditCardExpDate="" CreditCardName="" CreditCardNo=""
        CreditCardType="" CustomerAccountNo=""
        DisplayCreditCardNo="" DisplayCustomerAccountNo=""
        DisplayPaymentReferencel="" FirstName="" LastName=""
        MiddleName="" PaymentReferencel="" PaymentReference2=""
        PaymentReference3="" PaymentType="">
        <PersonInfoBillTo AddressID="" AddressLine1=""
            AddressLine2="" AddressLine3="" AddressLine4=""
            AddressLine5="" AddressLine6="" AlternateEmailID=""

```

```

        Beeper="" City="" Company="" Country="" DayFaxNo=""
        DayPhone="" Department="" EMailID="" ErrorTxt=""
        EveningFaxNo="" EveningPhone="" FirstName="" HttpUrl=""
        JobTitle="" LastName="" Latitude="" Longitude=""
        MiddleName="" MobilePhone="" OtherPhone="" PersonID=""
        PersonInfoKey="" PreferredShipAddress="" State=""
        Suffix="" Title="" UseCount="" VerificationStatus=""
    ZipCode=""/>
    </CustomerPaymentMethod>
</CustomerPaymentMethodList>
<AnswerSets>
    <AnswerSet AnswerSetMasterKey="" PrimaryTableName=""
        PrimaryTableRefKey="" QuestionType="">
        <Answers>
            <Answer AnswerMasterKey="" AnswerSetMasterKey=""
                AnswerValue="" QuestionID=""/>
        </Answers>
    </AnswerSet>
</AnswerSets>
<NoteList>
    <Note AuditTransactionId="" ContactReference="" ContactTime=""
        ContactType="" ContactUser="" CustomerSatIndicator=""
        NoteText="" Priority="" ReasonCode="" SequenceNo=""
        Tranid="" VisibleToAll=""/>
</NoteList>
<CustomerCurrencyList Reset="">
    <CustomerCurrency Currency="" CustomerCurrencyKey=""
        IsDefaultCurrency="" Operation=""/>
</CustomerCurrencyList>
</Customer>

```

Customer Details task returns null as the output.

6.4.14 Override Item Price Shared Task

Sterling Call Center and Sterling Store provides the Override Price for Item screen as a shared task. This shared task is used to open the Override Price as a pop-up window or dialog box in any user interface (UI) that references Sterling Call Center and Sterling Store.

The following is the input XML template for the Override Price task:

```

<Order EnterpriseCode="">
    <OrderLine>

```

```

        <LinePriceInfo Currency="" TransactionUnitPrice="" UnitPrice=""/>
    </OrderLine>
</Order>

```

The following is the output XML template for the Override Price task:

```

<Order ModificationReasonCode="">
    <OrderLine>
        <LinePriceInfo IsPriceLocked="" UnitPrice=""/>
        <Notes>
            <Note ContactReference="" ContactType="" ContactUser=""
                NoteText="" Priority="" ReasonCode="" VisibleToAll=""/>
        </Notes>
    </OrderLine>
</Order>

```

6.4.15 Advanced Sales Order Search Shared Task

Sterling Call Center and Sterling Store provides the Advanced Sales Order Search Wizard as a shared task. This shared task is used to open the Advanced Sales Order Search Wizard as a pop-up window or dialog box in any user interface (UI) that references Sterling Call Center and Sterling Store. On double click of the selected order in the list screen, the screen will return the selected order details as output of the shared task and close itself.

The following is the input XML template for the Order Search shared task:

```

<Order BillToID="" BillToIDQryType=""
    CardNo="" CustomerEMailID=""
    CustomerEMailIDQryType="" CustomerFirstName=""
    CustomerFirstNameQryType="" CustomerLastName=""
    CustomerLastNameQryType="" CustomerPhoneNo=""
    CustomerPhoneNoQryType="" CustomerZipCode=""
    DocumentType=""
    EnterpriseCode="" FromOrderDate=""
    OrderName="" OrderNameQryType="" OrderNo=""
    OrderNoQryType="" ReadFromHistory=""
    ShowOnlyStoreOrders="" ToOrderDate="">
    <OrderBy>
        <Attribute Desc="" Name=""/>
    </OrderBy>

```

```
</Order>
```

The following is the output XML template for the Order Search shared task:

```
<Order CustomerFirstName="" CustomerLastName="" CustomerZipCode=""
  DocumentType="" DraftOrderFlag="" EnterpriseCode=""
  MaxOrderStatusDesc="" MultipleStatusesExist=""
  OrderDate=""
  OrderHeaderKey="" OrderName=""
  OrderNo="" SellerOrganizationCode=""
  Status="" YCDPaginationPageNumber="" isHistory="">
  <PriceInfo Currency="" TotalAmount=""/>
  <PersonInfoBillTo AddressLine1=""/>
</Order>
```

6.4.16 Alternate Stores Shared Task

Sterling Call Center and Sterling Store provides the Alternate Stores popup screen as a shared task. This shared task is used to open the Alternate Stores pop-up screen as a pop-up window or dialog box in any user interface (UI) that references Sterling Call Center and Sterling Store. On selection of a node and clicking of Apply Button, the node details are returned as output of the shared task and the popup is closed. This pop-up can be opened in two modes:

- Modification Mode - Pass Mode=0, displays Apply button on pop-up and also allows selection of node.
- Details Mode - Pass Mode=1, does not display Apply button on pop-up and does not allow selection of node. It only allows to view the availability.

The default value of Mode is 0.

The following is the input XML template for the Alternate Stores shared task:

```
<Order DocumentType="" DraftOrderFlag="" EnterpriseCode=""
  OrderHeaderKey="" OrderName=""
  OrderNo="" SellerOrganizationCode="" Mode="">
  <PersonInfoBillTo AddressLine1="" AddressLine2="" AddressLine3=""
    AddressLine4="" AddressLine5="" AddressLine6=""
    AlternateEmailID="" Beeper="" City="" Company="" Country=""
    Createprogid="" Createts="">
```

```

Createuserid="" DayFaxNo="" DayPhone="" Department=""
EMailID="" ErrorTxt="" EveningFaxNo="" EveningPhone=""
FirstName="" HttpUrl="" IsAddressVerified="" JobTitle=""
LastName="" Lockid="" MiddleName="" MobilePhone=""
Modifyprogid="" Modifyfts=""
Modifyuserid="" OtherPhone="" PersonID=""
PersonInfoKey="" PreferredShipAddress=""
ShortZipCode="" State="" Suffix="" Title="" UseCount=""
VerificationStatus="" ZipCode="" isHistory=""/>
<PersonInfoShipTo AddressLine1="" AddressLine2="" AddressLine3=""
AddressLine4="" AddressLine5="" AddressLine6=""
AlternateEmailID="" Beeper="" City="" Company="" Country=""
Createprogid="" Createts=""
Createuserid="" DayFaxNo="" DayPhone="" Department=""
EMailID="" ErrorTxt="" EveningFaxNo="" EveningPhone=""
FirstName="" HttpUrl="" IsAddressVerified="" JobTitle=""
LastName="" Lockid="" MiddleName="" MobilePhone=""
Modifyprogid="" Modifyfts=""
Modifyuserid="" OtherPhone="" PersonID=""
PersonInfoKey="" PreferredShipAddress=""
ShortZipCode="" State="" Suffix="" Title="" UseCount=""
VerificationStatus="" ZipCode="" isHistory=""/>
<OrderLines>
  <OrderLine DeliveryMethod="" GiftFlag="" GiftWrap=""
    IsBundleParent="" ItemGroupCode="" KitCode=""
    MinLineStatus="" OrderHeaderKey=""
    OrderLineKey="" OrderedQty=""
    PrimeLineNo="" StatusQuantity="" SubLineNo=""
    TransactionalLineId="">
    <LinePriceInfo BundleTotal="" DisplayUnitPrice=""
      IsPriceLocked="" ListPrice="" UnitPrice=""/>
    <Item ItemDesc=""
      ItemID="" ItemShortDesc=""
      ProductClass="" UnitOfMeasure=""/>
    <Notes NumberOfNotes=""/>
    <ChildOrderLineRelationships/>
    <ParentOrderLineRelationships/>
    <Instructions NumberOfInstructions="0"/>
    <LineOverallTotals Charges="" Discount=""
      DisplayCharge="" DisplayDiscount=""
      DisplayExtendedPrice="" DisplayLineTotal=""
      DisplayLineTotalWithoutTaxes=""
      DisplayUnitPrice="" ExtendedPrice=""
      LineAdjustments="" LineTotal=""
      OptionPrice="" PricingQty="" Tax="" UnitPrice=""/>

```

```

<OrderLineTranQuantity OrderedQty="" TransactionalUOM="" />
<WorkOrders NumberOfWorkOrders="" />
<ItemDetails HasVisibleAssociations="" IsItemSuperseded=""
  ItemGroupCode="" ItemID=""
  ItemKey="" OrganizationCode=""
  TransactionalLineId="" UnitOfMeasure="">
<PrimaryInformation BundleFulfillmentMode=""
  DefaultProductClass=""
  Description=""
  ExtendedDescription=""
  HasProvidedServiceAssociated=""
  IsDeliveryAllowed="" IsPickupAllowed=""
  IsShippingAllowed="" IsStandaloneService=""
  IsSubOnOrderAllowed="" IsValid="" KitCode=""
  MaxOrderQuantity="" MinOrderQuantity=""
  OrderingQuantityStrategy=""
  ShortDescription="" Status="" />
<ClassificationCodes />
<AlternateUOMList />
<ItemAttributeGroupTypeList>
  <ItemAttributeGroupType
    ClassificationPurposeCode=""
    Description=""
    IsSingleGroup=""
    ItemAttributeGroupType="" ItemAttributeGroupTypeKey="">
  <ItemAttributeGroupList>
    <ItemAttributeGroup IsInherited=""
      ItemAttributeGroupDescription=""
      ItemAttributeGroupID=""
      ItemAttributeGroupKey="" SequenceNo="">
    <ItemAttributeList>
      <ItemAttribute IsKeyAttribute=""
        ItemAttributeDescription=""
        ItemAttributeGroupKey=""
        ItemAttributeKey=""
        ItemAttributeName=""
        SequenceNo="" Value="" />
      <ItemAttribute IsKeyAttribute=""
        ItemAttributeDescription=""
        ItemAttributeGroupKey=""
        ItemAttributeKey=""
        ItemAttributeName=""
        SequenceNo="" Value="" />
      <ItemAttribute IsKeyAttribute=""
        ItemAttributeDescription=""

```



```

        ItemAttributeGroupKey=" "
        ItemAttributeKey=" "
        ItemAttributeName=" "
        SequenceNo=" " Value=" "/>
    </ItemAttributeList>
</ItemAttributeGroup>
</ItemAttributeGroupList>
</ItemAttributeGroupType>
</ItemAttributeGroupTypeList>
<ItemAliasList>
    <ItemAlias AliasName=" " AliasValue=" "/>
</ItemAliasList>
<ItemInstructionList/>
<AssociationTypeList>
    <AssociationType CodeShortDescription=" " Type=" ">
        <AssociationList/>
    </AssociationType>
</AssociationTypeList>
<ItemServiceAssocList>
    <ItemServiceAssoc CategoryKey=" "
        HoldSchedTillCompletion=" "
        ItemKey=" "
        ItemServiceAssocKey=" "
        PricingProductQuantity=" "
        PricingServiceQuantity=" "
        ProductQuantity=" "
        ServiceItemDesc=" "
        ServiceItemGroupCode=" "
        ServiceItemId=" "
        ServiceQuantity=" " ServiceUOM=" " TimeOffsetInMinutes=" ">
        <ItemServiceAssocSkillList/>
        <ServiceItem CanUseAsServiceTool=" "
            GlobalItemID=" " ItemGroupCode=" "
            ItemID=" "
            ItemKey=" "
            OrganizationCode=" " UnitOfMeasure=" ">
            <PrimaryInformation DefaultProductClass=" "
                Description=" "
                DisplayItemDescription=" "
                IsAirShippingAllowed=" "
                IsDeliveryAllowed=" "
                IsParcelShippingAllowed=" "
                IsPickupAllowed=" " IsReturnService=" "
                IsReturnable=" " IsShippingAllowed=" "
                IsStandaloneService=" " KitCode=" "

```

```

                                OrderingQuantityStrategy=" "
ShortDescription=""/>
                                <ItemAttributeGroupTypeList/>
                                <ComputedPrice/>
                                </ServiceItem>
                                </ItemServiceAssoc>
                                </ItemServiceAssocList>
                                <ComputedPrice ListPrice=" " UnitPrice=" ">
                                <QuantityRangePriceList/>
                                </ComputedPrice>
                                </ItemDetails>
                                <Modifications>
                                <Modification ModificationAllowed=" " ModificationType=" "/>
                                </Modifications>
                                </OrderLine>
                                </OrderLines>
                                </Order>

```

The following is the output XML template for the Alternate Stores shared task:

```

<Order DocumentType=" " DraftOrderFlag=" " EnterpriseCode=" " Mode=" "
OrderHeaderKey=" " OrderName=" "
OrderNo=" " SellerOrganizationCode=" ">
<OrderLines>
    <OrderLine OrderLineKey=" " ShipNode=" ">
        <Shipnode AllowGiftWrap=" "
        Description=" "
        DistanceFromShipToAddress=" "
        DistanceUOM=" " NodeType=" " ShipNode=" ">
            <ShipNodePersonInfo AddressLine1=" "
                AddressLine2=" " AddressLine3=" " AddressLine4=" "
                AddressLine5=" " AddressLine6=" " AlternateEmailID=" "
                Beeper=" " City=" " Company=" "
                Country=" " DayFaxNo=" " DayPhone=" " Department=" "
                EMailID=" " EveningFaxNo=" " EveningPhone=" "
                FirstName=" " HttpUrl=" " JobTitle=" "
                LastName=" " MiddleName=" " MobilePhone=" "
                OtherPhone=" " PersonID=" " ShortZipCode=" "
                State=" " Suffix=" " Title=" " ZipCode=" "/>
            </Shipnode>
            <PromiseLine IsSubOnOrderAllowed=" " ItemID=" "
                LineId=" " ProductClass=" "

```

```

RequiredQty="" ShipNode="" UnitOfMeasure="">
<Assignments>
  <Assignment AvailableFromUnplannedInventory=""
    ProductAvailDate="" Quantity=""
    ReservedQty=""
    ShipDate="" ShipNode="">
    <SubstituteItems/>
    <Procurements/>
  </Assignment>
</Assignments>
</PromiseLine>
</OrderLine>
</OrderLines>
</Order>

```

6.5 User Interface Customization

This section explains the user interface customizations supported by Sterling Call Center and Sterling Store.

6.5.1 Special Themes

This section describes the special themes needed when implementing Sterling Call Center and Sterling Store.

6.5.1.1 Mandatory Fields

In Sterling Call Center and Sterling Store, certain screens have mandatory fields. You can customize the display of mandatory fields by creating a custom theme and modifying the entry in your custom theme. For more information about user interface themes, see [Section A.1, "User Interface Themes"](#).

6.5.1.2 Smileys

Sterling Call Center and Sterling Store uses emoticons. Each of these emoticons are configured by defining a theme starting with a "Smiley" string. For instance, you can display the 😞 (sad) emoticon by using the "SmileySad" theme.

6.5.2 Display of Day Panels in the Service Appointment Calendar

You can use the post command on the `getWorkOrderAppointmentOptions` API to override the default view of the day panels. You can modify the output template of the `getWorkOrderAppointmentOptions` API by adding the following elements at the root level:

```
<DateDisplays>
  <DateDisplay Date="<date>" ThemeName="<theme name>" StringDisplay="<string to
display>" />
</DateDisplays>
```

The value of the `ThemeName` attribute should be a valid theme name as found in the theme files being used in the client application. This theme will be applied to the day panels that appear in the calendar. This enables you to change the display of the day panel, including the background color. The value of the `StringDisplay` attribute will be displayed as it is inside each day panel. This enables you to display any string inside each day panel.

For more information about customizing an output template, see the *Selling and Fulfillment Foundation: Customization Guide*.

6.6 Address Panel Customization

Sterling Call Center and Sterling Store uses a common address panel when displaying the addresses in the following screens.

- Un-verified and verified addresses on the Alert Details screen for Alerts of type 'Address Verification'
- Ship To Address in Change Order Address
- Pickup Address on Return Fulfillment Summary
- Ship to address on Shipment Details
- Bill To address on Customer Pick
- Store Address on Line Summary
- Bill To Address and Ship To Address on Order Summary
- Bill To address on Invoice Details
- Store Address on Procurement Order Summary

- Bill To Address and Ship To Address on Return Order Summary
- Ship To address on Track an Item

If you customize the panel on any of these screens, the customizations will take effect in all the screens. For example, if you hide a control on the bill to address panel of the Order Summary screen, the control will also be hidden in the other screens displaying address.

6.7 Opening New Related Tasks in the Order Editor

Sterling Call Center and Sterling Store provides an Order Editor in which you can open new related tasks by specifying the following:

- Editor ID

```
com.yantra.pca.ycd.rcp.editors.YCDOrderEditor
```

- Input

```
<Order CustomerFirstName=" " CustomerLastName=" "
DocumentType=" " EnterpriseCode=" " OrderHeaderKey=" " OrderNo=" "
SellerOrganizationCode=" " isHistory=" ">
  <PriceInfo Currency=" " />
</Order>
```

For more information about using editor, see the *Selling and Fulfillment Foundation: Customization Guide*.

6.8 Opening the Screens of the Sterling Call Center and Sterling Store Application in an Editor

This section explains the procedure that you must follow to open the screens of the Sterling Call Center and Sterling Store application in an editor.

Note: It is recommended that you use the utility methods that are provided by the Sterling Call Center and Sterling Store application to open the screens in an editor.

6.8.1 Opening the Order Summary Screen in an Editor

You can open the Order Summary screen in an editor by using the `YCDExtensionUtils.launchTaskInEditor(String taskId, Element input);` utility method. For example, you can use the following utility method from the extension behavior class:

```
YCDExtensionUtils.launchTaskInEditor("YCD_TASK_VIEW_ORDER_SUMMARY", input);
```

Use the following input XML to open the Order Summary screen in an editor:

```
<Order BillToID="" BuyerOrganizationCode="" CustomerFirstName=""
  CustomerLastName="" DocumentType="" EnterpriseCode="" OrderHeaderKey=""
  OrderNo="" SellerOrganizationCode="" isHistory="">
  <PriceInfo Currency=""/>
</Order>
```

Note: Validations are not performed in the Order Summary screen to verify whether the order is a Draft Order.

Ensure that the `OrderHeaderKey` parameter is present in the input XML.

6.8.2 Opening the Return Search Screen in an Editor

You can open the Return Search screen in an editor by using the `YCDExtensionUtils.launchTaskInEditor(String taskId, Element input);` utility method. For example, you can use the following utility method from the extension behavior class:

```
YCDExtensionUtils.launchTaskInEditor("YCD_TASK_RETURN_SEARCH", input);
```

Use the following input XML to open the Return Search screen in an editor:

```
<Order BillToID="" BillToIDQryType="" CardNo="" CustomerEMailID=""
  CustomerEMailIDQryType="" CustomerFirstName="" CustomerFirstNameQryType=""
  CustomerLastName="" CustomerLastNameQryType="" CustomerPhoneNo=""
  CustomerPhoneNoQryType="" CustomerZipCode="" DraftOrderFlag=""
  EnterpriseCode="" FromOrderDate="" OrderNo="" OrderNoQryType=""
  ShowOnlyStoreOrders="" ToOrderDate="">
```

```

        <OrderLine DerivedFromOrderHeaderKeyQryType="" />
    <OrderLines>
        <OrderLine>
            <DerivedFromOrder OrderNo="" OrderNoQryType="" />
        </OrderLine>
    </OrderLines>
    <OrderBy>
        <Attribute Desc="" Name="" />
    </OrderBy>
</Order>

```

6.8.3 Opening the Cancel Order Screen in an Editor

You can open the Cancel Order screen in an editor by using the `YCDExtensionUtils.launchTaskInEditor(String taskId, Element input);` utility method. For example, you can use the following utility method from the extension behavior class:

```
YCDExtensionUtils.launchTaskInEditor("YCD_TASK_ORDER_CANCEL",
input);
```

Use the following input XML to open the Cancel Order screen in an editor:

```

<Order BillToID="" BuyerOrganizationCode="" ChangeTaskName=""
    CustomerFirstName="" CustomerLastName="" DocumentType="" EnterpriseCode=""
    OrderHeaderKey="" OrderNo="" SellerOrganizationCode="" isHistory="">
    <PriceInfo Currency="" />
</Order>

```

Note: Ensure that the `OrderHeaderKey` parameter is present in the input XML.

6.8.4 Opening the Create Alert Screen in an Editor

You can open the Create Alert screen in an editor by using the `YCDExtensionUtils.launchTaskInEditor(String taskId, Element input);` utility method. For example, you can use the following utility method from the extension behavior class:

```
YCDExtensionUtils.launchTaskInEditor("YCD_CREATE_ALERT", input);
```

Use the following input XML to open the Create Alert screen in an editor:

```

<Inbox AssignedToUserId="" DetailDescription="" ExceptionType="" FollowupDate=""
OrderNo="" Priority="" QueueKey="" SalesOrderNo="" />

```

6.8.5 Opening the Alert List Screen in an Editor

You can open the Alert List screen in an editor by using the `YCDExtensionUtils.launchTaskInEditor(String taskId, Element input);` utility method. For example, you can use the following utility method from the extension behavior class:

```
YCDExtensionUtils.launchTaskInEditor("YCD_SEARCH_ALERT", input);
```

Use the following input XML to open the Alert List screen in an editor:

```
<Input>
  <Input>
    <Inbox ConsolidationCount="" ConsolidationCountQryType=""
      ExceptionType="" FromFollowupDate="" FromGeneratedOn="" OrderNo=""
      OrderNoQryType="" Priority="" PriorityQryType="" QueueKey=""
      ShipnodeKey="" SubscribedQueues="" ToFollowupDate=""
      ToGeneratedOn=""> <User Loginid="" LoginidQryType=""/>
    </Inbox>
  </Input>
</Input>
```

6.8.6 Opening the Alert Details Screen in an Editor

You can open the Alert Details screen in an editor by using the `YCDExtensionUtils.launchTaskInEditor(String taskId, Element input);` utility method. For example, you can use the following utility method from the extension behavior class:

```
YCDExtensionUtils.launchTaskInEditor("YCD_ALERT_DETAIL", input);
```

Use the following input XML to open the Alert List screen in an editor:

```
<Inbox InboxKey="" Title=""/>
```

6.8.7 Opening the Item Details Screen in an Editor

You can open the Item Details screen in an editor by using the `YCDExtensionUtils.launchTaskInEditor(String taskId, Element input);` utility method. For example, you can use the following utility method from the extension behavior class:

```
YCDExtensionUtils.launchTaskInEditor("YCD_TASK_ITEM_DETAILS",
input);
```


Input element should not be null and should follow the following template. In case null is passed as input, an error message saying "Please enter a valid input" will be displayed.

```
<Item AuthenticationKey="" CallingOrganizationCode=""
  CanUseAsServiceTool="" Currency="" DemandType=""
  DisplayLocalizedFieldInLocale="" ExcludeChildItemsOfModelItems=""
  ExcludeItemsInPriceList="" ExecuteQueries="" FulfillmentType=""
  GetAvailabilityFromCache="" GetUnpublishedItems="" GlobalItemID=""
  IgnoreInvalidItems="" IgnoreIsSoldSeparately="" IgnoreOrdering=""
  InheritAttributesFromClassification="" IsForOrdering=""
  ItemGroupCode="" ItemID="" MaximumRecords="" OrganizationCode=""
  PriceProgramKey="" PriceProgramName="" PricingDate=""
  PurposeForDisplayClassification=""
  ShowAttributesWithDifferentValuesOnly=""
  ShowFinalSupersededItemOnly="" ShowKeyItemAttributesOnly=""
  StartItemKey="" SubCatalogOrganizationCode="" UnitOfMeasure=""
UserOrganizationCode="">
  <BarCode BarCodeData="" BarCodeType=""
    <ContextualInfo OrganizationCode=""/>
  </BarCode>
  <CustomerInformation CustomerID="" CustomerLevel="" CustomerType=""
    Region="" RelationshipType="" Vertical=""/>
  <ShipToAddress AddressLine1="" AddressLine2="" AddressLine3=""
    AddressLine4="" AddressLine5="" AddressLine6=""
    AlternateEmailID="" Beeper="" City="" Company="" Country=""
    DayFaxNo="" DayPhone="" Department="" EMailID="" ErrorTxt=""
    EveningFaxNo="" EveningPhone="" FirstName="" HttpUrl=""
    IsCommercialAddress="" JobTitle="" LastName="" MiddleName=""
    MobilePhone="" OtherPhone="" PersonID="" PersonInfoKey=""
    PreferredShipAddress="" State="" Suffix="" TaxGeoCode=""
    Title="" UseCount="" VerificationStatus="" ZipCode=""/>
  <ShipNodes>
    <ShipNode Node=""/>
  </ShipNodes>
  <ItemAssociationTypeList>
    <ItemAssociationType Type=""/>
  </ItemAssociationTypeList>
  <PrimaryInformation AssumeInfiniteInventory="" ColorCode=""
    ConfiguredModelKey="" CostCurrency="" CountryOfOrigin=""
    DefaultProductClass="" Description="" IsAirShippingAllowed=""
    IsConfigurable="" IsDeliveryAllowed="" IsForwardingAllowed=""
    IsFreezerRequired="" IsHazmat="" IsModelItem=""
    IsParcelShippingAllowed="" IsPickupAllowed="" IsPreConfigured=""
    IsProcurementAllowed="" IsReturnService="" IsReturnable=""
```

```

IsShippingAllowed="" IsStandaloneService=""
IsSubOnOrderAllowed="" ItemType="" KitCode=""
ManufacturerItem="" ManufacturerItemDesc="" ManufacturerName=""
MasterCatalogID="" MaxOrderQuantity="" MinOrderQuantity=""
MinimumCapacityQuantity="" ModelItemUnitOfMeasure=""
NumSecondarySerials="" PricingQuantityConvFactor=""
PricingQuantityStrategy="" PricingUOM="" PricingUOMStrategy=""
ProductLine="" RequiresProdAssociation="" ServiceTypeID=""
ShipmentConsolidationWindow="" ShortDescription="" SizeCode=""
Status="" TaxableFlag="" UnitCost="" UnitHeight=""
UnitHeightUOM="" UnitLength="" UnitLengthUOM="" UnitWeight=""
UnitWeightUOM="" UnitWidth="" UnitWidthUOM=""/>
<InventoryParameters ATPRule="" AdvanceNotificationTime=""
CapacityQuantityStrategy="" DefaultExpirationDays=""
FutureSafetyFactorPercentage="" InventoryMonitorRule=""
IsFifoTracked="" IsItemBasedAllocationAllowed=""
IsSerialTracked="" LeadTime="" MaximumNotificationTime=""
MinNotificationTime="" NodeLevelInventoryMonitorRule=""
OnhandSafetyFactorPercentage="" OnhandSafetyFactorQuantity=""
ProcessingTime="" SerializedFlag="" TagControlFlag=""
TimeSensitive="" UseUnplannedInventory=""/>
<ClassificationCodes CommodityCode="" ECCNNo="" HarmonizedCode=""
HazmatClass="" Model="" NAICSCode="" NMFCClass="" NMFCCode=""
OperationalConfigurationComplete="" PickingType=""
PostingClassification="" Schedule_B_Code="" StorageType=""
TaxProductCode="" UNSPSC=""/>
<ItemAliasList>
  <ItemAlias AliasName="" AliasValue=""/>
</ItemAliasList>
<ItemExclusionList>
  <ItemExclusion ExclusionCode=""/>
</ItemExclusionList>
<AdditionalAttributeList>
  <AdditionalAttribute DoubleValue="" IntegerValue="" Name="" Value=""/>
</AdditionalAttributeList>
<CategoryFilter CategoryPath="" OrganizationCode=""/>
<Components>
  <Component ComponentItemID="" ComponentItemKey=""
    ComponentOrganizationCode="" ComponentUnitOfMeasure=""/>
</Components>
<LanguageDescriptionList>
  <LanguageDescription LocaleCode=""/>
</LanguageDescriptionList>
<InventoryTagAttributes BatchNo="" ItemTagKey="" LotAttribute1=""
  LotAttribute2="" LotAttribute3="" LotKeyReference=""

```

```

        LotNumber="" ManufacturingDate="" RevisionNo="" />
    <ItemAttributeGroupTypeList>
        <ItemAttributeGroupType ClassificationPurposeCode=""
ItemAttributeGroupType="" />
    </ItemAttributeGroupTypeList>
    <OrderBy>
        <Attribute Desc="" Name="" />
    </OrderBy>
</Item>

```

6.8.8 Opening the Customer Details Screen in an Editor

You can open the Customer Details screen in an editor by using the `YCDExtensionUtils.launchTaskInEditor(String taskId, Element input);` utility method. For example, you can use the following utility method from the extension behavior class:

```
YCDExtensionUtils.launchTaskInEditor("YCD_CUSTOMER_DETAILS",
input);
```

This method can be used both for Consumers and Business Customers.

Input element should not be null and should follow the following template. In case null is passed as input, an error message saying "Please enter a valid input" will be displayed.

```

<Customer CustomerKey="" BuyerOrganizationCode="" CallingOrganizationCode=""
    CanConsumeSupplementalCapacity="" CommitmentTime=""
    CustomerAssignedVendorID="" CustomerClassificationCode=""
    CustomerID="" CustomerLevel="" CustomerType="" ExternalCustomerID=""
    FuncAckTime="" OrganizationCode="" ParentCustomerKey=""
    RegisteredDate="" RelationshipType="" RootCustomerKey="" SendsAsn=""
    SendsCommitment="" SendsFuncAck="" SlotPreferenceType="" Status=""
Vertical="">
    <ParentCustomer CustomerID="" OrganizationCode="" />
    <BuyerOrganization AccountWithHub="" AuthorityType=""
        BillingAddressKey="" CatalogOrganizationCode=""
        ContactAddressKey="" CorporateAddressKey=""
        CreatorOrganizationKey="" DunsNumber=""
        InventoryOrganizationCode="" InventoryPublished="" IsBuyer=""
        IsHubOrganization="" IsLegalEntity="" IsNode=""
        IsSourcingKept="" IssuingAuthority="" ItemXrefRule=""
        LocaleCode="" OrganizationCode="" OrganizationKey=""
        OrganizationName="" ParentOrganizationCode=""
        PaymentProcessingReqd="" PrimaryEnterpriseKey=""
        PrimarySicCode="" PrimaryUrl="" TaxExemptFlag=""

```

```

TaxExemptionCertificate="" TaxJurisdiction="" TaxpayerId=""
XrefAliasType="" XrefOrganizationCode="">
<Node AcceptanceRequired="" ActivateFlag=""
    AdvanceNotificationTime="" AgentCriteriaGroup=""
    CurrentBolNumber="" DcmIntegrationRealTime=""
    DefaultDeclaredValue="" ExportLicenseExpDate=""
    ExportLicenseNo="" GLN="" GenerateBolNumber=""
    IdentifiedByParentAs="" InheritConfigFromShipNode=""
    InterfaceSubType="" InterfaceType="" InventoryTracked=""
    Inventorytype="" IsItemBasedAllocationAllowed="" Latitude=""
    Longitude="" MaintainInventoryCost=""
    MaxDaysToScheduleBefore="" MinNotificationTime=""
    OwnerType="" PicklistType="" ProcureToShipAllowed=""
    ReceiptProcessingTime="" ReceivingCalendarKey=""
    ReceivingNode="" RequiresChangeRequest=""
    ReturnCenterFlag="" ReturnsNode="" SerialTracking=""
    ShipNode="" ShipNodeClass="" ShipnodeType=""
    ShippingCalendarKey="" ShippingNode="" SupplierKey=""
    ThreePlNode="" TimeDiff="" UseEndOfShiftTime="" XDocNode=""/>
<CorporatePersonInfo AddressID="" AddressLine1=""
    AddressLine2="" AddressLine3="" AddressLine4=""
    AddressLine5="" AddressLine6="" AlternateEmailID=""
    Beeper="" City="" Company="" Country="" DayFaxNo=""
    DayPhone="" Department="" EMailID="" ErrorTxt=""
    EveningFaxNo="" EveningPhone="" FirstName="" HttpUrl=""
    JobTitle="" LastName="" Latitude="" Longitude=""
    MiddleName="" MobilePhone="" OtherPhone="" PersonID=""
    PersonInfoKey="" PreferredShipAddress="" State="" Suffix=""
    Title="" UseCount="" VerificationStatus="" ZipCode=""/>
<ContactPersonInfo AddressID="" AddressLine1="" AddressLine2=""
    AddressLine3="" AddressLine4="" AddressLine5=""
    AddressLine6="" AlternateEmailID="" Beeper="" City=""
    Company="" Country="" DayFaxNo="" DayPhone="" Department=""
    EMailID="" ErrorTxt="" EveningFaxNo="" EveningPhone=""
    FirstName="" HttpUrl="" JobTitle="" LastName="" Latitude=""
    Longitude="" MiddleName="" MobilePhone="" OtherPhone=""
    PersonID="" PersonInfoKey="" PreferredShipAddress=""
    State="" Suffix="" Title="" UseCount=""
    VerificationStatus="" ZipCode=""/>
<BillingPersonInfo AddressID="" AddressLine1="" AddressLine2=""
    AddressLine3="" AddressLine4="" AddressLine5=""
    AddressLine6="" AlternateEmailID="" Beeper="" City=""
    Company="" Country="" DayFaxNo="" DayPhone="" Department=""
    EMailID="" ErrorTxt="" EveningFaxNo="" EveningPhone=""
    FirstName="" HttpUrl="" JobTitle="" LastName="" Latitude=""

```

```

        Longitude="" MiddleName="" MobilePhone="" OtherPhone=""
        PersonID="" PersonInfoKey="" PreferredShipAddress=""
        State="" Suffix="" Title="" UseCount=""
        VerificationStatus="" ZipCode=""/>
</BuyerOrganization>
<Consumer BillingAddressKey="">
    <BillingPersonInfo AddressID="" AddressLine1="" AddressLine2=""
        AddressLine3="" AddressLine4="" AddressLine5=""
        AddressLine6="" AlternateEmailID="" Beeper="" City=""
        Company="" Country="" DayFaxNo="" DayPhone="" Department=""
        EMailID="" ErrorTxt="" EveningFaxNo="" EveningPhone=""
        FirstName="" HttpUrl="" JobTitle="" LastName="" Latitude=""
        Longitude="" MiddleName="" MobilePhone="" OtherPhone=""
        PersonID="" PersonInfoKey="" PreferredShipAddress=""
        State="" Suffix="" Title="" UseCount=""
        VerificationStatus="" ZipCode=""/>
</Consumer>
<CustomerSlotPreferenceList>
    <CustomerSlotPreference EndTime="" FridayPreferred=""
        MondayPreferred="" SaturdayPreferred="" StartTime=""
        SundayPreferred="" ThursdayPreferred="" TuesdayPreferred=""
        WednesdayPreferred=""/>
</CustomerSlotPreferenceList>
<CustomerSchedulingPreferences CancelOrderOnBackorder="Y"
    IsDropShipAllowed="Y" IsLineShipComplete="Y"
    IsLineShipSingleNode="Y" IsShipComplete="Y" IsShipSingleNode="Y"
    IsSubstitutionAllowed="Y" OptimizationType=""/>
<CustomerContactList>
    <CustomerContact ApproverProxyUserId="" ApproverUserId=""
        Company="" CustomerContactID="" DateOfBirth="" DayFaxNo=""
        DayPhone="" Department="" EmailID="" EveningFaxNo=""
        EveningPhone="" FirstName="" JobTitle="" LastName=""
        MiddleName="" MobilePhone="" SpendingLimit=""
        SpendingLimitCurrency="" SpouseDateOfBirth="" Status=""
        Title="" UserID="" WeddingAnniversaryDate="">
    <CustomerAdditionalAddressList>
        <CustomerAdditionalAddress AddressType=""
            CustomerAdditionalAddressID="" IsBillTo=""
            IsDefaultBillTo="" IsDefaultShipTo=""
            IsDefaultSoldTo="" IsShipTo="" IsSoldTo="">
        <PersonInfo AddressID="" AddressLine1=""
            AddressLine2="" AddressLine3="" AddressLine4=""
            AddressLine5="" AddressLine6=""
            AlternateEmailID="" Beeper="" City="" Company=""
            Country="" DayFaxNo="" DayPhone="" Department=""

```

```

        EMailID="" ErrorTxt="" EveningFaxNo=""
        EveningPhone="" FirstName="" HttpUrl=""
        JobTitle="" LastName="" Latitude="" Longitude=""
        MiddleName="" MobilePhone="" OtherPhone=""
        PersonID="" PersonInfoKey=""
        PreferredShipAddress="" State="" Suffix=""
        Title="" UseCount="" VerificationStatus="" ZipCode=""/>
    </CustomerAdditionalAddress>
</CustomerAdditionalAddressList>
<CustomerPaymentMethodList>
    <CustomerPaymentMethod AccountLimit=""
        AccountLimitCurrency="" CreditCardExpDate=""
        CreditCardName="" CreditCardNo="" CreditCardType=""
        CustomerAccountNo="" DisplayCreditCardNo=""
        DisplayCustomerAccountNo=""
        DisplayPaymentReference1="" FirstName=""
        IsDefaultMethod="" LastName="" MiddleName=""
        PaymentReference1="" PaymentReference2=""
        PaymentReference3="" PaymentType="">
    <PersonInfoBillTo AddressID="" AddressLine1=""
        AddressLine2="" AddressLine3="" AddressLine4=""
        AddressLine5="" AddressLine6=""
        AlternateEmailID="" Beeper="" City="" Company=""
        Country="" DayFaxNo="" DayPhone="" Department=""
        EMailID="" ErrorTxt="" EveningFaxNo=""
        EveningPhone="" FirstName="" HttpUrl=""
        JobTitle="" LastName="" Latitude="" Longitude=""
        MiddleName="" MobilePhone="" OtherPhone=""
        PersonID="" PersonInfoKey=""
        PreferredShipAddress="" State="" Suffix=""
        Title="" UseCount="" VerificationStatus="" ZipCode=""/>
    </CustomerPaymentMethod>
</CustomerPaymentMethodList>
<Note AuditTransactionID="" ContactReference=""
    ContactTime="" ContactType="" ContactUser=""
    CustomerSatIndicator="" NoteText="" Operation=""
    Priority="" ReasonCode="" SequenceNo="" Tranid=""
VisibleToAll=""/>
</CustomerContact>
</CustomerContactList>
<CustomerAdditionalAddressList>
    <CustomerAdditionalAddress AddressType=""
        CustomerAdditionalAddressID="" IsBillTo=""
        IsDefaultBillTo="" IsDefaultShipTo="" IsDefaultSoldTo=""
        IsShipTo="" IsSoldTo="">

```

```

        <PersonInfo AddressID="" AddressLine1="" AddressLine2=""
            AddressLine3="" AddressLine4="" AddressLine5=""
            AddressLine6="" AlternateEmailID="" Beeper="" City=""
            Company="" Country="" DayFaxNo="" DayPhone=""
            Department="" EMailID="" ErrorTxt="" EveningFaxNo=""
            EveningPhone="" FirstName="" HttpUrl="" JobTitle=""
            LastName="" Latitude="" Longitude="" MiddleName=""
            MobilePhone="" OtherPhone="" PersonID=""
            PersonInfoKey="" PreferredShipAddress="" State=""
            Suffix="" Title="" UseCount="" VerificationStatus=""
ZipCode=""/>
    </CustomerAdditionalAddress>
</CustomerAdditionalAddressList>
<CustomerPaymentMethodList>
    <CustomerPaymentMethod AccountLimit="" AccountLimitCurrency=""
        CreditCardExpDate="" CreditCardName="" CreditCardNo=""
        CreditCardType="" CustomerAccountNo=""
        DisplayCreditCardNo="" DisplayCustomerAccountNo=""
        DisplayPaymentReference1="" FirstName="" LastName=""
        MiddleName="" PaymentReference1="" PaymentReference2=""
        PaymentReference3="" PaymentType="">
        <PersonInfoBillTo AddressID="" AddressLine1=""
            AddressLine2="" AddressLine3="" AddressLine4=""
            AddressLine5="" AddressLine6="" AlternateEmailID=""
            Beeper="" City="" Company="" Country="" DayFaxNo=""
            DayPhone="" Department="" EMailID="" ErrorTxt=""
            EveningFaxNo="" EveningPhone="" FirstName="" HttpUrl=""
            JobTitle="" LastName="" Latitude="" Longitude=""
            MiddleName="" MobilePhone="" OtherPhone="" PersonID=""
            PersonInfoKey="" PreferredShipAddress="" State=""
            Suffix="" Title="" UseCount="" VerificationStatus=""
ZipCode=""/>
    </CustomerPaymentMethod>
</CustomerPaymentMethodList>
<AnswerSets>
    <AnswerSet AnswerSetMasterKey="" PrimaryTableName=""
        PrimaryTableRefKey="" QuestionType="">
        <Answers>
            <Answer AnswerMasterKey="" AnswerSetMasterKey=""
                AnswerValue="" QuestionID=""/>
        </Answers>
    </AnswerSet>
</AnswerSets>
<NoteList>
    <Note AuditTransactionId="" ContactReference="" ContactTime=""

```

6.8.9 Opening the Return Order Summary Screen in an Editor

You can open the Return Order Summary screen in an editor by using the `YCDExtensionUtils.launchTaskInEditor(String taskId, Element input);` utility method. For example, you can use the following utility method from the extension behavior class:

```
YCDExtensionUtils.launchTaskInEditor("YCD_TASK_VIEW_RETURN_ORDER_SUMMARY", input);
```

Input element should not be null and should follow the following template:

```
<Order DraftOrderFlag="" CustomerFirstName="" CustomerLastName=""
DocumentType="" EnterpriseCode="" OrderHeaderKey="" OrderNo=""
SellerOrganizationCode="" isHistory="" BuyerUserId="" CustomerContactID=""
BillToID="" BuyerOrganizationCode="" >
PriceInfo Currency="" TotalAmount=""/>
<ExchangeOrders>
<ExchangeOrder OrderHeaderKey=""/>
</ExchangeOrders>
</Order>
```

`EnterpriseCode`, `OrderHeaderKey`, `DocumentType`, and `OrderNo` are mandatory and must be passed in the input.

If `DocumentType` is not passed in the input, Sterling Call Center and Sterling Store application will pass the Default Return Order Document Type value in the input.

In case null is passed as an input, an error message saying "Please provide a valid input" will be displayed.

6.8.10 Opening the Advanced Sales Order Search Screen in an Editor

You can open the Advanced Sales Order Search Screen in an editor by using the `YCDExtensionUtils.launchTaskInEditor(String taskId, Element input);` utility method. For example, you can use the following utility method from the extension behavior class:


```
YCDExtensionUtils.launchTaskInEditor("YCD_TASK_ORDER_SEARCH",
input);
```

The following is the input XML template:

```
<Order BillToID="" BillToIDQryType=""
      CardNo="" CustomerEMailID=""
      CustomerEMailIDQryType="" CustomerFirstName=""
      CustomerFirstNameQryType="" CustomerLastName=""
      CustomerLastNameQryType="" CustomerPhoneNo=""
      CustomerPhoneNoQryType="" CustomerZipCode=""
      DocumentType=""
      EnterpriseCode="" FromOrderDate=""
      OrderName="" OrderNameQryType="" OrderNo=""
      OrderNoQryType="" ReadFromHistory=""
      ShowOnlyStoreOrders="" ToOrderDate="">
  <OrderBy>
    <Attribute Desc="" Name="" />
  </OrderBy>
</Order>
```

6.9 Populating Notes based on the Note Type

You can set the note text for order notes, order line notes, draft order notes, return order notes, and customer notes as the default note text based on the note type selected from the 'Note Type' drop-down list in the "Order Notes" screen.

When you select a note type from the drop-down list, the system will generate a dynamic key and look for it in the `bundle.properties` file. If the note type key exists, then the system will set the default value in the "Note Text" panel.

The generated key is `<NOTE_TYPE>+_NOTES_DEFAULT`

Where `<NOTE_TYPE>` for a key is the code value for a common code record used to populate the key value in the 'Note Type' drop-down list.

For example, `YCD_ADD_MODIFY_CHARGES_NOTES_DEFAULT=modify charges notes`.

Note: In the out-of-the-box default key values will not be provided.

Implementing the Sterling Call Center Features

This chapter describes the call center features supported by Sterling Call Center and Sterling Store.

7.1 Item Inquiry

A user may want to search for product items or service items and view the details pertaining to them, such as fulfillment methods, availability, promotions, associations, and price. An enterprise may want to model items based on distinct attributes such as style, size and color, and enable users to search and view the details of the stylized items.

7.1.1 Searching and Viewing the Details of an Item

Call center representatives may frequently receive questions from customers about specific items, including their fulfillment methods, specifications, availability, or price.

7.1.1.1 Solution

The Item Inquiry task enables users to search for product and service items and view their details. Based on the search criteria entered, a list of items is displayed. The user can view additional information such as fulfillment methods, availability, price, promotions, and specifications for each item.

Note: Users can also search for and view the details of items whose effective end date has expired.

Sterling Call Center and Sterling Store provides two ways to search for items:

- Quick Access—The user can enter the item ID, description and manufacturer's name and search for the item.
- Advanced Item Search—The user can enter more restrictive search criteria to search for the item.

If the user has access to multiple enterprises, the Enterprise drop-down list is displayed in the Item Search Criteria panel of the Item Search screen. The `getOrganizationList` API is called to retrieve the list of enterprises. If the search criteria results in a single record, the Item Details screen is displayed. If the search criteria results in multiple records being retrieved, the Search and List screen is displayed.

This section explains the Item Inquiry process and the solution offered by Sterling Call Center and Sterling Store.

Item Information Retrieval

When a user scans item ID using the barcode scanner, the `translateBarCode` API is used to translate and validate the barcode of the item. If alternate item identifiers are entered or scanned, the `translateBarCode` API is called to retrieve the original item information for the scanned alternate item identifiers. However, the `translateBarCode` API is called only if the Enable Scanning Of Items Using Bar Code rule is selected in Configure Item Search Options of the Channel Applications Manager. For more information about alternate item identifiers, see [Section 7.3, "Alternate Item Identifier"](#). The `getCompleteItemList` API retrieves a list of items based on the input criteria. This item list includes additional information such as UOMs, fulfillment methods, pricing, and promotions.

The `getCompleteItemList` API supports case-insensitive searches for system defined columns. For more information about enabling APIs to support case-insensitive searches for search tasks in the Sterling Call Center and Sterling Store applications, see the *Selling and Fulfillment Foundation: Extending the Database Guide*.

The user can search for products, services, or both products and services in the Item Search screen. When searching for services, or both products and services, the results display both independent and non-independent services. Non-independent services cannot be added to an order from the Item Inquiry screens.

Note: If the user searches by item ID, item entitlement rules will be applied, if configured, when the `getCompleteItemList` API is called. For additional information, see [Section 5.5.9, "Configuring Item Search Options"](#).

The `getItemUOMList` is used to get the list of UOMs for the item.

Sterling Call Center and Sterling Store provides a configuration to display Delivery and Shipping as separate fulfillment methods. It also provides a configuration to never show the Pickup fulfillment method if the enterprise does not support Pickup. These configurations are verified when displaying the fulfillment methods in the Preview panel of the Item Search screen and the Item Details panel of the Item Details screen.

The `YFSGetPromotionsForItemList` user exit is called to retrieve and display the promotion details on the Item Details screen.

Item Availability Retrieval

The `findInventory` API is called to display the availability of product items and the capacity of service items.

You can disable availability checks in the Item Search screen to avoid frequent inventory requests on your inventory system.

You can inquire about an item's availability in the Item Detail screen even when the default availability check is disabled. The display of the Country drop-down list on this availability panel is based on the rule to allow country entry. If you have configured region schemas for displaying states, the availability panel displays a drop-down list of states.

Displaying Item Images

You can display the item images along with the item details in Sterling Call Center and Sterling Store. These images can reside on different servers and can be retrieved when needed. You can configure the servers

to fetch the item images, and the protocol to be used when fetching the item images. The Item Search screen requires an image to be 32 X 32 pixels in size in order to be configured on the image server. The Item Details screen requires an image that is 180 X 180 pixels in size in order to be configured on the image server.

Displaying the URL of a Product Web Page for an Item

Sterling Call Center and Sterling Store enable you to display the URL of the product Web page pertaining to an item in the Item Details screen. Configure the Display of a Product Web Page for an Item rule in the Channel Applications Manager by selecting the asset type to be used to display the URL. The `getCompleteItemList` API is called to retrieve the list of assets that are associated with the item. For more information about configuring the display of a product Web page for an item, see [Section 5.5.10, "Configuring the Display of a Product Web Page for an Item"](#).

Displaying the Key Attributes of an Item

Sterling Call Center and Sterling Store enable you to display key attributes pertaining to an item in the Item Details screen. When defining an attribute, you must specify whether the attribute is a key attribute. For more information about key attributes, see the *Business Center: Item Administration Guide*.

Pagination

Sterling Call Center and Sterling Store supports smart retrieval of record sets in the Item Search screen.

For more information about pagination, see [Section 7.22, "Pagination"](#).

7.1.1.2 End-User Impact

This section lists the end-user impact of this feature:

- The user will see item images if the image server is configured.
- The user will see the View Product Web Page hyperlink in the Item Details screen based on the configuration.
- In the Item Search screen and Item Details screen, the user will see Shipping and Delivery as separate fulfillment methods based on the configuration.

- In the Item Search screen and Item Details screen, the user will see pickup as a fulfillment method based on the configuration.
- The user will see the item availability information based on the check for availability configuration rule.
- If the Enable Scanning Of Items Using Barcode rule is selected, users can scan and enter the alternate item identifiers into all the item entry fields throughout the application.
- When checking for availability, the user will see the country and states drop-down list based on the configuration.
- The user will see the Key Attributes panel based on the Is Key Attribute configuration rule.

7.1.1.3 Implementation

This section explains the steps to implement for this feature.

- Sterling Call Center and Sterling Store allows you to configure the store pickup rules. For more information about configuring the store pickup rules, see [Section 5.11.1, "Configuring Store Pickup Rules"](#).
- Sterling Call Center and Sterling Store allows you to configure availability checks and reservation options. For more information about configuring availability checks and reservation options, see [Section 5.10.27, "Configuring Availability Check and Reservation Options"](#).
- Sterling Call Center and Sterling Store allows you to configure the server to fetch the images.

Define entries such as name, protocol, base URL, in the `locations.ycfg` file. The Item Search screens within Sterling Call Center and Sterling Store are designed for small item images that are 32 X 32 pixels in size and large item images that are 180 X 180 pixels in size. It is strongly recommended that your images conform to these sizes for ideal display within the screens. For more information about configuring the connection settings to fetch images from the server, see the *Selling and Fulfillment Foundation: Customization Guide*.

- You can configure the Sterling Call Center and Sterling Store application to display the URL of a product Web page pertaining to an item in the Item Details screen. For more information about

configuring the display of a product Web page for an item, see [Section 5.5.10, "Configuring the Display of a Product Web Page for an Item"](#).

- You can configure the Sterling Call Center and Sterling Store application to enable users to add or search for items using the alternate item identifiers. For more information about scanning of items using bar codes, see [Section 5.5.9, "Configuring Item Search Options"](#).
- You can define an item attribute as a key attribute. For more information about defining key attributes, see the *Business Center: Item Administration Guide*.

7.1.1.4 Reference Implementation

This section lists the default values provided for this feature.

- The YFSGetPromotionsForItemList implementation accepts all the items provided as part of the reference implementation. For more information about the items provided as the reference implementation, see [Section 4.2, "Catalog Management"](#).
- The default YFSGetPromotionsForItemListUE user exit implementation accepts the following promotions:
 - Buy two get one free
 - 20% discount on all accessories
 - 24 months no interest
 - The Prevent Availability Check When Searching for Items rule is defaulted to "Y".
 - The Allow Country to be Entered for screens that check Item Availability rule is defaulted to "Y".
- By default, the Enable Scanning Of Items Using Barcode rule is selected in Configure Item Search Options of the Channel Applications Manager.
- By default, the following asset types are provided:
 - Audio
 - Video

- Text
- Image

7.1.2 Handling Styles for an Item

Some retailers sell products that come in different variations, such as different styles, sizes, and colors, for example, a T-shirt may be sold in three different sizes, 10 different colors, and "v-neck" and "regular neck" styles.

7.1.2.1 Solution

Sterling Call Center and Sterling Store enables an enterprise to model items based on style, size, and color. It also enables users to search and view the details of stylized items.

This section explains the Item Inquiry process for stylized items and solution offered by Sterling Call Center and Sterling Store.

Configuring the Product Catalog

Sterling Call Center and Sterling Store provides the configuration to define an item as a model item in the Product Catalog. If an item is marked as a model item, you can define different styles. Stylized items are those items that share common attributes with the model item, for example, if the model item is a Short-sleeved Polo shirt, possible stylized items will be Small Red Short-sleeved Polo Shirt and Medium Red Short-sleeved Polo Shirt.

You must define a Classification with the Classification Purpose as Distinct Attributes in order to be able to define the set of attributes that identify a stylized item.

When defining stylized items for a model item, Sterling Call Center and Sterling Store assume that the fulfillment method and associations of the stylized items are the same as those of the model item. If you associate a stylized item with an order line containing a related item, Sterling Call Center and Sterling Store assumes that the related item applies to all the stylized items defined for the corresponding model item.

Sterling Call Center and Sterling Store assumes that model items cannot be marked as configured items. Also, it is assumed that configured items do not contain model items as components.

Item-Style Information Retrieval

Sterling Call Center and Sterling Store provides the functionality to search for model items and stylized items in the Item Search screen.

Sterling Call Center and Sterling Store provides the Item Style pop-up window which displays information about the availability and various styles for a model item. The `getCompleteItemList` API is called to retrieve the distinct attributes for a model item.

The `getIemUOMList` API is used to get the list of UOMs for the item. The `YCDOverrideDeliveryMethodUE` user exit is called to determine the list of available fulfillment methods for the item.

Delivery and Shipping are displayed as separate fulfillment methods based on the configuration for Order Entry Rules.

You can also configure the Sterling Call Center and Sterling Store user interface to never show the Pickup fulfillment method if the enterprise does not support the Pickup fulfillment method based on the configuration for Store Pickup Rules.

Style Items pop-up window

Sterling Call Center and Sterling Store provides a Style Items pop-up window that the CSRs can use to browse and select different combinations of style items. The item styles can be displayed as buttons or as lists, based on the configuration rule, for displaying the stylized items. For more information about configuring the display of Model items, see [Section 5.5.8, "Configuring Display of Model Items"](#). If the item style pop-up window is configured to display styles as buttons, the images for the buttons should be defined on an image server.

You can configure the order in which attribute values are displayed on the item style pop-up screen. For example, if you have configured Size as a distinct attribute for a stylized item and this attribute can take the values L, M, S and XL, you can configure that the values appear in the order S, M, L and XL on the style item pop-up.

If a distinct attribute value is not specified for some stylized items but is specified for all other stylized items, Sterling Call Center and Sterling Store displays a literal "None" for the stylized item for which the distinct attribute value is not defined. The display of this literal is bundle controlled. For example, if you have configured Size and Color as distinct attributes and have forgotten to specify the Color for one of the stylized

items, the literal "None" will be displayed on the style item pop-up screen for the item.

Item Availability Retrieval

Sterling Call Center and Sterling Store provides the functionality to retrieve availability information for a stylized item. The `getFulfillmentOptionsForLines` API is called to display the availability.

Sterling Call Center and Sterling Store provides a panel to check for availability if a Ship To address is not entered. The display of the Country drop-down list on this availability panel is based on the rule to allow Country entry. If you have configured region schemas to display states, the availability panel displays a drop-down list of states. For more information about configuring region schemas, see [Section 5.10.21, "Configuring Country and State Display Rules"](#).

Displaying Item Images and Style, Size, and Color Images

You can display item images along with the item details in the Item Styles pop-up window. These images may reside on different server and can be retrieved when needed.

You can configure the server to fetch the item images and the protocol to be used when fetching the item images. Additionally, you can also configure to display images for style, size, and color in the Item Styles pop-up window, if item styles are displayed as buttons.

7.1.2.2 End-User Impact

This section lists the end-user impact for this feature.

- When searching for items, if the user enters a complete or partial Model Item ID in the search criteria of the Item Search screen, the corresponding Model item will be displayed in the search results.
- In the Style Items pop-up screen, the user will see Shipping and Delivery as separate fulfillment methods based on the configuration for Order Entry Rules.
- In the Style Items pop-up window, the user will see pickup as a fulfillment method based on the configuration for Store Pickup Rules.
- When checking for availability in the Style Items pop-up window, the user will see Country and States drop-down list based on the configuration for country display and region schemas.

- In the Style Items pop-up window, the user will see item styles as buttons or as lists based on the configuration rule for display of style items.
- In the Style Items pop-up window, if images are configured for Distinct Attributes, the buttons display the configured images. If images are not configured, the buttons display the attribute values.
- In the Style Items pop-up window, the user will see a message "No styles are defined for this item" if no child items are associated with the Model Item.
- In the Style Items pop-up window, the user will see a message "Styles are not configured for this item" if the Model item is not associated with any classification definition with the purpose code "Distinct Attributes".
- In the Style Items pop-up window, the user will see a message "There is a configuration error with the setup for the Style Items, because of which we cannot display the options." if the same attribute values are defined for two or more item stylized items . For example, if you have configured Size and Color as distinct attributes for items Item1, Item2, and Item3, and the attribute values are as below, the user will see the error message because Item1 and Item2 have the same attribute values for Size and Color.

⁵¹ *Table 7–1 Sample Stylized Items*

Item ID	Color	Size
Item 1	Red	S1
Item 2	Red	S1
Item 3	Red	S2

- If you have configured model items as components of a bundle item, while adding these bundle items item to the order, the error message "Cannot include a bundle item with a model item as a component" is displayed on the Add Items screen.

7.1.2.3 Implementation

This section explains the steps to implement for this feature.

- Define the Model items and Child items in the Product Catalog. Define attributes that uniquely define the Child items. The fulfillment methods and associations defined for the Child item should be the same as those defined for the model item. For more information about defining Model items and child items, see the *Sterling Catalog Management: Configuration Guide*.
- Define a Classification with the Classification Purpose as Distinct Attributes.

Define the attributes for an item and associate these attributes with the classifications pertaining to the stylized items. Further, assign values to the attributes defined. When assigning values, ensure that the combination of values for the child items within a model item are unique.

For more information about defining classifications and attributes, see the *Business Center: Item Administration Guide*.

Note: When defining the attributes for a classification pertaining to a stylized item, ensure that all the attributes belong to the same attribute group.

- Add entries in the resource bundle and the possible values that can be returned for the distinct attributes of a stylized item. Configure the order in which attribute values are displayed on the Style Items pop-up screen by specifying the appropriate value for the resource bundle entries. For example, if you have configured Size as a distinct attribute for an item and this attribute takes the values L, M, S and XL, you can configure that the values appear in the order S, M, L and XL, by providing bundle keys for these attributes as below. Note that the alphabetical order of the bundle keys correspond to the order in which the attributes are to be shown.
 - Size_S1_Small=S
 - Size_S2_Medium=M
 - Size_S3_Large=L
 - Size_S4_Extra_Large=XL

For more information about resource bundles, see [Section A.2.1, "Resource Bundles"](#).

- You can also configure the order in which the attribute values are displayed on the Style Items pop-up screen by using sequence numbers.

For a given item attribute, configure the sequence numbers for the distinct attribute values in the output of the `getCompleteItemList` API. The attribute values are sorted in the ascending order of the sequence numbers. The bundle keys for the item attribute values are displayed in the sorted order.

The following rules must be applied when configuring the sequence numbers:

- The sequence numbers must be set with the below attribute:
`AttributeValueSeqNo="<sequence number>"`
- The sequence numbers must be integers.
- The sequence numbers must be unique for the attribute values.
- The sequence numbers must be consistent for the attribute values in the child item elements in the output of the `getCompleteItemList` API.

For the above example, if you have configured the sequence numbers as below;

Table 7–2 Sample Sequence Numbers

Attribute Value	Sequence Numbers	Bundle Entry
Size_S1_Small	4	S
Size_S2_Medium	3	M
Size_S3_Large	2	L
Size_S4_Extra_Large	1	XL

the attribute values will be displayed in the following order:

- Size_S4_Extra_Large=XL (1)
- Size_S3_Large=L (2)
- Size_S2_Medium=M (3)
- Size_S1_Small=S (4)

- Sterling Call Center and Sterling Store allows you to configure the server to fetch the item images.

Define entries such as name, protocol, and base URL in the `locations.ycfg` file. The Style Size pop-up window is designed for medium-sized images that are 64 X 64 pixels in size. It is strongly recommended that your images conform to this size for ideal display within the screens. For more information about configuring connection settings to fetch images from the server, see the *Selling and Fulfillment Foundation: Customization Guide*.

- To display item styles as buttons or as lists, see [Section 5.5.8, "Configuring Display of Model Items"](#).
- To configure images for item style, size, and color, define a new config in the `locations.ycfg` file with the Name set to "STYLE_ITEM" (see the following example below)

```
<Config Name="STYLE_ITEM"
  Protocol = "http"
  BaseUrl = "127.0.0.1"
  PortNumber = "80"
  ApiUrl = "/COMImages/$param1$.jpg"
  DefaultApiUrl = "/COMImages/404.jpg">
</Config>
```

The names of the images on the server should adhere to the following convention:

```
<Attribute Name>_<Attribute Value>
```

For example, if you have configured Color as a distinct attribute and this attribute can take the value Red, the corresponding image on the server should be Color_Red.jpg. For more information about configuring the connection settings to fetch images from the server, see the *Selling and Fulfillment Foundation: Customization Guide*.

- You can configure whether Delivery and Shipping are to be shown as separate fulfillment methods in the Item Style pop-up window. For more information about configuring the display of model items, see [Section 5.5.8, "Configuring Display of Model Items"](#).
- Sterling Call Center and Sterling Store allows you to configure the store pick up rules. For more information about configuring the store pick up rules, see [Section 5.11.1, "Configuring Store Pickup Rules"](#).

7.1.2.4 Reference Implementation

This section describes the default values provided for this feature.

- Model Item Polo Short Sleeved Shirt with attributes Supersize (Regular and Tall), Size (S, M, L, and XL) and Color (Red, Grey, and Black) is provided as part of reference implementation for the XYZ-CORP organization. The attribute values provided for each of the attributes are:

Table 7–3 Attributes and Values

Attribute	Value
Supersize	Regular Tall
Size	S M L XL
Color	Red Grey Black

The resource bundle entries provided for the attribute values for Size are:

Table 7–4 Resource Bundle Entries

S	Size_S1_Small
M	Size_S2_Medium
L	Size_S3_Large
XL	Size_S4_Extra_Large

- Sterling Call Center and Sterling Store provides the following items as part of reference implementation: PSL3C3SREGLB, PSL3C3SREGLG, PSL3C3SREGLR, PSL3C3SREGMB, PSL3C3SREGMG, PSL3C3SREGMR, PSL3C3SREGSB,

PSLS3C3SREGSG, PSL3C3SREGSR, PSL3C3STALXLB,
PSLS3C3STALXLG, PSL3C3STALXLR.

- The Classification Purpose for Distinct Attributes is bound to the Itemtype attribute. The Classification Values have the following hierarchy: Style Item > Mens Apparel > T-Shirt. The Distinct Attributes Class, Colorcode, and Sizecode are defined for Mens Apparel. These are defined for the XYZ-CORP organization.
- The Prevent Availability Check When Searching for Items rule is defaulted to "Y" for XYZ-CORP and XYZ-RETAIL organizations.
- The item style display rule is configured to display the button view for the XYZ-CORP and XYZ-RETAIL organizations.

7.2 Configured Items

In some retail environments may fulfill orders comprising of configured items. A configured item is a group of items which are related such as a computer which comprises of the processor, keyboard, mouse, and monitor. Configured items are also referred to as bundles.

7.2.1 Solution

Sterling Call Center and Sterling Store allows you to configure the bundle fulfillment mode. That is, whether bundle components should be shipped together or independently. For more information about configuring bundle fulfillment mode, see the *Sterling Catalog Management: Configuration Guide*.

Bundles are supported in the following flows:

- [Order Creation](#)
- [Add Multiple Items to an Order](#)
- [Change Fulfillment Options](#)
- [Change Gift Options](#)
- [Price Match](#)
- [Reship an Item](#)
- [Cancel Order](#)
- [Change Service Instructions](#)

- [Change Service Appointment](#)
- [Return Line Selection](#)

Sterling Call Center and Sterling Store allows you to configure if bundle components should be displayed on the following screens:

- Order Summary
- Shipment Summary
- Return Summary

Sterling Call Center and Sterling Store assumes that Configured Items do not contain Model Items as components.

Note: If you have configured model items as components of a bundle item, while adding these model items as components of a bundle item to the order, the error message "Cannot include a bundle item with a model item as a component" is displayed.

7.2.2 End-User Impact

The user will be able to see the bundle parent and components, if the bundle item is configured as ship independent. The user will only see the bundle parent if the bundle item is configured as ship together.

Based on the configuration for display of bundle components, the user will be able to see the bundle components in the following screens:

- Order Summary
- Shipment Summary
- Return Summary

7.2.3 Implementation

This section explains the configurations for bundles.

- Sterling Call Center and Sterling Store allows you to configure bundle items as ship together or ship independent. For more information about configuring bundle items as ship together or ship independent, see [Section 5.5.2, "Managing Products"](#).

- Sterling Call Center and Sterling Store allows you to configure the display of bundle components on the Order Summary, Return Summary and Shipment Summary screens. For more information about configuring the display of bundle components, see [Section 5.10.36, "Configuring Bundle Components Display"](#).

7.2.4 Reference Implementation

This section explains the reference implementation provided as part of bundles.

- As part of reference implementation Sterling Call Center and Sterling Store provides RDRF804SET bundle parent item and DTRND804, DFBDC804, and FSB804 bundle component items.
- The bundle item RDRF804SET is configured as Ship Independent.
- The Display Component Items For Bundles In Summary Screens rule is set to not display bundle component items.

7.3 Alternate Item Identifier

In some retail environments, the enterprise may use a different item identifier than what has been configured in the enterprise's global catalog. These enterprises use this alternate item identifier to scan and search for product or service items in the user interface. The alternate item identifiers are supported for product and service items.

7.3.1 Solution

Sterling Call Center and Sterling Store allows you to configure the item alias for alternate item identifiers. For more information about configuring item aliases for alternate item identifiers, see [Section 5.10.17, "Configuring Alternate Item Identifier Display"](#).

The user can scan or enter the alternate item identifiers in the Sterling Call Center and Sterling Store application.

If the Enable Scanning Of Items Using Barcode rule is selected in Configure Item Search Options of the Channel Applications Manager, the translateBarCode API is called in the following screens to retrieve the original item information for the scanned alternate item identifiers:

- Item Inquiry screen

- Create Order—Add Items screen
- Backroom Pick screen and Customer Pick screen

For more information about the item information retrieval, see [Section 7.1.1, "Searching and Viewing the Details of an Item"](#).

The `getCompleteItemList` API is called on the Large Order Entry Screen to retrieve the original item information for the scanned alternate item identifiers.

Note: Barcode translation takes place only when you press the TAB key after scanning the item barcode. The scanner must be configured to send out a TAB message immediately after scanning the barcode. This configuration may change based on the device.

Sterling Call Center and Sterling Store also provides the ability to store an alternate item identifier on an order line.

7.3.2 End-User Impact

You can scan the alternate item identifiers into all item entry fields throughout the user interface.

7.3.3 Implementation

If you want to use the alternate item ID instead of the original item ID, configure the:

- Store Alternate Item IDs on Order Lines rule.
- Rule to set the item alias for alternate item identifiers.

For more information about configuring the rules to display the alternate item identifier, see [Section 5.10.17, "Configuring Alternate Item Identifier Display"](#).

- Barcode translation for an item alias configured for an alternate item identifier. For more information about defining barcodes, see the *Sterling Warehouse Management System: Configuration Guide*.

Note: To display the item alias on all screens, you must set the display attributes for the item. To set the display attributes, configure the item attributes and modify the resource bundle key. For more information about configuring item display attributes, see [Section 7.4, "Item Display Options Configuration"](#).

7.3.4 Reference Implementation

The reference implementation items are associated with the alternate item identifiers. The following implementations are defined for the XYZ Corp organization:

- When configuring an item, you can specify the alternate item identifier in the Item Alias field.
- If you configure the Alternate Item ID rule, the alternate item identifier gets stamped on the order line.

7.4 Item Display Options Configuration

You may want to display certain item attributes to different enterprises as the description in Sterling Call Center and Sterling Store user interface. For example, one retailer may consider the item attributes 'ItemID' and 'Item Description' to be the most important attributes, while a different retailer may consider 'ItemID' and 'Manufacturer' to be the most important attributes to display in the user interface.

7.4.1 Solution


Sterling Call Center and Sterling Store enables you to configure which item attributes are displayed throughout the user interface. This is done by first configuring the item attributes associated with the item and then editing the resource bundle key.

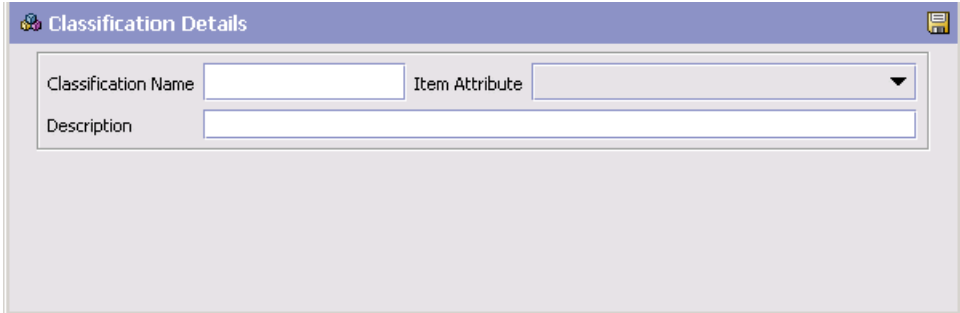
7.4.2 End-User Impact

The end user sees the primary item attributes you configure, in the format you specify, throughout the Sterling Call Center and Sterling Store user interface.

7.4.3 Implementation

To configure which item attributes are available for display:


1. Create a new classification and associate it with the classification purpose "Display Attributes". For more information about defining classifications, see the *Sterling Catalog Management: Configuration Guide*.
 - a. From the Channel Applications Manager, select Manage Products and Categories.
 - b. Under Manage Products and Categories, select Define Types of Product Classification. The Classification Definitions tab is displayed.
 - c. Choose . The Classification Details pop-up window is displayed.




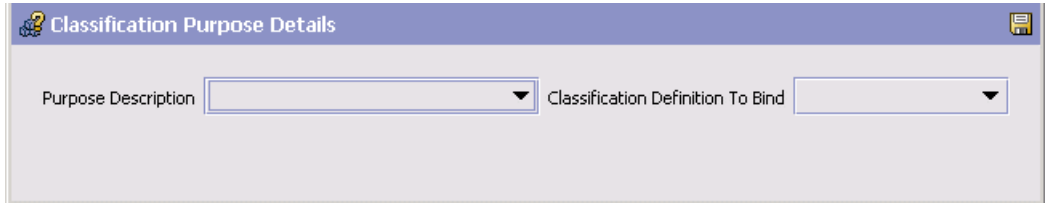
The screenshot shows a window titled "Classification Details". It contains three input fields: "Classification Name" (a text box), "Item Attribute" (a drop-down menu), and "Description" (a text box). The window has a standard title bar with a close button on the right.

- d. In Classification Name, enter the name of the classification.
- e. From the Item Attribute drop-down list, select the item attribute you want to associate with the classification.

Note: The item attributes in the drop-down may display with underscores or without spacing. Disregard this.


- f. In Description, enter a brief description of the classification.
- g. Choose .
- h. From Classification Definition window, select the Classification Purposes tab.

- i. Choose . The Classification Purpose Details pop-up window is displayed.



- j. Choose the "Item Display Attributes" classification purpose from the Purpose Description drop-down menu.

Note: You cannot assign more than one classification definition to a classification purpose.

- k. Choose the classification definition that you want to bind a classification purpose to from the Classification Definition To Bind drop-down menu.
- l. Choose .
- m. Define a Classification Hierarchy for the new classification and associate it with the item attribute groups and attribute values. For more information about defining classifications, see the *Sterling Catalog Management: Configuration Guide*.

If you have configured item aliases for alternate item identifiers, ensure that the item alias attribute is included in the classification hierarchy details. For more information about alternate item identifiers, see [Section 7.3, "Alternate Item Identifier"](#).

2. Modify the resource bundle.

Sterling Call Center and Sterling Store uses resource bundle keys to display item information on all screens. The resource bundle keys define the formatting and sequencing of the item attributes you choose when configuring the classification values.

To allow new or modified item attributes to display on a screen in Sterling Call Center and Sterling Store, you must edit the ItemDisplay bundle keys.

To edit the ItemDisplay bundle keys:

- a. From the Sterling Call Center and Sterling Store root directory > Plugins, select the `plugins\com.yantra.pca.ycd.rcp_1.0.0` folder.
- b. Select the `com.yantra.pca.ycd_format_bundle.properties` file located in the `resources.jar` file.
- c. In the `com.yantra.pca.ycd_format_bundle.properties` file, search for the following bundle keys:
 - `ItemDisplayConfigurationForLineDisplay`
 - `ItemDisplayConfigurationForLineDisplayNoAttributeList`
 - `ItemShortDescDisplayConfiguration`
 - `ItemShortDescDisplayConfigurationNoAttributeList`
 - `ItemIDDisplayConfiguration`
 - `ItemIDDisplayConfigurationNoAttributeList`

You can modify the value that appears to the right side of the equal sign ("=") in these bundle entries. The right side can contain any formatting characters, such as dashes, semicolons, and so forth. The right side can also contain place holders for the item attributes that you have made available through the configuration in the following format: `{x}`, where 'x' is an integer representing the index of the item attribute you want to display.

For example, a classification has the following item attributes:

Item Attribute	Description	Is Key Attribute
ShortDescription	ShortDescription	<input type="checkbox"/>
ColorCode	ColorCode	<input type="checkbox"/>
UnitOfMeasure	UnitOfMeasure	<input type="checkbox"/>
ItemID	ItemID	<input type="checkbox"/>

The place holders are available in the same sequence as the display attributes. In this example, the following place holders are available for use in the resource bundle:


```
#{0}-ShortDescription
{1}-ColorCode
{2}-UnitOfMeasure
{3}-ItemID
```

The resource bundle can be changed from this:

```
ItemIDDisplayConfiguration={3},{2},{0}
```

which displays the item ID, the unit of measure, and the short description in the Sterling Call Center and Sterling Store user interface, to this:

```
ItemIDDisplayConfiguration={3},{0},{2}
```

which displays the item ID, the short description, and the unit of measure in the Sterling Call Center and Sterling Store user interface.

7.4.4 Reference Implementation

None.

7.5 Alternate Store Pickup Locations Search

While creating an order, the customer may want to know the stores at which the items are available. In such situations, call center and store representatives may need to retrieve the availability information for the requested items.

7.5.1 Solution

Sterling Call Center and Sterling Store provides a way to search across stores to determine which ones have items available for pickup.

This section explains the Alternate Store Pickup Locations Search task and the solution offered by Sterling Call Center and Sterling Store.

The Alternate Stores screen displays a list of items and nearby stores where the item is available. You can configure which stores should be displayed in this screen. The `getSurroundingNodeList` API is called to

retrieve the list of surrounding nodes. The findInventory API is called to retrieve the inventory availability information.

Store Pickup Rules

You can configure the following store pick rules which are used to retrieve results for the Alternate Store Pickup Locations Search.

- Distance To Consider When Finding Nearby Store
- Distance To Consider When Finding More Store
- Distance UOM
- Standard Search Fulfillment Type
- Extended Search Fulfillment Type

For more information configuring these rules, see [Section 5.11.1, "Configuring Store Pickup Rules"](#).

Availability Information Retrieval

The display of the country drop-down list on the availability panel is based on the rule to allow country entry. If you have configured region schemas for display of states, the availability panel displays a drop-down list for states. For more information about configuring region schemas, see [Section 5.10.21, "Configuring Country and State Display Rules"](#).

7.5.2 End-User Impact

Based on the configuration to display country and state drop down lists, the end-user will see country and state drop down lists in the Alternate Stores screen.

7.5.3 Implementation

This section explains the configurations for the alternate store pickup locations search task.

- Sterling Call Center and Sterling Store allows you to configure Store Pickup rules. For more information about configuring the store pickup rules, see [Section 5.11.1, "Configuring Store Pickup Rules"](#).
- Sterling Call Center and Sterling Store allows you to configure the display of country and state drop down lists. For more information

about configuring the display of country and state drop down lists, see [Section 5.10.21, "Configuring Country and State Display Rules"](#).

7.5.4 Reference Implementation

This section explains the reference implementation provided as part of alternate store pickup locations search task.

- The default value for 'Distance Radius to Consider When Finding Nearby Stores' is 25 for XYZ-CORP organization.
- The default value for 'Distance Radius to Consider When Finding More Stores' is 50.
- The default value for 'Distance UOM' is Mile.
- The default value for 'Standard Search Fulfillment Type' is Fulfillment Type for Product Sourcing.
- The default value for 'Extended Search Fulfillment Type' is Fulfillment Type for Product Sourcing.

7.6 Order Capture

For orders to be fulfilled within Sterling Call Center and Sterling Store, the relevant data must be captured from the Sterling Call Center and Sterling Store user interface, a Web portal, or other external order entry systems. This involves accurately storing all the information relevant to an order internally, and after that is done, ensuring that the information captured is valid, and can be processed.

This section describes the following:

- [Order Creation](#)
- [Capturing Orders through Other Channels](#)
- [Order Delay](#)
- [Order Validation](#)

7.6.1 Order Creation

Sterling Call Center and Sterling Store receives the order-related data entered through customer order channels such as a retailer Web site,

and stores them internally for them to be processed. Call center agents and store representatives can also create orders.

7.6.1.1 Solution

Using the Create Order task, users who have access to multiple enterprises, can select the enterprise for which an order has to be created. It also enables the user to identify a customer and create an order for that customer. The user can enter multiple order lines for an order, modify the fulfillment options and appointments, and confirm the payment information as requested by the customer. Sterling Call Center and Sterling Store provides a set of rules for the create order task. You can use these rules to configure the order creation task to meet your specific requirements.

Using the Customer Screen Sequence and Line Entry Sequence rules, you can switch the order of the Customer Identification and Add Line steps. For more information about Configuring the Customer Screen Sequence and Line Entry Sequence rules, see [Figure 5-11](#).

Validations are carried out for items and the quantity of items in an order in the Customer Identification screen and the Add Items screen. For more information about validating items, see [Section 7.6.4.4, "Item Validation"](#).

If you create an order for a contact who does not have a User ID, that contact's payment methods will not be visible when you reach the payment confirmation screen. For more information about creating a contact, see [Section 7.16.1, "Create Consumer Customer"](#).

In the Sterling Call Center and Sterling Store, you cannot create an order for an anonymous customer whose record was created in the Sterling Multi-Channel Selling Solution. You must create the customer in Sterling Call Center and Sterling Store.

When creating an order for a customer or contact, the status of the customer or contact must not be Inactive. If the status is Inactive, an error message is displayed.

The steps involved in the order creation process in Sterling Call Center and Sterling Store are:

1. [Identifying a Customer](#)
2. [Adding Items to an Order](#)

3. [Opening an Existing Order from the Large Order Item Entry Screen](#)
4. [Changing the Fulfillment Options](#)
5. [Viewing Pickup and Shipping Fulfillment Summary](#)
6. [Changing Service Appointments](#)
7. [Viewing the Service Fulfillment Summary](#)
8. [Viewing and Confirming Payment Details](#)
9. [Entering a Name for a Draft Order](#)

Identifying a Customer

This section explains the customer identification step in the create order task, and the solution offered by Sterling Call Center and Sterling Store.

- [Identifying or Searching for a Customer](#)
- [Skipping the Customer Identification step](#)

If a customer contact ID is entered in the order header, the YCD_SetOrderDefaults_2.0 or YCD_SetOrderDefaultsOnChange_2.0 services are invoked as the beforeCreateOrderUE or beforeChangeOrderUE user exits, respectively, that are called by the createOrder API or changeOrder API. The getCustomerContactList API is called to populate the order with the first name, last name, e-mail address, and day phone number of the customer contact. If a customer contact ID is not entered in the order header, the billing address on the order is used to populate the first name, last name, e-mail address, and day phone number fields. The postal code in the order is always retrieved from the customer's Bill To address.

If a customer or contact does not have default addresses or payment methods defined, the default addresses or payment methods of the closest customer in the customer hierarchy are used.

Identifying or Searching for a Customer

Sterling Call Center and Sterling Store provides the functionality to search for a customer based on three options:

- [Advanced Customer Search](#)
- [Search Based on Address](#)
- [Basic Customer Search](#)

Advanced Customer Search

The Advanced Customer Search screen is recommended if the user wants to place orders for the customers maintained by Sterling Call Center and Sterling Store. This screen provides a full set of features to search against your database. Using the Advanced Customer Search option in Order Entry rules enables you to use of the more detailed information displayed by the Advanced Customer Search screen as well as associating additional addresses and payment methods back to the customer. Use the Advanced Customer Search screen if you want to access the customers created in the Sterling Call Center and Sterling Store.

When searching a customer master database, you can enable the search for business customers by configuring the Business Customers Enabled rule. You can also configure the default customer type when searching for a customer. For more information about configuring the display of the Customer Identification screen, see [Figure 5-12](#).

A user can add a new contact for a business customer in the Customer Identification screen. When the manageCustomer API is called at the end of the corresponding process, the new contact is saved against the selected customer record. The getCustomerList API is called to update the details of the customer after the contact is added.

A user can enter a new address or modify an existing address in the Customer Identification screen. For more information about the Address Search screen, see [Section 7.6.4.2, "Address Verification"](#).

When creating a customer from the Advanced Customer Search screen, the Create Customer wizard is loaded in a dialog box. [Section 7.16, "Customer Creation"](#) contains more information about this task.

When a new address is added or modified using the Advanced Customer Search screen, the new address is saved against the selected customer record or contact record through a manageCustomer API call.

When creating an order for a business customer from the Advanced Customer Search screen, a user can allow tax exemptions on the order by configuring the Change Tax Options for a business customer rule. If only one currency is defined for the customer, and this is not the same as the currency defined for the enterprise organization, the customer's currency is applied to the order through the createOrder API or the changeOrder API call.

The Advanced Customer Search screen contains validations to ensure that the end user enters enough information for a search. If this screen is extended to contain additional fields, these validations are not performed. This enables you to create validations based on the fields that you added. For more information about customizing screens, see the *Selling and Fulfillment Foundation: Customization Guide*.

Search Based on Address

If you do not maintain a customer database, you can choose to display Address Search screen which allows a user to search among the existing addresses in the system.

In a multischema setup, the addresses may be present in multiple transaction schemas. The `getOrganizationHierarchy` API is called to retrieve the colony to which the enterprise belongs. The `getPersonInfoList` API is called to retrieve the addresses based on the search criteria entered and the colony to which the enterprise belongs.

The `getPersonInfoList` API is called to retrieve the addresses based on the search criteria entered. The `getConsumerDetails` API is used to retrieve the details of the consumer associated with the address. If a consumer corresponding to the address is not found, and if corporate users are enabled for the corresponding enterprise, the system attempts to find a corporate user associated with the address.

If the Customer Identification screen is the first screen in the create order flow, this screen calls the `createOrder` API. Otherwise, the `changeOrder` API is called to save the address on the order.

The user can enter a new address or modify an existing address in the Address Search screen. For more information about the Address Search screen, see [Section 7.6.4.2, "Address Verification"](#).

The Address Entry screen performs the necessary validations to ensure that the end user enters enough information for a search. If this screen is extended to contain additional fields, these validations are not performed. This enables you to create validations based on the fields that you added. For more information about customizing screens, see the *Selling and Fulfillment Foundation: Customization Guide*.

Basic Customer Search

The Basic Customer Search screen is not recommended for new installations. It is only provided for backward compatibility.

Sterling Call Center and Sterling Store provides a configuration to enable searches based on customer types. You can also configure the default customer type to be used when searching for a customer. For more information about configuring the customer types, see [Figure 5-14](#).

The `getCustomerList` API is used to retrieve the details of the business customer or consumer customer. If the Customer Identification screen is the first screen in the create order flow, this screen calls the `createOrder` API. Otherwise, the `changeOrder` API is called to save the address on the order.

The user can enter a new address or modify an existing address in Customer Identification screen. For more information about the Address Search screen, see [Section 7.6.4.2, "Address Verification"](#).

The Basic Customer Search screen contains validations to ensure that the end user enters enough information for a search. If these screens are extended to contain additional fields, these validations are not performed. This enables you to create validations based on the fields that you added. For more information about customizing screens, see the *Selling and Fulfillment Foundation: Customization Guide*.

Skipping the Customer Identification step

The user has the option of skipping the customer identification step.

- If the user is using the Default Address Entry/Search screen, the user will be prompted to enter the billing address before the completion of the order capture.
- If the user is using one of the Customer Search screens, the Customer Search screen is displayed again before the order is captured. At this point, the user can either search for or create a customer for use on the order, or can enter a billing address. In such a situation, no customer record will be associated to the order.

If the user skips the customer identification step, the items and the quantity of the items in the order are validated in the Customer Identification screen after the user adds the items to the order. The `validateItemForOrdering` API is called to validate the items in the order. If the items in the order fail validation, the Add Items screen is displayed. For more information about item validation, see [Section 7.6.4.4, "Item Validation"](#).

Adding Items to an Order

This section explains the item entry step in the create order task, and the solution offered by Sterling Call Center and Sterling Store. Adding items to an order comprises the following tasks:

- [Alternate Views for the Add Items Screen](#)
- [Identifying Items](#)
- [Display of Columns in the Add Items screen](#)
- [Configuring the Focus of the Cursor in the Add Items or the Large Order Entry Screen](#)
- [Adding Or Deleting Lines From An Order](#)
- [Customizing the Way Items are Added to an Order](#)
- [Alternate Item Identifiers](#)
- [Item Entitlement](#)
- [Adding Stylized Items or Modifying an Item's Style](#)
- [Adding Related Items or Replacing Items](#)
- [Viewing Updated Price Details and Price Breakdown](#)
- [Displaying the Fulfillment Methods](#)
- [Checking for Availability](#)
- [Disabling Pickup from Store for all Items](#)

Alternate Views for the Add Items Screen

Sterling Call Center and Sterling Store provides the functionality to search for items based on two options:

- Large Order Item Entry (with a table that is designed to handle a large number of items)
- Add items (with panels for each order line)

Sterling Call Center and Sterling Store provides a Large Order Item Entry screen that is designed to handle a large number of items. You can choose to either display this screen always, or when the number of order lines exceeds a preconfigured number. You can also opt to never display this screen. If your enterprise fulfills orders with a large number of order lines, it is recommended to use the Large Order Item Entry screen. For

more information about configuring the display of Large Order Item Entry screen, see [Figure 5–15](#). If you choose to display the Large Order Item Entry screen, it is displayed when performing the following tasks:

- Create Order
- Add Lines to Order
- Change Item Style
- Return Entry: Add Exchange items

Identifying Items

If you have configured to display the Add Items screen with panels, when the user scans the item ID using the barcode scanner, the `translateBarCode` API is used to translate and validate the barcode of the item. If alternate item identifiers are entered or scanned, the `translateBarCode` API is called to retrieve the original item information for the scanned alternate item identifiers. For more information about alternate item identifiers, see [Section 7.3, "Alternate Item Identifier"](#). However, the `translateBarCode` API is called only if the Enable Scanning Of Items Using Barcode rule is selected in Configure Item Search Options of the Channel Applications Manager. For more information about the item information retrieval, see [Section 7.1.1, "Searching and Viewing the Details of an Item"](#). The `getCompleteItemList` API is called to retrieve descriptions, price, accessories, and units of measure for the item.

If you have configured to display the Large Order Entry screen, when the user scans item ID using the barcode scanner, the `getCompleteItemList` API is used to translate and validate the barcode of the item. If alternate item identifiers are entered or scanned, the `getCompleteItemList` API is called to retrieve the original item information for the scanned alternate item identifiers. For more information about alternate item identifiers, see [Section 7.3, "Alternate Item Identifier"](#). The `getCompleteItemList` API is used to retrieve descriptions, price, accessories, and units of measure for the item.

Note: When searching for an item, if item entitlement has been configured for the customer, the `getCompleteItemList` API returns only items that have been configured for that customer.

The `getCompleteItemList` API is called to retrieve the details of the item, and the item is added to the order.

When invoking the `getCompleteItemList` API, in addition to retrieving the details of the original item, Sterling Call Center and Sterling Store also retrieves the details of the associated items that have been configured to substitute the original item. If the original item meets all of the following conditions, the user is prompted to add the item configured to substitute the original item:

- The item's effective end date has expired.
- The item has an associated item, whose Association Type is configured as Supersession.

Note: Sterling Call Center and Sterling Store does not take into consideration the associated quantity for an associated item whose association type is configured as Supersession.

- The Item Substitution On Order Allowed rule is set to "No" in the Applications Manager. For more information about defining a product item's sourcing and transportation, see the *Sterling Catalog Management: Configuration Guide*.

In an order, a user cannot add an item whose effective start date and effective end date are either before the current date or after the current date. For example, if the current date is 05/26/2009, and a user attempts to add an item whose start date is 01/01/2009 and end date is 04/30/2009, Sterling Call Center and Sterling Store displays an error message.

Sterling Call Center and Sterling Store does not allow users to add items that are always tag-controlled to an order.

Display of Columns in the Add Items screen

You can configure whether line quantity, UOM, line price and line total columns need to be displayed on the Add Items screens. For more information about configuring the columns to be displayed, see [Figure 5-17](#).

Configuring the Focus of the Cursor in the Add Items or the Large Order Entry Screen

You can configure the focus of the cursor after adding an item to an order. Usually, for an enterprise for which multiple quantities are present in a single order line (mostly Business-to-Business), the practice is to enter the quantity after the item is added to the order. However, for an enterprise for which a single quantity is present in a single order line (mostly Business-to-Consumer), it is recommended that the focus is placed on the next Item ID entry field instead of the Quantity field. For more information about configuring the focus of the cursor, see [Figure 5-17](#), and the information following the figure.

If a user adds multiple items from the Item Search screen, the focus of the cursor shifts to the next Item ID field and the default value displayed in the Quantity field is 1.

If a user adds an item from the Related Items pop-up window or panel, depending on the configuration, the focus of the cursor shifts to the next Item ID field. However, the quantity of the related item that is displayed is derived by multiplying the Associated Qty with the quantity of the parent item. If the user has not specified any quantity for the parent item, the value of the parent item's quantity is taken as 1, and subsequently, the quantity of the related item that is displayed is derived by multiplying the Associated Qty with 1.

If a user adds an item from the Style Items pop-up window, the focus of the cursor shifts to the next Item ID field and the default value displayed in the Quantity field is 1.

If a user is adding a single item from the Item Search screen, the behavior of the cursor and the quantity of the item that is displayed depends on the way the cursor's focus is configured.

- If the focus of the cursor is set to the next Item ID field, the cursor shifts to the next Item ID field and the default value displayed in the Quantity field is 1.
- If the focus of the cursor is set to the next editable field (Quantity), the cursor shifts to the next editable field and no default value is displayed in the Quantity field.

Adding Or Deleting Lines From An Order

If the add items screen is the first screen in the create order flow, this screen calls the createOrder API. Otherwise, the changeOrder API is called to add lines to the order. The changeOrder API is also called to delete existing lines from the order.

Note: When a user deletes an order line in the Add Items screen, the changeOrder API is called to delete the order line from the order. However, in the Large Order Item Entry screen, the changeOrder API is called to delete the order line only when the user navigates to the next screen.

Sterling Call Center and Sterling Store assumes that the status modification rules allow addition of lines to cancelled orders. If the status modification rules do not allow addition of lines to cancelled orders, the user will not be able to add new lines to the order and remove all existing lines at the same time.

Customizing the Way Items are Added to an Order

Sterling Call Center application provides a way to add items to an order using its extensibility feature. This feature can be used by users to customize the application to support the task of adding lines to an order from a customer's wish list.

Note: The items that are being added to an order should be valid items. The Add To Order utility method `(YCDExtensionUtils.addToOrder (Element ItemList);)` does not validate the items. Also, Delivery Service items cannot be added to an order using the extensibility feature.

- **Adding Standalone Items using Extensibility**

The `YCDExtensionUtils.addToOrder (Element ItemList);` utility method can be used to add a list of standalone items to both the Add Items screen and the Advanced Add Items screen. The `ItemList` element should have the following attributes:

```
<ItemList CallingOrganizationCode=" " >
  <Item ItemID=" " UnitOfMeasure=" " ItemGroupCode=""/>
```

```
</ItemList>
```

For the list of the input XML attributes, see [Table 7-5](#)

- **Adding Stylized Items to the Advanced Add Items Screen using Extensibility**

The `YCDEExtensionUtils.addToOrder (Element ItemList);` utility method can be used to add stylized items to the Advanced Add Items screen using extensibility. The `ItemList` element should have the following attributes:

```
<ItemList CallingOrganizationCode=" " >
  <Item ItemID=" " UnitOfMeasure=" " ItemGroupCode=""/>
</ItemList>
```

Here, `ItemID` indicates the Item ID of the model item.

When adding a stylized item to the Advanced Add Items screen, the system displays the Style Size pop-up window in which you can enter the details of the item. If you are adding multiple model items, the system will not display the Style Size pop-up window. Click the Choose Style hyperlink in the Item panel to select the item style.

- **Adding Stylized Items to the Add Items Screen using Extensibility**

The `YCDEExtensionUtils.addToOrder (Element ItemList);` utility method can be used to add stylized items to the Add Items screen using extensibility. The `ItemList` element should have the following attributes:

```
<ItemList CallingOrganizationCode=" " >
  <Item ItemID=" " UnitOfMeasure=" " ItemGroupCode="">
    <PrimaryInformation IsModelItem="" />
  </Item>
</ItemList>
```

Here, `ItemID` indicates the Item ID of the model item. When adding a stylized item to the Add Items screen, the system displays the Style Size pop-up window in which you can enter the details of the item. If you are adding multiple model items, the system will not display the

Style Size pop-up window. Click the Choose Style hyperlink in the Item panel to select the item style.

- **Adding Related Items using Extensibility**

Related items can be added to the Advanced Add Items screen using the `YCDExtensionUtils.addToOrder (Element ItemList);` utility method. The `ItemList` element should have the following attributes:

```
<ItemList CallingOrganizationCode=" " ParentUniqueKey=" ">
  <Item ItemID=" " UnitOfMeasure=" " AssociatedQuantity=" "
    ItemGroupCode=" " AssociationType=" " />
</ItemList>
```

For the list of the input XML attributes, see [Table 7-5](#).

Note: If the `ParentUniqueKey` is not passed, the items will be added as standalone items. Also, the `Association Type` is mandatory to form the correct relationship between the PROD parent items and the PROD child items.

Note: When adding items to an order, the items can be added either as a list of stand alone order lines or a list of related items to an existing parent order line.

Note: This feature is currently supported only for the Advanced Add Items screen and not for the Add Items screen.

- **Adding Multiple Stylized Items from the Style Size Pop-up Window using Extensibility**

Sterling Call Center and Sterling Store provides a way to add multiple stylized items to an order without closing the Style Size pop-up window.

You can add a new control, for example, a button, that enables you to add the items. When you click this control, you need to get the

"SelectedItem" model from the screen and form an input element that is similar to that provided in the following example:

```
<ItemList CallingOrganizationCode=" ">
  <Item Currency="USD" ItemGroupCode="PROD"
    ItemID="PSLS3C3SREGMR" OrganizationCode="XYZ-CORP"
    Quantity="1.0" UnitOfMeasure="EACH">
  </Item>
</ItemList>
```

Here, the `Item` element is the "SelectedItem" model.

The `YCDEExtensionUtils.addToOrder (Element ItemList);` utility method can be invoked by using the `ItemList` element given in the previous example.

Note: You should provide the complete information pertaining to the items that are being passed. If you do not provide the complete information, the system displays the Style Size pop-up window again.

- **Input XML for Adding Items using Extensibility**

The input XML for adding items using the extensibility feature is as follows:

```
<ItemList CallingOrganizationCode=" " ParentUniqueKey="">
  <Item ItemID=" " UnitOfMeasure=" " AssociatedQuantity=""
    ItemGroupCode=" " AssociationType=" " >
    <PrimaryInformation IsModelItem=" " />
  </Item>
</ItemList>
```

Table 7–5 Input XML for Adding Items using Extensibility

Attribute	Description
CallingOrganizationCode	The CallingOrganizationCode at the ItemList level that must match the EnterpriseCode of the order.
ParentUniqueKey	TransactionalLineID of the item that should be the parent item of the ItemList Element.

Table 7–5 Input XML for Adding Items using Extensibility

Attribute	Description
ItemID	Item ID
UnitofMeasure	Unit of measure
AssociatedQuantity	The quantity to be associated with the parent item. This is necessary if the item is added as a child line.
ItemGroupCode	Item Group Code
AssociationType	The association that is to be set up between the items, for example, cross sell, up sell, and so on.
IsModelItem	The information required when adding the model items to the Add Items screen.

Note: To add a stylized item from the Style Size pop-up window, the item element that is passed should be the SelectedItem model in the Style Size pop-up window.

Alternate Item Identifiers

Sterling Call Center and Sterling Store allows you to configure the item alias for alternate item identifiers (IDs). For more information about alternate item identifiers, see [Section 7.3, "Alternate Item Identifier"](#).

Item Entitlement

If a user keys in an Item ID directly into the Item field, this Item ID will be validated against the item entitlement in the Sterling Multi-Channel Selling Solution based on the customer's product entitlement from the order. If the customer information is not present in the order, the anonymous customer will be used.

If a customer does not have entitlement to an item but the user does, the user can see the item, but cannot add it to an order. An attempt to add the item to an order will cause an Invalid Item error.

Adding Stylized Items or Modifying an Item's Style

A user can add a stylized item or modify an item's style based on the user permissions and order status modification rules. For more

information about changing an item's style, see [Section 7.9.31, "Change an Item's Style"](#).

Adding Related Items or Replacing Items

Sterling Call Center and Sterling Store provides the capability to display the associated items for an order line and add the associated items or replace the original items with the associated items.

You can configure whether the related items should be displayed in a pop-up window or a panel at the bottom of the screen when a user views the associated items for an item on the order. For more information about configuring the display of related items, see [Figure 5-18](#). If you have configured to display the Large Order Entry screen, Sterling Commerce recommends that you configure to display the Related Items screen as a pop-up window.

If the screen resolution of your system is set to 800 X 600, it is recommended to configure the related items to display as a pop-up window in the Add Items screen.

You can configure which associated items should be displayed in the Related Items pop-up window or panel. For more information about configuring which items should be displayed, see [Figure 5-19](#). The `getAssociationRelationshipListAPI` is called to retrieve the associated items that can be displayed in the Related Items panel.

You can configure whether an associated item should be added as a related item or the original item should be replaced by the associated item when a user adds an associated item to an order line. For more information about configuring whether an associated item should be added to an order line or replace the original item, see [Figure 5-19](#).

Sterling Call Center and Sterling Store allows you to configure associations for items. For more information about associations, see the *Sterling Catalog Management: Configuration Guide*.

You can define the line relationship types to be used when linking two related lines together. The relationship types defined should support sorting. This ensures that the order lines displayed in Sterling Call Center and Sterling Store are ordered based on the relationship type. For more information about line relationship types, see the *Sterling Distributed Order Management: Configuration Guide*.

After the associations and line relationship types are defined, you can specify the line relationship type to be used when related product items are added to an order. For more information about specifying relationship types for associated product items, see [Figure 5-19](#). The `getAssociationRelationshipListAPI` is called to retrieve information.

You can specify whether inventory checks should be performed for associated items. For more information about configuring inventory checks for associated items, see [Figure 5-19](#). If inventory for associated item is not available and the inventory check required rule is enabled, the associated item is not displayed on the UI. The `getAssociationRelationshipListAPI` is called to retrieve information about which associated items need to be displayed in the related items panel.

When the related items are added to the order, the fulfillment methods for the related items are copied from that of the parent item. If the related item does not support the fulfillment method, the fulfillment option of the related item is set to the default fulfillment method. When you select the parent item to modify the fulfillment option, the related lines associated with it are also selected for modification.

Sterling Call Center and Sterling Store provides a configuration to specify the line relationship type to be used when related service items are added to the order. For more information about specifying relationship types for associated service items, see [Figure 5-19](#).

Viewing Updated Price Details and Price Breakdown

If the addition or modification of an order line results in charges or discounts being applied to the order or order lines, or a change in price details, Sterling Call Center and Sterling Store provides an Update Order button to enable users to view the payment impact before navigating to the next screen. The user can view the updated order total and order line total along with the charges and discounts applied to the order after the user updates the order by clicking the Update Order button. For example, if a pricing rule states that for every 10 quantity of Item1 ordered, the customer can get a \$100 discount, the user will be able to view the discount after the user clicks the Update Order button. However, the Update Order button is displayed only if the user has the necessary permission to use it.

If permission has not been turned on for the Update Order button, Sterling Call Center and Sterling Store does not display the price

breakdown of an order line, and the extended price is displayed as the line total.

The user can click the Subtotal value hyperlink to view the price breakdown of the order in the Order Pricing Summary pop-up window. If there are any changes made to the order, the `changeOrder` API is called to update the order. The `getCompleteOrderDetails` API is used to display the price breakdown of the order. The user can also view the details of the charges and discounts applied to the order by clicking the charges and discounts value hyperlinks from the Add Items screen and the Order Pricing Summary pop-up window. The `getChargeNameList` API is called to display the charge names associated with the charges and discounts applied to the order, and the `getCompleteOrderDetails` API is used to display the charges and discounts.

The `changeOrder` API or `createOrder` API is called to refresh the Add Items screen after the user clicks the Update Order button. The `YFSOrderRepricingUE` user exit can be called as part of the `changeOrder` API or `createOrder` API call to update the appropriate prices, charges, and discounts for the order.

When an existing draft order is opened, repricing is done on the order.

Displaying the Fulfillment Methods

The `getCompleteItemList` API is called to retrieve the fulfillment methods that are applicable to the item. Based on the configuration, Delivery and Shipping may be displayed as separate fulfillment methods. You can also configure the default fulfillment method. For more information about configuring Delivery and Shipping as separate fulfillment methods, see [Figure 5–16](#).

The `YCDOVERRIDEDELIVERYMETHODUE` user exit is used to override the fulfillment methods defined in the catalog. This user exit provides the ability to override the logic of enabling a fulfillment method. The default implementation is not provided, and you can use your own implementation for this user exit.

Checking for Availability

Sterling Call Center and Sterling Store provides a panel to check for availability if the Ship To address is not present in the order. The display of the Country drop-down list on this availability panel is based on the rule to allow country entry. If you have configured region schemas for

displaying states, the availability panel displays a drop-down list for states. For more information about country display and configuring region schemas, see [Section 5.10.21, "Configuring Country and State Display Rules"](#).

The `getFulfillmentOptionsForLines` API is used to determine the availability for product items, bundle items, and related items. The `findInventory` API is used to determine whether a location is serviceable for a Provided Service Item.

A user can disable the availability checks when the inventory is maintained externally because the user is aware of the inventory availability details. This aids in better performance and pace in capturing the order.

If the Prevent Initial Availability Checks During Order Entry and Order Modifications rule is disabled or set to "N", the availability check will not be performed, and the calls to `getFulfillmentOptionsForLines`, `findInventory`, or its derivation APIs will be eliminated on the Line Entry screen. For more information about configuring availability checks and reservations, see [Section 5.10.27, "Configuring Availability Check and Reservation Options"](#).

When related items are configured to be displayed in a panel, the availability information of the related items is not updated when the quantity is changed for the parent item. It is updated only when the focus is reset to the parent order line.

Disabling Pickup from Store for all Items

You can configure the user interface to never show the Pickup fulfillment method if the enterprise does not support that fulfillment method. For more information about configuring store pickup rules, see [Section 5.11.1, "Configuring Store Pickup Rules"](#). If you have configured the UI to never display the pickup fulfillment method, Sterling Call Center and Sterling Store assumes that you will not set the default fulfillment method for order lines as pickup.

Opening an Existing Order from the Large Order Item Entry Screen

Sterling Call Center and Sterling Store provides a way to open an existing order from the Large Order Item Entry screen by using the extensibility feature. A new `refreshAddItem(String orderHeaderKey)`

method is exposed in the `com.yantra.pca.ycd.rcp.exposed.YCDExtensionUtils` utility method. Using the order header key as the input, this method opens the corresponding order in the Large Order Item Entry screen. You can invoke this method from the extension behavior class of the Large Order Item Entry screen as `YCDExtensionUtils.refreshAddItem(String orderHeaderKey)`

If an order is already open in the client, and if you pass the order header key corresponding to this order, this method transfers the focus to the open order. In addition, this action does not refresh the open order.

Note: If you need to refresh the Large Order Item Entry screen, use the REFRESH action provided by the Rich Client Platform Framework.

Changing the Fulfillment Options

When a customer requests a change in the fulfillment options for an item, you can modify the fulfillment options as requested, for example, a customer may request the delivery of ordered items, but later decide to pick up the items from a store. In such situations, the user can modify the fulfillment options for the items or a provided service line. For more information about changing the fulfillment options, see [Section 7.9.19, "Change Fulfillment Options"](#).

Viewing Pickup and Shipping Fulfillment Summary

The Fulfillment Summary screen provides the complete scenario of how the pickup and ship order lines are fulfilled. The items are reserved based on the configuration. For more information about fulfillment summary, see [Section 7.9.20, "Fulfillment Summary"](#).

Changing Service Appointments

The user can change the delivery appointment for the customer, if applicable. The items are reserved based on the configuration. For more information about service appointments, see [Section 7.9.23, "Change Service Appointment"](#).

Viewing the Service Fulfillment Summary

After adding items to the order using the `changeOrder` API, if you choose the Delivery option, the `generateWorkOrder` API is used to create the delivery lines and generate work orders. For more information about service fulfillment summary, see [Section 7.9.24, "Service Fulfillment Summary"](#).

Viewing and Confirming Payment Details

The Payment Confirmation screen displays the summary of the payments that have to be made for an order. For more information about adding or modifying the payment methods in an order, see [Section 7.9.3, "Change Payment Method"](#).

Sterling Call Center and Sterling Store can be used to carry out critical payment-related processes during order management processing. It also enables you to integrate with external payment processing systems such as CyberSource[®] or Chase[™] Paymentech. For more information about integrating with external systems for payment handling, see [Section 5.10.30, "Configuring User Interface Payment Handling"](#).

Sterling Call Center and Sterling Store provides the functionality to process real-time credit card authorizations when confirming draft orders. For more information about real-time credit card authorizations, see [Section 7.12, "Real-Time Credit Card Authorization"](#).

If an exchange order is opened from the sales order flow, the exchange order cannot be confirmed if the return order is a draft order. The `getCompleteOrderDetails` API is called to verify whether the return order associated with the exchange order has been confirmed. If the return order has not been confirmed, an appropriate message is displayed in the Confirm Payment screen.

Entering a Name for a Draft Order

Sterling Call Center and Sterling Store enables a user to enter a name for a draft order during the process of creating an order. You can also configure the default draft order name that is displayed in the Confirm pop-up window that appears when a user attempts to close the Order Entry screen before completing the order creation process. For more information about configuring the default draft order name, see [Section 5.10.1, "Configuring Order Entry Rules"](#). (The `changeOrder` API is called to save the Draft Order Name on the order header.)

7.6.1.2 End-User Impact

Depending on how you configure the order entry rules, the end users will see different behavior in the user interface:

- The user will see either the Customer Identification screen or the Add Item screen as the first screen in the order creation flow based on the Customer Screen Sequence and Line Entry Sequence rule.
- The user will see the Advanced Customer Search screen, the Address Search screen, or the Basic Customer Search screen based on the configuration.
- The user can search for customers based on the customer type if the configuration for Customer Type Search is enabled, and the default Customer Type during search is Business.
- The user can enter tax options for a business customer if the Change Tax Options for a business customer rule is enabled.
- The user will see either the Item Entry screen or the Large Order Item Entry screen based on the configuration.
- The user will see Shipping and Delivery as separate fulfillment methods based on the configuration.
- Based on the configuration, the user will see either the Basic Fulfillment Summary screen or the Advanced Fulfillment Summary screen. In the Advanced Fulfillment Summary screen, if a scheduling rule to display an additional shipping option is configured, the user will be able to see an additional option to schedule the order based on the scheduling rule configured.
- The user will see only the set of columns that you configure on the Add Line screen.
- The user will see the related items as a panel in the Add Line screen or as a pop-up window based on the configuration.
- The user will see item associations that are configured as Show in UI. The user will see the availability for the associated items based on the inventory check for associated items. Based on the configuration, when an associated item is added to an order, the associated item either replaces the original item or is added as a related item.
- When checking for availability, the user will see Country and States drop-down list based on the configuration.

7.6.1.3 Implementation

This section explains the configurations for the Create Order task.

- Sterling Call Center and Sterling Store allows you to configure the order entry rules. For more information about this, see [Section 5.10.1, "Configuring Order Entry Rules"](#). If the enterprise has been configured to not display unit prices in the UI ([Figure 5-17](#)), it is recommended that permissions to use the Update Order button be denied.
- Sterling Call Center and Sterling Store allows you to configure the display of model items. For more information about this, see [Section 5.5.8, "Configuring Display of Model Items"](#).
- Sterling Call Center and Sterling Store allows you to configure external payment options. For more information about this, see [Section 5.10.30, "Configuring User Interface Payment Handling"](#).
- To add relationships between lines, you need to configure the association types to be displayed on the user interface. For more information about association types, see [Figure 5-19](#). You should also configure a Relationship Type to be used with the Association Type. Ensure that the Consider for Sorting box is selected when defining line relationship types. For more information about configuring relationship types, see [Section 5.10.33, "Configuring Line Relationship Types"](#).
- Sterling Call Center and Sterling Store allows you to configure the store pickup rules. For more information about this, see [Section 5.11.1, "Configuring Store Pickup Rules"](#).
- Sterling Call Center and Sterling Store allows you to configure availability checks and reservation options. For more information this, see [Section 5.10.27, "Configuring Availability Check and Reservation Options"](#).
- Sterling Call Center and Sterling Store allows you to configure the order statuses for which addition of new order lines is allowed. Ensure that the status modification rules allow addition of lines to cancelled order. For more information about this, see [Section 5.10.6, "Configuring Order Modification Rules"](#).
- Implement the YCDOVERRIDEDELIVERYMETHODUE user exit if the delivery method defined in the catalog has to be overridden.

- This task is permission-controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.
- To allow the user to view the updated price details and price breakdown on the Add Items screen before navigating to the next screen, the user must have resource permissions to see the Update Order button.
- Notes entered for this task are saved on the order with the YCD_ORDER_ENTRY note type.
- Enable notes for all status modifications of an order. This is how Sterling Call Center and Sterling Store records status changes. For more information, see [Section 5.10.14, "Defining Order Note Types and Configuring Automatic Note Logging"](#).

7.6.1.4 Reference Implementation

This section explains the reference implementation provided for the create order task.

- The Customer Identification step is configured to be the first step in the create order task.
- By default, the Advanced Customer Search screen is displayed for customer identification.
- By default, the customer type search is enabled, and the default customer type during search is Business.
- By default, users are not allowed to enter tax options for a business customer.
- By default, the Add Items screen is displayed for item entry.
- By default, Shipping and Delivery are displayed as separate fulfillment options, and the default fulfillment method is Delivery.
- By default, the Basic Fulfillment Summary screen is displayed.
- By default, the following columns are displayed in the line entry step:
 - Unit of Measure
 - Line Quantity
 - Line Price
 - Line Totals

- By default, related items are displayed as a pop-up window.
- The Allow Country to be Entered for screens that check Item Availability rule is defaulted to "Y".
- As part of reference implementation, Sterling Call Center and Sterling Store provides permissions to create an order to all user groups.
- As part of reference implementation, Sterling Call Center and Sterling Store provides permissions to the hub users to access the Update Order button.

7.6.2 Capturing Orders through Other Channels

Sometimes an enterprise may have orders captured through other channels. If this order is to be processed in Sterling Call Center and Sterling Store, additional fields should be passed to the createOrder API.

7.6.2.1 Solution

The information that can be passed on to Sterling Call Center and Sterling Store to process an order can be divided into the following groups:

- [Address Information](#)
- [Customer Information](#)
- [Item and Line Information](#)
- [Pricing and Payment Information](#)
- [Fulfillment Information](#)
- [Additional Order Information](#)

Address Information

The following address information fields can be passed on to Sterling Call Center and Sterling Store:

Table 7–6 Address Information fields

Field	Description
Ship To Address	The address to which the order is being shipped.
Bill To Address	The address to which the bill for the order is sent.

Table 7–6 Address Information fields

Field	Description
Is Address Verified Flag	This flag indicates whether the address has been verified by an external address verification system. For more information about address verification, see Section 7.6.4.2, "Address Verification" .
All Addresses Verified Flag	This flag indicates whether all addresses on the order have been verified by an external address verification system. For more information about address verification, see Section 7.6.4.2, "Address Verification" .

Customer Information

The following customer information fields can be passed at the `<Order>` level on to Sterling Call Center and Sterling Store by calling the `createOrder` API or `changeOrder` API:

Table 7–7 Customer Information fields

Field	Description
Customer ID	The identifier of the customer on the order. This field maps to the Bill To ID field in the database.
Customer Contact ID	The identifier of the customer contact on the order. When the order header contains a customer contact ID, any changes to contact information, such as payment methods and addresses, are saved to the applicable contact.
Special Care Flag	This flag indicates whether this is a special care customer.
IP Address	The IP address of the computer from which the order was placed. This field is referred to as <code>SourceIPAddress</code> in the input XML to the APIs.
Customer Phone Number	The daytime phone number of the customer who placed the order. This attribute can be passed at the order header level, and if not, it is defaulted to the daytime phone number of the customer contact. If a customer contact daytime phone number is not available, it is defaulted to the daytime phone number of the bill-to address, if available. This field is referred to as <code>CustomerPhoneNo</code> in the input XML to the APIs.

Table 7–7 Customer Information fields

Field	Description
Customer First Name	The first name of the customer who placed the order. This attribute can be passed at the order header level, and if not, it is defaulted to the first name of the customer contact. If the first name of a customer contact is not available, it is defaulted to the customer first name of the bill-to address, if available. This field is referred to as CustomerFirstName in the input XML to the APIs.
Customer Last Name	The last name of the customer who placed the order. This attribute can be passed at the order header level, and if not, it is defaulted to the last name of the customer contact. If the last name of a customer contact is not available, it is defaulted to the customer last name of the bill-to address, if available. This field is referred to as CustomerLastName in the input XML to the APIs.
Customer E-Mail ID	The e-mail ID of the customer who placed the order. This attribute can be passed at the order header level, and if not, it is defaulted to the e-mail ID of the customer contact. If the e-mail ID of a customer contact is not available, it is defaulted to the e-mail ID of the bill-to address, if available. This field is referred to as CustomerEMailID in the input XML to the APIs.

Item and Line Information

The following item and line information fields can be passed on to Sterling Call Center and Sterling Store:

Table 7–8 Item and Line Information fields

Field	Description
Item ID	The identifier of the item on an order line.
Quantity	The quantity of the item ordered on an order line.

Table 7–8 Item and Line Information fields

Field	Description
Item Promised Date	The shipping date displayed by the front-end system. Typically, retailer web sites display next to an item 'usually ships within 24 hours', or 'usually ships within 1-3 business days'. That projected date is the Item Promised Date.
Line Dependencies and Relationships	The relationships, if any, that exist between certain order lines. For example, an order may require all of its order lines to be shipped together. That relationship would be defined here.

Pricing and Payment Information

The following pricing and payment information fields can be passed on to Sterling Call Center and Sterling Store:

Table 7–9 Pricing and Payment Information fields

Field	Description
Payment Method	The payment method used on the order.
Price	The price for an item.
Charges	The amount of charges applied to the order.
Taxes	The tax amount applied to the order.
List of Promotions Applied to the Order	The list of possible promotions that can be used on the order. For example, free shipping on orders above \$20, or a 10% discount on a specific category of goods.

Fulfillment Information

The following fulfillment information fields can be passed on to Sterling Call Center and Sterling Store:

Table 7–10 Fulfillment Information fields

Field	Description
Carrier Service Level	The type of service used to ship the order. For example, a customer could want a next day air delivery, or a standard delivery that would take 5 business days, depending on how much they are willing to spend. This attribute helps Sterling Call Center and Sterling Store select a carrier for the order.
Fulfillment Option	The fulfillment mode of the order: <ul style="list-style-type: none"> • Ship To Home • Delivery • Store Pick-up

Additional Order Information

The following additional order information fields can be passed on to Sterling Call Center and Sterling Store:

Table 7–11 Additional Order Information fields

Field	Description
Order Date	The date on which the order was initially placed.
Channel	The channel through which the order was entered. For example, this could be a web portal, a mail order, or a phone call.
Enterprise Code	The enterprise code on the order.

7.6.2.2 End-User Impact

None.

7.6.2.3 Implementation

None.

7.6.2.4 Reference Implementation

None.

7.6.3 Order Delay

A customer may want to modify an order after it has been captured, for example to add quantity to a line, or change a ship-to address. Once an order is scheduled, most of its attributes can no longer be changed. Therefore, it is necessary to delay the scheduling of an order for a certain amount of time in case a customer wants to make a change to their order.

7.6.3.1 Solution

To solve this business requirement, an order should be prevented from being scheduled until a certain number of hours has elapsed after order capture. In that time period, the order can be modified. Therefore, all orders should be delayed at order capture time to allow for these last minute modifications.

The length of the delay depends on your specific business practices.

7.6.3.2 End-User Impact

An order is modifiable by a customer service representative for a certain amount of time, during which the order is not picked up by the scheduling agent.

7.6.3.3 Implementation

When calling the `createOrder` API to initially capture an order from a front-end system into Sterling Call Center and Sterling Store, set the `EarliestScheduleDate` attribute in the input XML to a date that corresponds to the current time + the number of hours that the order should be delayed for.

For more information about the `createOrder` API, see the *Selling and Fulfillment Foundation: Javadocs*.

7.6.3.4 Reference Implementation

None.

7.6.4 Order Validation

When an order is captured by Sterling Call Center and Sterling Store, it needs to be verified as a valid order that can be paid for, sent to the correct address, and is the order that the customer meant to enter in the front-end system.

The order validation process includes:

- [Duplicate Order Validation](#)
- [Address Verification](#)
- [Fraud Check](#)
- [Item Validation](#)
- [Credit Limit Exceeded](#)

7.6.4.1 Duplicate Order Validation

When placing an order on the front-end system, a customer may inadvertently click the Submit button twice, thereby creating two duplicate orders. To avoid this scenario, every order that is captured must be checked against orders with similar attributes.

7.6.4.1.1 Solution

When a draft order is confirmed, or an order is created, the YCD_DUPLICATE_ORDER hold is applied to the order. The hold prevents any transaction from processing the order, and is processed by the Duplicate Order agent, which is derived from the Process Order Hold Type base transaction.

Details for the Duplicate Order agent are described below:

Attributes

Table 7–12 Duplicate Order Agent Attributes

Attribute	Value
Base Transaction ID	PROCESS_ORDER_HOLD_TYPE
Base Document Type	0001 (Sales Order)
Base Process Type	ORDER_FULFILLMENT (Order Fulfillment)
Abstract Transaction	Yes
APIs Called	checkDuplicateOrder

Criteria Parameters

Table 7–13 Duplicate Order Agent Criteria Parameters

Parameter	Description
Action	This field is used internally by Sterling Call Center and Sterling Store. The only valid value is Get. Please do not modify this field.
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 7–13 Duplicate Order Agent Criteria Parameters

Parameter	Description
CollectPendingJobs	<p>If this parameter is set to “N”, the agent does not collect information on the pending jobs for this time-triggered transaction. This pending job information is used to monitor the agent in the System Management Console.</p> <p>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.</p>
Next Task Queue Interval	The number of hours to wait before attempting to check for duplicate orders again. If not set, the default value is 5 hours from the current time.

Statistics Tracked

None.

Pending Job Count

The number of orders that need to be checked for duplicates.

Events Raised

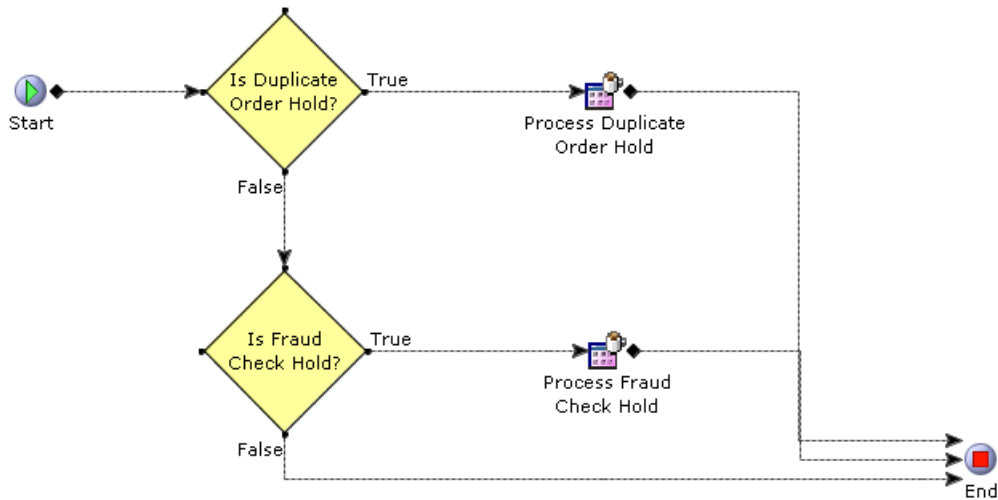
The following events are raised by this time-triggered transaction:

Table 7–14 Events Raised by the Duplicate Order Agent

Transaction/Event	Key Data	Data Published	Template Support?
ON_DUPLICATE_ORDER	OrderHeaderKey, OrderNo	VERIFY_ADDRESS.0001.VERIFY_ADDRESS_FAILED.0001.xml	Yes
ON_HOLD_TYPE_STATUS_CHANGE	modifyOrder_dbd.txt	PROCESS_ORDER_HOLD_TYPE.ON_HOLD_TYPE_STATUS_CHANGE.xml	Yes
ON_SUCCESS	modifyOrder_dbd.txt	PROCESS_ORDER_HOLD_TYPE.ON_SUCCESS.xml	Yes

The Duplicate Order agent calls the YFSProcessOrderHoldTypeUE user exit, which is implemented as the YCD_ProcessCustOrdMgmtHolds_1.0 service as illustrated in [Figure 7-1](#).

Figure 7-1 The YCD_ProcessCustOrdMgmtHolds_1.0 Service



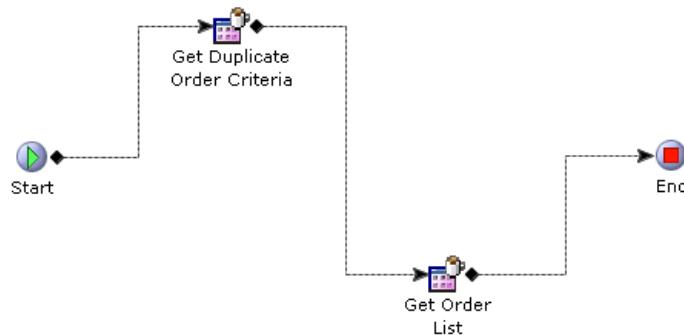
In this case, the processDuplicateOrderHold custom API is called, which in turn calls the checkDuplicateOrder API, which finally calls the YCDProcessDuplicateOrderCheckUE user exit.

The user exit takes the following file as its input XML:

```
<INSTALL_DIR>/repository/xapi/template/merged/userexit/process
DuplicateOrderCheck.0001.xml
```

The XML is then passed on to the YCD_ProcessDuplicateOrderCheck_1.0 service as illustrated in [Figure 7-2](#).

Figure 7–2 The YCD_ProcessDuplicateOrderCheck_1.0 Service



In this service, the `getOrderList` API is called using the output of the `getDuplicateOrderCriteria` custom API as input. If more than one record is returned by the `getOrderList` API call, then the order is a potential duplicate.

By default, the criteria for a duplicate order are the following:

- **Bill To ID:** if the identifier of the customer on the orders is identical.
- **Total Amount:** if the total amount on the orders are within \$5 of each other.
- **Order Date:** if the timestamp on the orders are within 20 seconds of each other.
- **Enterprise Code:** if the enterprise code on the orders is identical.
- **IP Address:** if the IP address of the customer on the orders is identical.

In that case, the `ON_DUPLICATE_ORDER` event is raised by the Duplicate Order agent, which invokes the `YCD_DuplicateOrderAlert_1.0` service through the `YCDOnDuplicateOrder` action. The `YCD_DuplicateOrderAlert_1.0` service sends an alert to the Duplicate Order queue, which is monitored by default by the user.

7.6.4.1.2 End-User Impact

The user is notified through an alert of possible duplicate orders. They must either cancel the order if it is a duplicate, or remove the Duplicate Order hold if it is a valid order.

7.6.4.1.3 Implementation

To use this feature, you should ensure that the `YCD_DUPLICATE_ORDER` hold type is implemented for the enterprise that performs your duplicate order checks. Because the hold type provided by Sterling Call Center and Sterling Store is for the DEFAULT Enterprise, your Enterprise should either inherit its configuration from DEFAULT, or have a copy of this hold type implemented.

In the `YCD_DuplicateOrderAlert_1.0` service, the alert sent to the Duplicate Order queue uses the following XSL by default:

```
<INSTALL_DIR>/repository/xapi/template/merged/exception_console/YCD_DuplicateOrderAlert.xsl.sample
```

This XSL should be copied to a file named `YCD_DuplicateOrderAlert.xsl`, customized as needed, and its path and name should be specified in the Template Name field of the Alert properties.

You can save it to another directory, but using the standard directory structure supplied by the Selling and Fulfillment Foundation helps ensure consistency.

You can customize all services and user exits to adapt to changing business needs. You can also customize the `getDuplicateOrderCriteria` custom API to return the exact set of criteria that you use to determine whether an order is duplicate.

7.6.4.1.4 Reference Implementation

None.

7.6.4.2 Address Verification

When a customer defines or changes an address, it needs to be verified as being a valid address. You may want to verify addresses on the order for any of the following reasons:

- To ensure that the order is shipped to an address that actually exists and that the user has entered it correctly
- To ensure that the ship-to address is not a known fraudulent address

- To ensure that the address is stored in Sterling Call Center and Sterling Store as a standardized address that all carrier services can understand and process

Sterling Call Center and Sterling Store has an understanding of when such validations should occur.

7.6.4.2.1 Solution

Sterling Call Center and Sterling Store provides a user interface to capture an address for the order.

There may be various scenarios like order capture or change of order address which mandate address verification. Sterling Call Center and Sterling Store provides an address verification agent to verify addresses on the order.

Address Capture

Sterling Call Center and Sterling Store provides a user interface to capture an address pertaining to an order. This screen can be launched as a Shared Task. For more information about shared tasks, see [Section 6.4, "Shared Tasks"](#). When an address is either entered or modified, the `verifyAddress` API is called to verify the address.

A user can derive the City and State names using the Country and Postal Code fields, if the corresponding enterprise has defined a region schema in the Applications Manager. For more information about defining a region schema, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

The `getRegionList` API is called to retrieve the City and State names. The region schema that is called corresponds to the enterprise to which the user belongs. If multiple values are retrieved for the City and State names, the first value returned by the `getRegionList` API is displayed. For more information about deriving the City and State names using the Country and Postal Code fields, see [Section 5.10.21, "Configuring Country and State Display Rules"](#).

Users have the option of overriding the validation if they feel that the address that is provided is correct despite an address verification failure. If address validation fails and the Address Verification System (AVS) returns multiple addresses, the user can select an address from the list, or select none and override the validation.

UI Verification of Phone Number and E-Mail Address

Sterling Call Center and Sterling Store validates e-mail address and phone numbers on the address capture screens. These fields are validated in the plug-in using the YRCDataFormatter extension point. For more information about custom data formatting, see the *Selling and Fulfillment Foundation: Customization Guide*.

Sterling Call Center and Sterling Store checks that each phone number and e-mail address entered is valid.

The phone number validation logic verifies that there are either ten or eleven digits entered in the field.

Once a phone number has been validated, Sterling Call Center and Sterling Store removes all non-digit characters from the phone number field and formats it: (###) - ### - ####.

Note: Sterling Call Center and Sterling Store will only validate phone numbers located in the United States. The validation logic can be extended in the extension behavior class to work with other countries, if required. For more information about creating extension behavior, see the *Selling and Fulfillment Foundation: Customization Guide*.

Sterling Call Center and Sterling Store validates e-mail addresses using the following criteria:

- The first character must be an alphabet.
- The symbol @ must be present.
- There must be at least one character before @.
- There must be at least one character between at and the period.
- There must be between 2-4 characters after the period.
- There must not be spaces in the e-mail address.
- There must be a semi-colon (;) between addressess.

If any of these validations fail, Sterling Call Center and Sterling Store displays an error message to notify the user of the incorrect field.

Address Verification

When the order is initially captured by Sterling Call Center and Sterling Store using the createOrder API, the customer's ship-to and bill-to addresses should be validated. Address validation, however, could have already been completed by the front-end system for some or all of the addresses on the order. For example, the bill-to address is often validated by the credit card authorization process. The ship-to address could also have been validated up front.

Sterling Call Center and Sterling Store keeps track of which addresses have already been verified. Each address record maintains the `IsAddressVerified` flag with the value Y if the address has been recognized as being valid. If all the addresses on the order are valid, the `AllAddressesVerified` flag is set to Y, at the order header level.

During order capture, if the `AllAddressesVerified` flag is passed as "Y" in the input XML of the createOrder API, Sterling Call Center and Sterling Store does not attempt to verify any addresses on the order unless one of them is changed.

If the `AllAddressesVerified` flag is passed as N in the input XML of the createOrder API, Sterling Call Center and Sterling Store places the order on the address verification hold. The hold type applied to orders that have failed address verification is `YCD_VERIFY_ADDRESS`. By default, this hold type is defined for the DEFAULT Enterprise. If your implementation defines a different Enterprise to perform the address verification, you should either ensure that your configuration is inherited from the DEFAULT Enterprise, or that you create a copy of the `YCD_VERIFY_ADDRESS` hold type for your Enterprise. Orders on the address verification hold cannot be scheduled or released.

The Address Verification agent processes the address verification hold by trying to validate all addresses with `IsAddressVerified` set to N.

End users are notified of the addresses that have failed verification through alerts. When all the addresses on an order are verified, the associated alerts are closed automatically.

Address Verification User Exit

The user exit allows Sterling Call Center and Sterling Store to interact with the AVS and modify the order for which the AVS was called appropriately.

The YCDVerifyAddressWithAVSUE user exit is called from the verifyAddress API. The user exit returns an XML output, which is same as the verifyAddress API output. For more information about the YCDVerifyAddressWithAVSUE user exit, see the *Selling and Fulfillment Foundation: Javadocs*.

The value of the AVSReturnCode attribute returned by the user exit can have the following values:

- VERIFIED if the address is valid.
- FAILED if the address is not valid.
- AVS_DOWN if the AVS system could not be connected with.

Address Verification Agent

The Address Verification agent picks up orders that are placed on the address verification hold. For each address in an order that needs to be validated, the agent calls the verifyAddress API, which in turn calls the YCDVerifyAddressWithAVSUE user exit to interact with the AVS.

If the AVS confirms that all addresses are valid, the agent removes the hold on the order. If the address is invalid, the agent rejects the hold.

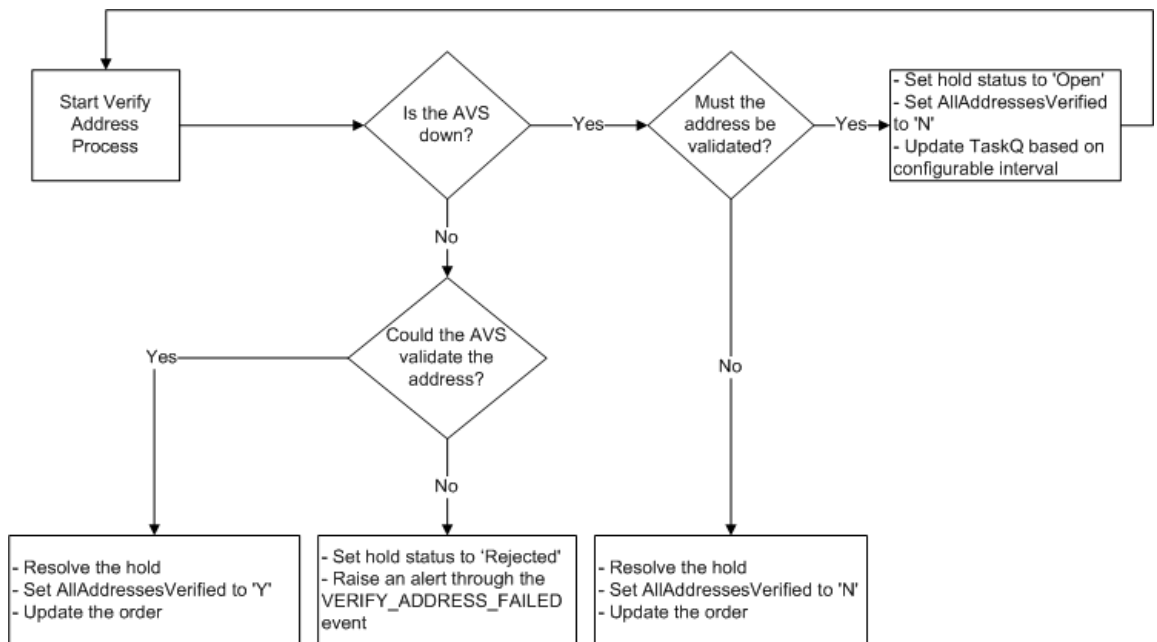
When an address is not valid, the AVS returns multiple possible close matches if it can. The agent handles this situation in the same way as if the AVS had indicated an invalid address: it rejects the hold on the order and raises an alert. The agent does not reprocess the order unless an address is changed manually.

In the event that the AVS is not online, the agent can be configured to either remove the hold from the order and process it, or reject it, to be reprocessed by the agent at a later time.

The time interval between the agent rejecting a hold and reprocessing that hold is configurable.

The flow chart in [Figure 7-3](#) illustrates the behavior of the Address Verification agent:

Figure 7–3 The Address Verification Agent



The details for the address verification agent are as follows:

Attributes

Table 7–15 Address Verification Agent Attributes

Attribute	Value
Base Transaction ID	PROCESS_ORDER_HOLD_TYPE
Base Document Type	0001 (Sales Order)
Base Process Type	ORDER_FULFILLMENT (Order Fulfillment)
Abstract Transaction	No
APIs Called	verifyAddress

Criteria Parameters

Table 7–16 Address Verification Agent Criteria Parameters

Parameter	Description
Action	This field is used internally by Sterling Call Center and Sterling Store. The only valid value is <code>Get</code> . Please do not modify this field.
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.
CollectPendingJobs	<p>If this parameter is set to <code>N</code>, the agent does not collect information on the pending jobs for this time-triggered transaction. This pending job information is used to monitor the agent in the System Management Console.</p> <p>By default, <code>CollectPendingJobs</code> is set to <code>Y</code>. It can be helpful to set it to <code>N</code> if one particular time-triggered transaction is performing a significant amount of <code>getPendingJobs</code> queries, and the overhead cost is too high.</p>
Next Task Queue Interval	The number of hours to wait before attempting to process an address again. This value is used in conjunction with the <code>MUST_VERIFY_ADDRESS</code> rule. If not set, the default value is 5 hours from the current time.

Statistics Tracked

None.

Pending Job Count

The number of orders that need to have addresses verified.

Events Raised

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

Table 7–17 Events Raised by the Address Verification Agent

Transaction/Event	Key Data	Data Published	Template Support?
VERIFY_ADDRESS_FAILED	OrderHeaderKey, OrderNo	VERIFY_ADDRESS.0001.VERIFY_ADDRESS_FAILED.001.xml	Yes

7.6.4.2.2 End-User Impact

The user will be notified using alerts if the address verification agent is configured to raise alerts.

7.6.4.2.3 Implementation

To use the address verification feature, the following steps need to be completed:

- Implement the YCDVerifyAddressWithAVSUE user exit to verify the address with AVS.
- Configure the address verification agent:

To configure the behavior of the agent when the AVS is not online, see [Section 5.20, "Extending and Customizing the Application"](#).

Warning: The Sterling Call Center and Sterling Store Rules home page is not permission controlled. Be sure to disable access to this page when Sterling Call Center and Sterling Store is deployed into a production environment.

To configure the amount of time that the agent should wait before attempting to reprocess an address that could not be verified can be configured in the Applications Manager. For more information about configuring agent criteria parameters, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

- If your configuration does not inherit from the DEFAULT Enterprise, create a copy of the YCD_VERIFY_ADDRESS hold type for your Enterprise.

- To validate the address and phone numbers entered on the address capture user interface, extend the YRCDataFormatter extension point.

7.6.4.2.4 Reference Implementation

Sterling Call Center and Sterling Store provides reference implementation for the YCDVerifyAddressWithAVSUE user exit. If you pass the value "AMES POND DR" to the PersonInfo/@AddressLine1 attribute, the user exit returns a set of three matches for the address.

7.6.4.3 Fraud Check

Your business may maintain a list of known fraudulent IP addresses, or a list of customers that have placed fraudulent orders in the past. Orders should be validated by specific fraud checks at order capture time, and fraud analysts should be notified of the failures.

7.6.4.3.1 Solution

The fraud check mechanisms are very specific to business needs and practices. Because of this, Sterling Call Center and Sterling Store provides a general framework for fraud checks.

All orders are placed on the YCD_FRAUD_CHECK hold upon order creation or draft order confirmation. This hold prevents any transaction from processing the order, and is processed by the Fraud Check agent once the Duplicate Order hold has been resolved. For more information about duplicating an order validation, see [Section 7.6.4.1, "Duplicate Order Validation"](#). The Fraud check agent is derived from the Process Order Hold Type base transaction.

The details of the Fraud Check agent are as follows:

Attributes

Table 7–18 Fraud Check Agent Attributes

Attribute	Value
Base Transaction ID	PROCESS_ORDER_HOLD_TYPE
Base Document Type	0001 (Sales Order)
Base Process Type	ORDER_FULFILLMENT (Order Fulfillment)

Table 7–18 Fraud Check Agent Attributes

Attribute	Value
Abstract Transaction	Yes
APIs Called	checkFraudOnOrder

Criteria Parameters

Table 7–19 Fraud Check Agent Criteria Parameters

Parameter	Description
Action	This field is used internally by Sterling Call Center and Sterling Store. The only valid value is <code>Get</code> . Do not modify this field.
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.
CollectPendingJobs	<p>If this parameter is set to <code>N</code>, the agent will not collect information on the pending jobs for this time-triggered transaction. This pending job information is used for monitoring the agent in the System Management Console.</p> <p>By default, <code>CollectPendingJobs</code> is set to <code>Y</code>. It can be helpful to set it to <code>N</code> if one particular time-triggered transaction is performing a significant amount of <code>getPendingJobs</code> queries, and the overhead cost is too high.</p>
Next Task Queue Interval	The number of hours to wait before attempting to process an order for fraud check. If not set, the default value is 5 hours from the current time.

Statistics Tracked

None.

Pending Job Count

The number of orders that need to be checked for fraud.

Events Raised

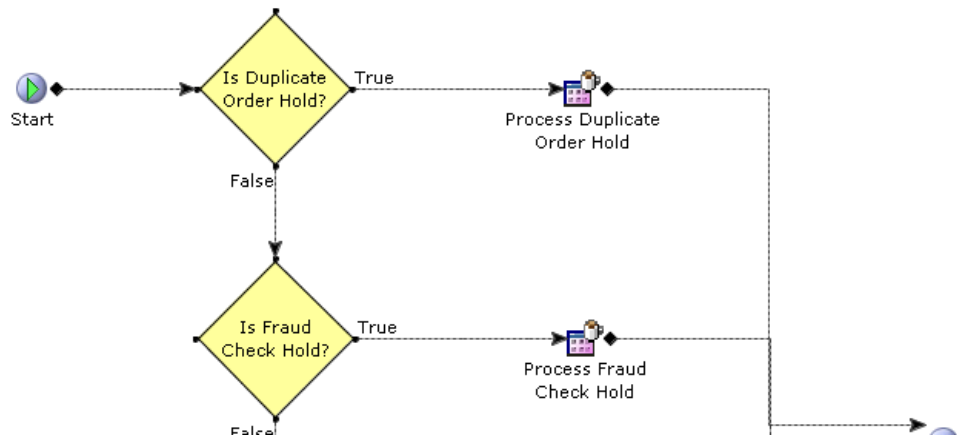
The following events are raised by this time-triggered transaction:

Table 7–20 Events Raised by the Fraud Check Agent

Transaction/Event	Key Data	Data Published	Template Support?
ON_FRAUDULENT_ORDER	OrderHeaderKey, OrderNo	FRAUD_CHECK.0001.ON_FRAUDULENT_ORDER.0001.xml	Yes
ON_HOLD_TYPE_STATUS_CHANGE	modifyOrder_dbd.txt	PROCESS_ORDER_HOLD_TYPE.ON_HOLD_TYPE_STATUS_CHANGE.xml	Yes
ON_SUCCESS	modifyOrder_dbd.txt	PROCESS_ORDER_HOLD_TYPE.ON_SUCCESS.xml	Yes

The Fraud Check agent calls the YFSProcessOrderHoldTypeUE user exit, which is implemented as the YCD_ProcessCustOrdMgmtHolds_1.0 service as illustrated in [Figure 7–4](#).

Figure 7–4 The YCD_ProcessCustOrdMgmtHolds_1.0 Service



In this case, the processFraudCheckHold custom API is called, which in turn calls the checkFraudOnOrder API, which finally calls the YCDProcessFraudCheckOnOrderUE user exit.

The user exit takes the following file as its input XML:

```
<INSTALL_DIR>/repository/xapi/template/merged/userexit/process
OrderFraudCheck.0001.xml
```

If the user exit returns a message to the agent that indicates possible fraud, the ON_FRAUDULENT_ORDER event is raised, and the YCDFraudCheckAlert_1.0 service is invoked through the YCDOnFraudulentOrder action.

The YCD_FraudCheckAlert_1.0 service sends an alert to the Fraud Queue queue, which is monitored by the Fraud Analyst user.

If the user exit returns a message indicating that the order is not fraudulent, the agent will automatically resolve the hold. The processFraudCheckHold API, on the other hand, will not.

7.6.4.3.2 End-User Impact

When an order fails the fraud check, an alert is sent to the queue monitored by the Fraud Analysts. After analyzing the order, the Fraud Analyst either cancels it if it turns out to be fraudulent, or removes the hold so that it can be processed normally.

7.6.4.3.3 Implementation

To use this feature, you should ensure that the YCD_FRAUD_CHECK hold type is implemented for the Enterprise that performs the fraud checks. Since the hold type provided by Sterling Call Center and Sterling Store is for the DEFAULT Enterprise, your Enterprise should either inherit its configuration from the DEFAULT Enterprise, or have a copy of this hold type implemented.

In the YCD_FraudCheckAlert_1.0 service, the alert sent to the Fraud Check queue uses the following XSL by default:

```
<INSTALL_DIR>/repository/xapi/template/merged/exception_console/YCD_FraudCheckAlert.xsl.sample
```

This XSL should be copied to a file named YCD_FraudCheckAlert.xsl, customized as needed, and its path and name should be specified in the Template Name field of the Alert properties.

You can save it to another directory, but using the standard directory structure supplied by the Selling and Fulfillment Foundation helps ensure consistency.

All of these services can be customized as needed to fit your business needs, as well as the user exits.

The `YCDProcessFraudCheckOnOrderUE` user exit should return the response code of the fraud check in the `FraudCheckResponseCode` attribute, at the `Order` element level. This attribute value should be 'FAILED' if the fraud check failed, and 'SUCCESS' if the fraud check succeeded. Additionally, a `FraudCheckResponseMessage` element should be returned under the `Order` element. For more information about the `YCDProcessFraudCheckOnOrderUE` user exit, see the *Sterling Call Center and Sterling Store: Javadocs*.

7.6.4.3.4 Reference Implementation

None.

7.6.4.4 Item Validation

After items are added to an order, validations must be performed to verify whether the items or the quantity of the items in the order are valid. For example, an enterprise may want to sell some items only in bulk quantities. In such a situation, the enterprise may want to set a minimum order quantity for those items.

7.6.4.4.1 Solution

In the Add Items screen, Sterling Call Center and Sterling Store validates whether an item or the quantity of an item is valid for an order. Validations are also performed in the Customer Identification screen to verify whether a customer is entitled to an item. The validations are performed only if the following rules are configured in the Applications Manager:

- Enable Extended Item Validation
For more information about defining installation rules, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.
- Validate Item
For more information about configuring a document's order validation, see the *Sterling Distributed Order Management: Configuration Guide*.
- Validate Item During Order Creation/Modification

For more information about defining a process type's primary information, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

The items in the order are validated based on the following criteria:

- **Minimum Order Quantity and Maximum Order Quantity**—The quantity ordered for the item must not be less than the minimum order quantity and not more than the maximum order quantity that is configured for the item.

Note: A user can override the quantity validation for an item. If the user overrides the quantity validation for an item, the quantity validation is overridden for all the order lines containing the item, and a note will be automatically generated on the order using the YCD_QUANTITY_VALIDATION_OVERRIDDEN note type.

- **Item Cannot be Sold Separately**—The item must be configured in such a way that it can be sold separately.
- **Item Entitlement**—The customer to whom the order belongs must have entitlements to the item.
- **Item Status**—The status of the item must be "Published".
- **Item's Effective Date**—The effective end date of the item must not be earlier than the current date.

The `validateItemForOrdering` API is called to validate the items as follows:

- When the Add Items screen is launched if the order is an existing draft order.
- When the user clicks the Next button in the Add Items screen.
- When the User clicks the Update Order button in the Add Items screen.
- When the user clicks the Next button in the Customer Identification screen after adding the items to the order.

If validation fails for any of the items, an error message is displayed to notify the user of the invalid item in the order. If the validation fails because the item is not valid and the minimum or maximum quantity

criteria is not met, the error message pertaining to the invalid item is displayed.

7.6.4.4.2 End-User Impact

Validations will be performed to verify whether the items and the quantity of items in an order are valid or not only if the item validation rules are configured in the Applications Manager.

7.6.4.4.3 Implementation

To use this feature, the item validation rules must be configured in the Applications Manager.

Notes, which are automatically generated on the order when the quantity validation is overridden, are saved in the order using the YCD_QUANTITY_VALIDATION_OVERRIDDEN note type.

7.6.4.4.4 Reference Implementation

None.

7.6.4.5 Credit Limit Exceeded

When a customer exceeds the credit limit on the customer account used to place an order, the order is placed on hold. The hold prevents the order from processing the following transactions:

- Accept Reservation
- Close Order
- Confirm Draft Order
- Release Order
- Schedule Order
- Payment Collection
- Payment Execution

Refer to the *Sterling Distributed Order Management: Configuration Guide* for more information about removing the hold.

7.6.4.5.1 Reference Implementation

As part of reference implementation, Sterling Call Center and Sterling Store provides an event handler for customer modifications performed on account limit change, which is handled by `CUSTOMER_DEFINITION.ON_ACCOUNT_LIMIT_CHANGE`. When the account limit is changed, all orders that use the account number are updated, and the system automatically removes the hold from the order if the credit limit has been increased sufficiently to confirm the order.

As part of reference implementation, Sterling Call Center and Sterling Store provides a hold type that implements the `USE_HOLD_TYPE_CUSTOMER_ACCOUNT` rule provided by Selling and Fulfillment Foundation, which automatically places the order on hold if the customer exceeds his customer account limit.

7.7 Order Inquiry

Customers often enquire about information on orders they have placed. In such situations, Sterling Call Center and Sterling Store needs to respond to order inquiries by publishing information about the orders captured internally to the external systems.

7.7.1 Solution

Sterling Call Center and Sterling Store provides user interface tasks which enable users to search for orders. It also enables users to view the summary of an order. Additionally, users can view the summary of individual order lines.

Order Search

This section explains the Order Search task and the solution offered by Sterling Call Center and Sterling Store.

Sterling Call Center and Sterling Store provides two ways to search for orders:

- Quick Access—The user can enter the order number, customer's phone number or customer's e-mail ID and search for the order.
- Advanced Order Search—The user can enter more restrictive search criteria to search for the order.

If a user has access to multiple enterprises, the Enterprise drop-down list is displayed in the Order Search Criteria panel of the Advanced Order

Search screen. The `getOrganizationList` API is called to retrieve the list of enterprises. If the search criteria results in a single record, the Order Summary screen is displayed. If the search criteria results in multiple records being retrieved, the Search and List screen is displayed.

The search results can be sorted in ascending or descending order based on following Order By options:

- Order Number
- Order Date
- Customer Last Name

After an order has been captured, the detailed information about the order, shipments, containers, and the return orders associated with that order can be retrieved.

Sterling Call Center and Sterling Store user interface (UI) allows users to search and view the orders that are purged into their corresponding history tables. When these purged orders are accessed through the UI, they are restored to the non-history tables by calling the `restoreOrder` API.

Sterling Call Center and Sterling Store provides the `getCompleteOrderDetails` API, which retrieves the list of orders that match the search criteria. For more information about the `getCompleteOrderDetails` API, see the *Sterling Call Center and Sterling Store: Javadocs*.

The `getCompleteOrderDetails` API can return the `OverallStatus` attribute for orders and order lines. This attribute's value is based on the `YFSGetOverallStatusUE` user exit. For more information about APIs and user exits, see the *Selling and Fulfillment Foundation: Javadocs*.

The order status generated by the Sterling Call Center and Sterling Store application may be different than the order status that you want to display to customers. For example, an order may be in the Scheduled status, but you may want to display the status as In Progress to customers who access the Sterling Multi-Channel Selling Solution to inquire about the status of their order. You can implement the `YFSGetOverallStatusUE` user exit to return the `OverallStatus` attribute, which is used to display the order status in the Order Summary screen and the Order Line Summary screen of Sterling Call Center and Sterling Store. For more information about the `YFSGetOverallStatusUE` user exit,

see the corresponding section in the *Sterling Call Center and Sterling Store: Javadocs*.

Order Summary

Sterling Call Center and Sterling Store enables users to view the summary of a particular order. Users can view order information such as the order number, date when the order was created, status of the order, total amount, shipping address, billing address, and individual order lines.

The `getCompleteOrderDetails` API is called to display the Order Summary screen. This API returns a `SupportLevel` attribute with the following values:

- **Minimum**—If this value is returned, the Order Summary screen is displayed with most of the tasks disabled. For more information about the Order Summary screen for incompatible orders, see [Order Summary Screen for Incompatible Orders](#).
- **Medium**—If this value is returned, the Order Summary screen will be displayed to the older clients, but with fewer order modification tasks.
- **Full**—If this value is returned, the Order Summary screen is displayed with all the order modification tasks.

Also, the `getExceptionListForOrder` API is called to retrieve the number of open alerts on the order.

Sterling Call Center and Sterling Store assumes that the `Create Shipments For Products Being Delivered In Addition To Work Order` check box is selected in the Applications Manager, to view order lines that have Delivery as a fulfillment method and are already delivered. This is defined as part of the process type's primary information. For more information about defining a process type's primary information, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

Order Pricing Summary

Sterling Call Center and Sterling Store enables users to view the price breakdown of an order. In the Order Pricing Summary pop-up window, users can view the details of the prices on the order, such as the order line prices, the line-level price adjustments, the order total, and the

order-level price adjustments. The `getCompleteOrderDetails` API is called to display the Order Pricing Summary pop-up window.

Order Summary Screen for Incompatible Orders

An Order Summary screen for incompatible orders is displayed if the value of the `SupportLevel` attribute of the `getCompleteOrderDetails` API is `Minimum`. This screen enables the user to view the details of the order, but does not allow the user to perform any of the order modification tasks, except order cancellation. A message is displayed on the Order Summary screen indicating that the screen has been modified because it is not compatible with the client version being used.

The user is provided with an option to cancel the order. The `CANCEL_REASON` common code is used to display the list of cancellation reasons. The `changeOrder` API is called to cancel the order and a note is automatically added to the order along with the cancellation reason selected by the user.

Line Summary

Users can view the summary of individual order lines. The Line Summary screen displays the primary details of the order line and the shipping address. If the user has included a message for a gift item, the gift message is displayed in the Primary Details panel of the Line Summary screen. The `getOrderLineDetails` API is called to display the Line Summary screen. Users can also view the pricing information and important events or notes specified for the order line. The `getOrderAuditDetails` API is called to display the important events specified for the order line.

If the Display of URLs for Items rule in the Channel Applications Manager is configured to display the URL of a product Web page pertaining to an item, a View Product Web Page hyperlink is displayed in the Primary Details panel of the Line Summary screen. The `getCompleteOrderDetails` API is called to retrieve the list of assets that are associated with the item. For more information about configuring the display of a product Web page for an item, see [Section 5.5.10, "Configuring the Display of a Product Web Page for an Item"](#).

Pagination

Sterling Call Center and Sterling Store supports smart retrieval of record sets in the Order Search screen. You can configure if history records

need to be automatically fetched while retrieving records. For more information about configuring pagination rules, see [Section 5.19.9, "Configuring Pagination Rules"](#).

For more information about pagination, see [Section 7.22, "Pagination"](#).

7.7.2 End-User Impact

This section explains the end-user impact for the Order Inquiry task.

- Based on the configuration to search for history orders, the user will see history orders or recent orders in the search results.
- In Order Search and Return Order Search tasks, the user sees the Order By pull-down window, which enables a user to sort the data by Order Number, Order Date, or Customer Last Name.
- If an order is incompatible with a particular version of the application, an Order Summary screen for incompatible orders is displayed.
- If the YFSGetOverallStatusUE user exit is implemented, and if this user exit returns the `OverallStatus` attribute, the user will be able to view the Display Status field in the Order Summary screen and the Order Line Summary screen.
- The user will see the View Product Web Page hyperlink in the Line Summary screen based on the configuration.

7.7.3 Implementation

This section explains the configurations for the order inquiry task.

- Implement the YFSGetOverallStatusUE user exit to return the `OverallStatus` attribute for orders and order lines.
- Define the qualifiers for an order to indicate the compatibility of an order with a particular version of the application. For more information about defining the qualifiers, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.
- Configure the list of cancellation reasons to be displayed while cancelling the order. For more information about configuring the cancellation reasons, see [Section 5.10.9, "Defining Cancellation Reasons"](#).

- Configure the Sterling Call Center and Sterling Store application to display the URL of a product Web page pertaining to an item, in the Line Summary screen. For more information about configuring the display of a product Web page for an item, see [Section 5.5.10, "Configuring the Display of a Product Web Page for an Item"](#).
- This task is permission-controlled. Sterling Call Center and Sterling Store allows you to assign permissions to the corresponding user groups for this task.

7.7.4 Reference Implementation

This section explains the reference implementation provided as part of the Order Inquiry task.

- By default, the following asset types are provided:
 - Audio
 - Video
 - Text
 - Image
- As part of reference implementation, Sterling Call Center and Sterling Store provides permissions to search for orders to all users.

7.8 Order Monitoring

After the orders have been captured, validated, paid for, and their processing has begun, they need to be monitored to ensure that customers are notified when the order is about to ship, or whether the promised delivery dates are going to be met.

Currently, Sterling Call Center and Sterling Store supports the following aspects of order monitoring:

- [Federal Trade Commission Compliance](#)
- [Shipment Notification](#)
- [Order Cancellation Notification](#)

7.8.1 Federal Trade Commission Compliance

The United States Federal Trade Commission (FTC) defines rules that retailers must follow when dealing with customer orders. One of these rules deals with mail or telephone order merchandise.

This rule states that:

- A notification must be sent to a customer if the promised ship date cannot be met and that a new promised ship date will be given to the customer.
- If the customer does not respond to the notification that is sent the first time the merchandise is delayed, the retailer can assume that the customer accepts the delay.
- If the merchandise is delayed more than once and the customer does not respond to these notifications, the retailer must cancel the order.
- If the retailer is unable to give a promise date and the customer can accept an indefinite delay, notifications do not have to be sent to the customer notifying them of delays.

In retail scenarios, ship dates should be calculated based on business advertising. For example, if a Web site states that items that are on-hand are shipped within ten days, the promised ship date should be ten days after the date of the order capture. If a time frame is not advertised by the retailer, the FTC stipulates that an order must be shipped within 30 days of the order capture.

If it becomes apparent that the ship date will not be met, a second ship date must be calculated. This date cannot be more than 30 days after the first ship date. A notification should be sent to the customer, informing them about the shipment failure, along with the next ship date. If, for any reason, the notice cannot be received by the customer, the order is expected to be cancelled by the end of the day corresponding to the first ship date.

A second ship date has been calculated, and if, before that date, it becomes apparent that the order will not be completely delivered on time, a notification should be sent to the customer, stating that the ship date is unknown, and that the order should be cancelled on the second ship date.

Note: When a customer has an e-mail set on the order, notification e-mails will be sent directly to them. In all cases, an alert will be raised. This alert can be resolved when a response is received from the customer or automatically, if the alert is raised for the first delay.

7.8.1.1 Solution

Sterling Call Center and Sterling Store monitors orders from end-to-end to assist you in abiding by this FTC regulation. To do this, five dates are used to determine whether a delay occurred, if yes, the type of delay, whether a notification is required, and finally, notify the customer accordingly. The dates are:

- Expected ship date
- First promised date
- Current promised date
- Next promised date
- Cancel date

Calculation of Dates

First Promised Date

When an order is created, the first promised date should be set by the application creating the order. This can be done by passing the OrderDate element of the order line, with the DateTypeId as YCD_FTC_FIRST_PROMISE_DATE, and the ActualDate, that is, the date the merchandise will ship on. If the first promised date is not passed, Sterling Call Center and Sterling Store will default this date to OrderDate + a fixed number of days that can be configured. When orders are created within Sterling Call Center and Sterling Store, the first promised date is set to the reservation date (see [Section 5.10.34, "Configuring FTC Compliance"](#)). If reservations are not turned on in Sterling Call Center and Sterling Store, the same logic that is used to determine the reservation date will be used to determine the first promised date. This date will remain untouched unless it is reset through the UI. If the order is changed in a way that results in the ship date being changed, this date can be updated to the new first promised date. This will be determined by the application making the change. When the first promised date is

passed in the input to the createOrder API or changeOrder API, all the dates will be reset to reflect the new promised date:

```
<OrderDates>
  <OrderDate ActualDate="20050807"
    DateTypeId="YCD_FIRST_PROMISED_DATE" />
</OrderDates>
```

Note: If a line has multiple expected ship dates, the highest ship date will be used. This means that the customer is being told that the entire quantity on this line will be shipped by this date. Some quantity may be shipped earlier, but the shipment will be completed by this date.

Current Promised Date

The current promised date will be set to the first promised date whenever the first promised date is passed as input to the createOrder API or changeOrder API. When a delay is accepted, the current promise date is set to the next promised date given to the customer.

Note: This is handled by one of the order monitors shipped with Sterling Call Center and Sterling Store and the Alert Details screens in Sterling Call Center and Sterling Store. If there are any custom screens that will resolve FTC notifications or accept delays, they will have to set the FTC promised date on the order line. To accomplish this, pass the OrderDate Element in the input to changeOrder API, with the DateTypeId attribute set to YCD_FTC_PROMISED_DATE.

Next Promised Date

The next promised date is always handled through back-end logic and should never be set by the UI. When the order monitor runs, if a delay is found, the next promised date will be set to the maximum ship date for the corresponding line. In case of an indefinite delay, the next promised date will be set to a high date.

Cancel Date

The cancel date is always handled through back-end logic and should never be set by the UI. When the order monitor runs, if it is determined that the order has to be cancelled because action is not taken by the customer, the cancel date will be set. If the delay is greater than 30 days or if it is an indefinite delay, Sterling Call Center and Sterling Store will set the cancel date to the current promise date + the fixed number of days. This value can be configured in the Configuring FTC Compliance screen in the Channel Applications Manager (see [Section 5.10.34, "Configuring FTC Compliance"](#)). In cases where the delay is less than 30 days, and at least one delay has already been sent to the customer, the cancel date will be set to the current promise date + the process buffer.

Notifications

Backorder/Indefinite Notifications

When a quantity on an order line is backordered, an indefinite notification is sent to the customer, informing them of the backorder. Because the inventory picture changes often, no notification will be sent to the customer for more than the configured time before the promised date. This allows time for rescheduling so that the order will not be delayed.

If the order is backordered from node, a notification will not be sent. Instead, Sterling Call Center and Sterling Store will wait for the scheduler to run again in order to determine either another node or whether it needs to back order, in which case, Sterling Call Center and Sterling Store will send the indefinite notification to the customer.

The monitor rules used to catch these scenarios are:

```
IF Order
  meets condition Indefinite FTC Notification Is Needed? and has not reached YCD unreachable Milestone 48 elapsed hours before Actual Current FTC Promise Date
THEN
  raise Create Indefinite FTC Delay Email.
```

```
IF Order
  meets condition Indefinite FTC Notification Is Needed? and has not reached YCD unreachable Milestone 120 elapsed hours before Actual Current FTC Promise Date
THEN
  raise Create Indefinite FTC Delay Alert.
```

Note: In compliance with this FTC regulation, if the customer accepts an indefinite delay, they will not be notified again until the shipment is shipped.

First Delay Notifications

When a quantity on an order line is delayed beyond the process buffer and within 30 days of the promised date, and where the promised date has not already been delayed, a first delay notification will be sent to the customer. The notification is sent a configured number of hours before the promised date. By default, this is 48 hours for orders with e-mail addresses and 120 hours for orders without e-mail addresses. This is achieved by defining the monitoring rules that raise events when a line does not have its entire quantity shipped or cancelled. The monitor rules that are used to handle these scenarios are described in the next paragraph. These events are consolidated at the order level. Therefore, the customer is notified only once for all the lines on the same order with the same promised date and same type of delay. Notes will also be added to each order line, stating that the customer has been notified by e-mail, or that the customer should be notified by a CSR about the order not being shipped on time.

Each line, with the applicable quantity, is included in the notice to the customer, along with a second promised delivery date. The notice informs the customer that the order is not likely to be shipped by the first promised date. It will also state that if the customer does not reply, it will be assumed that the delay is acceptable and therefore approved.

IF Order

 meets condition First FTC Notification Is Needed? and has not reached Order line completely shipped or cancelled 48 elapsed hours before Actual First FTC Promise Date

THEN

 raise Send First FTC Delay Email.

IF Order

 meets condition First FTC Notification Is Needed? and has not reached Order line completely shipped or cancelled 120 elapsed hours before Actual First FTC Promise Date

THEN

 raise Create First FTC Delay Alert.

Next Delay Notifications

As with the first FTC notification, the next delay notification is defaulted to send notifications if the lines have not been completely shipped or cancelled 48 hours before the promised date when the customer has an e-mail address, and 120 hours before the promised date if they do not. The next delay notifications are the same as the first delay notifications with the following exceptions:

- The notification states that if the customer does not explicitly request the order to remain open, it will be cancelled by the cancel date.
- The monitor rule will retrigger to catch the additional delays.

In the event that the customer requests to keep the order open and accepts the delay, and if there are further delays, the customer will continue to be notified of these delays.

The monitor rules that handle these scenarios are:

IF Order

meets condition Next FTC Notification Is Needed? and has not reached Order line completely shipped or cancelled 48 elapsed hours before Actual Current FTC Promise Date

THEN

raise Send FTC Delay Email.

IF Order

meets condition Next FTC Notification Is Needed? and has not reached Order line completely shipped or cancelled 120 elapsed hours before Actual Current FTC Promise Date

THEN

raise Create FTC Delay Alert.

Automatic Acceptance

When first delay notifications are sent, if the customer does not respond by the promised date, the delay is automatically accepted and the open alert is automatically closed. This is achieved by defining a monitor rule that runs on the promised date if the line has not been completely shipped or cancelled. These events will be consolidated at the order level. No notification will be sent to the customer. However, a note will be logged on the order line, stating that it was automatically accepted because the customer did not respond.

The monitor rule that is used to handle this scenario is:

```
IF Order
  has not reached Order line completely shipped or cancelled within 1 elapsed
hours of Actual First FTC Promise Date
THEN
  raise Auto Resolve FTC Alerts.
```

Note: If the promised date given to the customer is the same day the order is taken, and if, later in the day, it is found that it will not ship on that day, a notification will be sent and the delay will be automatically accepted at the same time. However, this complies with the FTC regulations, and if the customer does not agree to the delay, they can cancel their order any time.

Auto Cancellation Notice

When a next delay notification or indefinite delay notification is sent, and the customer does not respond by the cancel date, the order lines will be cancelled and the corresponding alert will be closed. This is achieved by defining a monitor rule that will run on the cancel date if the line has not been completely shipped or has been cancelled. These events will be consolidated at the order level. The customer will be sent a notice that the order lines were cancelled, and notes will be put on the order line, stating that the lines were cancelled because the customer did not respond.

The monitor rule that is used to handle this scenario is:

```
IF Order
  has not reached Order line completely shipped or cancelled within 1 elapsed
hours of Actual YCD FTC CCANCEL DATE
THEN
  raise FTC Cancel Lines.
```

7.8.1.2 End-User Impact

Alerts will be raised whenever a customer needs to be notified, regardless of whether an e-mail was sent to the customer or not. If an e-mail was sent, the alert description will state that the e-mail was sent.

In the event that the customer has not provided an e-mail address, the user should contact the customer, either by phone or mail, and inform them of the problem with the order. The user should not resolve the alert until the customer has responded to the notification with either acceptance or cancellation.

7.8.1.3 Implementation

The services called by Sterling Call Center and Sterling Store to send notifications to customers can be customized as needed.

To run the monitor for Federal Trade Commission compliance, use the order monitor template that is located in

`<INSTALL_DIR>\template\monitor`. If you have not previously extended this template, rename the sample file

`ORDER_MONITOR_EX.001.xml.sample` as `ORDER_MONITOR_EX.001.xml`. If you have already extended this template, include the contents of the sample file in your extended template.

To use this feature, you must enable the Synchronize Dates Between Master Order Dates And Dates On Order Line And Schedules rule in the Applications Manager. For more information about defining transaction rules, see the *Sterling Distributed Order Management: Configuration Guide*. During the fulfillment process, the order date is set to the maximum ship date. When the Order Monitor runs, the maximum ship date is compared with the promised date to determine if a delay has occurred. If a delay has occurred, the order date is updated based on the stipulations laid down by the Federal Trade Commission.

Notes entered for this task are saved in the order using the `YCD_FTC_NOTIFICATION` note type.

Services

The following services are present in the Applications Manager in the Application Platform Module under the Sales Order document type:

- `YCD_FTC_AUTO_RESOLVE` – This service is used to resolve the FTC notification alert, and update the dates on the order lines being delayed. It is invoked by the `YCD_FTC_Auto_Resolve` monitor event. This service invokes the `FTCHandler` custom API with the arguments listed in [Table 7-21](#). For details about how this custom API can be customized, see the corresponding section. [Figure 7-5](#) illustrates this service.

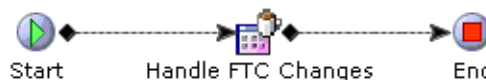
Table 7–21 *YFC_FTC_AUTO_RESOLVE arguments for FTCHandler*

Fields	Description
FTCDelayType	AutoResolve
NoteText	YCD_FTC_AUTO_RESOLVE_NOTE_TEXT

- **YCD_FTC_CANCEL_ORDER_LINES** – This service is used to cancel the order lines if the customer has not responded to the notifications and resolved the FTC notification alert. It is invoked by the **YCD_FTC_Cancel_Lines** monitor event. This service invokes the FTCHandler custom API with the arguments listed in [Table 7–22](#). For details about how this custom API can be customized see the corresponding section. The only difference between this service and the **YCD_FTC_AUTO_RESOLVE** service are the arguments passed to the FTCHandler. [Figure 7–5](#) illustrates this service.

Table 7–22 *YCD_FTC_CANCEL_ORDER_LINES arguments for FTCHandler*

Fields	Description
FTCDelayType	CancellLines
NoteText	YCD_FTC_CANCEL_LINES_NOTE_TEXT

Figure 7–5 *The YCD_FTC_AUTO_RESOLVE and YCD_FTC_CANCEL_ORDER_LINES Services.*

- **YCD_FTC_DELAY_ALERT** – This service is used to update the order dates and send a notification to the customer. It is invoked by the **YCD_FTC_Delay_Alert** monitor event. This service invokes the FTCHandler custom API with the arguments listed in [Table 7–23](#). For details about how this custom API can be customized, see the corresponding section. [Figure 7–6](#) illustrates this service.

Table 7–23 YCD_FTC_DELAY_ALERT arguments for FTCHandler

Fields	Description
FTCDelayType	NextFTCDelay
NoteText	FTC_Delay_Alert_Note_Text

- YCD_FTC_FIRST_DELAY_ALERT – This service is used to update the order dates and send a notification to the customer. It is invoked by the YCD_FTC_First_Delay_Alert monitor event. This service invokes the FTCHandler custom API with the arguments listed in [Table 7–24](#). For details about how this custom API can be customized, see the corresponding section. The only difference between this service and the YCD_FTC_DELAY_ALERT service are the arguments passed to the FTCHandler custom API. [Figure 7–6](#) illustrates this service.

Table 7–24 YCD_FTC_FIRST_DELAY_ALERT arguments for FTCHandler

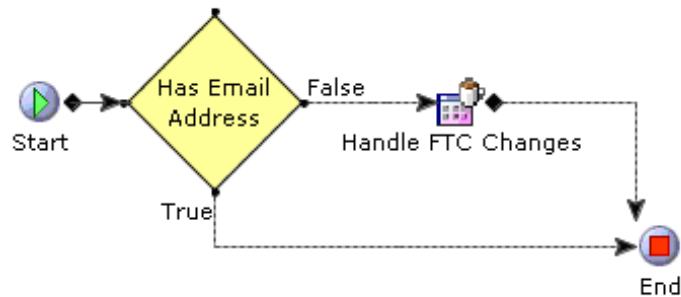
Fields	Description
FTCDelayType	FirstFTCDelay
NoteText	FTC_First_Delay_Alert_Note_Text

- YCD_FTC_INDEFINITE_DELAY_ALERT – This service is used to update the order dates and send a notification to the customer. It is invoked by the YCD_FTC_Indefinite_Delay_Alert monitor event. This service invokes the FTCHandler custom API with the arguments listed in [Table 7–25](#). For details about how this custom API can be customized, see the corresponding section. The only difference between this service and the YCD_FTC_DELAY_ALERT service are the arguments passed to the FTCHandler custom API. [Figure 7–6](#) illustrates this service.

Table 7–25 YCD_FTC_INDEFINITE_DELAY_ALERT arguments for FTCHandler

Fields	Description
FTCDelayType	IndefiniteFTCDelay
NoteText	FTC_Indefinite_Delay_Alert_Note_Text

Figure 7–6 YCD_FTC_DELAY_ALERT, YCD_FTC_FIRST_DELAY_ALERT, and YCD_FTC_INDEFINITE_DELAY_ALERT Services.



- **YCD_FTC_DELAY_EMAIL** – This service is used to update the order dates and send a notification to the customer. It is invoked by the `YCD_FTC_Delay_Email` monitor event. This service invokes the `FTCHandler` custom API with the arguments listed in [Table 7–26](#). For details about how this custom API can be customized, see the corresponding section. [Figure 7–7](#) illustrates this service.

Table 7–26 YCD_FTC_DELAY_EMAIL arguments for FTCHandler

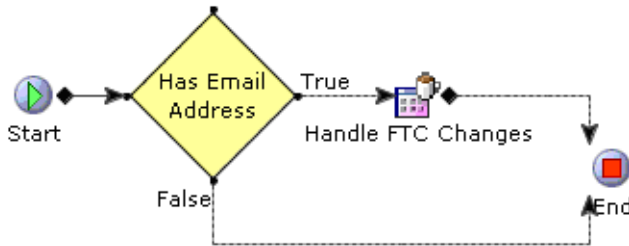
Fields	Description
FTCDelayType	FirstFTCDelay
NoteText	FTC_First_Delay_Email_Alert_Note_Text

- **YCD_FTC_INDEFINITE_DELAY_EMAIL** – This service is used to update the order dates and send a notification to the customer. It is invoked by the `YCD_FTC_Indefinite_Delay_Email` monitor event. This service invokes the `FTCHandler` custom API with the arguments listed in [Table 7–27](#). For details about how this custom API can be customized, see the corresponding section. The only difference between this service and the `YCD_FTC_DELAY_EMAIL` service are the arguments passed to the `FTCHandler` custom API. [Figure 7–7](#) illustrates this service.

Table 7–27 YCD_FTC_INDEFINITE_DELAY_EMAIL arguments for FTCHandler

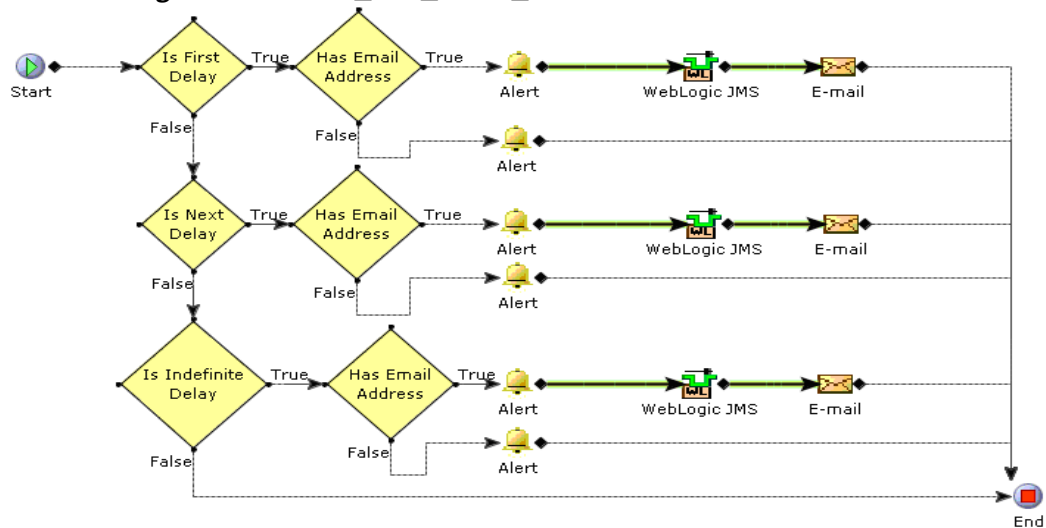
Fields	Description
FTCDelayType	IndefiniteFTCDelay
NoteText	FTC_Indefinite_Delay_Email_Alert_Note_Text

Figure 7–7 YCD_FTC_DELAY_EMAIL, YCD_FTC_FIRST_DELAY_EMAIL, and YCD_FTC_INDEFINITE_DELAY_EMAIL Services.



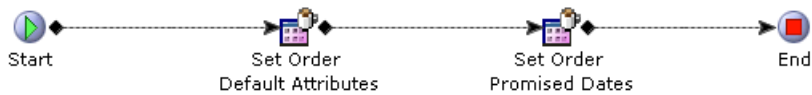
- YCD_FTC_SEND_NOTIFICATION – This service determines what type of notification is needed, and determines what the notification should state. This service is invoked by the custom API FTCHandler. This is used in all the services described until now. [Figure 7–8](#) illustrates this service.

Figure 7-8 YCD_FTC_SEND_NOTIFICATION Service.



- YCD_SetOrderDefaults_2.0 and YCD_SetOrderDefaultsOnChange_2.0—These two services are invoked as the beforeCreateOrderUE and beforeChangeOrderUE user exits, respectively, that are called by the createOrder API and changeOrder API. For more information about user exits and APIs, see the *Selling and Fulfillment Foundation: Javadocs*. These services are used, in part, to set the promised delivery dates. Under the Arguments tab of the Set Order Promised Dates component in both the services, configure the advertised promised date that is used to calculate the first promised delivery date and how many days after the first promised date the second promised date is set to by default (this value cannot exceed 30). [Figure 7-9](#) illustrates this service.

Figure 7–9 The YCD_SetOrderDefaults_2.0 and YCD_SetOrderDefaultsOnChange_2.0 Services



Depending on the service you are configuring, you may have to configure the Alert or E-mail sender components.

FTCHandler Custom API

This custom API contains important parts of the logic for the FTC compliance feature. This custom API determines what type of delay is being sent, what the note text should contain, and what service should be used to send notifications to a customer by the three arguments. These three arguments are described here.

- **DelayType** – This argument tells the custom API about what it needs to do to the order. It can resolve alerts by accepting or cancelling the lines, and get all the lines on the order with the same delay type and promised date, and invoke the notification service with that list of lines. The possible values for this argument are:
 - IndefiniteFTCDelay
 - NextFTCDelay
 - FirstFTCDelay
 - AutoResolve
 - CancelLines
- **NoteText** – This argument will set the bundle key that will be used to set the note text on the order lines when they are changed.
- **NotificationService** – This argument will specify the name of the service that will run when it is determined that a notification needs to be sent. If this argument is not passed, it will be defaulted to YCD_FTC_SEND_NOTIFICATION.

This service will also close the FTC Notification alerts for the corresponding lines if the DelayType argument is passed as AutoResolve or CancelLines.

Monitor Rules

The monitor rules can be customized to notify the customer of delays, either earlier than or later than what is configured by default. By default, all the notifications are sent to the customer, at the most, 120 hours before the date, if they have not provided an e-mail address. If they have provided an e-mail address, the notification is sent, at the most, 48 hours before the date. This can be changed by going to the corresponding rule and changing the time component to suit your business requirements better. For more information about modifying the monitor rules, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

Configuring the Alert Component

If the service raises an alert, the alert component must be configured accordingly. In particular, set the Alert Queue Name field to the queue where the alert must be sent, which, by default, is set to the Customer Notification queue. Additionally, specify the XSL used for the template of the alert, in the Template Name field.

For more information about default XSLs, see [Section , "Configuring Templates"](#).

For more information about component nodes, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

Configuring the E-mail Component

If the service sends an e-mail notification, the e-mail component must be configured accordingly. In particular, set the E-mail Server field to the ID of the mail server user to send the notifications. Additionally, specify the XSL used for the template of the e-mail, in the Template Name field.

For more information about the default XSLs, see [Section , "Configuring Templates"](#).

For more information about the component nodes, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

Configuring Templates

The XSL components are used to convert the output XMLs into HTML messages that are sent to the customers through the e-mail components of the services. By default, the names of all the XSL files are provided by Sterling Call Center and Sterling Store with a .sample extension. Copy

these to create a new XSL file without the .sample extension, customize your XSL files as needed, and update the Template Name field of the E-mail Sender components of the relevant services.

The following XSLs are used as templates of the notification e-mail components in the default implementation of this feature:

- `<INSTALL_DIR>/repository/xapi/template/merged/email/ycd/YCD_FTC_First_Delay_notification.xsl.sample`: This XSL formats the HTML message that is sent by e-mail to the customer to inform them that the order has been delayed for the first time.
- `<INSTALL_DIR>/repository/xapi/template/merged/email/ycd/YCD_FTC_Delay_Notification.xsl.sample`: This XSL formats the HTML message that is sent by e-mail to the customer to inform them that the order has been delayed again.
- `<INSTALL_DIR>/repository/xapi/template/merged/email/ycd/YCD_FTC_Indefinite_Notification.xsl.sample`: This XSL formats the HTML message that is sent by e-mail to the customer to inform them that the order will be delayed and a new date cannot be determined.
- `<INSTALL_DIR>/repository/xapi/template/merged/exception_console/YCD_CancelOrderNotification.xsl.sample`: This XSL formats the HTML message that is sent to the user so that they can inform the customer of the auto cancellation alert if they do not have an e-mail address.

You can save it to another directory, but using the standard directory structure supplied by the Selling and Fulfillment Foundation helps ensure consistency.


Implementation at the Enterprise Level

By default, the FTC feature is configured at the hub level. If you want this configuration to be at the enterprise level, you have two options:

- Copy the existing pipeline and monitor rules to the enterprise level.
- Create your own pipeline and monitor rules from scratch.

Copying the Existing Hub-Level Pipeline to the Enterprise Level

Following is the recommended process for moving the configuration to the enterprise level:

1. From the Channel Applications Manager, load the configuration for the enterprise the pipeline is to be copied to.
2. Select Configure Business Process Models and Monitoring Rules.
3. Under Configure Business Process Models and Monitoring Rules, select Configure Order Fulfillment Process. If the dependent task list pop-up window is displayed, you can click the Ignore Lock icon and enter the configuration.
4. In the Pipelines tab, click the Sterling Call Center and Sterling Store Sales Order Fulfillment pipeline.
5. Click . The process modeling dialog box is displayed.
6. Enter the new pipeline ID and click OK.

Note: Order monitors and monitor events are automatically copied along with the pipeline.

Creating a pipeline

This process involves creating each monitor rule and monitor event manually. For this reason, it is recommended that you copy the existing pipeline. You can always change the pipeline after it is copied. If you still want to create your own pipeline, follow these steps:

1. From the Channel Applications Manager, load the configuration for the enterprise the pipeline is to be copied to.
2. Select Configure Business Process Models and Monitoring Rules.
3. Under Configure Business Process Models and Monitoring Rules, select Configure Order Fulfillment Process. If the dependent task list pop-up window is displayed, click the Ignore Lock icon and enter the configuration.
4. In the Pipelines tab, click the Sterling Call Center and Sterling Store Sales Order Fulfillment Pipeline.
5. Select the pipeline that you created.

6. Create nine monitor rules that are configured in exactly the same manner as those configured at the hub level. For more information about how to create monitor rules, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.
7. From the Channel Applications Manager, select Configure Business Process Models and Monitoring Rules.
8. Under Configure Business Process Models and Monitoring Rules, select Define Order Monitoring Events. If the dependent task list pop-up window is displayed, click the Ignore Lock icon and enter the configuration.
9. Create nine monitor events that are configured in exactly the same manner as those configured at the hub level. For more information about how to create monitor events, see the *Sterling Distributed Order Management: Configuration Guide*. The events should point to the same services that the hub-level monitor events point to. If you do not want to use the default services, make copies of the default services and point the monitor events to these services.

7.8.2 Shipment Notification

When an order ships out of a warehouse, it is important that the customers are notified of the shipment as a confirmation that everything is going well with the order.

7.8.2.1 Solution

Sterling Call Center and Sterling Store provides a shipment notification agent that sends an e-mail to the customer containing all shipments for a given day. For each shipment entry in the YFS_SHIPMENT table, the NOTIFICATION_SENT flag is maintained, which indicates whether the notification for that shipment has been sent to the customer.

One consolidated notification is sent for all shipments in a given day that the customer has not been notified. The shipment notification does not contain line item details if the shipment is not packed in a container.

To achieve this, the Shipment Notification time-triggered transaction is defined at the `Sales Order` document type level. The transaction reads task queue entries, and if some shipments qualify for notification, the `sEND_NOTIFICATION` event is raised, which calls the

YCD_ShipmentNotificationEmail_1.0 service, that is responsible for sending an e-mail to the customer.

The details of the shipment notification agent are as follows:

Attributes

Table 7–28 Shipment Notification Agent Verification Agent Attributes

Attribute	Value
Base Transaction ID	SHIPMENT_NOTIFICATION
Base Document Type	0001 (Sales Order)
Base Process Type	ORDER_FULFILLMENT (Sales Order)
Abstract Transaction	None
APIs Called	None

Criteria Parameters

Table 7–29 Shipment Notification Agent Criteria Parameters

Parameter	Description
Action	This field is used internally by Sterling Call Center and Sterling Store. The only valid value is Get. Do not modify this field.
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.
CollectPendingJobs	If this parameter is set to "N", the agent does not collect information on the pending jobs for this time-triggered transaction. This pending job information is used to monitor the agent in the System Management Console. By default, CollectPendingJobs is set to "Y". It can be set to "N" if one particular time-triggered transaction is performing a significant amount of getPendingJobs queries, and the overhead cost is too high.

Statistics Tracked

None.

Pending Job Count

The number of orders for which a shipment notification has to be sent.

Events Raised

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

Table 7–30 Events Raised by the Shipment Notification Agent

Transaction/Event	Key Data	Data Published	Template Support?
SEND_NOTIFICATION	order_dbd.txt	SHIPMENT_NOTIFICATION.SEND_NOTIFICATION.0001.xml	Yes

7.8.2.2 End-User Impact

None.

7.8.2.3 Implementation

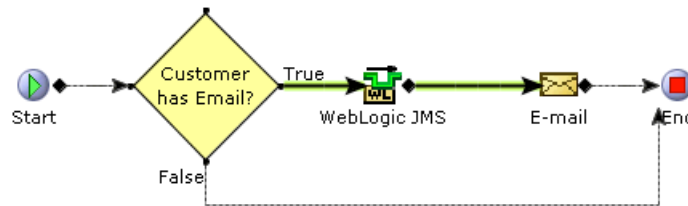
When the Shipment Notification agent raises the SEND_NOTIFICATION event, the XML used as input to the YCD_ShipmentNotificationEmail_1.0 service is in:

```
<template>/event/SHIPMENT_NOTIFICATION.SEND_NOTIFICATION.0001.xml
```

Note: Sterling Commerce recommends that the Shipment Notification agent be run once a day, at the end of the day.

You can customize the YCD_ShipmentNotificationEmail_1.0 service as needed. By default, this service checks whether the customer has an e-mail address, and if that is the case sends the e-mail using the E-mail Sender component. [Figure 7–10](#) illustrates YCD_ShipmentNotificationEmail_1.0 service.

Figure 7–10 The *YCD_ShipmentNotificationEmail_1.0*



You must specify the e-mail server and e-mail server listener port in the properties of the E-mail Sender component. In the Body Template field, specify XSL used to generate the HTML message that is sent to the customer. By default, the XSL used is in the following file:

```
<INSTALL_DIR>/repository/xapi/template/merged/email/YCD_ShipmentNotification.xsl.sample
```

Copy this XSL file, remove the `.sample` extension, customize it as needed, and specify it in the Body Template field of the E-mail Sender component.

You can save it to another directory, but using the standard directory structure supplied by the Selling and Fulfillment Foundation helps ensure consistency.

For more information about service builder nodes and parameters, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

7.8.3 Order Cancellation Notification

You may cancel the orders for various reasons: when a customer does not want the order that is placed, by mistake, a duplicate is created, or the payment methods on the order turn out to be fraudulent. As soon as you cancel the order, make sure you send a notification to the customer.

7.8.3.1 Solution

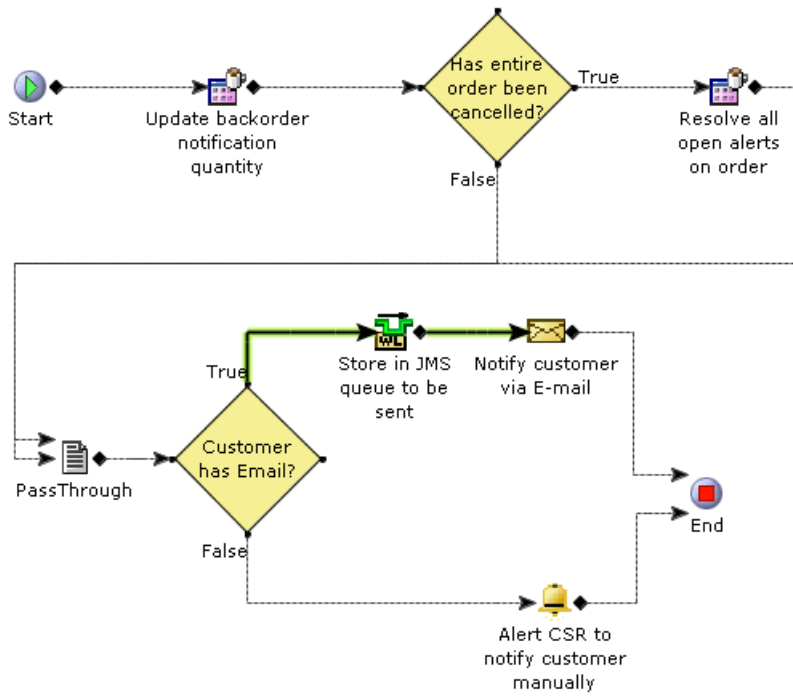
Sterling Call Center and Sterling Store provides a service that handles e-mail notification when an order is successfully cancelled.

When an order is cancelled through the `changeOrder` API, the `ON_CANCEL` event is raised, which invokes the `YCD_CancelOrderNotification_1.0` service through the `YCDOnCancel` action.

Before sending the notification, the service attempts to close all open alerts on the order if all order lines in that order have been cancelled. A notification is sent to the customer if they have an e-mail address defined. Otherwise, an alert is sent to the user to indicate that the user must inform the customer about the order cancellation.

Orders that are automatically cancelled when promised delivery dates are not met can be notified to the customer using this feature. For more information about order cancellation due to passed promised delivery dates, see [Section 7.8.1, "Federal Trade Commission Compliance"](#). The message sent to the customer depends on the reason, either an automatic cancellation or a regular cancellation. [Figure 7-11](#) illustrates the `YCD_CancelOrderNotification_1.0` service.

Figure 7-11 *YCD_CancelOrderNotification_1.0 Service*



This service calls the `getOrderDetails` API to retrieve the relevant order information, and passes it on to an e-mail service that will send the information to the customer, in html format, converted by an XSL.

Although the solution above is provided with Sterling Call Center and Sterling Store, you may need to enhance the service to account for the e-mail service being potentially down. The suggested solution is instead if calling the `getOrderDetails` API, pass on the output XML of the `ON_SUCCESS` event to a queue of your choice (for example, a JMS queue), and check to see if the e-mail server is up. If it is down, leave the notification in the queue, and try to reprocess it at a later time. If it is up, call the XSL to convert the XML in the queue to HTML, and send the e-mail to the customer.

7.8.3.2 End-User Impact

If an ordered is cancelled and the customer does not have an e-mail address defined, an alert is sent to the `Customer Notification` queue. By default, the user monitors this queue and informs the customer about cancellation.

7.8.3.3 Implementation

Unless you do not want to use this feature, ensure that the `ON_CANCEL` event is active in the Change Order transaction, and that the `YCDOnCancel` action invokes the `YCD_CancelOrderNotification_1.0` service.

By default, this feature is turned off because the `ON_SUCCESS` event is disabled. If you want to use this feature, enable the `ON_SUCCESS` event for the Confirm Draft Order and Create Order transactions in the Applications Manager, for the Consumer Direct Order Fulfillment document type.

The template used by the E-mail Sender component of the service to format the output XML of the `getOrderDetails` API into an HTML that is e-mailed to the customer is found in the following file:

```
<INSTALL_DIR>/repository/xapi/template/merged/email/YCD_CancelOrderNotification.xsl.sample.
```

Copy this file, name it `CancelOrderNotification.xsl`, customize it as needed, and specify the XSL used to generate the HTML message in the Body Template field of the service's E-mail Sender component.

You can save it to another directory, but using the standard directory structure supplied by the Selling and Fulfillment Foundation helps ensure consistency.

7.9 Order Maintenance

The user can modify orders that are created and captured in Sterling Call Center and Sterling Store. For example, customers may call the user to change the payment type or bill-to address on their order, or to cancel the order because they are dissatisfied with a late shipment. Therefore, it is very important to maintain orders.

Sterling Call Center and Sterling Store provides the following order maintenance features:

- [Apply Hold](#)
- [Remove Holds](#)
- [Change Payment Method](#)
- [Add Line](#)
- [Add Multiple Items to an Order](#)
- [Change Gift Options](#)
- [Customer Appeasement](#)
- [Price Match](#)
- [Competitor Search](#)
- [Price Match Search](#)
- [Create or Modify a Competitor Record](#)
- [Create or Modify a Price Match Record](#)
- [Reship an Item](#)
- [Add or Modify Charges](#)
- [Add Coupon](#)
- [Cancel Order](#)
- [Track an Item](#)
- [Order Notes](#)
- [Change Service Instructions](#)
- [Change Service Appointment](#)
- [Change Fulfillment Options](#)

- [Fulfillment Summary](#)
- [Reservations](#)
- [Increase Order Line Quantity](#)
- [Schedule and Release an Order](#)
- [View Procurement Orders](#)
- [Change Order Address](#)
- [Launch Application Console](#)
- [Change an Item's Style](#)
- [Change Tax Options](#)
- [Copy Order](#)
- [E-Mail Order Information](#)

7.9.1 Apply Hold

Users may sometimes want to manually place an order on hold for the purpose of verification, for example, a user may want to place an order on a Fraud Check hold after creating the order.

7.9.1.1 Solution

Sterling Call Center and Sterling Store enables users to place an order on hold after order creation. Based on user permissions and status modification rules, users can apply holds on the entire order or specific order lines.

The `getCompleteOrderDetails` API is used to display the Apply Hold screen and the `changeOrder` API is called when the user applies a hold.

7.9.1.2 End-User Impact

A user can place a hold on an order or order line only if the user belongs to a user group that has the permission to apply holds. Also, users can select only those hold types for which they have permission.

If status modification rules are configured such that users are not allowed to apply holds on an order or order line, an error message is displayed.

7.9.1.3 Implementation

This section explains the configurations for the apply holds task.

- To grant permission for users to apply holds on an order or order line, configure the hold type appropriately:
 - Any user can apply a hold
 - Users belonging to a particular user group can apply holds

For more information about configuring holds, see the *Sterling Distributed Order Management: Configuration Guide*.

- Notes entered for this task are saved on the order with YCD_HOLD_INFO note type.
- This task is permission controlled. You can assign permissions to user groups for this task.

7.9.1.4 Reference Implementation

This section explains the reference implementation provided for the apply hold task.

- Sterling Call Center and Sterling Store provides permissions to apply hold to CSR Leads and store managers.
- By default, the following order level hold types are provided for the apply hold task:
 - Credit Limit Reached
 - Duplicate Order
 - Fraud Check
 - Address Verification
- Sterling Call Center and Sterling Store provides permissions to apply the hold types provided, to all user groups.

7.9.2 Remove Holds

In some retail environments, holds are automatically applied to an order during order modifications. Call center and store representatives may need to manually remove these holds applied on orders and order lines.

7.9.2.1 Solution

Sterling Call Center and Sterling Store enables the users to remove the holds applied to an entire order or to just certain order lines.

It also provides the ability to control which users can remove which types of holds. A user cannot manually put an order on hold within the Sterling Call Center and Sterling Store user interface.

The `getCompleteOrderDetails` API is called to retrieve the details of the hold. The `changeOrder` API is called to update the status of the hold, after the hold is removed.

7.9.2.2 End-User Impact

A user can remove holds placed on an order or order line if that user belongs to a user group that has permissions to remove holds. Once the hold on the order is removed, the user can modify the order or order line.

7.9.2.3 Implementation

This section explains the configurations for the remove holds task.

- To remove holds placed on an order or order line, configure the following rules to grant permissions:
 - Any User Can process this Hold
 - Users Belonging To The Following User Groups Can Process This Hold

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

- Notes entered for this task are saved on the order with `YCD_HOLD_INFO` note type.
- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.9.2.4 Reference Implementation

As part of reference implementation, Sterling Call Center and Sterling Store provides permissions to remove holds to all user groups.

7.9.3 Change Payment Method

At times, a customer may want to add a new payment method or modify an existing payment method when creating or modifying an order.

Note: When a credit card payment method is selected by the user, you must validate the credit card.

Note: When the order header contains a CustomerContactID, the manageCustomer API saves the payment methods to the applicable customer contact.

7.9.3.1 Solution

The Sterling Call Center and Sterling Store application supports different types of payment methods. Users can add or modify the payment methods using the Change Payment Method task. The application supports credit card validation and enables you to configure the way credit card names are displayed.

Adding or Modifying a Payment Method During Order Creation or Order Modification

When an order is modified or created, for example, if the order is cancelled or if new order lines are added, a Confirm Payment screen is displayed. Users can view the details of the existing payment methods pertaining to an order. Based on the PAYMENT_METHOD status modification rule, users can add or modify payment methods. For more information about configuring the status modification rule, see the *Sterling Distributed Order Management: Configuration Guide*. For more information about adding a new payment method, see [Adding a Payment Method](#). For more information about modifying an existing payment method, see [Modifying the attributes of a Payment Method](#).

When creating an order in the context of a customer, the payment methods that were previously saved against the customer are displayed in the Confirm Payment screen. If a default payment method was chosen by the customer earlier, this payment method is populated and is charged with the order amount. However, if the customer wants to use another payment method, the default payment method must be unselected in the Confirm Payment screen. For more information about

creating an order in the context of a customer, see [Customer Context Ordering](#).

Modifying Payment Methods on an Order

Sterling Call Center and Sterling Store provides the functionality to modify a payment method of an order by using one of the following screens:

- [Change Payment Methods screen](#) (payment methods are displayed in a table)
- [Enhanced Change Payment Methods Screen](#) (payment methods are displayed in panels)

Based on the configuration, either the Change Payment Methods screen or the enhanced Change Payment Methods screen is displayed. It is recommended that you use the enhanced Change Payment Method screen. The PAYMENT_METHOD status modification rule is called in both the screens to determine whether the payment method of an order can be changed.

Change Payment Methods screen

In the Change Payment Methods screen, the payment methods are displayed in a table. The `getCompleteOrderDetails` API is called to retrieve the payment methods on an order. The Details panel displays the payment types, the amount charged on the order, the amount refunded, the maximum charged amount on the payment type, and the action to be performed on the payment.

A user can activate a payment method by selecting `Activate` from the Actions drop-down list. To suspend an active payment method from further transactions, users can select `Suspended For Charge` from the Actions drop-down list. Users can also suspend a payment method for charge and refund by selecting `Suspended: Charge and Refund` from the Actions drop-down list.

Note: If a payment method has already been processed, it has to be manually suspended to prevent it from being charged.

Users can modify the attributes of an existing payment method by clicking on the payment method they want to modify. An Edit Payment Method pop-up window is displayed. For more information about modifying an existing payment method, see [Modifying the attributes of a Payment Method](#). Users can also add new payment methods by clicking the Add Payment Method hyperlink. For more information about adding a new payment method, see [Adding a Payment Method](#). The changeOrder API is called to add or modify a payment method.

Note: Users cannot add notes in the Change Payment Methods screen.

Enhanced Change Payment Methods Screen

Sterling Call Center and Sterling Store provides an enhanced Change Payment Methods screen, which enables users to change the payment methods on an order. The getCompleteOrderDetails API is called to retrieve the payment methods, order total, and bill-to address pertaining to an order. Each payment method is displayed in a panel. The payment methods are displayed in the order of the charge sequence and the available funds, if applicable. Payment details, payment activity, maximum charged amount on the payment method, and payment transactions, if any, pertaining to each payment method is displayed.

Users can modify the attributes of some payment methods by clicking the Edit button corresponding to that payment method. For more information about modifying an existing payment method, see [Modifying the attributes of a Payment Method](#). After modifying the attributes of a payment method, the Adjust Charges pop-up window is displayed and the charges on the applicable payment methods are adjusted accordingly.

The Adjust Charges pop-up window can also be displayed by clicking the Adjust Charges button in the enhanced Change Payment Methods screen. All the payment methods are displayed in the Adjust Charges pop-up

window and the charges on applicable payment methods are adjusted accordingly.

Users can remove the payment methods that are yet to be processed using the Remove button corresponding to that payment method. If a payment method has already been processed, the Revoke button is displayed instead of the Remove button. Users can click the Revoke button to suspend any further transactions to be performed on the payment method. If a payment method is revoked, users can click the Restore button to enable transactions to be performed on the payment method.

Users can also add a new payment method by clicking the Add Payment Method hyperlink. After adding a payment method, the Adjust Charges pop-up window is displayed and the charges on the applicable payment methods are adjusted accordingly. For more information about adding a new payment method, see [Adding a Payment Method](#). The changeOrder API is called to add or modify a payment method.

In the enhanced Change Payment Methods screen, users can also add notes pertaining to the Change Payment Method task. The changeOrder API is called to add the notes.

Adding a Payment Method

When adding a payment method, the following are taken into consideration:

- A user can add a payment method based on the user permissions and order status modification rules.
- If an order is created in the context of a customer and if the Customer Payment Method rule is configured for the customer's enterprise to allow the customer payment method information to be stored and used through the application, the user will be able to save the payment method against the customer or contact. For more information about configuring the customer payment methods, see [Section 5.7.6, "Configuring Customer Payment Method Rules"](#). For more information about creating an order in the context of a customer, see [Customer Context Ordering](#).
- If a credit card payment method is used, the credit card is validated. For more information about validating a credit card, see [Credit Card Validation](#).

Modifying the attributes of a Payment Method

When modifying the attributes of a payment method, the following are taken into consideration:

- A user can modify the payment method based on the user permissions and order status modification rules.
- If the following conditions are satisfied, users can modify the attributes pertaining to a payment method that is described in [Table 7-31](#):
 - The payment method has been saved to the order.
 - The payment processing agents are yet to process the order.
 - There are no existing authorizations on any other payment methods.

Table 7-31 *Attributes that can be modified for a Payment Method*

Payment Method	Attributes
Credit Card	Billing Address and Credit Card Expiration Date
Stored Value Card	Payment Reference1, Payment Reference2, and Payment Reference3
Pre-Paid	Max Charge Limit
Other	Max Charge Limit
Check	None
Refund Check	None
Customer Account	None

Customer Context Ordering

Sterling Call Center and Sterling Store provides a configurable option to save a payment method against a customer in the Add Payment Method pop-up window provided the order is created in the context of a customer, and the Customer Payment Method rule is configured for the customer's enterprise to allow the customer payment method information to be stored and used through the application. For more information about configuring the customer payment methods, see [Section 5.7.6, "Configuring Customer Payment Method Rules"](#).

The manageCustomer API is called to save the payment method against the customer or contact.

Note: The address entered in the credit card payment method will not be saved against the customer.

Handling Credit Cards

Sterling Call Center and Sterling Store enables you to validate a credit card payment method. It also allows you to configure the way credit card names are displayed.

Credit Card Validation

All credit cards follow a pattern in their number depending on their type. For example, the first two digits of all MasterCard credit cards are between 51 and 55, and the total length of a MasterCard card number is 16. An American Express card number has either 34 or 37 as its first two digits, and has a total length of 15.

Additionally, all numbers of a credit card follow a pattern, which can be validated with Luhn's algorithm. However, this algorithm only ensures that the given credit card number is a valid number. It does not ensure that it exists in any bank database.

It is useful to run this validation every time a new credit card number is added to save payment processing validations, which will fail every time against an invalid number.

Sterling Call Center and Sterling Store provides functionality to process real-time credit card authorizations while confirming draft orders. For more information about real-time credit card authorizations, see [Section 7.12, "Real-Time Credit Card Authorization"](#).

Displaying Credit Card Name

Sterling Call Center and Sterling Store enables you to configure whether a text field or multiple text fields should be used for entering credit card name. For more information about displaying credit card name, see [Section 5.9.7, "Configuring Advanced Credit Card Rules"](#).

Note: Sterling Call Center and Sterling Store does not allow you to retrieve sensitive payment information such as credit card number, SVC number, customer's account number.

Note: Ensure that the Display Credit Card Name rule is same for an enterprise for which you are creating an order, and for the customers defined for an enterprise.

The credit card number is validated as follows:

- [Prefix and Length Validation](#)
- [Luhn's Algorithm](#)

Prefix and Length Validation

[Table 7-32](#) specifies the exact numbers to prefix for a card number of a specific card type, and how many digits the card number must contain. For example, American Express cards all start with either 34 or 37 as their first digits, and contain 15 digits.

Note: The JCB credit card type has two entries in [Table 7-32](#). This is due to the fact that a JCB card can follow the prefix system listed in the table.

Table 7-32 *Credit Card Types*

Credit Card Type	Prefix	Length
American Express	34, or 37	15
MasterCard	51 through 55	16
Visa	4	13 or 16
Diners Club and Carte Blanche	36, 38, or 300 through 305	14
Discover	6011	16

Table 7–32 Credit Card Types

Credit Card Type	Prefix	Length
JCB	2123 or 1800	15
JCB	3	16

When a credit card type is selected and a credit card number is entered in the Application Console, the system validates the number prefixed and the length. If both are valid, the system executes the Luhn's algorithm.

Luhn's Algorithm

Luhn's algorithm determines whether or not a credit card number is valid. For a given credit card number:

1. Double the value of every other digit from right to left, beginning with the second to last digit.
2. Add the digits of the results of [Step 1](#) to the remaining digits in the credit card number.
3. If the result mod 10 is equal to 0, the number is valid. If the result mod 10 is not equal to 0, the validation fails.

Example

A credit card of type Visa is added with the number 4624 7482 3324 9080.

This credit card number starts with 4, as it should be in all Visa cards. It also has 16 digits, which is valid for a Visa card. Now, execute Luhn's algorithm:

- a. Double the value of every other digit from right to left, beginning with the second to last digit.

4624 7482 3324 9080:

- $8 * 2 = 16$
- $9 * 2 = 18$
- $2 * 2 = 4$
- $3 * 2 = 6$
- $8 * 2 = 16$

- $7 * 2 = 14$
- $2 * 2 = 4$
- $4 * 2 = 8$
- b. Add the digits of the results of the previous step to the remaining digits in the credit card number.
 - The digits of the result of [Step a](#) amount to the following:
 - $1+6+1+8+4+6+1+6+1+4+4+8 = 50$
 - The remaining digits in the credit card number amount to the following:
 - $6+4+4+2+3+4+0+0 = 23$
 - The sum of the two sub results is:
 - $23+50 = 73$
- c. If the result mod 10 is equal to 0, the number is valid. If the result mod 10 is not equal to 0, the validation fails.

$73 \text{ mod } 10$ is 3, therefore the card number is not valid.

A Visa credit card of number 4624 7482 3324 9780, on the other hand, passes the validation.

Note: You can override the validation for the credit card types listed in [Table 7-32](#) by implementing YCDValidateCreditCardInfoUE user exit. If you are configuring new credit card types, the validation for the new credit card types should also be implemented by the YCDValidateCreditCardInfoUE user exit.

7.9.3.2 End-User Impact

- Based on the configuration, a user will see either the Change Payment Methods screen or the enhanced Change Payment Methods screen.
- After a user enters the credit card number and clicks the Save button, the system validates the credit card number.

7.9.3.3 Implementation

This section explains the configurations for the Change Payment Method task.

- You can configure the Sterling Call Center and Sterling Store application to display either the old Change Payment Methods screen or the enhanced Change Payment Methods screen.
- Sterling Call Center and Sterling Store enables you to configure the order statuses to allow users to add or modify payment methods. For more information about configuring the order statuses for modification, see [Section 5.10.6, "Configuring Order Modification Rules"](#).
- Sterling Call Center and Sterling Store allows you to configure different credit card types. For more information about configuring different credit card types, see [Section 5.9.4, "Defining Credit Card Types"](#).
- If you have configured a credit card type other than the types listed in [Table 7-32](#), implement the YCDValidateCreditCardInfoUE user exit to validate this credit card type. Implement the YCDValidateCreditCardInfoUE user exit to override the validation for the credit card types listed in [Table 7-32](#).
- Notes entered in the enhanced Change Payment Method screen are saved on the order with the YCD_PAYMENT_CHANGE note type.
- Configure the Customer Payment Method rule for a customer's enterprise if you want to save the payment method against a customer when adding a new payment method. This functionality is available only when an order is created in the context of a customer. If the order is not created in the context of a customer, users will not be able to save the payment method against the customer or contact. For more information about configuring the customer payment methods, see [Section 5.7.6, "Configuring Customer Payment Method Rules"](#).

7.9.3.4 Reference Implementation

This section explains the reference implementations provided for the Change Payment Method task:

- By default, the enhanced Change Payment Methods screen is displayed.

- By default, Sterling Call Center and Sterling Store provides permissions to all users to change the payment methods on an order.
- By default, the Allow Customer Payment Method Information To Be Stored And Used Through The User Interface check box is selected to enable users to save the payment methods against the customer or contact. For more information about configuring the customer payment methods, see [Section 5.7.6, "Configuring Customer Payment Method Rules"](#).
- Following are the default payment types that are configured:
 - Credit Card
 - Pre-paid
 - Check
 - Refund Check
 - Customer Account
 - Stored Value Card
 - Other Payment Method
- Sterling Call Center and Sterling Store supports the following pre-defined credit card types:
 - American Express
 - Master Card
 - Visa
 - Diners Club
 - Carte Blanche
 - Discover
 - JCB
- Sterling Call Center and Sterling Store provides a reference implementation of YCDValidateCreditCardInfoUE user exit, which fails the validation for the following credit card numbers: 7890123456789012, 8901234567890123, and 9012345678901234. This user exit does not validate the credit card information if the credit card number is 8091234567890123. For all other credit card numbers, the validation succeeds.

7.9.4 Add Line

After placing an order, a customer may want to add new product or service items to the order, if the customer has forgotten to place the order for product or service items earlier, or if it was unavailable at the time of placing the initial order.

7.9.4.1 Solution

Sterling Call Center provides an add line task which the user can use to add order lines to the existing order. This section explains the complete process of adding a new order line to an existing order.

Validating Whether A New Item Can Be Added

Sterling Call Center and Sterling Store allows you to validate whether the user can add a new order line to an existing order based on the following criteria:

- Order Age—You can configure the number of days after an order is created to allow the addition of new order lines to an existing order.
- Order Modification rule—You can configure the order statuses for which the add line action is allowed.

Searching For An Item To Be Added

The `getCompleteItemList` API is called that retrieves a list of items based on the input criteria. The list of items includes additional information such as pricing, availability and promotions.

Sterling Call Center and Sterling Store does not allow users to add items which are always tag controlled to an order.

Choosing The Fulfillment Option And Quantity

If an item is available that can be added to an order line, choose the required quantity and the delivery option. The `getFulfillmentOptionsForLines` API is used to obtain the available fulfillment options, which include delivery, shipping, and pickup options for a set of new or existing order lines. The customer can also view details about the nearby stores from where the customer can pick the item.

The `getSurroundingNodeList` API is called that provides a list of stores within a specified radius, from where the item can be picked up. To configure the radius for stores from where the items can be picked up, the following rules are considered:

- Distance To Consider rule—You can configure the distance from the current location for stores from where the customer can pick the items.
- UOM To Consider rule—You can configure the UOM for the distance of stores from the current location.

If the user enters the delivery address and selects the 'ship to' carrier service code, the `getFulfillmentOptionsForLines` API is used to determine the availability of 'delivery address' and 'carrier service' the user has input.

Note: If the `getFulfillmentOptionsForLines` API determines that both delivery and shipping are allowed, the fulfillment method is given the preference and the UI displays the fulfillment method as "Available to Deliver".

To display the carrier service information, the `Y_ANY` carrier organization must be implemented with the associated carrier services.

Choosing Accessories

The `getCompleteItemList` API is used to determine the accessories for an item. The user can select fulfillment options and the quantity for each of the selected accessories.

Choosing A Delivery Appointment

After adding the items to an order using the `changeOrder` API, the `generateWorkOrder` API is used to create any delivery lines (if the chosen delivery option is 'Delivery'), and generate work orders for the delivery lines.

The user can change appointment for any generated work order, if necessary.

Configuring Reasons For Overriding Item Price

The item prices can be overridden during the Add Line process using the YCD_PRICEOVERRIDE common code. You can configure reasons such as substitution, price adjustment, and price match to allow override.

7.9.4.2 End-User Impact

The user will not be able to add new order lines to an existing order after the configured amount of days are passed. Addition of order lines to an order also depends on the status of the order. Addition of order lines is done through the status modification rules. The modification types performed for the Add Line process include:

- Add Line
- Associate Delivery Line With Product Line
- Change Appointment

7.9.4.3 Implementation

This section describes how to configure the Add Line rule:

1. Log in to the Channel Applications Manager. For more information about logging in to the application, see [Section 2.1, "Starting the Channel Applications Manager"](#).
2. From the Channel Applications Manager, select Configure Order Administration > Advanced Configurations > Add Line Rules.
3. In the Maximum Number Of Days After Order To Allow Adding An Order Line field, enter the number of days allowed to add an order line.
4. From the Applications Manager, select Configure Order Administration > Configure Order Modification Rules > Add Line > Order.
5. Select the order statuses for which the add line action is allowed.
6. From the Channel Applications Manager, select Order Promising > Store Pickup Rules.
 - Check The Enterprise Allows Pickup From Store Fulfillment box to indicate that an item is available for pick up.
 - In Distance To Consider When Finding Nearby Stores field, enter the appropriate distance.

- In Distance UOM, enter the appropriate UOM for the distance.
7. Click Save.

To define the Y_ANY carrier service.

1. From the Channel Applications Manager, select Configure Outbound Logistics > Define Carriers > Roles and Participation > Carrier Attributes > Parcel Services.
2. Define the Y_ANY carrier service. For more information about defining carrier services, see the *Sterling Logistics Management: Configuration Guide*.

Notes entered for this task are saved on the order with YCD_NEW_ITEM_INFO note type.

7.9.4.4 Reference Implementation

This section explains the default values that are provided to configure rules to add an order line.

- The maximum number of days allowed after an order is created to allow addition of new order lines to an existing order is 30.
- If pickup from a store is allowed for the items of the order, the distance radius to consider when finding nearby stores is 25 miles.

The following reasons are configured in the YCD_PRICEOVERRIDE common code:

- Substitution
- Price Adjustment
- Price Match

All rules for the Add Line task are defined for the "XYZ-ONLINE" organization.

As part of the reference implementation provided by Sterling Call Center and Sterling Store, the Order Repricing user exit is enabled when additional items are added to the Order.

7.9.5 Add Multiple Items to an Order

After placing an order, a customer may want to add more of an item, new items or service items to the order.

7.9.5.1 Solution

Sterling Call Center and Sterling Store provide a task to add multiple items to an order. This section explains the solution offered by Sterling Call Center and Sterling Store for the process of adding multiple items to an order.

Validating Whether New Items Can Be Added

Sterling Call Center and Sterling Store validates if new order lines can be added to an existing order based on the following configurations:

- Order Age—The number of days after an order is created to allow the addition of new order lines to an existing order.
- Order Modification rule—The order statuses for which permit addition of lines to an order.

Adding Items to the Order

This section explains the item entry step in the add multiple items task and the solution offered by Sterling Call Center and Sterling Store.

The user cannot change any of the existing order lines. For more information about adding new order lines, see [Section , "Adding Items to an Order"](#).

Adding or Deleting Lines from an Order

The changeOrder API is called to add only new lines to the order. The changeOrder API is also called to delete existing lines from the order.

Sterling Call Center and Sterling Store assumes that the status modification rules allow addition of lines to cancelled orders. If the status modification rules do not allow addition of lines to cancelled orders, the user will not be able to add new lines to the order and remove all existing lines at the same time.

Validating Items in an Order

Sterling Call Center and Sterling Store validates the new items that are added to an order. If a newly added item fails validation, an error message is displayed. For more information about validating items in an order, see [Section 7.6.4.4, "Item Validation"](#).

Changing Fulfillment Options

The user can modify the fulfillment options for the items added. For more information about changing fulfillment options, see [Section 7.9.19, "Change Fulfillment Options"](#).

Viewing Service Fulfillment Summary

After adding items to the order using the changeOrder API, if you choose the Delivery option, the generateWorkOrder API is used to create the delivery lines and generate work orders. For more information about service fulfillment summary, see [Section 7.9.24, "Service Fulfillment Summary"](#).

Changing Service Appointments

The user can change the delivery appointment for the customer, if applicable. The items are reserved based on the configuration. For more information about service appointments, see [Section 7.9.23, "Change Service Appointment"](#).

Viewing Pick up and Shipping Fulfillment Summary

The Fulfillment Summary screen provides the complete scenario of how the order is configured and fulfilled. The items are reserved based on the configuration. For more information about fulfillment summary, see [Section 7.9.20, "Fulfillment Summary"](#).

Viewing and Confirming Payment Details

Due to the addition of items, the payment information changes, and the system displays the updated payment details. To make additional payments, the user must select the payment method.

Sterling Call Center and Sterling Store can be used to carry out the critical payment related processes during order management processing and enables you to integrate with external payment processing systems such as CyberSource or Chase Paymentech. For more information about integrating with external systems for payment handling, see [Section 5.10.30, "Configuring User Interface Payment Handling"](#).

7.9.5.2 End-User Impact

When the user adds related items to an order, the fulfillment method is defaulted to the fulfillment method of the parent item.

The user will not be shown certain columns in the order line entry screen if the user has configured not to display.

The user will be able to add bundle items to the order.

Depending on how you configure the order entry rules, the end users will see different behavior in the user interface:

- The user will see either the Item Entry screen or Large Order Item Entry screen based on the configuration.
- The user will see Shipping and Delivery as separate fulfillment methods based on the configuration to display Shipping and Delivery as separate fulfillment methods.
- The user will only see the set of columns that you configure on the Add Line screen.
- The user will see related items as a panel on the Add Line screen or as a pop-up window based on the configuration.
- The user will see item associations that are configured as Show in UI. The user will see the availability for the associated items based on the inventory check for associated items. Based on the configuration, when an associated item is added to an order, the associated item either replaces the original item or is added as a related item.

7.9.5.3 Implementation

This section explains the configurations for the add lines to order task.

- Sterling Call Center and Sterling Store allows you to configure the Order Age beyond which new lines cannot be added. For more information about configuring the add line rule, see [Section 5.10.18, "Configuring Add Line Rules"](#).
- Sterling Call Center and Sterling Store allows you to configure the order statuses for which addition of new order lines is allowed. Ensure that the status modification rules allow addition of lines to cancelled order. For more information about configuring the order statuses for modification, see [Section 5.10.6, "Configuring Order Modification Rules"](#).
- Sterling Call Center and Sterling Store allows you to configure the store pick up rules. For more information about configuring the store pick up rules, see [Section 5.11.1, "Configuring Store Pickup Rules"](#).

- Sterling Call Center and Sterling Store allows you to configure rules for adding lines to the order. For more information about configuring order entry rules, see [Section 5.10.1, "Configuring Order Entry Rules"](#).
- Sterling Call Center and Sterling Store allows you to configure the display of model items. For more information about configuring the display of model items, see [Section 5.5.8, "Configuring Display of Model Items"](#).
- Sterling Call Center and Sterling Store allows you to configure external payment options. For more information about configuring external payment options, see [Section 5.10.30, "Configuring User Interface Payment Handling"](#).
- To add relationships between lines, you need to configure the association types to be displayed on the user interface. For more information about association types, see [Figure 5-19](#). You also need to configure a Relationship Type to be used with the association type. For more information about configuring relationship types, see [Section 5.10.33, "Configuring Line Relationship Types"](#).
- Sterling Call Center and Sterling Store allows you to configure availability checks and reservation options. For more information about configuring availability checks and reservation options, see [Section 5.10.27, "Configuring Availability Check and Reservation Options"](#).
- This task is permission-controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.
- Notes entered for this task are saved in the order using the YCD_MULTI_ADD_LINES_INFO note type.

7.9.5.4 Reference Implementation

This section explains the reference implementation provided for the add lines to order task.

- By default, the Maximum number of days after order date to disallow adding an order line rule is set to 30 days.
- By default, the Add Items screen is displayed for item entry.
- By default, Shipping and Delivery are displayed as separate fulfillment options and the default fulfillment method is Delivery.

- By default, the following columns are displayed in the line entry step:
 - Unit of Measure
 - Line Quantity
 - Line Price
 - Line Totals
- By default, related items are displayed as a pop-up window.
- As part of reference implementation, Sterling Call Center and Sterling Store provides permissions to add lines to an order to all user groups.

7.9.6 Change Gift Options

A customer may want to place an order for some gift items. In such situations, you can configure the available gift options to ensure that the selected items are marked as gift items.

7.9.6.1 Solution

Sterling Call Center and Sterling Store user interface provides two screens to change gift options.

To change gift option for pick up and shipping lines, the Fulfillment Summary screen is used. For more information about changing gift options for pick up and shipping lines, see [Marking Items as Gifts](#). To change gift options of delivery lines, the Delivery Fulfillment Summary screen is provided. Based on the Available Gift Options Rule in the Channel Applications Manager, users can mark either the entire work order or individual work order lines as a gift. For more information about changing gift options for delivery lines, see [Marking Delivery Lines As Gift Items](#).

You can configure which of the fulfillment methods allow gift options to be recorded in the user interface.

The Sterling Call Center and Sterling Store application also enables users to include a gift message for the item marked as a gift. Gift messages are stored as instructions with a GIFT instruction type. Additionally, if the Allow Gift Wrapping Of Items check box is selected in Configure Available Gift Options of the Channel Applications Manager, the application will enable a user to gift wrap an item marked as a gift. For more information

about configuring the available gift options, see [Section 5.10.19, "Configuring Available Gift Options"](#).

The `getCompleteOrderDetails` API is called to get details of the order lines marked for a gift recipient. The `changeOrder` API is called to record the gift option on the order.

Handling Bundle Items

If a bundle item is configured as ship independent, gift options can be changed for all the corresponding component items. Users can gift wrap only those component items that support gift wrapping. If a bundle item is configured as ship together, gift options can be changed only for the bundle parent. Users can gift wrap the bundle parent only if it supports gift wrapping. For more information about bundles, see [Section 7.2, "Configured Items"](#).

7.9.6.2 End-User Impact

This section explains the end-user impact for the Change Gift Options task:

- Based on the Configuring Available Gift Options rule, the user can enter gift options for product items, bundle items which are being shipped, picked up, or being delivered.
- The Gift Wrap Item check box will be displayed to the user if both the following conditions are satisfied:
 - The ship node is configured to provide gift wrapping services. For more information about configuring the attributes of a node, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.
 - The Configuring Available Gift Options rule in the Channel Applications Manager is configured to allow gift wrapping of an item.

7.9.6.3 Implementation

This section explains the configurations for the change gift options task.

- You can configure the gift options for the following items:
 - Items being Picked Up

- Items being Shipped
- Items being Delivered

You can also configure the gift options to allow users to select either the entire work order or individual work order lines as a gift.

For more information about configuring the available gift options, see [Section 5.10.19, "Configuring Available Gift Options"](#).

- You can configure a ship node to provide gift wrapping services. For more information about configuring the attributes of a node, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.
- You can configure the Sterling Call Center and Sterling Store application to enable users to gift wrap an item. For more information about configuring the available gift options, see [Section 5.10.19, "Configuring Available Gift Options"](#).
- Sterling Call Center and Sterling Store allows you to configure the order statuses for which changing gift options is allowed. For more information about configuring the order statuses for modification, see [Section 5.10.6, "Configuring Order Modification Rules"](#).
- If you want to modify permissions for this task, you must also modify permissions for the following actions:
 - Mark Shipping Lines As a Gift actions
 - Enter Gift Recipient Info
- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.9.6.4 Reference Implementation

This section explains the reference implementation provided as part of the change gift options task.

- The Items being Picked Up, Items being Shipped, and Items being Delivered rules are set to "Y" for XYZ-ONLINE and XYZ-RETAIL organizations.
- By default, the Sterling Call Center and Sterling Store is configured to enable users to select an entire work order as a gift.

- By default, the Sterling Call Center and Sterling Store application does not allow users to gift wrap an item marked as a gift.
- As part of reference implementation, Sterling Call Center and Sterling Store provides permissions to change the gift options to all user groups.

7.9.7 Customer Appeasement

Sometimes you may have to appease the customer when a customer reports of not being satisfied with any of the services provided. For instance, a customer may report problems faced when placing an order online or report of receiving a damaged item. In such situations, you need to perform the appeasement task to make amends for the bad experiences.

7.9.7.1 Solution

This section explains the customer appeasement process and the solution offered by Sterling Call Center and Sterling Store.

Selecting Appeasement Reasons

The customers may call a user to report various reasons for which a user needs to perform an appeasement action on the customer's order. The appeasement may apply to the entire order or only some of the items in the order. The `getCommonCodeList` API is invoked, which retrieves all common codes that match the input criteria. The reasons for appeasement are configured using the `YCD_APPEASEMENT_RSN` common code. You can configure reasons such as damaged item, bad phone experience and so forth to enable the appeasement action.

Selecting An Appeasement Offer

The `YCDGetAppeasementOffersUE` user exit returns the appeasement offers. This user exit provides an option to plug in custom logic to retrieve appeasement offers. The offers provided depend on the selected appeasement reason and order total details. For example, you can provide 10% discount on the current order. Using the `YCDGetAppeasementOffersUE` user exit, you can implement different appeasement offers, if applicable.

If the appeasement applies to the current order, the `recordInvoiceCreation` API is called which creates a `CREDIT_MEMO`

invoice for the appeasement. If the selected appeasement offer applies for future orders, the YCDSendFutureOrderCustomerAppeasementUE user exit is invoked. This user exit implementation has the responsibility (like informing the promotion engine) to apply the appeasement on future orders of the same customer.

7.9.7.2 End-User Impact

None.

7.9.7.3 Implementation

This section explains the configurations for this feature.

- You can configure to provide a list of reason codes that are available during the customer appeasement process. For more information about defining appeasement reasons, see [Section 5.10.8, "Defining Appeasement Reasons"](#).
- Notes entered for this task are saved on the order with YCD_CUSTOMER_APPEASE note type.

7.9.7.4 Reference Implementation

This section explains the various factory setups that need to be configured:

1. Create a new charge category called CUSTOMER_APPEASEMENT and describe it as Customer Appeasement. This is billable.
2. Create a new charge name called CUSTOMER_APPEASEMENT and describe it as Customer Appeasement.
3. Configure the following appeasement reasons as common codes:
 - Late Shipment
 - Damaged Items
 - Bad Delivery Experience
 - Bad Online Experience
 - Bad Phone Experience
4. The default implementation of the YCDGetAppeasementOffersUE user exit returns the following offers:

- FLAT_AMOUNT_ORDER (if the offer provides a flat amount discount. The discount is applied only at the order header level)
 - A flat discount of \$10 is returned.
 - PERCENT_ORDER (if the offer provides a percentage discount on the current order. The discount is applied at both order and order line level).
 - A discount of 10% is returned on the order.
 - PERCENTAGE_FUTURE_ORDER (if the offer provides a percentage discount on the future order).
 - A discount of 5% for the future order is returned.
 - VARIABLE_AMOUNT_ORDER (if the offer allows the user to enter the discount amount. The discount is applied only at the order header level).
 - This is a flat discount and the amount is entered by the user.
5. The default implementation of the YCDSendFutureOrderCustomerAppeasementUE user exit does not return any offer because it is the implementation of the logic to send the future order appeasement offer to the promotion engine.

This set up is provided for "XYZ-CORP" organization.

7.9.8 Price Match

A customer may sometimes find that an item is available for a cheaper price at a different retailer. In such situations, the call center or store associate can investigate the customer's claims and perform the necessary price match action.

7.9.8.1 Solution

Sterling Call Center and Sterling Store provides user interfaces for maintaining a list of price match details, competitor details, and for recording price match information against an order line. Users can perform the price match task, all the while ensuring the user acts in accordance with the price match policies.

This section explains the Price Match process and the solution offered by Sterling Call Center and Sterling Store.

Validating If An Item Can Be Price Matched

Sterling Call Center and Sterling Store provides the ability to determine which items can be price matched. In the Price Match Line Selection screen, the YCDCanPriceMatchBePerformedUE user exit is called to determine which items can be price matched. By default, the logic provided in the default implementation user exit considers the price match window rule. This rule specifies the exact time period beyond which the user cannot perform a price match. For example, you can use this rule if you have a 15 day guaranteed price period. You can, however, provide a different validation logic by creating your own implementation for this user exit. However, even after the YCDCanPriceMatchBePerformedUE user exit determines that a price match cannot be performed, the user can still perform the price match if the user has permissions.

Handling Bundle Items

The Price Match Line Selection screen does not allow users to price match bundle component items. For more information about bundles, see [Section 7.2, "Configured Items"](#).

Searching For A Competitor

When the customer reports that a competitor is selling an item at a cheaper price, the call center or store representative can search whether the competitor already exists in the database. If the competitor does not exist and if the user has the permissions to create a competitor, the user can create the competitor and proceed with the price match. If the user does not have the permissions to create a competitor, price match cannot be performed.

The getCompetitorList API is called to get the list of competitors and the manageCompetitor API is called to create a competitor. For more information about creating a competitor, see [Section 7.9.11, "Create or Modify a Competitor Record"](#).

Checking For Prior Price Matches

When the user selects the item to perform a price match and then selects the competitor, the system checks for prior price matches performed for that item. If prior price matches are found, the user can choose from a list of prior-approved price matches. This allows the user to apply the price match quickly without having the user to waste time in

investigating the price match. The `getPriceMatchList` API is called to get the list of prior price matches.

Price Match Worksheet Calculation

If the user cannot find a prior-approved price match or if the user wants to manually enter the field values, the user can enter the competitor's price, charges and discounts and modify the existing shipping charges and discounts in the Price Match Worksheet. Discounts can be modified at the order header level and line level. For more information about adding discounts, see [Section 7.9.14, "Add or Modify Charges"](#).

If a customer requests for a price match that is less than a previously rejected price match, the price match is rejected. If a customer requests for a price match that is higher than a previously approved price match, the price match is approved.

The Refund Amount Per Unit From Price Match is calculated by applying the price match percentage defined for the competitor to the difference between the competitor total price and existing total price.

Defaulting Specific Charges For A Price Match

An enterprise can configure which of the order line charges needs to be taken into consideration as shipping charge when performing a price match. Depending on the configuration, the specific order line charge is defaulted on the Price Match Worksheet.

Checking For "No Hassle" Criteria

If none of the prior price matches can be used to approve or disapprove the customer's requested price match, the system will perform a "No Hassle" price match check to verify if the price match can be given to the customer without a CSR or store representative having to investigate the customer's price match claims manually.

The `checkNoHassleCriteria` API is used to validate the price match.

Sterling Call Center and Sterling Store allows you to configure the following "No Hassle" rule:

- **Maximum No Hassle Unit Price Difference**—According to this rule, the price match action is allowed for items whose price difference falls within the configured range.

- **Maximum No Hassle Unit Price Difference Percentage**—This is the maximum percentage price difference rule that allows to price match an item. The maximum percentage difference between the current item's price and the competitor's price can be configured to disallow the price match action if this difference is exceeded.
- **Maximum No Hassle Line Quantity**—The maximum ordered item quantity should not exceed a certain limit if price match is to be allowed. When a user performs the "No Hassle" price check, the system compares the price match information against the rules that have been configured using the `checkNoHasslePriceMatch` API. By default, this API considers only the rules mentioned above. You can implement different "No Hassle" logic by implementing the `checkNoHasslePriceMatchUE` user exit.

If the system determines that the requested price match falls within the "No Hassle" criteria, it allows the user to apply the price match to the order.

If the requested price match does not fall within the "No Hassle" criteria, the user should either manually investigate the price match by viewing the competitor's Web site or sales flyers, or can create a follow-up alert for this price match request that is to be investigated later. In the latter scenario, the user should inform the customers that they will be contacted later about the price match request.

Overriding Disallowed Price Matches

If, despite a price match not being allowed because of non-compliance with the "No Hassle" criteria, users can still perform the price match if they have the necessary permissions. They can also specify an expiration date for the price match.

Recording A Price Match On An Order Line

When a user performs a new price match, the system saves the new price match information. Whether an absolute price match or a possible price match, the `changeOrder` API is called to apply the price match. The `Price Match Recorded As` enterprise rule is used to determine the way in which to apply the price match. The user can record price match as a charge in the unit price, or apply with the charge category as discount. The charge name is according to the `Price Match Charge Name` rule.

Creation Of Alerts

If a price match is not allowed because of non-compliance with "No Hassle" criteria, the price match is placed in `Pending` status, and an alert is raised. The `managePriceMatch` API is called to create a price match record. The `createException` API is used to create an alert of the type `YCD_PRICE_MATCH`. The alert is assigned to the `YCD_PRICE_MATCH` queue. For more information about the creation of alerts, see [Section 7.23, "Alert and Queue Management"](#).

Approval Of Pending Price Matches

Sterling Call Center and Sterling Store provides two ways in which to approve the pending price matches:

- **Alert Details screen**—The user can approve the price match records that are in `Pending` status from the Alert Details screen. For more information about searching for alerts and viewing alert details, see [Section 7.23, "Alert and Queue Management"](#).
- **Price Match Details screen**—The user can approve the price match records that are in `Pending` status from the Price Match Details screen. For more information about viewing price match details, see [Section 7.9.12, "Create or Modify a Price Match Record"](#).

A user with the necessary permissions to search for alerts can view the alerts generated for price matches that are in `Pending` status. The Alert Details screen displays the list of order lines on which the price match was attempted, by calling the `getOrderLinesForPriceMatch` API. The user can either approve or deny the price match.

If the price match is approved, the `managePriceMatch` API is called to change the price match status and the `changeOrder` API is called to apply the price match on those order lines on which price match is possible.

If the price match is denied, the `managePriceMatch` API is called to change the price match status, and the order lines are not updated.

Viewing and Confirming Payment Details

The Payment Confirmation screen displays the summary of the payment impact on the order as a result of the price match. If payment is configured to be handled outside Sterling Call Center and Sterling Store, the Payment Confirmation screen is not displayed.

Purging Of Price Match Records

In order to minimize the number of unused price match records in the database, Sterling Call Center and Sterling Store provides a price match purge agent. If the number of days that have elapsed after the price match expiry date is greater than the configured number of retention days, the agent moves the price match records to the price match history table. If a price match record is still present in the YFS_ORDER_LINE_PRICE_MATCH table, the price match record cannot be purged. In such situations, the price match record will be purged only after the record is purged from the YFS_ORDER_LINE_PRICE_MATCH table.

For more information about configuring the agent criteria details, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

The price match purge retention days can be configured using the Channel Applications Manager.

Purging Of Price Match History Records

Sterling Call Center and Sterling Store also provides the price match history purge agent that purges the price match history records from the YFS_PRICE_MATCH_H table.

For more information about configuring the agent criteria details, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

The price match history purge retention days can be configured using the Channel Applications Manager.

7.9.8.2 End-User Impact

Based on the rules to check the "No Hassle" criteria, the user will be able to either allow or disallow price matches.

7.9.8.3 Implementation

This section explains the configurations for the price match task.

- Sterling Call Center and Sterling Store allows you to configure the criteria that determines when a price match can be performed on an item in an order. For more information about configuring price match rules, see [Section 5.10.3, "Configuring Price Match Rules"](#).

- Sterling Call Center and Sterling Store allows you to specify the retention days for price match records and price match history records through purge rules. For more information about configuring the price match purge retention days and price match history purge retention days, see [Section 5.19.1, "Configuring System Purge Criteria"](#).
- Implement the YCDCanPriceMatchBePerformedUE user exit to verify if an item can be price matched.
- Implement the checkNoHasslePriceMatchUE user exit to validate if the price match satisfies the "No Hassle" criteria rule.
- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.
- Sterling Call Center and Sterling Store allows you to provide permissions to users to override and perform price matches for items that do not satisfy the price match window rule.
- Sterling Call Center and Sterling Store allows you to provide the necessary permissions to users to override and perform price matches for items that do not satisfy the "No Hassle" criteria rules.
- Sterling Call Center and Sterling Store allows you to provide the necessary permissions to specific users to create competitors.
- If you are providing the necessary permissions to perform a price match, you should also provide permissions for the following tasks:
 - Create Price Match
 - Search Competitor
 - Search Price Match
 - Search for Alerts
- Notes entered for this task are saved in the order using the YCD_PRICE_MATCH note type.

7.9.8.4 Reference Implementation

This section lists the default values that are provided as a part of the reference implementation to configure the rules to perform price match for an item.

- The Maximum Number of Days after Order Line Was Created to Allow Price Match rule is set to 14 days.
- The Maximum No Hassle Unit Price Difference rule is set to \$100.
- The Maximum No Hassle Unit Price Difference (%) rule is set to 25%.
- The Maximum No Hassle Line Quantity rule is set to 10.
- The Default Number of Days for Price Matches to Expire rule is set to 30 days.
- The Price Match Percentage Applied rule is set to 100%.
- The Charge Category Representing Shipping Charges To Default On The Price Match WorkSheet rule is not set by default.
- The Price Match Recorded As rule is set to Change In Order Line's Unit Price.
- Sterling Call Center and Sterling Store provides permissions to record price match to all the user groups as part of reference implementation.
- Sterling Call Center and Sterling Store provides permissions to override the price match window rule to the CSR lead user group and store managers as part of reference implementation.
- Sterling Call Center and Sterling Store provides the necessary permissions to override the "No Hassle" criteria rules to CSR lead user group and store managers as part of reference implementation.

All the rules for price match are defined for the XYZ-CORP and XYZ-RETAIL organizations.

7.9.9 Competitor Search

The call center and store representatives may have to search for existing competitors when performing a price match. Also, a retailer may want to maintain a list of valid competitors for whom a price match can be performed.

7.9.9.1 Solution

Sterling Call Center and Sterling Store provides a user interface that enables users to search, and edit competitor records. If a user has access to multiple enterprises, the Enterprise drop-down list is displayed

in the Competitor Search Criteria panel of the Competitor Search screen. The `getOrganizationList` API is called to retrieve the list of enterprises. When performing a price match, the user can verify if the competitor already exists in the database. Competitors can be defined for each enterprise.

The `getCompetitorList` API is called to retrieve a list of existing competitors.

If competitor records exist on an external database, the `getCompetitorListUE` user exit is called to retrieve a list of existing competitors.

Sterling Call Center and Sterling Store provides the following common codes for competitor statuses. The `getCommonCodeList` API is called to retrieve the descriptions for the competitor statuses.

- **Approved**—This status is used for approved competitors. Price matches can be performed for these competitors.
- **Pending**—This status is used for competitors for whom approval is pending. Price matches can be performed for these competitors only after they are approved.
- **Rejected**—This status is used for rejected competitors. Price matches cannot be performed for these competitors.

Pagination

Sterling Call Center and Sterling Store supports the smart retrieval of record sets in the Competitor Search screen.

For more information about pagination, see [Section 7.22, "Pagination"](#).

7.9.9.2 End-User Impact

None.

7.9.9.3 Implementation

This section lists the configurations for the competitor search task:

- To retrieve competitor records from external systems, implement the `getCompetitorListUE` user exit.

- The Competitor Search task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.9.9.4 Reference Implementation

Sterling Call Center and Sterling Store provides the necessary permissions to search for competitors to all the user groups as part of reference implementation.

7.9.10 Price Match Search

The call center and store representatives may have to search for existing price matches when performing a price match.

7.9.10.1 Solution

Sterling Call Center and Sterling Store provides a user interface which enables users to search and edit the existing price match records. If a user has access to multiple enterprises, the Enterprise drop-down list is displayed in the Price Match Search Criteria panel of the Price Match Search screen. The `getOrganizationList` API is called to retrieve the list of enterprises. During the price match process, a user may want to search for an existing price match. Based on the search criteria entered, a list of price matches is displayed. Based on the configuration, alternate item identifiers are used to display the items in the price match search results.

The `getPriceMatchList` API is called to retrieve a list of existing price matches.

If the price match records exist on an external database, the `getPriceMatchListUE` user exit is called to retrieve the list of existing price matches.

Note: If the price match records exist on an external database, Sterling Commerce assumes that the competitor records also exist on an external database and the `getCompetitorListUE` user exit is called to retrieve a list of existing competitors.

Sterling Call Center and Sterling Store provides the following common codes for price match statuses. The `getCommonCodeList` API is called to retrieve the descriptions for the price match statuses.

- **Approved**—This status is used for approved price matches. These price matches can be applied to order lines.
- **Pending**—This status is used for price matches for which approval is pending. These price matches should be approved before they can be applied to order lines.
- **Rejected**—This status is used for rejected price matches. These price matches cannot be applied to order lines.

Pagination

Sterling Call Center and Sterling Store supports the smart retrieval of record sets in the Price Match Search screen.

For more information about pagination, see [Section 7.22, "Pagination"](#).

7.9.10.2 End-User Impact

None.

7.9.10.3 Implementation

This section lists the configurations for the price match search task.

- Implement the `getPriceMatchListUE` user exit to retrieve price match records from external systems.
- This price match search task is permission controlled. Sterling Call Center and Sterling Store allows you to assign the necessary permissions to user groups for this task.

7.9.10.4 Reference Implementation

Sterling Call Center and Sterling Store provides the necessary permissions to search for price matches to all the user groups as part of reference implementation.

7.9.11 Create or Modify a Competitor Record

If a competitor record does not already exist in the database, the call center and store representatives may need to create a new competitor, when performing a price match. CSR leads and Store leads may want to modify an existing competitor record, for example, a CSR lead may want to change the status of a competitor from `Pending` to `Approved`.

7.9.11.1 Solution

Sterling Call Center and Sterling Store provides a user interface task to create a new competitor if that competitor does not already exist in the database. It also allows you to modify an existing competitor record. Users who have access to multiple enterprises can select the enterprise for which a competitor record has to be created.

The `getCompetitorDetails` API is called to retrieve details about a competitor. The `manageCompetitor` API is called to create a new competitor or update an existing competitor.

If the competitor records exist on an external database, the `getCompetitorDetailsUE` user exit is called to retrieve the details of existing competitors. The `manageCompetitorUE` user exit is called to create a new competitor or update an existing competitor.

Sterling Call Center and Sterling Store provides the following common codes for competitor statuses. The `getCommonCodeList` API is called to retrieve the descriptions for the competitor statuses.

- Approved
- Pending
- Rejected

7.9.11.2 End-User Impact

None.

7.9.11.3 Implementation

The create or modify competitor record task is permission-controlled. Sterling Call Center and Sterling Store allows you to assign the necessary permissions to user groups for this task.

When creating a new competitor, the value of the price match percentage for the competitor will be defaulted to the value of the Price Match Percentage Applied rule defined in the Channel Applications Manager. For more information about configuring the Price Match Percentage Applied rule, see [Section 5.10.3, "Configuring Price Match Rules"](#).

7.9.11.4 Reference Implementation

Sterling Call Center and Sterling Store provides the necessary permissions to create or modify a competitor record to the CSR lead user group and store managers as part of reference implementation.

7.9.12 Create or Modify a Price Match Record

If a price match does not exist for a selected item and competitor, the call center and store representatives may need to create a new price match record. CSR leads and Store leads may want to modify an existing price match record, for example, a CSR lead may want to change the status of a price match from `Pending` to `Approved`.

7.9.12.1 Solution

Sterling Call Center and Sterling Store provides a user interface task to create a new price match, if the price match does not already exist in the database. It also allows users to modify the existing price match records. Users who have access to multiple enterprises can select the enterprise for which a price match record has to be created.

This section explains the process of creating and modifying price match records and the solution offered by Sterling Call Center and Sterling Store.

Adding Items To A Price Match

When selecting items for price match, a user can search for items based on Item ID or Alternate Item ID. The `getCompleteItemList` API is called to retrieve details of the item.

Retrieving Details Of The Price Match

The `getPriceMatchDetails` API is called to display the details of an existing price match. The `getPriceMatchDetailsUE` user exit is invoked if the price match records exist on an external database. The `getOrderLinesForPriceMatch` API is called to retrieve the order lines related to the price match.

Creating A Price Match

The `managePriceMatch` API is called to create a price match record. The `managePriceMatchUE` user exit is invoked if the price match records exist on an external database.

Modifying A Price Match

The `managePriceMatch` API is called to modify a price match. The `managePriceMatchUE` user exit is invoked if the price match records exist on an external database. When a price match is approved, the `changeOrder` API is called to apply the price match to the corresponding order lines. The Price Match Recorded As enterprise rule is called to determine the way in which to apply the price match. The user can record price match as a charge in the unit price, or apply with the charge category as discount. The charge name is according to the Price Match Charge Name rule.

Sterling Call Center and Sterling Store provides the following common codes for price match statuses. The `getCommonCodeList` API is called to retrieve the following descriptions for the price match statuses:

- Approved
- Pending
- Rejected

7.9.12.2 End-User Impact

None.

7.9.12.3 Implementation

The create or modify a price match record task is permission controlled. Sterling Call Center and Sterling Store allows you to assign the necessary permissions to user groups for this task.

7.9.12.4 Reference Implementation

Sterling Call Center and Sterling Store provides the necessary permissions to create or modify a price match record to the CSR lead user group and store managers as part of reference implementation.

7.9.13 Reship an Item

A customer may report that the item ordered is either not received or damaged in transit. In such situations, the item may need to be reshipped or the customer has to be refunded for the shipment.

7.9.13.1 Solution

A user would typically reship a shipment when the system indicates that an item has been shipped but the customer claims of not having received it. This section explains the complete Reship process.

Tracking An Item

Reship of an item is possible if it is in the *Shipped* status. If the item is in *Delivered* status, it cannot be reshipped. This is because an order line can be reshipped only if a shipment has been created for it; when a delivery line is delivered without a shipment, it cannot logically be reshipped. Therefore, the user must first track the item and investigate the current status of the item to determine whether reship is possible or not.

Configuring Reasons For Reship

The reasons for reshipping an item are configured using RESHIP_REASON common code. You can configure reship reasons such as missing items, missing container, wrong item and so forth to allow performing reship action.

Validating that an Item can be Reshipped

Before reshipping an item, you must ensure that the following conditions are met:

- The order line must have enough available quantity that has not already been reshipped.
- The reship of an item is allowed only after certain number of elapsed days. This is to ensure that sufficient time is allowed for the item to

reach the customer. For example, we can configure the `MINIMUM_RESHIP_WINDOW` as 5 days to ensure that a reship is possible only after 5 days after placing an order.

The validity of the item to be reshipped is checked using the `validateReship` API. The `validateReship` API validates that the order lines passed as input are valid for being reshipped. You may implement other validations using the `validateReshipUE` user exit, if applicable.

If the item is not valid for reshipping, but needs to be reshipped, the user can override the reship validation, if the users have permissions to do so, or create a follow-up alert for their supervisor.

Handling Bundle Items

You can reship bundle parent items and bundle component items. Reshipping a Bundle parent item will result in reship of all component items. For more information about bundles, see [Section 7.2, "Configured Items"](#).

Reshipping and Refunding an Item

After validating, the user can either reship or refund the items. The reship or refund options are provided based on the availability of the items.

If the customer chooses the reship option, the `reshipOrderLines` API is called which creates new order lines to fulfill reshipment of order lines passed in the input. Attributes on the new order lines created by the `reshipOrderLines` API can be controlled by the `ReshipOrderLines` document template for the order's document type, as well as by the `YFSreshipOrderLinesUE` user exit. Additional validations may be done by this user exit. This user exit may cause the API to return different reship message.

Sometimes, the ordered item may be out of stock or the customer might not want the item. In such situations, the user would have to refund the items. If refund is involved, a return is created for the order line with line type as 'Credit'.

The user can enter notes when reshipping an item. The `changeOrder` API is called to save the notes in the order.

Note: The order lines are not reserved when you reship an item.

7.9.13.2 End-User Impact

None.

7.9.13.3 Implementation

This section explains how to configure the reasons for reshipping an item and how to configure the minimum reship window days.

1. Log in to the Channel Applications Manager. For more information about logging in to the application, see [Section 2.1, "Starting the Channel Applications Manager"](#).
2. From the Channel Applications Manager, select Configure Order Administration > Reship Reasons.
3. Enter appropriate reasons for reshipping the item.
4. From the Channel Applications Manager, select Configure Order Administration > Advanced Configurations > Configure Transaction Specific Rules.
5. In the Reship Order panel, enter the appropriate number of days in the Minimum Reship Window field.

Notes entered for this task are saved on the order with YCD_RESHIP_INFO note type.

7.9.13.4 Reference Implementation

This section explains the reference implementation configured to allow reship of an item for XYZ-CORP.

1. The minimum reship window period is set to five days which specifies the minimum number of days to be elapsed after which reship is allowed.
2. The following reasons are configured in the RESHIP_REASON common code:
 - Missing Item
 - Missing Container

- Wrong Item
- Cargo Loss
- Damaged or Defective Item

7.9.14 Add or Modify Charges

Call center and store representatives may have to add a new charge or modify an existing charge for an order that has been placed. For example, if a customer has been given two appeasements for the same issue, this task can be used to recover the excess refunded amount.

7.9.14.1 Solution

Sterling Call Center and Sterling Store provides a user interface that allows users to add or modify charges at both the header level and the line level.

The `getChargeCategoryList` API is called to retrieve the list of charge categories. The `getChargeNameList` API is called to retrieve the list of charge names. The user can add or modify charges at the header level and line level, based on permissions.

The `getCompleteOrderDetails` API is called to display the list of charges and taxes that are already applied on the order. The `changeOrder` API is called to apply the charge modifications. However, if the charges that are applied on the order are based on a pricing rule, users cannot modify the charges.

Viewing and Confirming Payment Details

The Payment Confirmation screen displays the summary of the payment impact on the order as a result of adding or modifying the charges. If payment is configured to be handled outside Sterling Call Center and Sterling Store, the Payment Confirmation screen is not displayed. For more information about confirming the payment details, see [Section 7.9.3, "Change Payment Method"](#).

7.9.14.2 End-User Impact

None.

7.9.14.3 Implementation

This section lists the configurations for this task.

- Sterling Call Center and Sterling Store allows you to configure the order statuses for which the addition of a new charge or the modification of an existing charge is allowed. For more information about configuring the order statuses for modification, see [Section 5.10.6, "Configuring Order Modification Rules"](#).
- Sterling Call Center and Sterling Store allows you to define charge names, charge categories, and tax names for an enterprise. For more details about charge names, charge categories, and tax names, see the *Sterling Distributed Order Management: Configuration Guide*.
- If you do not use the reference implementation provided by Sterling Call Center and Sterling Store, you can implement the YFSOrderRepricingUE user exit to handle repricing during order modification. This implementation should take into consideration the changes in charges and taxes. For example, you may have to extend the Add Modify Charges user interface to pass additional information to the changeOrder API in order to indicate that the charges and taxes were overridden through the UI. For more information about the YFSOrderRepricingUE user exit and the changeOrder API, see the *Sterling Call Center and Sterling Store: Javadocs*.
- The add or modify charges task is permission controlled. Sterling Call Center and Sterling Store allows you to assign the necessary permissions to user groups for this task.
- Notes entered for this task are saved in the order with the YCD_ADD_MODIFY_CHARGES note type.

7.9.14.4 Reference Implementation

This section explains the reference implementation provided as part of reference implementation for the add or modify charges task.

- The following charge categories are provided as part of the reference implementation:
 - Customer Appeasement
 - Discount
 - Handling

- Price Match
- Shipping
- Personalization
- The following charge names are provided as part of the reference implementation:
 - Customer Appeasement
 - Discount
 - Handling
 - Price Match
 - Shipping
 - Personalization
- Sterling Call Center and Sterling Store provides the necessary permissions to add or modify charges to the CSR lead user group and store managers as part of reference implementation.

7.9.15 Add Coupon

After placing an order, a customer may want to add a coupon or promotion code to the order.

7.9.15.1 Solution

The Sterling Multi-Channel Selling Solution integration provides a user interface task that enables a user to add a coupon or a promotion code to an order. The YCDPromotionValidationUE user exit is used to verify whether a coupon or a promotion code is valid for a customer or not. If the YCDPromotionValidationUE user exit is not implemented, the validateCoupon API is called to validate the coupon or promotion code.

Applying the Promotion to the Order

If the YCDPromotionValidationUE user exit or the validateCoupon API confirms that a coupon or a promotion code is valid, the changeOrder API is called to apply the new coupon or promotion code to the order. The repricing logic is executed whenever the Reprice Order flag is set to "Y" for the Change Promotion modification type.

7.9.15.2 End-User Impact

None.

7.9.15.3 Implementation

This section explains the configuration settings for adding a coupon or a promotion code to an order.

1. Log in to the Channel Applications Manager. For more information about logging in to the Channel Applications Manager, see [Section 2.1, "Starting the Channel Applications Manager"](#).
2. In the Applications Manager, set the StatusModificationTypeKey to "PROMO_AWARD", by performing the following steps:
 - a. From the Applications Manager menu bar, select Distributed Order Management > Document Specific > Sales Order > Fulfillment > Order Modification > Modifications Impacting Pricing.
 - b. Click Details. In the Modification Type List screen, add the Change Promotion and Remove Promotion modification types to the list of modifications that impact pricing.

Notes entered for this task are saved in the order using the YCD_NEW_PROMOTION note type.

7.9.15.4 Reference Implementation

This section explains the reference implementation provided for the Add Coupon task.

- As part of reference implementation, Sterling Call Center and Sterling Store provides the coupons described in [Table 4-15](#).
- All rules for adding a coupon or promotion code are configured for the XYZ-ONLINE organization.

7.9.16 Cancel Order

A customer may want to cancel an entire order, or just certain product or service items of the order.

7.9.16.1 Solution

Sterling Call Center and Sterling Store provides a user interface task which enables users to cancel the entire order or only certain product or service items of the order.

This section explains the Cancel Order process and the solution offered by Sterling Call Center and Sterling Store.

Selecting The Cancel Quantity

The customers can choose to cancel the entire order, if all ordered items need to be cancelled, or cancel a part of the order if only some items of the order need to be cancelled.

Cancelling Related Lines

When the user selects a parent item that has related product or service lines for cancellation, the related lines are automatically selected for cancellation.

Cancelling a Bundle Item

The user can only cancel a bundle parent item. When a bundle parent item is cancelled, all the components of the bundle are cancelled automatically.

Configuring Reasons For Cancellation

The reasons for cancelling an item can be configured in the CANCEL_REASON common code. You can configure reasons such as change of mind, cheaper price found, and so forth to allow the Cancel action.

Cancelling Pick up Lines After Release

If the Allow Cancellation of Pickup Lines after Release rule is enabled, the user can cancel the order lines even after the order lines with the pickup fulfillment method are moved to the `Released` status. This is achieved by calling the following APIs:

- `getCompleteOrderDetails` API—This API retrieves the sales order details.
- `changeOrder` API—This API cancels the lines on the order and release, if associated with the order line.

- **changeShipment API**—This API cancels the shipment lines associated with the order line.

Cancelling Delivery Lines After Release

If the Allow Cancellation of Delivery Lines after Release rule is enabled, the user can cancel the order lines that have the Delivery fulfillment method and are moved to the `Released` status, but are not shipped. This is achieved by calling the following APIs:

- **getCompleteOrderDetails API**—This API retrieves the sales order details.
- **changeOrder API**—This API cancels the lines on the order and release associated with the order line.
- **changeShipment API**—This API cancels the shipment lines associated with the order line.

In order to cancel delivery lines after release, shipments must be created for product lines with fulfillment method as delivery.

Requesting For A Stop Delivery After Lines Have Been Shipped

The Cancel Order screen in Sterling Call Center and Sterling Store can be configured to allow users to request a stop delivery for order lines in `Shipped` status.

If an order line has already been shipped, you can either enable the lines for requesting a stop delivery or disable the lines so they cannot be cancelled if you do not support a stop delivery process.

This can be achieved by configuring the order status modification rules appropriately. If you wish to allow a stop delivery to be requested on shipped lines, configure the stop delivery modification type to be allowed for the `Shipped` status. If you do not support stop delivery requests, you should disable this modification type.

Order lines can either be cancelled or requested for stop delivery (not both). Therefore, you must configure the status modification rules for cancellation and stop delivery to be mutually exclusive; any status that is allowed for cancellation cannot be allowed for stop delivery and vice-versa. For more information about configuring status modification

rules, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

This is achieved by calling the following APIs:

- `getCompleteOrderDetails` API—This API returns the quantity which is available for cancellation and stop delivery.
- `manageStopDeliveryRequest` API—This API manages the request for the stop delivery.

The `createException` API is used to create an alert of type `YCD_STOP_DELIVERY` whenever a stop delivery request is placed. The alert is assigned to the `YCD_STOP_DELIVERY` queue. For more information about creation of alerts, see [Section 7.23, "Alert and Queue Management"](#).

In order for stop delivery requests to work, shipments must be created for product lines with fulfillment method as delivery.

7.9.16.2 End-User Impact

This section explains the end-user impact for the cancel order task.

- When the user selects a line for cancellation that has related lines, the related lines are automatically selected for cancellation.
- Based on the rules configured for cancellation of released lines, the end users can cancel delivery and pickup order lines that are above the `Released` status.
- Based on the status modification rules for an order, the end users can place stop delivery requests for shipped lines.
- The Payment Confirmation screen will display the list of all stop delivery requests placed on the order. Since order lines requested for stop delivery are not yet cancelled from the order, the user will not see any change in the order total on the Payment Confirmation screen. If these order lines are successfully stopped from being delivered to the customer, the order total will be adjusted at that time. Refunds for the stop delivery will only be made after the item is received.

7.9.16.3 Implementation

This section explains the configurations for the cancel order task.

- To cancel delivery lines after they have been released or to allow requests for stop delivery after lines have been shipped, ensure that that Sales Order Fulfillment pipeline is configured to create shipments for product lines with fulfillment method as delivery. For more information about the sales order fulfillment pipeline, see the *Sterling Distributed Order Management: Configuration Guide*.
- Sterling Call Center and Sterling Store allows you to define reason codes that are available during the cancellation process. For more information about defining cancellation reasons, see [Section 5.10.9, "Defining Cancellation Reasons"](#).
- Sterling Call Center and Sterling Store allows you to configure the order statuses for which cancellation of order lines is allowed. If you allow cancellation of order lines for a particular status, ensure that you allow cancellation of work order lines for the corresponding status. For more information about configuring the order statuses for modification, see [Section 5.10.6, "Configuring Order Modification Rules"](#).
- When a stop delivery request is placed, the YCD_StopDeliveryRequest_Alert_8.0 service generates an alert to notify that a stop delivery request is placed. This alert is sent to the Stop Delivery Request queue. When a return is received for the item for which stop delivery is requested, the YCD_StopDeliveryRequest_UpdateQty_8.0 service marks the stop delivery request as successful.
- Notes entered for this task are saved on the order with YCD_CANCEL_INFO note type.
- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.9.16.4 Reference Implementation

This section explains the reference implementation provided as part of the Cancel Order task.

- The following reasons are configured in the "CANCEL_REASON" common code:
 - Change of Mind
 - Cheaper Price Found

- Late/Failed Delivery
 - Unacceptable Delivery Time Promised
 - Product No Longer Available
 - Fraudulent Order
 - Address Undeliverable
 - Duplicate Order
 - Other
- As part of the reference implementation provided by Sterling Call Center and Sterling Store, the Order Repricing user exit is enabled when cancelling quantity on the Order.
 - As part of reference implementation, Sterling Call Center and Sterling Store provides permissions to cancel an order to all user groups.

7.9.17 Track an Item

The customers may sometimes need to know the status of the orders. For example, if a customer does not receive items that were ordered, then the customer can call the CSR to enquire about the shipment status.

7.9.17.1 Solution

Sterling Call Center and Sterling Store provides a user interface task which enables users to track orders.

The `getCompleteShipmentDetails` API is called to display the details of each order line such as status, work order-related information, shipments, containers. This API invokes the `YCDgetTrackingNumberURL` user exit to retrieve the tracking URL for a container. This user exit is implemented to retrieve the Tracking Number URL for the given Tracking Number, Carrier, Carrier Service, and ScacAndService. The URL is displayed on the Order Summary and Shipment Tracking screens. When the user clicks this hyperlink, the appropriate carrier's website is displayed where the user can view the container's tracking information. Users can also view the shipment details of the order by clicking the View Shipment hyperlink. The `getSortedShipmentDetails` API is called to retrieve the shipment details.

Sometimes, an enterprise may want to view the activities pertaining to a container, for example, a truck delivering goods to a certain region has broken down. If activities are specified for a container, the View Container Activities hyperlink is displayed in the Shipment Inquiry screen. On clicking this hyperlink, the Container Activities pop-up window is displayed. A user can view information such as the activity code, timestamp, additional information pertaining to the activity, and the user who created the activity.

If an order is on hold, the user can view and resolve holds. For more information about resolving holds, see [Section 7.9.2, "Remove Holds"](#).

Refer [Table 7-33](#) for different order statuses and the corresponding screen display.

Table 7–33 Order Status and Screen Display

Order Status	Screen Display
Scheduled/Released	<ul style="list-style-type: none"> • If the fulfillment method is 'Shipping', the user can view the estimated ship date, estimated delivery date, item ID and description, and the item quantity. • If the fulfillment method is 'Pickup', the user can view the estimated pickup date, item ID and description, and the item quantity. • If the fulfillment method is 'Delivery' and if the order has associated work orders, the user can view the workorder information, otherwise the user can view the estimated ship date, estimated delivery date, item ID and description, and the item quantity.
Created/Reserved/ Back Ordered	<ul style="list-style-type: none"> • If the fulfillment method is 'Shipping', the user can view the estimated ship date, estimated delivery date, item ID and description, and the item quantity. • If the fulfillment method is 'Pickup', the user can view the estimated pickup date, item ID, description, and the item quantity. • If the fulfillment method is 'Delivery', the user can view the estimated delivery date, item ID and description, and the item quantity.
Cancelled	If the fulfillment method is 'Shipping', 'Delivery', or 'Pickup', the user can view the cancel date and cancel quantity.

Table 7–33 Order Status and Screen Display

Order Status	Screen Display
Included in shipment/Shipped	<ul style="list-style-type: none"> • If the items are Included in Shipment, the user can view the 'estimated to ship on' date, the estimated delivery date, and the item quantity. The user can view the shipped-on date, and the estimated delivery date. The View shipment, Reship shipment, and the reship container hyperlinks are available for a single order. • If the fulfillment method is 'Pickup', the shipment information is recorded. The user can view the 'picked up on' date, and the pickup quantity, and the store name.
Work Order Created	<p>If an appointment is configured, the user can view the recent, open delivery appointment dates.</p> <p>The user can also view the item's identifier, quantity, and the unit price information.</p>
Work Order Completed	<p>The user can view the date on which the items were delivered to the customer, completed appointment date, completed delivery date and time, and the item quantity.</p> <p>The user can also view the item's identifier, quantity, and the unit price information.</p>
Work Order Cancelled	<p>If a work order is in cancelled status, the user will not be able to view any information.</p>
Stop Delivery Request Placed	<p>If a stop delivery request is placed, the user will see an icon indicating the stop delivery request.</p>

If an order has associated work orders, based on the Process Type Details configuration options, the user can view the shipment and container information.

7.9.17.2 End-User Impact

None.

7.9.17.3 Implementation

This section explains the configurations for the track an item task.

- Implement the YCDgetTrackingNumberURLUE user exit to retrieve the tracking URL for a container from an external system.
- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.9.17.4 Reference Implementation

As part of reference implementation, Sterling Call Center and Sterling Store provides permissions to track an item to all user groups.

7.9.18 Order Notes

A user may have to enter notes to an order or order line, describing the actions performed against that order or order line, for future reference.

7.9.18.1 Solution

Order notes can be either system-generated or entered by a user. Users can add notes at either the order header level or order line level. Additionally, a user can track important events and changes that have occurred on an order by viewing previously logged order notes.

Sterling Call Center and Sterling Store provides the following features:

- An Order Notes screen, where a user can view and add notes to an order.
- A Notes panel, where a user can add notes. The Notes panel is displayed under each order-related task and in the Order Notes screen.
- A mechanism to automatically log notes when important events occur in an order's life cycle.

Order Notes Screen

Sterling Call Center and Sterling Store provides an Order Notes screen, which can be launched from the Order Summary screen and the View/Add Notes hyperlink in each order-related task.

Users can limit the notes that are displayed in the Order Notes screen based on the following criteria:

- Note Type
- Contact Method
- Priority
- System-Generated or Manually Entered
- Created on Order or Return Order

The `getCommonCodeList` API is called to retrieve the note types and contact methods for the order. The `getCompleteOrderDetails` API is called to retrieve the notes that match the filter criteria.

Users can also add notes through the Order Notes screen. For more information about adding notes, see ["Adding Notes Through the Order Notes Screen"](#).

The Order Notes screen can be accessed from an extension plug-in as a shared task. For more information about the Order Notes shared task, see [Section 6.4.2, "Order Notes Shared Task"](#).

Adding Notes Through the Order Notes Screen

Sterling Call Center and Sterling Store provides a Notes panel in the Order Notes screen to enable users to add notes.

The `getCommonCodeList` API is called to retrieve the note types and the contact methods for the order. The `changeOrder` API is called to add notes to the order.

Adding Notes Through Order-Related Tasks

Sterling Call Center and Sterling Store provides a Notes panel under each order-related task to enable users to add notes to the order while performing the corresponding task. Based on the related task, the corresponding notes are displayed by default in the Notes panel.

The `getCommonCodeList` API is called to retrieve the contact methods for the order. When the `changeOrder` API is called, the notes added to the order are saved along with a note type specific to the related task.

System-Generated Notes

You can configure the system to log notes automatically when the following events occur:

- Chained Order Created—The system generates a note when a chained order is created.
- FTC Notification—The system generates a note if the FTC monitors make a change in an order or send a notification.
- Hold Created—The system generates a note when a hold is created.

Note: System-generated notes will not be logged if a hold, irrespective of whether it is added to an order or order line, is applied based on the hold type configuration. For example, if the Fraud Check hold type is configured to be automatically applied at the time of order creation, a note will not be logged when the order is created. A note will be logged only if the Fraud Check hold is applied by calling the changeOrder API.

- Hold Resolved—The system generates a note when a hold is resolved.
- Hold Rejected—The system generates a note when a hold is rejected.
- Back Ordered—The system generates a note if an order is back ordered while scheduling or releasing.
- On Shipment Confirmation—The system generates a note when a shipment is confirmed.
- Appointment Execution Failure—The system generates a note if an appointment fails.
- Appointment Execution Success—The system generates a note if an appointment is completed.
- Alert Created—The system generates a note when an alert is created for an order.

7.9.18.2 End-User Impact

The notes that have been configured to be logged automatically will be visible to the end users in the Order Notes screen.

7.9.18.3 Implementation

This section explains the configurations for the order notes task.

- Sterling Call Center and Sterling Store allows you to define note types and configure automatic note logging. For more information about defining note types and configuring note logging, see [Section 5.10.14, "Defining Order Note Types and Configuring Automatic Note Logging"](#). This configuration does not provide an option to configure system-generated notes on chained order create event and FTC Notification event.

Note: You can use the sample XSL files listed in [Table 7–34](#) or you can use your own XSL files while selecting the XSL transformation file for an event in the Order Notes Wizard.

By default, the system-generated notes on chained order created event is enabled. To disable system generated notes on this event, do not invoke the YCD_Log_Note_On_Chained_Order_Created_2.0 service.

System generated notes on FTC Notification events cannot be disabled.

- Sterling Call Center and Sterling Store provides sample XSL files to generate the note texts of the notes being logged for each event. [Table 7–34](#) lists the events and the sample XSL files used to log notes on the corresponding events.

Table 7–34 Sample XSL Files

Event	Sample XSL File
Chained Order Created	YCD_Log_Note_On_Chained_Order_Created_2.0.xsl.sample
Hold Created	YCD_Log_Note_On_Hold_Status_Change_8.0.xsl.sample
Hold Resolved	YCD_Log_Note_On_Hold_Status_Change_8.0.xsl.sample
Hold Rejected	YCD_Log_Note_On_Hold_Status_Change_8.0.xsl.sample

Table 7–34 Sample XSL Files

Event	Sample XSL File
Back Ordered	YCD_Log_Note_On_Back_Order_8.0.xsl.sample
On Shipment Confirmation	YCD_Log_Note_On_On_Shipment_Confirmation_8.0.xsl.sample
Appointment Execution Failure	YCD_Log_Note_On_On_Appointment_Failure_8.0.xsl.sample
Appointment Execution Success	YCD_Log_Note_On_On_Appointment_Completion_8.0.xsl.sample
Alert Created	YCD_Log_Note_On_Create_Exception_8.0.xsl.sample

- Sterling Call Center and Sterling Store logs notes with a unique note type for each task. The information regarding note types used in the Sterling Call Center and Sterling Store task flows are given in the corresponding task sections.
- Users can select a customer contact type while entering a note. For more information about configuring contact types, see [Section 5.7.2, "Configuring Contact Types"](#).

7.9.18.4 Reference Implementation

This section explains the default Note Types and the Contact Types that are configured.

1. The Note Types are configured for system-generated notes and task-based notes.
 - The following are the Note Types configured for system-generated notes:
 - Chained Order Information
 - FTC Notification Information
 - Shipment Confirmation Information
 - Hold Information
 - Backorder Information
 - Delivery Appointment Change Information
 - Create Alert Information

- The following are the Note Types configured for task-based notes:
 - Called Customer
 - Wrong Item Received
 - Customer Called
 - Schedule and Release Information
 - Issue Refund Now Information
 - Increase Line Quantity Information
 - Return Order Cancellation Information
 - Change Return Address
 - Change Return Method
 - Change Service Appointment
 - Called Issuing Bank
 - Marketing Opt-In
 - Cleared Held Order
 - Return Policy Overridden
 - Backorder Information
 - Hold Information
 - New Item Information
 - Order Entry
 - Fulfillment Options Change Information
 - Delivery Appointment Change Information
 - Delivery Instructions Change Information
 - Order Cancellation Information
 - Return Information
 - Order Address Change Information
 - Reship Information
 - Price Match Information

- Customer Appeasement Information
 - New Promotion Information
 - Payment Change Information
 - Customer Verification Information
 - Add Modify Charges
 - Undo-Pick Information
 - Backroom-Pick Shortage Information
 - Create Alert Information
 - Add Lines to Order Information
 - Tax Exempt Information
 - Quantity Validation Overridden
2. Refer [Table 4-16](#) for the system-generated note configuration provided as part of reference implementation for XYZ-CORP and XYZ-RETAIL organizations.
 3. As part of the reference implementation, the following Contact Types are configured:
 - Phone
 - E-mail

7.9.19 Change Fulfillment Options

When a customer requests a change in the fulfillment options for an item, the user can modify the fulfillment options as requested. For example, a customer may request the delivery of ordered items, but later decides to pick up the items from a store. In such situations, the user can modify the fulfillment options for the items or a provided service line.

Note: In the Change Fulfillment Options screen, all order lines that are associated with drop ship lines are disabled.

7.9.19.1 Solution

This section explains how to modify the fulfillment options.

Changing The Fulfillment Option For An Order Or An Order Line

The user can change the fulfillment options and the address for an order. The fulfillment options that are available are shipment, delivery, and pickup.

Note: When the order header contains a CustomerContactID, the manageCustomer API saves the addresses to the applicable customer contact.

If the rule to enable stores is configured, the items are available for pickup from a store. The options available for pickup are based on the option selected by the user. The getFulfillmentOptionsForLines API returns all fulfillment options that are applicable for the order line.

- If the selected option is "Ship", the items are shipped to the specified address.
- If the selected option is "Delivery", the items are delivered to the customer's doorstep.
- If the selected option is "Pickup", the user has a choice to choose to pick up from the current store or to select another store by entering the country and postal code details.

The getFulfillmentOptionsForLines API is used to determine the availability of the 'delivery address' and 'carrier service' that the user has supplied.

The generateWorkOrder API checks for order lines marked for delivery and determines if it has a delivery service associated with it, and if not, the generateWorkOrder API creates one and then creates a work order.

The YCDOVERRIDEDELIVERYMETHODUE user exit is used to override fulfillment methods. This user exit provides the ability to override the logic of enabling a fulfillment method. The default implementation is not provided and you can use your own implementation for this user exit.

If the UsedForOrdering attribute is set to "Y", the information about all the carrier services is displayed.

The order dates for each order line displays based on the fulfillment methods of the order line.

- Pickup—The value of the ReqShipDate attribute from the OrderLine element displays.
- Ship—The order dates display based on:
 - The date range of the CommittedDate attribute values within the OrderDates element displays as follows:
 - The minimum date is considered from the OrderDate element having DateTypeId attribute value as MIN_DELIVERY.
 - The maximum date is considered from the OrderDate element having DateTypeId attribute value as MAX_DELIVERY.
 - If the minimum date and maximum date for the CommittedDate attribute value are blank, the date range of the ExpectedDeliveryDate attribute value within Details element in the OrderStatus element displays.
- Delivery—The value of the PromisedApptStartDate attribute displays, if there is a work order associated with the orderline. Otherwise, the order dates do not display.

Disabling Availability Checks

The user can disable availability checks when inventory is maintained externally as the user is aware of the inventory availability details.

Disabling Fulfillment Methods

A user can select only the supported fulfillment methods for order lines. The fulfillment methods that are not supported are disabled. For instance, if an item does not support the "Pickup" fulfillment method, upon selecting the order line, the pick up option is disabled. Based on the configuration, Delivery and Shipping are displayed as separate fulfillment methods.

Disabling Pickup From Store for All Items

You can configure the user interface to never show the pickup fulfillment method if the enterprise does not support that fulfillment method.

Validating Fulfillment Options

A user may skip the customer identification details when creating an order and proceeding to the next screen. When the Change Fulfillment Options screen is displayed, if the user moves to the next screen, the

system validates that the fulfillment method is added to every order line. The user must enter the Ship To Address, if the fulfillment method is "Shipping", the Deliver To Address if the fulfillment method is "Delivery". If the fulfillment method is "Pickup", the Pick up Store must be entered.

Selection of Related Lines

When the user wants to modify the fulfillment option for the parent item, the related lines associated with it are also selected for modification.

Selection of Bundle Lines

When the user wants to modify the fulfillment option for the bundle item, if the bundle item is configured as ship independent, you can also select the components lines for modification. If the bundle item is configured as ship together, only the bundle parent item is displayed for modification and the fulfillment method of the component lines will be changed accordingly. For more information about bundles, see [Section 7.2, "Configured Items"](#).

Changing Service Instructions And Appointments

A user can modify the service instructions. A user can also take appointments for deliveries for a customer by selecting the available time slot and date from the calendar. The generateWorkOrder API considers the new work orders and existing work orders, if any. If the work orders are in the `Failed` or `Cancelled` status, or if an appointment is not taken, the generateWorkOrder API returns a suggested appointment. For more information about changing service appointments, see [Section 7.9.23, "Change Service Appointment"](#).

Changing Pickup Lines

A user can modify pickup lines even if they are in the `Released` status, and until the items are picked up and are not in the `Shipped` status. The user can change the ship node and fulfillment method for the pick up line. The changeRelease API is called to backorder an order line that is in the `Released` status.

Changing Delivery Lines

A user can modify delivery lines even if they are in the `Released` status and are not in the `Shipped` status. The user can change the ship node and the fulfillment method for a delivery line if the "Allow Modification of

Delivery Lines after Release" option is enabled. The changeRelease API is called to backorder an order line that is in the Released status.

Payment Confirmation Details

Due to the change in fulfillment options, if the payment information changes, the system displays the updated payment details. If the customer wants to make additional payments, the user must select the payment method.

Customer Context Ordering

When the order is in the context of a customer, all addresses available to the customer/contact will be provided in the drop-down list in the Change Fulfillment Options screen. These addresses will also appear in the create new and edit address pop-up screens to serve as a starting point for a new address.

Note: When the order is in the context of a customer, all new addresses added to the order will automatically be saved against the customer record or contact record.

7.9.19.2 End-User Impact

This section explains the impact on the user.

Disabling Availability Checks

The user is not shown the availability details in any store on the Add Multiple Lines, Order Entry, Change Fulfillment Options, Change Order Addresses, and Item Inquiry screens.

Changing Pickup Lines

The user is allowed to modify the order lines that have the pickup fulfillment method even after the status is changed to Released.

Changing Delivery Lines

The user is allowed to modify the order lines that have the delivery fulfillment method even after the status is changed to Released.

7.9.19.3 Implementation

This section details the rules to be configured to change the fulfillment options.

Disabling Availability Checks

If the Prevent Initial Availability Checks During Order Entry and Order Modifications rule is enabled, the inventory availability check is not performed and the calls to the `getFulfillmentOptionsForLines`, `findInventory`, or any derivation APIs are eliminated. This aids in better performance and pace when capturing the order.

Changing Pickup Lines

To modify the pickup lines that are in the `Released` status or above, check the Allow Modification of Pickup Dates and Store for Pickup Lines after Release box for the Enterprise.

Changing Delivery Lines

To modify the delivery lines that are in the `Released` status or later, check the Allow Modification of Fulfillment Options for Delivery Lines After Release box for the Enterprise.

Notes entered for this task are saved on the order with `YCD_DELIVERY_OPTIONS` note type.

7.9.19.4 Reference Implementation

This section explains the reference implementation provided for the following tasks:

Disabling Availability Checks

The Prevent Initial Availability Checks During Order Entry and Order Modifications rule is defaulted to ensure that availability checks are performed.

Changing Pickup Lines

The Allow Modification of Pickup Dates and Store for Pickup Lines after Release rule is defaulted to allow modification of lines after release.

Changing Delivery Lines

The Allow Modification of Fulfillment Options for Delivery Lines after Release rule is defaulted to allow modification of lines after release.

The Allow Cancellation of Delivery Lines after Release rule is also defaulted to allow modification of lines after release.

7.9.20 Fulfillment Summary

Sometimes Sterling Call Center and Sterling Store users may have to view the fulfillment summary of an order to get a complete picture of the way in which the order is being fulfilled. In a B2B scenario, customers may place orders for large quantities of items, and this may result in the items being available on multiple dates. In such a situation, Sterling Call Center and Sterling Store users may require a better visibility into the way the orders are fulfilled.

7.9.20.1 Solution

The Fulfillment Summary screen provides information about the way in which an order is configured and fulfilled. The order lines are grouped based on the fulfillment method. Within each fulfillment method, the order lines can be grouped as follows:

- Shipment and Ship To Address (for Shipping fulfillment method)
- Ship Node (for Pickup fulfillment method)

The Fulfillment Summary screen provides visibility to order information, line items, quantity, price, fulfillment time, fulfillment date, available date, and delivery date. The Fulfillment Summary screen also provides the ability to:

- Set the order lines as gift items
- Select the replacement nodes for pickup
- Modify the fulfillment options of the order lines
- Cancel lines

getOrderFulfillmentDetails API

This API calls the getCompleteOrderDetails API, getPossibleSchedules API, and the getCarrierServiceOptionsForOrdering API. It returns information such as availability of items, level of service, and so forth,

that are added to the order line. This information is used to display the Fulfillment Summary screen.

Viewing the Fulfillment Summary Screen

Sterling Call Center and Sterling Store enables users to view the fulfillment summary in the following screens:

- Basic Fulfillment Summary Screen
- Advanced Fulfillment Summary Screen

The Basic Fulfillment Summary screen is recommended for enterprises fulfilling orders in business-to-customer (B2C) scenarios.

The Advanced Fulfillment Summary screen is recommended for enterprises fulfilling orders in business-to-business (B2B) scenarios.

The following features are available in the Basic Fulfillment Summary screen and the Advanced Fulfillment Summary screen:

- [Availability of Items](#)
- [Changing the Carrier Service for Shipping](#)
- [Changing the Pickup Date of the Item](#)
- [Changing Fulfillment Method](#)
- [Handling Related Items](#)
- [Handling Bundle Items](#)
- [Cancelling Items](#)
- [Reserving Items](#)
- [Marking Items as Gifts](#)
- [Changing the Pickup Location](#)
- [Overriding Availability](#)

In addition, the following features are available in the Advanced Fulfillment Summary screen:

- [Selecting the Optimization Type to be Used for the Order](#)
- [Changing Requested Delivery Date for Order Line](#)
- [Combining or Splitting an Order Line](#)

Availability of Items

The item availability is displayed depending on the date. The `getPossibleSchedule` API returns the date, which determines whether or not the items are available.

Changing the Carrier Service for Shipping

The `getCarrierServiceOptionsForOrdering` API provides a list of carrier service options and their estimated dates for items that have fulfillment method as "Shipping". By implementing the `GetCarrierServiceOptionsForOrderingUE` user exit, you can obtain the cost of each carrier service.

Note: Users can change the carrier service of an order line based on the order status modification rules.

Changing the Pickup Date of the Item

The user can change the pickup date for an item by selecting the preferred date from the calendar. Only the dates on or after the `ProductShipDate` are enabled on this calendar.

Changing Fulfillment Method

The fulfillment method can be changed for an item if the item supports the new fulfillment method. This is possible by choosing the action you want to change from "Shipping" to "Change to Pick up" or from "Change to Pickup" to "Shipping".

Handling Related Items

The related items are selected automatically when the parent item and the related lines have the same fulfillment method.

Handling Bundle Items

If the bundle item is configured as ship independent, gift options can be changed for all the component items. If the bundle item is configured as ship together, then if the gift option for bundle parent is changed, the gift option will be changed for all the components items. For more information about bundles, see [Section 7.2, "Configured Items"](#).

The user can only cancel a bundle parent item. When a bundle parent item is cancelled, all the components of the bundle are cancelled automatically.

Cancelling Items

Items that are in a status that supports cancellation can be cancelled by selecting the Cancel action.

Reserving Items

Items can be reserved upon confirmation or when navigating to the next screen.

Marking Items as Gifts

The user can mark selected items as gift items by clicking the Gift Options button. Users can include gift messages for the gift items.

You can also configure the gift options to enable users to gift wrap an item marked as a gift. For more information about configuring the available gift options, see [Section 5.10.19, "Configuring Available Gift Options"](#).

Changing the Pickup Location

The pickup location can be changed by clicking the Pick Locations button for the selected order lines. This button is displayed in the Pickup panel.

Overriding Availability

The inventory availability can be overridden only in the Pickup panel, when logged in at the store from where the user wants to pickup inventory. Overriding of availability is possible only if the user logs in at the current store from where you perform pickup, and belongs to a user group that has permission to override inventory availability.

The order dates for each order line displays based on the fulfillment methods of the order line.

- Pickup—The value of the ReqShipDate attribute from the OrderLine element displays.
- Ship—The order dates display based on:

- The date range of the CommittedDate attribute values within the OrderDates element displays as follows:
 - The minimum date is considered from the OrderDate element having DateTypeId attribute value as MIN_DELIVERY.
 - The maximum date is considered from the OrderDate element having DateTypeId attribute value as MAX_DELIVERY.
- If the minimum date and maximum date for the CommittedDate attribute value are blank, the date range of the ExpectedDeliveryDate attribute value within Details element in the OrderStatus element displays.
- Delivery—The value of the PromisedApptStartDate attribute displays, if there is a work order associated with the orderline. Otherwise, the order dates do not display.

Selecting the Optimization Type to be Used for the Order

Users can select the optimization type to be used to fulfill the order based on the following options:

- Optimization of order scheduling based on the number of shipments, followed by the ship node priority, and the date. If the user selects this option, the items in the order will be shipped in as few shipments as possible. Therefore, even if some items are available earlier, they will not be shipped until all the items are available. This will reduce the shipping costs.
- Optimization of order scheduling based on the scheduling rule configured in the Channel Applications Manager. This option is displayed only if you configure the Scheduling Rule For Additional Shipping Option rule in the Channel Applications Manager. For more information, see [Section 5.10.37, "Configuring Display of Fulfillment Summary Screen"](#).

The description of this option is defined as a bundle entry in the `com.yantra.pca.ycd_bundle.properties` file, and the key for this bundle entry is the scheduling rule.

- Optimization of order scheduling based on the date, followed by the number of shipments, and the ship node priority. If the user selects this option, the items will be shipped as and when they become available. This may result in higher shipping costs.

Note: The shipping options will be displayed based on the status modification rules. If the status modification rules do not allow changing of shipping options, the shipping options will not be displayed in the Advanced Fulfillment Summary screen.



One of the options is selected by default based on the optimization type that is saved in the order. If the user changes the optimization type, the changeOrder API is called to save the updated information.

Changing Requested Delivery Date for Order Line

Users can change the requested delivery date pertaining to an order line by clicking the Change Line Options button. The changeOrder API is called to save the new requested delivery date after the user clicks either Save and Refresh or Next.

Note: Users can change the requested delivery date pertaining to an order line based on the order status modification rules.

Combining or Splitting an Order Line

If an order line is included in more than one shipment, users can combine the order line by clicking the  icon. When this icon is clicked, the FillQty attribute in the order line is set to the value of the OrderedQty attribute. Users can also split an order line into multiple shipments by clicking the  icon. When this icon is clicked, the FillQty attribute in the order line is set to a blank value. This feature enables a user to have better control on the way items are shipped at the line level. For example, if a customer wants the entire quantity of an item to be shipped together at the same time, the user can combine the order lines, and if the customer wants some quantity of an item to be shipped on a particular date and the remainder of the item on a different date, the user can split the order line. This feature also enables a user to use a scheduling rule defined by the enterprise to optimize order scheduling.

Note: The number of shipments displayed in the Advanced Fulfillment Summary screen is based on the attributes defined in the Release Consolidation template in the Applications Manager.

7.9.20.2 End-User Impact

This section explains the impact on the user.

Alternate Views of the Fulfillment Summary Screen

Based on how you configure the order entry rules, end users will see either the Basic Fulfillment Summary screen or the Advanced Fulfillment Summary screen in the order creation task flow.

Handling Related Items

When the user selects the parent item, the related lines having the same fulfillment method as the parent item are also selected.

Handling Bundle Items

When the user wants to modify the fulfillment option for the bundle item, if the bundle item is configured as ship independent, the user can also select the components lines for modification. If the bundle item is configured as ship together, the user can only select the bundle parent item for modification and the fulfillment method of the component lines will be changed automatically. For more information about bundles, see [Section 7.2, "Configured Items"](#).

7.9.20.3 Implementation

This section explains the configurations for viewing the fulfillment summary:

- Sterling Call Center and Sterling Store enables you to configure the Fulfillment Summary screen to be displayed in the order creation task flow. Sterling Call Center and Sterling Store also enables you to configure a default scheduling rule to be used to display an additional shipping option in the Advanced Fulfillment Summary screen. For more information, see [Section 5.10.37, "Configuring Display of Fulfillment Summary Screen"](#).

- You can enable users to record the committed dates when the user selects the level of service. For more information, see [Section 5.10.32, "Configuring Information Recorded During Level of Service Selection"](#).

7.9.20.4 Reference Implementation

This section explains the reference implementation provided for viewing the fulfillment summary.

- The "Compute Expected Dates When Requested Dates On The Pickup Order Lines Are Changed" rule is set to "Y" for XYZ-CORP and XYZ-RETAIL organizations.
- By default, the Basic Fulfillment Summary screen is displayed in the order creation task flow for XYZ-CORP and XYZ-RETAIL organizations.
- CORP-SCH and SYSTEM scheduling rules are provided for XYZ-CORP and XYZ-RETAIL organizations.
- The OptimizationType attribute for the CORP-SCH scheduling rule is set to "03".
- By default, permission is provided for modifying the level of service and the requested delivery date of an order line.

7.9.21 Delivery and Service Grouping

When a complex order pertaining to numerous products, provided services, and delivery services exists, the task of scheduling appointments for these orders in the appointment scheduling screens of the Sterling Call Center and Sterling Store application becomes difficult. Users can group the order lines into smaller groups to ensure that appointments are available for the various services.

7.9.21.1 Solution

The Delivery and Service Grouping screen provides a summary of all the work orders and appointments related to an order. This screen enables users to select products and services, and assign them to a group before choosing an appointment. Users can create new groups, merge multiple groups, and add or remove lines from the existing groups. Sterling Call Center and Sterling Store enables you to assign permissions to users to access the Delivery and Service Grouping task on the order creation and

order modification tasks. Users with permissions can access the Delivery and Service Grouping task from the Change Fulfillment Options, Service Fulfillment Summary, View/Change Service Instructions, and Change Service Appointment screens. The Delivery and Service Grouping task does not consider the inventory of product items or capacity of service items when grouping the order lines.

The `getOrderFulfillmentDetails` API is called to retrieve the list of work orders sorted based on the `ShipToKey` attribute. This API does not provide any out-of-the-box sequencing logic on work orders. However, you can use the post-command of this API for your custom sequencing logic. The `manageServiceGrouping` API is a wrapper API that internally calls the `changeOrder` API, `modifyWorkOrder` API, and the `createWorkOrder` API. The `changeOrder` API is called to create new associations between the product and delivery service lines, create additional delivery service line, and remove the old associations between the product and delivery service lines. The `modifyWorkOrder` API is called to cancel or remove an orderline from an existing work order, and to associate a product or provide service line to an existing work order. The `createWorkOrder` API is called to create the order.

Note: If the Delivery Allowed flag for an item, say, Item A, is set to Only If Something Else Is Being Delivered, and if this item is part of an order that contains another item, say, Item B, for which the Delivery Allowed flag is set to Yes, users cannot create different groups for these two items. If a user tries to create different groups, an error is displayed, indicating that some of the order lines (in this context, Item A) are not grouped with a valid delivery line.

7.9.21.2 End-User Impact

This section explains the end-user impact for the Delivery and Service Grouping task:

- The user will see the Perform Advanced Service Grouping check box in the Change Fulfillment Options screen based on user permissions.
- The user will see the Advanced Service Grouping button in the Service Fulfillment Summary, View/Change Service Instructions, and Change Service Appointment screens based on user permissions.

7.9.21.3 Implementation

The Delivery and Service Grouping task is permission controlled. Sterling Call Center and Sterling Store allows you to assign the necessary permissions to user groups for this task. For more information about administering user group permissions, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

7.9.21.4 Reference Implementation

As part of reference implementation, Sterling Call Center and Sterling Store provides permissions to all users to perform the Delivery and Service Grouping task.

7.9.22 Change Service Instructions

Customers may request to change instructions for orders that are associated with delivery lines or service lines.

7.9.22.1 Solution

Sterling Call Center and Sterling Store provides a user interface task which enables users to change service instructions.

At the time of delivery, if a customer requests to change the service instruction for a product or service item, the user can modify the service instructions as requested. For each service line, the user can modify the service instructions in the text box that has been provided. Sterling Call Center and Sterling Store allows the users to modify instructions for the deliveries or services that are not complete. For more information about viewing service fulfillment summary, see [Section 7.9.24, "Service Fulfillment Summary"](#).

7.9.22.2 End-User Impact

None.

7.9.22.3 Implementation

This section explains the configurations for the change service instructions task.

- Notes entered for this task are saved on the order with YCD_DELIVERY_INSTR note type.

- Sterling Call Center and Sterling Store allows you to configure the order statuses for which changing service instructions is allowed. For more information about configuring the order statuses for modification, see [Section 5.10.6, "Configuring Order Modification Rules"](#).
- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.9.22.4 Reference Implementation

As part of reference implementation, Sterling Call Center and Sterling Store provides permissions to change service instructions to an order to all user groups.

7.9.23 Change Service Appointment

When a customer places an order for provided services or delivery services, an appointment needs to be taken with the corresponding retailer to agree on a time frame for the services to be fulfilled. Additionally, customers may need to provide the retailer with specific instructions to ensure that the service fulfillment is successful. For example, the customer may request the retailer to deliver an item at the back door.

After placing an order, the customers may request to make changes to an appointment or service instructions.

7.9.23.1 Solution

Sterling Call Center and Sterling Store provides configurable appointment screens, which include Service Fulfillment Summary screen and Change Service Appointment screen that allow users to create or modify service appointments and enter service instructions.

Sterling Call Center and Sterling Store does not support scheduling multiple appointments for a delivery or service line, while creating an order. The user can only take one appointment per line at a time.

If the customer wants more appointments to be taken, perform one of the following:

- The existing appointment must to be marked completed/failed and a new appointment must be taken.

- A new line must be added and a new appointment must be taken for the newly added line.

Service Fulfillment Summary Screen

The Service Fulfillment Summary screen provides visibility to service appointments pertaining to an order. For more information about service fulfillment summary, see [Section 7.9.24, "Service Fulfillment Summary"](#).

Change Service Appointment Screen

A calendar is displayed from which the user can select the appropriate appointment for the customer. When the customer chooses the time slot for delivery, the calendar displays information such as working or non-working days, capacity available days, and so forth. Sterling Call Center and Sterling Store provides multiple ways to take appointments. The user can take appointments by selecting the time slot and viewing the days available for the selected time slot. Alternatively, the user can select a day in the calendar and view the slots available on that day.

You can configure the number of weeks to display on the calendar at a time. By default, a complete month is displayed. To improve the performance, reduce the number of weeks to display to two so that only two weeks of data needs to be returned by the `getWorkOrderAppointmentOptions` API.

Users can look beyond the initial weeks displayed on the calendar in case there are no acceptable appointments within the initial time frame. By default, the appointment calendar allows the user to look out infinitely into the future for appointments. However, your capacity system may not have visibility beyond a certain time frame. You can configure the maximum number of days to allow users to look into the future. After the maximum number of days is reached in the appointment screen, the user will not be able to proceed to the next time period. When an appointment is saved, the `reserveOrder` API is called. This API calls the `changeOrder` API to make a reservation.

If the reservation succeeds, the `modifyWorkOrder` API is called to save the appointment on the work order. If the reservation fails due to that same inventory being consumed by another order, the Service Appointment screen refreshes and requests the user to take a new appointment based on the new inventory picture.

Modifying Delivery Lines After Release

If the Allow Modification of Delivery Lines After Release rule is enabled, the user can change the service appointments of order lines that have the "Delivery" fulfillment method and are not in the `Shipped` status.

Handling Bundle Items

If the bundle item is configured as ship independent, the user can change the service appointment for all the component items. If the bundle item is configured as ship together, the user can only change the service appointment for the bundle parent item. For more information about bundles, see [Section 7.2, "Configured Items"](#).

7.9.23.2 End-User Impact

The configurable rules for the Change Service Appointment screen determines what information to display. As explained in the [Change Service Appointment Screen](#) section, you can configure the default calendar view and the number of weeks to display.

7.9.23.3 Implementation

This section explains configurations for the change service appointments task.

- To change the service appointment calendar view, configure the following rules:
 - Capacity Information
 - Calendar Display
 - Default Appointment Calendar View
 - Defaulting Option

For more information about configuring the service appointment calendar view, see [Section 5.6.22, "Configuring the Service Appointment Calendar View"](#).

- Notes entered for this task are saved on the order with `YCD_DELIVERY_APPT` note type.
- Sterling Call Center and Sterling Store allows you to configure the order statuses for which changing service appointments is allowed. For more information about configuring the order statuses for

modification, see [Section 5.10.6, "Configuring Order Modification Rules"](#).

- Sterling Call Center and Sterling Store allows you to configure the order statuses for which cancellation or modification of fulfillment options for delivery and pickup order lines that are beyond the released status is allowed. For more information about configuring the special order statuses for modification, see [Section 5.10.31, "Configuring Special Order Modification Rules"](#).
- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.9.23.4 Reference Implementation

The instruction type provided and the note reason configured for changing a delivery appointment are:

- An instruction type called 'DELIVERY' is provided for saving service appointment instructions.
- The Calendar Display is set to "Monthly View"
- The Default Appointment Calendar View is set to "Select Slot First, Then Choose the Day".
- As part of reference implementation, Sterling Call Center and Sterling Store provides permissions to change service appointments on an order to all user groups.

7.9.24 Service Fulfillment Summary

The Service Fulfillment Summary screen provides visibility to service appointments pertaining to an order.

7.9.24.1 Solution

This section explains the functionality of the Service Fulfillment Summary screen.

getOrderFulfillmentDetails API

This API calls the `getCompleteOrderDetails`, `getPossibleSchedules`, and `getCarrierServiceOptionsForOrdering` APIs. It returns information pertaining to the work orders associated with delivery and service lines.

This information is used to display the Delivery Fulfillment Summary screen.

This screen also provides the ability to:

- Mark delivery lines as gift items
- Change service instructions for work orders

Marking Delivery Lines As Gift Items

The Sterling Call Center and Sterling Store allows you to select items being delivered as gifts based on status modification rules. You can configure the Sterling Call Center and Sterling Store application to enable users to mark either the entire work order or individual work order lines as gifts. For more information about configuring the gift options, see [Section 5.10.19, "Configuring Available Gift Options"](#).

Users can include a gift message for an item marked as a gift. Additionally, you can also configure the gift options to enable users to gift wrap an item marked as a gift.

The `getOrderFulfillmentDetails` API is called to retrieve the details of the order lines marked for a gift recipient. The `changeOrder` API is called to modify the gift options for the lines.

Change Service Instructions For The Work Order

The Sterling Call Center and Sterling Store allows you to change service instructions if the work order status modification rules permit. For more information about changing service instructions, see [Section 7.9.22, "Change Service Instructions"](#).

The `getOrderFulfillmentDetails` API is called to retrieve details of the work orders. The `modifyWorkOrder` API is called to modify the service instructions on the work order.

Handling Bundle Items

If the bundle item is configured as ship independent, the user can change the service instructions for all the component items. If the bundle item is configured as ship together, the user can only change the service instructions for the bundle parent item. For more information about bundles, see [Section 7.2, "Configured Items"](#).

7.9.24.2 End-User Impact

None.

7.9.24.3 Implementation

This section explains the configurations for the service fulfillment summary screen.

- Sterling Call Center and Sterling Store allows you to configure the order statuses for which changing gift options is allowed. For more information about configuring the order statuses for modification, see [Section 5.10.6, "Configuring Order Modification Rules"](#).
- Sterling Call Center and Sterling Store allows you to configure the order statuses for which changing service instructions is allowed. For more information about configuring the order statuses for modification, see [Section 5.10.6, "Configuring Order Modification Rules"](#).
- Sterling Call Center and Sterling Store allows you to configure the available gift options. For more information about configuring the available gift options, see [Section 5.10.19, "Configuring Available Gift Options"](#).

7.9.24.4 Reference Implementation

None.

7.9.25 Reservations

The reservation of items is performed to confirm availability and resolve issues when handling multiple customers simultaneously. For example, if two CSRs are assisting two different customers for the same item, which is the only available item, and if the item is not reserved, then both CSRs might sell the item by checking the availability status. In such situations, reservations are essential.

7.9.25.1 Solution

This section describes the functionality of reservations.

Creating Reservations

Reservations can be created only if the Reserve Items During Order Entry and Order Modifications rule is enabled.

To reserve items on the Fulfillment Summary screen for order lines with fulfillment method as "Pickup" or "Ship", the reservation is created by calling the changeOrder API.

To reserve items on the Delivery Appointment screen for order lines with fulfillment method as "Delivery", the reservation is created by calling the reserveOrder API.

Handling Bundle Items

While reserving a bundle item, if the reservation of a component item fails, the bundle parent item will not be reserved. For more information about bundles, see [Section 7.2, "Configured Items"](#).

7.9.25.2 Implementation

This section explains the rules to configure item reservations.

To reserve items:

1. Log in to the Channel Applications Manager.
For more information about logging in to the Channel Applications Manager, see [Section 2.1, "Starting the Channel Applications Manager"](#).
2. From the Channel Applications Manager, select Configure Order Administration > Advanced Configurations > Configure Availability Check and Reservation Options. The Configure Availability Check and Reservation Options screen is displayed.
3. Configure the Reserve Items During Order Entry and Order Modifications rule. The default value is "N".

Note: If the Reserve Items During Order Entry and Order Modifications rule is enabled, and in the Fulfillment Summary Screen, if the system fails to reserve some items, the user cannot go to the next screen.

7.9.25.3 End-User Impact

None.

7.9.25.4 Reference Implementation

By default, the Reserve Items During Order Entry and Order Modifications rule is set to "N" for XYZ-CORP and XYZ-RETAIL organizations.

7.9.26 Increase Order Line Quantity

When a customer wants to increase the quantity of one or more items on an order that is already placed, the call center or store representatives can increase the order line quantity as requested. Line quantity for provided services cannot be increased.

7.9.26.1 Solution

Sterling Call Center and Sterling Store provides a user interface task which enables users to increase the order line quantity.

This section explains Increase Order Line Quantity process and the solution offered by Sterling Call Center and Sterling Store.

Validating Whether The Order Line Quantity Can Be Increased

Sterling Call Center and Sterling Store validates if the order line quantity can be increased based on the order modification rules. The order modification rule verifies if the order status permits addition of lines to an order.

The `getCompleteOrderDetails` API is called to retrieve the details of the order. The `findInventory` API is called to retrieve the capacity information for service items. The `getFulfillmentOptionsForLines` API is called to retrieve the inventory information for product items.

The `getFulfillmentOptionsForLines` API is called with `ReqEndDate` as an input to verify whether the additional item quantity can be fulfilled along with the existing order quantity. The `ReqEndDate` is the farthest available `ExpectedShipmentDate` taken from the `Details` element under the order status of the order line. The `ShipNode` is passed from the `OrderStatus` element having the `Details` element from where the `ExpectedShipmentDate` is taken.

If the `getFulfillmentOptionsForLines` API returns the `HasAnyUnavailableQty` attribute value as "N", the adjustment can be fulfilled and the additional item quantity can be added to the order. If the value of the `HasAnyUnavailableQty` attribute is set to "Y", the additional item quantity requested by the customer cannot be added to the order. In such situations, a warning icon is displayed on the screen along with the available item quantity that can be added to the order.

If the `getFulfillmentOptionsForLines` API returns a different delivery date for the additional item quantity that is not the same as the original delivery date, an appropriate message is displayed on the screen.

Note: If the service line is a related line and you increase the quantity of the parent item, based on the configuration, the quantity of the service line automatically increases. For more information about configuring the provided services, see the *Sterling Catalog Management: Configuration Guide*.

Note: When an order line is a part of a work order that has been partially delivered, users cannot increase the order line quantity.

Handling Bundle Items

While increasing the line quantity of a bundle item, the quantity of the component items will automatically be increased. For more information about bundles, see [Section 7.2, "Configured Items"](#).

Validating Whether The Items Are Present In The Store

The user needs to verify if the requested additional item quantity is present in the store. If the minimum order line status is in the `Released`

status or exceeds this status, a warning message displays that prompts the user to manually check whether the items are present in the store.

Viewing Service Fulfillment Summary

The user can view the service fulfillment summary and modify appointments for the items added. The items are reserved based on the configuration. For more information about service fulfillment summary, see [Section 7.9.24, "Service Fulfillment Summary"](#). For more information about service appointments, see [Section 7.9.23, "Change Service Appointment"](#).

Viewing And Confirming Payment Details

Due to the increase in line quantity, the payment information changes, and the system displays the updated payment details. To make additional payments, the user must select the payment method.

Sterling Call Center and Sterling Store can be used to carry out the critical payment related processes during order management processing and enables you to integrate with external payment processing systems such as CyberSource or Chase Paymentech.

7.9.26.2 End-User Impact

None.

7.9.26.3 Implementation

This section explains the configurations for the increase order line quantity task.

- Sterling Call Center and Sterling Store allows you to configure the order statuses for which increasing order line quantity is allowed. For more information about configuring the order modification statuses, see [Section 5.10.6, "Configuring Order Modification Rules"](#).
- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.9.26.4 Reference Implementation

This section explains the reference implementation provided as part of the increase order line quantity task.

- As part of the reference implementation provided by Sterling Call Center and Sterling Store, order repricing logic is enabled when the line quantity is increased on the Order.
- Sterling Call Center and Sterling Store provides permissions to increase the order line quantity to all users as part of reference implementation.

7.9.27 Schedule and Release an Order

After an order is created, it has to be scheduled so that it can be delivered to the customer. Important shipment attributes, such as delivery dates and ship nodes, are determined at this point. After Sterling Call Center and Sterling Store determines one or more ship nodes that can be utilized to ship the ordered merchandise, those nodes are notified with all the information that is necessary to send the shipment. In some cases, it may be necessary to execute the schedule and release process from Sterling Call Center and Sterling Store user interface.

7.9.27.1 Solution

Sterling Call Center and Sterling Store provides a user interface that allows users to schedule and release an order. This task enables users to demonstrate the flow of an order that is created and fulfilled in Sterling Call Center and Sterling Store without having to go to the Selling and Fulfillment Foundation console.

The order is scheduled by calling the `scheduleOrder` API. It is released by calling the `releaseOrder` API. After the order is successfully scheduled and/or released, the details of all the order lines are displayed by calling the `getOrderLineStatusList` API and `getCompleteOrderDetails` API. If there is a problem with scheduling an order, the `getPossibleSchedules` API is called to display the schedule failure reasons.

Sterling Call Center and Sterling Store provides a list of common codes to display reasons for the failures that may occur during scheduling and releasing. These common codes are defined in the `YCD_YFS_BASE_COMMON_CODE` table and can be identified by the `YCD_SCH_FAILURE_RSN` code type.

7.9.27.2 End-User Impact

None.

7.9.27.3 Implementation

The schedule and release order task is permission controlled. Sterling Call Center and Sterling Store allows you to assign the necessary permissions to user groups for this task.

7.9.27.4 Reference Implementation

Sterling Call Center and Sterling Store provides the necessary permissions to schedule and release an order to hub users as part of reference implementation.

7.9.28 View Procurement Orders

Call center and store representatives may need to view procurement and transfer orders that have been created for a sales order to get a complete picture of how the sales order is being fulfilled. If the ship node defined for an order line does not have enough inventory to fulfill the order, the required inventory can be acquired from a procurement node. In this scenario, the ship node defined for the order line receives inventory from the procurement node to fulfill the order.

7.9.28.1 Solution

Sterling Call Center and Sterling Store provides a user interface task which allows users to view procurement orders (Purchase Orders and Transfer Orders) that are created for a sales order.

The getOrderLineList API is called to retrieve a list of procurement orders for the sales order. The getCompleteOrderDetails API is called to display the details of the procurement order.

7.9.28.2 End-User Impact

None.

7.9.28.3 Implementation

This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.9.28.4 Reference Implementation

Sterling Call Center and Sterling Store provides permissions to view procurement orders to hub users as part of reference implementation.

7.9.29 Change Order Address

A customer may want to change or modify the addresses on an order after placing the order. In such situations, call center and store representatives can modify the addresses as requested.

Note: When the order header contains a CustomerContactID, the manageCustomer API saves the addresses to the applicable customer contact.

7.9.29.1 Solution

This section explains the process of changing the order address and the solution offered by Sterling Call Center and Sterling Store.

Disabling Availability Checks

You can disable availability checks when inventory is maintained externally. If the Prevent Availability Checks During Order Entry and Order Modifications rule is enabled or set to "Y", the inventory availability check is not performed and the calls to the getPossibleSchedules, findInventory, or any derivation APIs are eliminated. This aids in better performance and pace in capturing the order.

Validating the Address Information

When the user has to enter an order address for a new customer, or modify an existing address, the validity of the address needs to be verified.

The validity of the address needs to be verified when the address of a new customer is to be entered or when the existing address of a customer needs to be modified. For more information about address verification, see [Section 7.6.4.2, "Address Verification"](#).

Modifying Delivery Lines After Release

If the Allow Modification of Delivery Lines After Release rule is enabled, the user can change the shipping address of order lines that have the Delivery fulfillment method and are not in the `Shipped` status.

Viewing Service Fulfillment Summary

After changing the address on the order using the `changeOrder` API, the `generateWorkOrder` API is used to create the delivery lines and generate work orders. The user can change the delivery appointment for the customer, if applicable. The items are reserved based on the configuration. For more information about service fulfillment summary, see [Section 7.9.24, "Service Fulfillment Summary"](#). For more information about service appointments, see [Section 7.9.23, "Change Service Appointment"](#).

Note: The order lines with fulfillment method as "Shipping" are not reserved when the user changes the shipping address.

7.9.29.2 End-User Impact

None.

7.9.29.3 Implementation

This section explains the configurations for the change order address task.

- Sterling Call Center and Sterling Store allows you to configure the order statuses for which changing the address is allowed. For more information about configuring the order statuses for modification, see [Section 5.10.6, "Configuring Order Modification Rules"](#).
- Sterling Call Center and Sterling Store allows you to configure availability checks and reservation options. For more information about configuring availability checks and reservation options, see [Section 5.10.27, "Configuring Availability Check and Reservation Options"](#).
- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

- Notes entered for this task are saved on the order with YCD_SHIPPING_ADDRESS note type.

7.9.29.4 Reference Implementation

This section explains the reference implementation provided as part of change order address task.

- By default, the Prevent Availability Checks During Order Entry and Order Modifications rule is set to "N" for XYZ-CORP and XYZ-RETAIL organizations.
- Sterling Call Center and Sterling Store provides permissions to change the order address to all users as part of reference implementation.

7.9.30 Launch Application Console

In some implementations, call center and store representatives may need to access screens and functionality from the Application Console. For example, call center and store representatives may need to access the detailed order audit screens available in the Application Console.

7.9.30.1 Solution

Sterling Call Center and Sterling Store provides a user interface task which allows users to launch the Application Console from within the Sterling Call Center and Sterling Store user interface.

Sterling Call Center and Sterling Store allows you to configure the URL to be used when launching the Application Console from the Sterling Call Center and Sterling Store user interface so that you can configure a specific screen or set of screens that will be opened.

Note: Since Application Console are not supported on Linux, you cannot launch the Application Console from within the Sterling Call Center and Sterling Store user interface for Linux based installations.

7.9.30.2 End-User Impact

None.

7.9.30.3 Implementation

This section explains the configurations for this task.

- To launch the Application Console from the Sterling Call Center and Sterling Store user interface, you must configure the Config element "COM.Console" in the `locations.ycfg` file. For information about editing the `locations.ycfg` file, see the *Sterling Call Center and Sterling Store: Installation Guide*.

For information about configuring settings to allow logging into the browser, see the *Selling and Fulfillment Foundation: Installation Guide*.

- If the client machine's network connection is configured to use a proxy server and port:
 - Ensure that the proxy server and port are specified in connection settings for the client machine's default browser.
 - Ensure that the BaseUrl and PortNumber are set in the `locations.ycfg` file.

For example if the client machine's network connection is configured to use a proxy server "Proxy" and Port "8080", you should set the following in the `locations.ycfg` file.

```
BaseUrl = "Proxy"
PortNumber = "8080"
```

For more information about editing the `locations.ycfg` file, see the *Sterling Call Center and Sterling Store: Installation Guide*.

- Sterling Call Center and Sterling Store allows you to configure the URL to be used when launching the Application Console from the Sterling Call Center and Sterling Store user interface. For more information about configuring the URL, see [Section 5.10.35, "Configuring External User Interface Rules"](#).

Sterling Call Center and Sterling Store allows you to configure URLs for each enterprise in your organization. If the user belongs to multiple enterprises, the URL corresponding to the user's primary enterprise is used.

- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.9.30.4 Reference Implementation

This section explains the default values provided for this feature.

- The rule to configure the URL to be launched is set to the Application Console URL for XYZ-CORP and XYZ-RETAIL organizations.
- Sterling Call Center and Sterling Store provides permissions to launch the Application Console to hub users as part of reference implementation.

7.9.31 Change an Item's Style

After placing an order for a stylized item, a customer may want to change the attributes of that item.

7.9.31.1 Solution

Sterling Call Center and Sterling Store provides the Change Items Style functionality which enables the user to change an item's style even after the item is added to the order.

The `getCompleteItemList` API is called to display the different styles for an item. On entering the partial Item ID of a model item or a stylized item, a pop-up window appears, in which the user can select the corresponding item by selecting the attributes that are used to model the item. For more information about handling styles for an item, see [Section 7.1.2, "Handling Styles for an Item"](#).

When an item's style is changed:

- The original item is cancelled and a new item is added.

Note: The user will be able to change an item's style only if status modification rules permit the cancellation and addition of lines.

- If the order line containing the original item is associated with a related item, the same association applies to the order line containing the newly added item.

When the attributes of a stylized item are changed, the `changeOrder` API is called to cancel the existing order line, and the `changeOrder` API is called to add a new line.

7.9.31.2 End-User Impact

None.

7.9.31.3 Implementation

The change an item's style task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.9.31.4 Reference Implementation

Sterling Call Center and Sterling Store provides the necessary permissions to change an item's style to all the user groups as part of reference implementation.

7.9.32 Change Tax Options

A business customer may want to request tax exemptions on an order after placing the order. A CSR can allow tax exemptions on an order for a business customer.

7.9.32.1 Solution

Sterling Call Center and Sterling Store provides a user interface that allows a user to indicate whether an order should be exempt from tax, based on the permissions provided to the user. The `getCompleteOrderDetails` API is called to retrieve the tax options for the order, and the `changeOrder` API is called to save the tax options on the order.

7.9.32.2 End-User Impact

None.

7.9.32.3 Implementation

This section explains the configurations for the Change Tax Options task.

- Sterling Call Center and Sterling Store allows you to configure the order statuses for which a CSR can allow tax exemptions. Ensure that the status modification rules allow the task of changing tax options for an order. For more information about configuring the order

statuses for modification, see [Section 5.10.6, "Configuring Order Modification Rules"](#).

- Depending on whether taxes are applied at the header level or the line level, implement either the YFSRecalculateHeaderTaxUE user exit or the YFSRecalculateLineTaxUE user exit to recalculate taxes after the tax exemption code is entered.
- This task is permission-controlled. Sterling Call Center and Sterling Store allows you to assign permissions to the corresponding user groups for this task.
- Notes entered for this task are saved in the order using the YCD_TAX_OPTIONS note type.

7.9.32.4 Reference Implementation

The Sterling Call Center and Sterling Store application provides permissions to CSR Leads and store managers as part of the reference implementation.

7.9.33 Copy Order

When creating an order or viewing an order that was placed earlier, a customer may decide to use that order to create new orders in the future, where applicable. For example, a customer may place an order for a particular list of items every month, with the list varying only slightly from month to month.

7.9.33.1 Solution

Sterling Call Center and Sterling Store provides the Copy Draft Order related task, which enables a user to copy an existing draft order, and the Order Again related task to create a new draft order from a confirmed order, based on the permissions provided to the user.

The copyOrder API is called to copy an existing draft order or confirmed order, including all the attributes defined in the Copy Order template in the Applications Manager. For more information about defining a process type's templates, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

Note: When a user copies an order, the EnterpriseCode of the existing order will be retained in the copied order.

7.9.33.2 End-User Impact

None.

7.9.33.3 Implementation

This section explains the configurations for the Copy Order task:

- You should define the order and order line attributes that should be copied when copying an order in the Copy Order template in the Applications Manager.
- This task is permission-controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for the two related tasks.

7.9.33.4 Reference Implementation

This section explains the reference implementation provided as part of the Copy Order task:

- Sterling Call Center and Sterling Store provides a Copy Order template that can be modified depending on the way this functionality is implemented.
- Sterling Call Center and Sterling Store provides permissions for the Copy Draft Order and Order Again tasks to all user groups provided by Sterling Call Center and Sterling Store.

7.9.34 E-Mail Order Information

A customer may request a CSR to send information pertaining to an order through e-mail. A customer may, for example, want to review the items that have been included in the order.

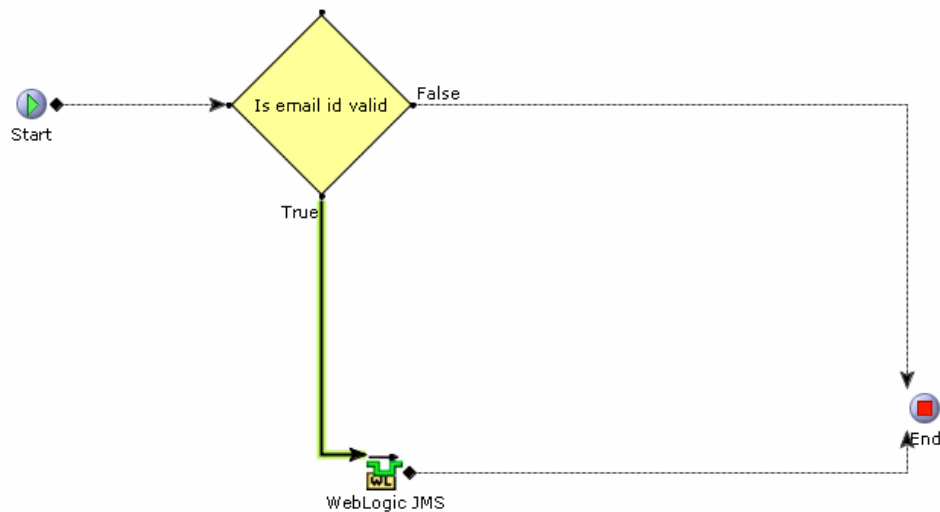
7.9.34.1 Solution

Sterling Call Center and Sterling Store provides the Send Order E-mail related task to enable users to send information pertaining to a draft order or a confirmed order to the e-mail address of the customer to

whom the order belongs. Users can send the order information to a single e-mail address or multiple e-mail addresses.

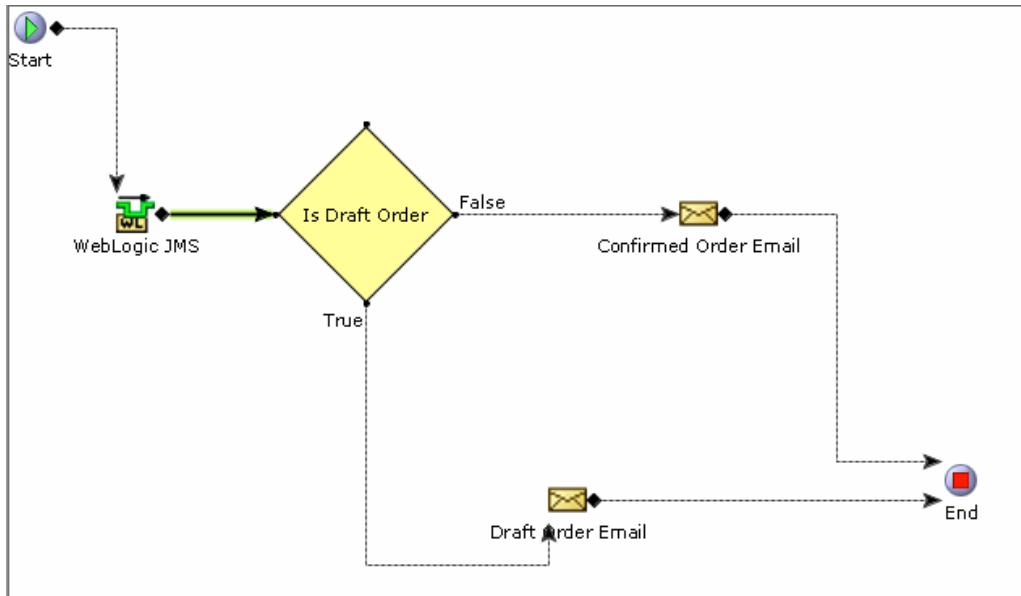
The YCDEmailOrderUE user exit is called to send the order information to the customer through e-mail. The YCDEmailOrderUE user exit uses the YCD_Populate_Order_Email_8.5 service and the YCD_Send_Order_Email_8.5 service illustrated in [Figure 7-12](#) and [Figure 7-13](#) to send the order information through e-mail.

Figure 7-12 YCD_Populate_Order_Email_8.5 Service



The YCDEmailOrderUE user exit calls the getCompleteOrderDetails API to retrieve the relevant information required for sending the e-mail to the customer. The information is passed to the YCD_Populate_Order_Email_8.5 service and the e-mail is sent to the customer using the YCD_Send_Order_Email_8.5 service, as illustrated in [Figure 7-13](#).

Figure 7–13 YCD_Send_Order_Email_8.5 Service



Validation of E-Mail Addresses

Sterling Call Center and Sterling Store validates the e-mail addresses to which a user has to send order information. The e-mail addresses are validated based on the following criteria:

- The first character must be an alphabet.
- The symbol @ must be present.
- There must be at least one character before at.
- There must be at least one character between at and the period.
- There must be between 2-4 characters after the period.
- There must not be spaces in the e-mail address.
- There must be a semi-colon (;) between addressess.

If any of these criteria fail, Sterling Call Center and Sterling Store displays an error message to notify the user of the incorrect criterion.

7.9.34.2 End-User Impact

None.

7.9.34.3 Implementation

This section explains the configurations for the Send Order E-mail task:

- To use this feature, you should implement the YCDEmailOrderUE user exit.
- The Send Order E-mail related task is permission-controlled. Sterling Call Center and Sterling Store allows you to assign permissions to the corresponding user groups for this task.

7.9.34.4 Reference Implementation

Sterling Call Center and Sterling Store provides permissions to all the user groups as part of the reference implementation.

7.10 Payment Processing

In a customer order scenario, each order has to be paid for whenever it is placed. The user can use different payment types to pay for an order. To process these payment types, different requests need to be made to payment servers. For example, a credit card needs to be validated as not being fraudulent, having sufficient funds, and charged. However, for a stored value card (SVC), validations need to be done to see whether it has sufficient funds and is charged.

The commonly used payment types need to be made available to the customers placing orders. The payment types need to be validated and charged by external payment validation servers.

If your enterprise implements its own or a third-party payment system, the Payment Summary screen is not displayed. This option is set through the external payment rule, YCD_PAYMENT_ENTERED_EXTERNALLY.

7.10.1 Solution

An unlimited number of payment methods can be used on an order. The payment methods are based on the following payment types defined in Sterling Call Center and Sterling Store:

- [Credit Card](#)

- [Stored Value Card](#)
- [Pre-paid](#)
- [Check](#)
- [Customer Account](#)
- [Refund Check](#)

Through user exit implementations, Sterling Call Center and Sterling Store interacts with the payment servers to authorize and charge the payment methods, if applicable. It is assumed that the front-end system attempts to validate and charge the payment methods up front, and Sterling Call Center and Sterling Store attempts to validate any unauthorized or uncharged amount at the time of order capture, or when a payment method is modified on the order.

Sterling Call Center and Sterling Store provides the capability to put an order on hold if the spending limit of the customer is breached. The hold type that is applied to the order is determined by the Hold Type To Be Applied When Order Needs Approval rule. To use this functionality, you must enable the Hold Type To Be Applied When Order Needs Approval rule in the Applications Manager. For more information about defining transaction rules, see the *Sterling Distributed Order Management: Configuration Guide*.

When any payment method validations or charges fail, the system invokes configurable services to send alerts to queues that are monitored by user groups.

Based on the encryption rules configured as part of the Installation Rules provided by Selling and Fulfillment Foundation, some of the fields of the different payment methods can be encrypted. These encryption rules are read by the client and the encrypted payment attributes are hidden from the user. For more information about Installation Rules, see [Section 5.2.7, "Configuring Installation Rules"](#).

Table 7–35 *Attributes that may be encrypted*

Payment Method	Rule—Encrypt Primary Payment Attributes for the following Payment Type Groups	Attributes	UI Behavior
Credit Card	Credit Card	Credit Card #	Display Credit Card #.
Credit Card	Encrypt Credit Card Name and Credit Card Expiration Date	Credit Card Name, Expiration Date	The Credit Card Name is displayed as a set of asterisks. The Expiration Date fields specified, i.e. the Month and Year, are also displayed as a set of asterisks.
Stored Value Card	Stored Value Card	SVC #, Payment Reference 1	Display SVC #, Display Payment Reference 1.
Customer Account	Customer Account	Customer Account #	Display Customer Account #.
Check/PrePaid/Other Payment	Other	Payment Reference 1	Display Payment Reference 1.

Payment Method Display Sequence

The payment type's charge sequence is used when adding payment methods to the order. If the charge sequence of two payment methods is the same, the following logic is used to display the payment methods in the Confirm Payment screen:

- Payment methods of the OTHER payment type group are displayed first.
- Payment methods of the STORED VALUE CARD payment type group are displayed after the payment methods of the OTHER payment type group.
- Payment methods of the CREDIT CARD and CUSTOMER ACCOUNT payment type groups are displayed after the payment methods of the STORED VALUE CARD payment type group.

- In case of multiple stored value cards, based on the funds available on the payment method, the stored value cards are sorted in ascending order (from the least amount available to the highest).

Logic Used to Apply Charge Amounts

The charge amount will be automatically added to the payment methods of the OTHER and STORED VALUE CARD payment type groups based on the MaxChargeLimit and FundsAvailable attributes defined for the groups respectively.

If only one credit card or customer account exists on the order along with the payment methods of the OTHER payment type group or STORED VALUE CARD payment type group or both the groups, the charge amount will be automatically added to the payment methods of the OTHER and STORED VALUE CARD payment type groups, and the remainder of the order total will be applied as the charge amount on the credit card or customer account.

During order modification, only the additional amount of the order will be required for charge amount entry. The existing stored value card, credit card, and customer accounts will be visible for assigning additional charge amounts, if applicable. The MaxChargeLimit will be increased on these payment methods, but no real-time authorization will occur. The CSR can also add additional payment methods, if required.

7.10.1.1 Credit Card

Credit cards always need to be checked for fraudulent activity and funds availability by a payment system. It is assumed that the front-end systems attempt to check the credit cards up front for fraud, and attempt to authorize them. If the validation and authorization are successful, the order is captured with the authorization details. However, if the payment verification system is down, or if a payment type is changed on the order, payment verification may need to be completed by Sterling Call Center and Sterling Store payment processing agents.

When an order is captured, the request collection agent creates an authorization and charge request for any unauthorized amount. The requestCollection API is called and creates an authorization or charge request, which is picked up by the executeCollection API. The executeCollection API in turn calls the YFSCollectionCreditCardUE user exit, which communicates with the external payment systems.

If the credit card is authorized, the order is processed normally. If the user exit returns a response code indicating that something is wrong with the credit card, the order is not processed, and an alert is sent to the appropriate queue depending on why the credit card failed the authorization.

For more information about implementing the credit card payment method, see [Section 7.10.3.1, "Credit Card Implementation"](#).

Sterling Call Center and Sterling Store provides functionality to process real-time credit card authorizations while confirming draft orders. For more information about real-time credit card authorizations, see [Section 7.12, "Real-Time Credit Card Authorization"](#).

7.10.1.2 Stored Value Card

Unlike credit cards, a stored value card (SVC) is always assumed not to be fraudulent, since it is issued by the store itself. However, SVCs need to be checked for available funds. Similar to credit cards, this is assumed to be completed by the front-end system, but any SVC payment method not validated for funds is processed by Sterling Call Center and Sterling Store.

When SVC payment types are created, ensure that the "Charge Up To Available" option is selected.

When an order is captured, the Request Collection agent creates a charge request for any uncharged amount, which is picked up by the Payment Execution agent. The Request Collection agent calls the payment server to get the available funds using the YFSGetFundsAvailableUE user exit. The default implementation for this user exit is not provided.

The executeCollection API calls the YFSCollectionStoredValueCardUE user exit for the payment collection.

If the SVC is successfully charged, the order is processed normally. If the user exit returns a response code indicating that the SVC could not be processed, either because of unavailable funds or due to the payment system being unavailable, the order is not processed, and an alert is sent to the appropriate queue.

Sterling Call Center and Sterling Store assumes that the FundsAvailable on an SVC are adjusted as soon as the authorization call is made on the payment method. Therefore, in order modification scenarios, only the

additional amount required is considered when comparing against the FundsAvailable attribute.

For more information implementing the stored value card method, see [Section 7.10.3.2, "Stored Value Card Implementation"](#).

7.10.1.3 Pre-paid

An entire order or a part of the an order may be charged before the order is captured. For example, a customer may place an order in a store, which can be picked up from there at a later time, at another store, or shipped to their home. Full or partial payment can be made for that order, and the store operator can create that order online providing all payment information.

The amount that has already been paid at the time of order capture falls under the Pre-paid payment method.

When adding the pre-paid payment method to an order, the following fields are captured by Sterling Call Center and Sterling Store:

- Transaction Number (corresponds to Payment Reference #1)
- Register Number (corresponds to Payment Reference #2)
- Store Tender Type (corresponds to Payment Reference #3)

7.10.1.4 Check

An entire order or a part of the order can be paid using a check. Sterling Call Center and Sterling Store assumes that a check payment method is pre-charged and pre-approved. The check amount should be specified, and is marked as the collected amount.

When adding the check payment method to an order, the following fields are captured in Sterling Call Center and Sterling Store:

- Check Account Number (corresponds to Payment Reference #1)
- Check Amount (corresponds to Payment Reference #2)
- Check Reference (corresponds to Payment Reference #3)

7.10.1.5 Customer Account

An entire order or a part of an order can be paid for by using a customer account payment type. The customer account payment type is a

payment type where a credit amount is assigned to a customer by the corresponding enterprise. Users can specify the account limit for a customer account payment type.

When an order is created or modified, the customer account payment type is validated to check for sufficient funds. If a customer account payment type has insufficient funds to complete a transaction, a warning message is displayed, indicating that the funds available in the account are insufficient to fulfill the order, and that the order may be put on hold until sufficient funds are provided. The `getCustomerDetails` API is called to retrieve the account limit for a customer account payment type. For more information about configuring the payment rules, see the *Sterling Distributed Order Management: Configuration Guide*.

When adding a customer account payment type for a customer, information pertaining to the following fields is captured in the Sterling Call Center and Sterling Store application:

- Customer Account Number
- Currency
- Account Limit

7.10.1.6 Refund Check

When a check or small amount of money need to be refunded to the customer, a refund check can be issued and mailed to them.

The request collection agent creates a request for the refund amount. A refund check is always assumed to be valid, and there is no authorization mechanism. The charge request is picked up by the `executeCollection` API, which calls the `YFSCollectionOthersUE` user exit to interact with the payment system.

For more information about implementing the refund check payment method, see [Section 7.10.3.3, "Return Check Implementation"](#).

Note: Although the Refund Check payment type is available on a sales order, it must only be used in the context of a return.

7.10.2 End-User Impact

The payment processing of Sterling Call Center and Sterling Store affects users of the Application Console in the following ways:

- Certain user groups can view alerts raised by failed payment validations or charges. The users who can view the alert details depends on the alert services configuration. The end users resolve alerts by calling the customers and replacing the payment method on the order. For more information about implementing alert services, see [Section 7.10.3.4, "Payment Processing Error Handling"](#).
- When modifying orders, the users are able to select the available payment types as payment methods on the orders.
- The strike limit is displayed on the order, and if that limit exceeds, an alert is raised. For more information about strike limit configuration, see [Section 7.10.3.5, "Strike Limit Configuration"](#).

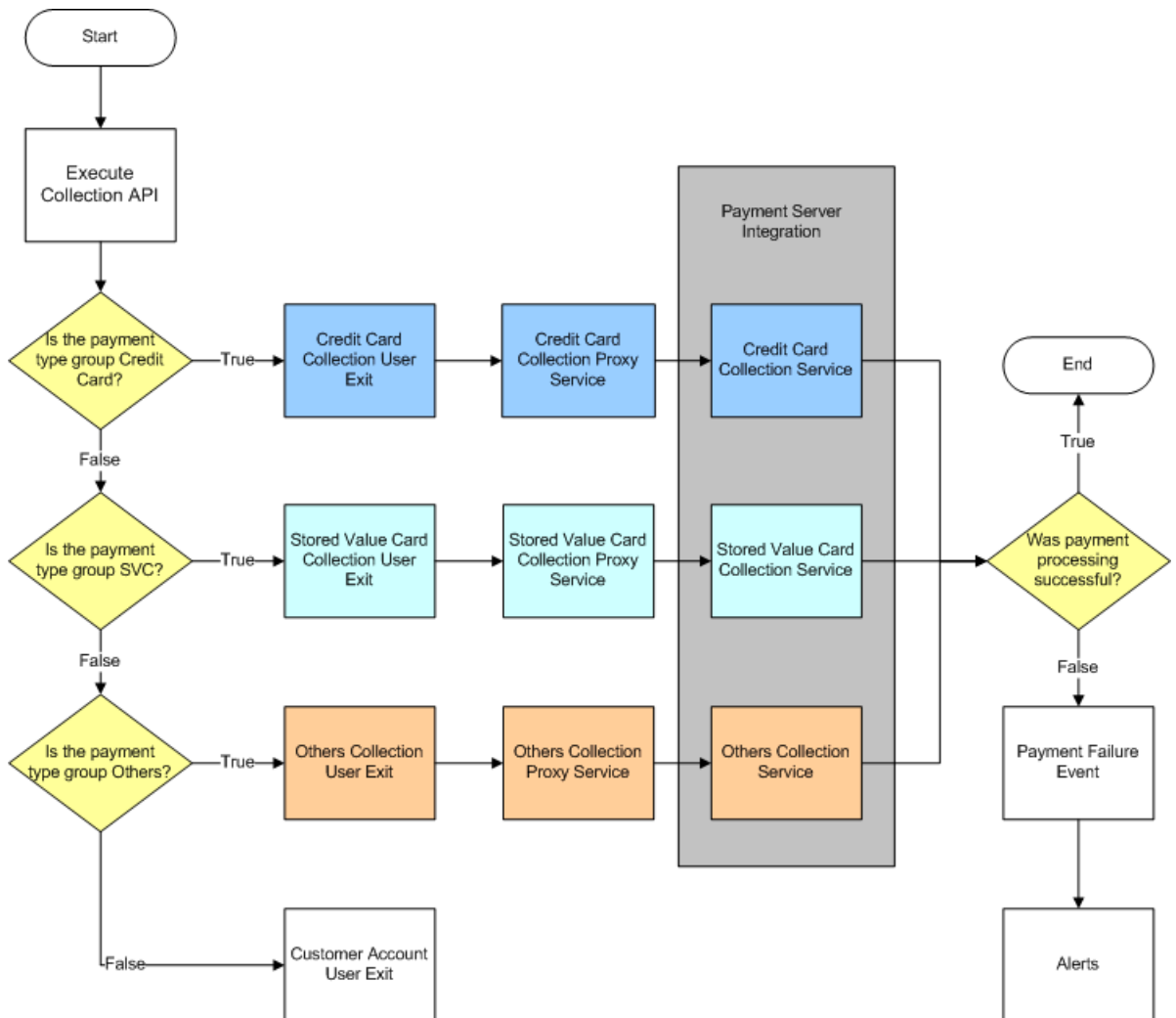
7.10.3 Implementation

All payment processing goes through the `executeCollection` API. This API calls the appropriate user exits depending on the payment method being used. The those user exits call the system defined payment services. These services are pointers to the customizable payment service implementations, which call the external payment server to perform authorizations and charges.

Depending on the response codes returned by the payment server, the user exits raise an event which invokes services responsible for sending alerts to the appropriate queues if certain user groups need to be notified of the outcome of the payment verification attempt. For more information about error handling in payment processing, see [Section 7.10.3.4, "Payment Processing Error Handling"](#).

[Figure 7–14](#) depicts the flow of payment processing in Sterling Call Center and Sterling Store.

Figure 7–14 Payment Processing



The following topics are covered in this section:

- [Credit Card Implementation](#)
- [Stored Value Card Implementation](#)

- [Return Check Implementation](#)
- [Payment Processing Error Handling](#)
- [Alert Services](#)
- [Strike Limit Configuration](#)

7.10.3.1 Credit Card Implementation

In order for a credit card to be validated as a payment method, you must implement the YFSCollectionCreditCardUE user exit. It takes its input from the executeCollection API. From that input, the following XML is created, and passed to a java class which in turn calls the YCD_ExecuteCollectionCreditCard_Proxy_1.0 service, a pointer to the YCD_ExecuteCollectionCreditCard_1.0 service which is responsible for integrating with the external payment system:

```
<Payment AuthorizationId="" BillToAddressLine1="" BillToCity="" BillToCountry=""
BillToDayPhone="" BillToEmailId="" BillToFirstName="" BillToId="" BillToKey=""
BillToLastName="" BillToState="" BillToZipCode="" bPreviouslyInvoked=""
ChargeTransactionKey="" ChargeType="" CreditCardExpirationDate=""
CreditCardName="" CreditCardNo="" CreditCardType="" Currency=""
CustomerAccountNo="" CustomerPONo="" DocumentType="" EnterpriseCode=""
MerchantId="" OrderHeaderKey="" OrderNo="" PaymentReference1=""
PaymentReference2="" PaymentReference3="" PaymentType="" RequestAmount=""
ShipToAddressLine1="" ShipToCity="" ShipToCountry="" ShipToDayPhone=""
ShipToEmailId="" ShipToFirstName="" ShipToId="" ShipToKey="" ShipToLastName=""
ShipToState="" ShipToZipCode="" SvcNo="">
```

You should create your own custom service to handle the integration with the external payment system, and modify the YCD_ExecuteCollectionCreditCard_Proxy_1.0 service to point to your service.

To modify YCD_ExecuteCollectionCreditCard_Proxy_1.0 service to use your own custom service, perform following steps:

1. Launch the Applications Manager.
2. From Distributed Order Management > Document Specific > Sales Order > Fulfillment > Fulfillment Process Model > Service Repository > Payment Processing.
3. From the application rules side panel, select YCD_ExecuteCollectionCreditCard_Proxy_1.0 service.


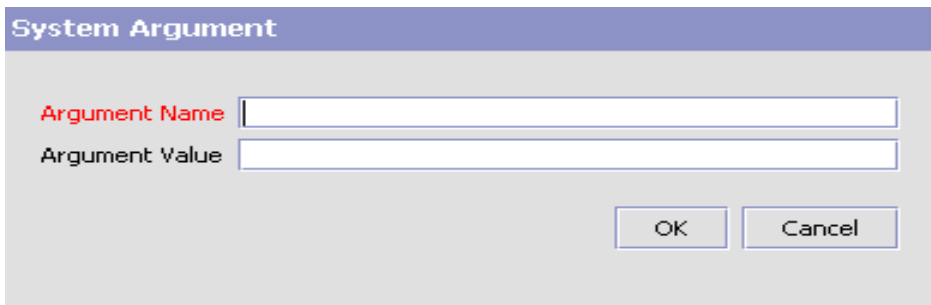
4. Select the Execute Collection Check API component.
5. Select the Arguments tab.
6. Click . The Service Argument window is displayed as shown in [Figure 7-15](#).
7. In Argument Name, enter ServiceName.
8. In Argument Value, enter the name of your own custom service.

Figure 7-15 System Argument Window for API Component



The screenshot shows a dialog box titled "System Argument". It has two text input fields. The first field is labeled "Argument Name" and the second is labeled "Argument Value". Below the fields are two buttons: "OK" and "Cancel".

Note: Sterling Call Center and Sterling Store reference implementation provides a demo service, YCD_ExecuteCollectionCreditCard_1.0 service, to integrate with the external payment system.

The expected output of the YCD_ExecuteCollectionCreditCard_Proxy_1.0 service is in the following XML format:

```
<Payment ResponseCode="" AsynchRequestProcess="" AuthAVS="" AuthCode=""
AuthorizationAmount="" AuthorizationExpirationDate="" AuthorizationId=""
AuthReturnCode="" AuthReturnFlag="" AuthReturnMessage="" AuthTime=""
BPreviousInvocationSuccessful="" CollectionDate="" DisplayPaymentReference1=""
HoldOrderAndRaiseEvent="" HoldReason="" InternalReturnCode=""
InternalReturnFlag="" InternalReturnMessage="" PaymentReference=""
PaymentReference2="" PaymentReference3="" RequestID="" RetryFlag=""
SCVVAUTHCode="" SuspendPayment="" TranAmount="" TranRequestTime=""
TranReturnCode="" TranReturnFlag="" TranReturnMessage="" TranType="" />
```

The value of the `ResponseCode` attribute returned by the user exit determines how to handle the order, if the payment method fails the validation:

If the payment processing fails for any reason, the `COLLECTION_FAILED` is raised by the `YFSCollectionCreditCardUE` user exit. The event calls the `YCDOnCollectionFailure` action, which invokes the `YCD_ProcessCollectionFailure_1.0` service, responsible for calling the appropriate alert service depending on the `ResponseCode`.

- **APPROVED**—This response code returns if the authorization or charge was successful.
- **HARD_DECLINE**—This response code returns if the authorization or charge fails because the card is invalid. For example, a lost or stolen credit card.

In this case, the order's strike count is increased by 1. The strike count represents how many times an order has had its payment declined with a `HARD_DECLINE` response code. The maximum allowed number of strikes is configurable. For more information about strike limit configuration, see [Section 7.10.3.5, "Strike Limit Configuration"](#).

- If the strike count is higher than the maximum allowed number of strikes, the payment method is marked not to retry authorization, suspended, updated with the failure details, and the `YCD_PaymentAuthRetryLimitAlert_1.0` alert service invoked. The alert is sent to the Payment Auth Retry Limit Reached queue, which is monitored by the Fraud Analyst Group users.
- If the strike count is lower than the maximum allowed number of strikes, the payment method is marked not to retry authorization, suspended, updated with the failure details, and the `YCD_PaymentHardDeclinedAlert_1.0` alert service is invoked. The alert is sent to the Payment Hard Declined queue, which is monitored by the Fraud Analyst Group users.
- **SOFT_DECLINE** and **BANK_HOLD**—This response code is returned if the authorization or charge fails because the card was declined. For example, an invalid CVV number or insufficient funds.

The payment method is marked not to retry authorization, suspended, updated with the failure details, and the `YCD_PaymentDeclinedAlert_1.0` alert service invoked. The alert is

sent to the `Payment Declined` queue, which is monitored by the CSR Group users.

- `SERVICE_UNAVAILABLE`—This response code returns if the credit card authentication service could not be reached.

The payment method is marked as retry charge, is not suspended, not updated with the failure details, and the `YCD_PaymentServiceUnavailableAlert_1.0` alert service is invoked. The alert is sent to the `Payment Service Unavailable` queue, which is monitored by the System Group users.

For more information about error handling in payment processing, see [Section 7.10.3.4, "Payment Processing Error Handling"](#).


7.10.3.2 Stored Value Card Implementation

The Stored Value Cards do not need to be authorized. It needs to be only charged. In order for stored value cards to be charged, you must implement the `YFSCollectionStoredValueCardUE` user exit. This user exit takes its input from the `executeCollection` API. From that input, the following XML is created, and passed to a java class which in turn calls the `YCD_ExecuteCollectionSVC_1.0_Proxy` service, a pointer to the `YCD_ExecuteCollectionSVC_1.0` service responsible for integrating with the external payment system:

```
<Payment AuthorizationId="" BillToAddressLine1=""
BillToCity="" BillToCountry="" BillToDayPhone=""
BillToEmailId="" BillToFirstName="" BillToId="" BillToKey=""
BillToLastName="" BillToState="" BillToZipCode=""
bPreviouslyInvoked="" ChargeTransactionKey="" ChargeType=""
CreditCardExpirationDate="" CreditCardName="" CreditCardNo=""
CreditCardType="" Currency="" CustomerAccountNo=""
CustomerPONo="" DocumentType="" EnterpriseCode=""
MerchantId="" OrderHeaderKey="" OrderNo=""
PaymentReference1="" PaymentReference2="" PaymentReference3=""
PaymentType="" RequestAmount="" ShipToAddressLine1=""
ShipToCity="" ShipToCountry="" ShipToDayPhone=""
ShipToEmailId="" ShipToFirstName="" ShipToId="" ShipTokey=""
ShipToLastName="" ShipToState="" ShipToZipCode="" SvcNo="">
```

You should create your own custom service to handle the integration with the external payment system, and modify the `YCD_ExecuteCollectionSVC_Proxy_1.0` service to point to your service.

To modify YCD_ExecuteCollectionSVC_Proxy_1.0 service to use your own custom service, perform following steps:

1. Launch the Applications Manager.
2. From Distributed Order Management > Document Specific > Sales Order > Fulfillment > Fulfillment Process Model > Service Repository > Payment Processing
3. From the application rules side panel, select YCD_ExecuteCollectionSVC_Proxy_1.0 service.
4. Select the Execute Collection Check API component.
5. Select the Arguments tab.
6. Click . The Service Argument window is displayed as shown in [Figure 7-15](#).
7. In Argument Name, enter ServiceName.
8. In Argument Value, enter the name of your own custom service.

Note: Sterling Call Center and Sterling Store reference implementation provides a demo service, YCD_ExecuteCollectionSVC_1.0 service, to integrate with the external payment system.

The expected output of the user exit is in the following XML format:

```
<Payment ResponseCode="" AsynchRequestProcess="" AuthAVS=""
AuthCode="" AuthorizationAmount="" AuthorizationId=""
AuthReturnCode="" AuthReturnFlag="" AuthReturnMessage=""
DisplayPaymentReferencel="" DisplaySvcNo=""
HoldOrderAndRaiseEvent="" HoldReason="" PaymentReferencel=""
PaymentReference2="" PaymentReference3="" RequestID=""
RetryFlag="" SuspendPayment="" SvcNo="" TranAmount=""
TranRequestTime="" TranReturnCode="" TranReturnFlag=""
TranReturnMessage="" TranType="" />
```

The value of the `ResponseCode` attribute returned by the user exit determines how the order is handled if the payment method fails the validation:

- **APPROVED**—This response code is returned if the charge was successful.
- **DECLINED**—This response code is returned if the charge failed. The payment method is marked not to retry charge, suspended, updated with the failure details, and the YCD_PaymentDeclinedAlert_1.0 alert service invoked. The alert is sent to the `Payment Declined` queue, which is monitored by the CSR Group users.
- **SERVICE_UNAVAILABLE**—This response code is returned if the authentication service could not be reached. The payment method is marked as retry charge, is not suspended, not updated with the failure details, and the YCD_PaymentServiceUnavailableAlert_1.0 alert service invoked. The alert is sent to the `Payment Service unavailable` queue, which is monitored by the System Group users.

For more information about error handling in payment processing, see [Section 7.10.3.4, "Payment Processing Error Handling"](#).

7.10.3.3 Return Check Implementation

In order for a charge to be issued for the refund check, you must implement the YFSCollectionOthersUE user exit.


The `executeCollection` API passes its output to the user exit. From that input, the following XML is created, and passed to the YCD_ExecuteCollectionRefundCheck_Proxy_1.0 proxy service, which is the pointer to the YCD_ExecuteCollectionRefundCheck_1.0 service responsible for integrating with the external payment system:

```
<Payment AuthorizationId="" BillToAddressLine1=""
BillToCity="" BillToCountry="" BillToDayPhone=""
BillToEmailId="" BillToFirstName="" BillToId="" BillToKey=""
BillToLastName="" BillToState="" BillToZipCode=""
bPreviouslyInvoked="" ChargeTransactionKey="" ChargeType=""
CreditCardExpirationDate="" CreditCardName="" CreditCardNo=""
CreditCardType="" Currency="" CustomerAccountNo=""
CustomerPONo="" DocumentType="" EnterpriseCode=""
MerchantId="" OrderHeaderKey="" OrderNo=""
PaymentReference1="" PaymentReference2="" PaymentReference3=""
PaymentType="" RequestAmount="" ShipToAddressLine1=""
```

```
ShipToCity="" ShipToCountry="" ShipToDayPhone=""  
ShipToEmailId="" ShipToFirstName="" ShipToId="" ShipTokey=""  
ShipToLastName="" ShipToState="" ShipToZipCode="" SvcNo="">
```

You must create your own custom service to integrate with the external payment system, and modify the YCD_ExecuteCollectionRefundCheck_Proxy_1.0 service to point to your service.

To modify YCD_ExecuteCollectionRefundCheck_Proxy_1.0 service to use your own custom service, perform following steps:

1. Launch the Applications Manager.
2. From Distributed Order Management > Document Specific > Sales Order > Fulfillment > Fulfillment Process Model > Service Repository > Payment Processing
3. From the application rules side panel, select YCD_ExecuteCollectionRefundCheck_Proxy_1.0 service.
4. Select the Execute Collection Check API component.
5. Select the Arguments tab.
6. Click . The Service Argument window is displayed as shown in [Figure 7-15](#).
7. In Argument Name, enter ServiceName.
8. In Argument Value, enter the name of your own custom service.

Note: Sterling Call Center and Sterling Store reference implementation provides a demo service YCD_ExecuteCollectionRefundCheck_1.0 service to integrate with the external payment system.

The expected output of the YCD_ExecuteCollectionRefundCheck_Proxy_1.0 service is in the following XML format:

```
<Payment AuthCode="" AuthorizationAmount="" AuthorizationId=""  
AuthReturnCode="" AuthReturnFlag="" AuthReturnMessage=""  
DisplayPaymentReferencel="" HoldOrderAndRaiseEvent=""  
HoldReason="" RequestID="" RetryFlag="" SuspendPayment=""
```

```
TranAmount="" PaymentReference1="" PaymentReference2=""  
PaymentReference3="" TranReturnCode="" TranReturnFlag=""  
TranReturnMessage="" TranType="" />
```

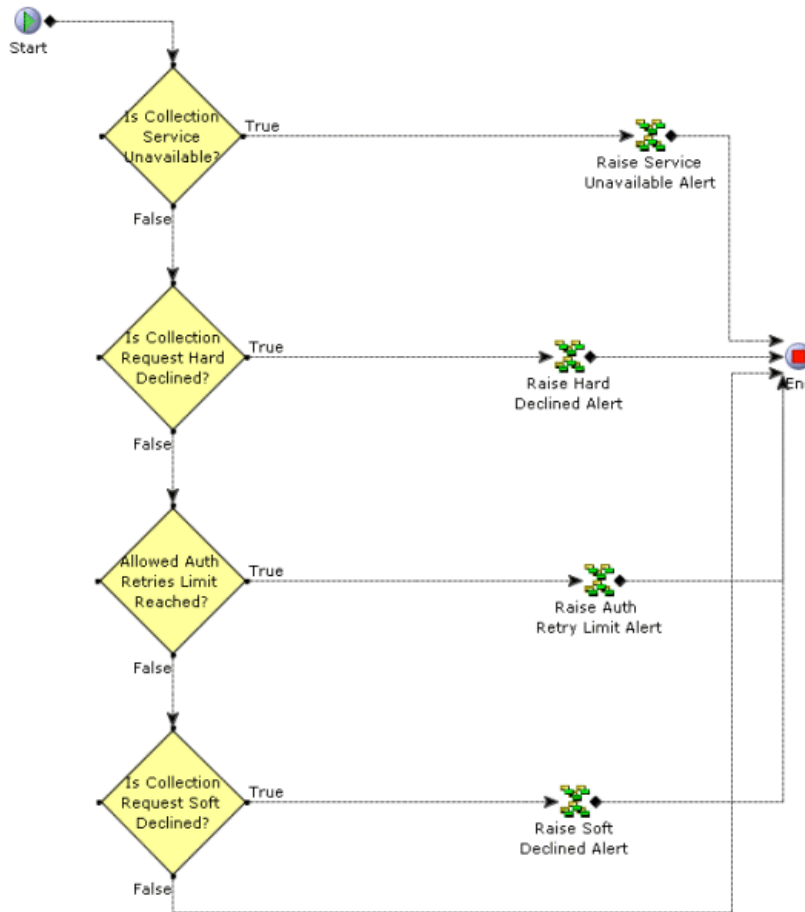
The user exit should return the `PaymentReference1`, `PaymentReference2` and `PaymentReference3` as Check Account Number, Check Amount, and Check Reference, respectively.

7.10.3.4 Payment Processing Error Handling

When user exits receive response codes from the Payment Server, they raise the `COLLECTION_FAILED` event if the collection fails for any reason. That event calls the `YCDOnCollectionFailure` action, which invokes the `YCD_ProcessFailure_1.0` service.

This service examines the response code and calls one of the defined alert services to send notification to the appropriate queue. [Figure 7-16](#) illustrates the Process Collection Failure service.

Figure 7–16 The *YCD_ProcessCollectionFailure_1.0* Service



All services can be accessed through the Applications Manager in the Application Platform module at the Sales Order document type level, in the Payment Processing branch service definitions tree.

The XML passed by the `COLLECTION_FAILED` event to the `YCD_ProcessCollectionFailure_1.0` service is found in the following file:

```
<INSTALL_DIR>/documentation/api_javadocs/XML/YFS_PAYMENT_EXECUTION.CHARGE_FAILED_XML.xml
```


For an example of how an error in payment processing is handled in Sterling Call Center and Sterling Store, see [Section , "Example: HARD_DECLINE response code on credit card collection attempt"](#).

For a list of the alert services defined by default in Sterling Call Center and Sterling Store, see [Section 7.10.3.4.1, "Alert Services"](#).

Example: HARD_DECLINE response code on credit card collection attempt

If the Payment Server returns the HARD_DECLINE response code to the YFSCollectionCreditCardUE user exit on an order that hasn't been declined before, it raises the COLLECTION_FAILED event, which invokes the YCD_ProcessCollectionFailure_1.0 service through the YCDOnCollectionFailure action.

This service evaluates the XML output of the COLLECTION_FAILED event, whether or not the payment service is available (which is false). Then, the service evaluates whether the collection service is hard declined (which is true).

Therefore, the YCD_PaymentHardDeclinedAlert_1.0 service invokes, which sends an alert to the Payment Hard Declined queue, which is typically monitored by the user as illustrated in [Figure 7-17](#).

Figure 7-17 The YCD_PaymentHardDeclinedAlert_1.0 Service



7.10.3.4.1 Alert Services

By default, the following services are defined in Sterling Call Center and Sterling Store to send alerts in case of payment failure:

- YCD_PaymentHardDeclinedAlert_1.0
- YCD_PaymentServiceUnavailableAlert_1.0
- YCD_PaymentAuthRetryLimitAlert_1.0
- YCD_PaymentDeclinedAlert_1.0

If you need to change the queue to which payment alerts are sent, the user can edit the Alert Queue Name field on the General tab in the alert properties for the appropriate service.

7.10.3.5 Strike Limit Configuration

A strike is given to an order when a credit card is declined by the payment server with `HARD_DECLINE` as a response code. An order that has had several credit cards declined because they were stolen or invalid can be considered to be fraudulent. You may want to build a mechanism that cancels the order automatically in that case.

You can define how many strikes an order can receive before an alert is sent to the fraud analyst. For more information about configuring the strike limit, see [Section 5.9.5, "Configuring Payment Failure Rules"](#).

7.10.4 Reference Implementation

This section explains the reference implementation provided as part of the Sterling Call Center and Sterling Store application's capability to put an order, which is pending approval, on hold.

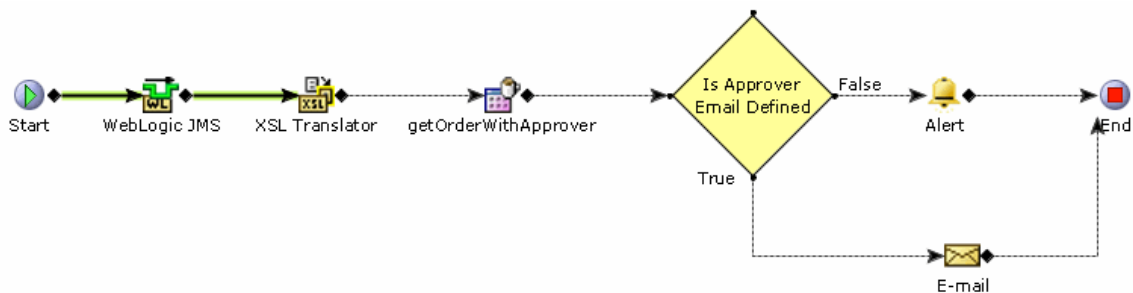
- An implementation of the `YCD_ORDER_APPROVAL` hold type that prevents an order from processing the following transactions:
 - Accept Reservation
 - Close Order
 - Release Order
 - Schedule Order
 - Payment Collection
 - Payment Execution
- By default, the `YCD_ORDER_APPROVAL` hold type is defined as the value of the Hold To Be Applied When Order Needs Approval rule defined in the Applications Manager.
- An implementation of the `CHANGE_ORDER.ON_HOLD_TYPE_STATUS_CHANGE` event that generates e-mails for the approver of the order and the customer to whom the order belongs. If the e-mail cannot be sent because the

approver of the order does not have an e-mail address, an alert will be generated to inform the CSR to contact the approver of the order.

The `CHANGE_ORDER.ON_HOLD_TYPE_STATUS_CHANGE` event is raised when the `YCD_ORDER_APPROVAL` hold type is applied to the order through the `CHANGE_ORDER` transaction. The `CHANGE_ORDER.ON_HOLD_TYPE_STATUS_CHANGE` event invokes a service that generates an e-mail, which is sent to the approver of the order and the customer who placed the order, or an alert to indicate that the order is on hold pending approval.

A sample implementation of the service that is used to generate an e-mail or an alert when an order is on hold pending approval is illustrated in [Figure 7-18](#).

Figure 7-18 *The YCD_Order_Approval_Email_8.5 Service*



The custom API checks to verify whether a proxy approver exists for the approver of the order. If a proxy approver exists for the approver of the order, the `getCustomerContactList` API is called to fetch the details of the customer contact who has been set as the approver of the order. The service passes through a condition that checks whether the approver of the order has an e-mail address.

- If the approver of the order has an e-mail address, an e-mail is sent to both the approver of the order and the customer to whom the order belongs.
- If the approver of the order does not have an e-mail address, an alert is generated to indicate that the order is on hold pending approval and to inform the CSR to contact the approver of the order.

If the approver of the order has an e-mail address, e-mails will be sent in the following situations:

- After a customer places an order, if the order is put on hold pending approval, an e-mail will be sent to the approver of the order or the proxy approver and the customer to whom the order belongs to inform them that the order has been put on hold pending approval.
- When the approver approves or rejects the hold, an e-mail will be sent to the approver of the order and the customer to whom the order belongs to inform them that the order has been either approved or rejected.
- If, after the approver of the order approves the hold, the order is put on hold pending approval from a second approver, an e-mail will be sent to the new approver and the customer to whom the order belongs to inform them that the order is on hold pending approval.

7.11 Payment Inquiry

Sometimes, customers may want to inquire about the payment details pertaining to an order. For example, a customer may want to inquire about the payment methods or refunds pertaining to an order.

7.11.1 Solution

The Payment Inquiry task enables users to view the payment information pertaining to an order, such as the order total, refunds, and pending charges. The `processOrderCollection` API is called to retrieve the payment details.

The user can also view the invoice details from the Payment Inquiry screen. The `getCompleteOrderInvoiceDetails` API is called to display the Invoice Details screen.

The payment status generated by the Sterling Call Center and Sterling Store application may be different than the payment status that you want to display to customers. You can implement the `YFSGetOverallStatusUE` user exit to return the `PaymentStatus` attribute, which is used to display the payment status in the Payment Inquiry screen of Sterling Call Center and Sterling Store. For more information

about the YFSGetOverallStatusUE user exit, see the corresponding section in the *Sterling Call Center and Sterling Store: Javadocs*.

7.11.2 End-User Impact

If the YFSGetOverallStatusUE user exit is implemented, and if this user exit returns the `PaymentStatus` attribute, the user will be able to view the Payment Status field in the Payment Inquiry screen.

7.11.3 Implementation

This section explains the configurations for the Payment Inquiry task.

- Implement the YFSGetOverallStatusUE user exit to return the `PaymentStatus` attribute.
- This task is permission-controlled. You can assign the necessary permissions to the corresponding user groups.

7.11.4 Reference Implementation

As part of reference implementation, Sterling Call Center and Sterling Store provides the permission to view payment information to all the users.

7.12 Real-Time Credit Card Authorization

When confirming a draft order, you may want to process real-time credit card authorizations instead of batch processing orders. For instance, if an authorization fails due to an invalid card number, expired date, or invalid billing address, the CSR can inform the customer immediately and correct the errors. The CSR can also suggest that the customer use a different card. In order to authorize credit card in real-time, the CVV number must be captured.

7.12.1 Solution

Sterling Call Center and Sterling Store provides the functionality to process real-time credit card authorizations when confirming a draft order. This section explains the real-time credit card authorization process and the solution offered by Sterling Call Center and Sterling Store.

Authorizing Credit Cards

Authorizing a credit card involves validating whether a credit card is valid and can be used to pay for an amount of money requested after adding it in the user interface. The logic to authorize a credit card is implemented as the last step in the order entry process, that is, while confirming a draft order in the Confirm Payment screen.

The `executePaymentTransactions` API is called to authorize the payment method. If the authorization succeeds, the `changeOrder` API is called to save the authorization on the order. If the authorization fails, the CSR can proceed by selecting the Override and Continue check box. If this check box is selected, the payment information and the failed authorization details are saved on confirmation of the order.

If multiple credit cards are added to a single order, the CSR must enter the charge amount on each card. The `executePaymentTransactions` API is called to authorize each credit card. If the authorization succeeds for all the payment methods, the `changeOrder` API is called to save the authorizations on the order.

Using the Advanced Credit Card Rules, you can configure Advanced Credit Card Rules to authorize a credit card before saving it to an order. If you have configured any payment rules that do not require authorization, do not enable this rule. For more information about configuring advanced credit card rules, see [Section 5.9.7, "Configuring Advanced Credit Card Rules"](#). If this rule is enabled, the CVV number is mandatory for all payment methods of CREDIT CARD payment type group. Real-time credit card authorizations are not available for any modification tasks.

Handling Authorization Failures

If the authorization for any payment method fails, an appropriate error message is displayed. The payment method is displayed in red, highlighting the failed payment method. The CSR will then be prompted to edit the payment methods.

When an order has two payment methods of CREDIT CARD payment type group, it is possible that the first credit card is successfully authorized, but not the second card. In such a situation, if the CSR attempts to add the amount from the failed authorization to the credit card that has already been authorized, the additional amount is not authorized in real time, but will be picked up by the payment processing agents.

Handling CVV Numbers

When confirming a draft order, the CSR needs to enter the customer's payment information and CVV numbers in the Add Payment Method screen. If the payment method is already defined but not authorized, the CSR can select the corresponding payment method and will be prompted to enter only the CVV number. The CVV number will not be saved on an order.

To hide the CVV number from client-side log files, disable the log functionality from the clients that the CSR will be using. This can be accomplished by not defining a log location in the com.ini file.

It is recommended that the RCP client components are stored in protected file folders in order to prevent the program or property file from being tampered. As further assurance, use a one-way hash, for example, SHA-256, to validate the programs and property files during startup.

7.12.2 End-User Impact

If real-time authorization is enabled, the CVV code is mandatory for credit cards in the Confirm Payment screen.

7.12.3 Implementation

This section explains the configurations for real-time credit card authorization.

- Sterling Call Center and Sterling Store allows you to configure advanced credit card rules to process real-time credit card authorizations when confirming a draft order. For more information about advanced credit card rules, see [Section 5.9.7, "Configuring Advanced Credit Card Rules"](#).
- Implement the YFSCollectionCreditCardUE user exit to handle both encrypted and unencrypted credit card numbers.
- To facilitate the return of user-friendly error messages whenever an error occurs, implement the YFSCollectionCreditCardUE user exit in such a way that it returns a localizable message in the internalReturnMessage attribute of the output. In order to localize these messages, add them to the extension resource bundle that will be picked up by the application. For more information about localizing

resource bundles, see the *Selling and Fulfillment Foundation: Localization Guide*.

Note: If the payment system is unavailable, or if an error occurs, the YFSCollectionCreditCardUE user exit does not return any message. The application then uses the default error message bundle entry `Authorization_Failed_No_Message_Was_Returned` to display an error message on the screen.

7.12.4 Reference Implementation

None.

7.13 Return Order Capture

Users need to enter return orders with maximum flexibility. They might need to create a return from several sales orders, allow a customer to return an item without a receipt, note return reasons, create exchanges, and set up appointments for pickup.

7.13.1 Solution

Sterling Call Center and Sterling Store provides a returns interface that enables CSRs to manage all aspects of a return process. Users who have access to multiple enterprises can select the enterprise for which a return order has to be created. A CSR can perform the following using the Create Return task:

- Create a return from single or multiple sales orders.
- Create a return for a customer who has no order in the system or has lost a receipt (if the enterprise allows this).
- Create a return for a customer who has received a wrong item or an item that was not ordered.
- Enter a variety of return reasons.
- Avoid the high shipping and handling costs of customer returns by exercising configurable appeasement and price-matching options.
- Create exchanges.

- Change an item's pickup location (if it is different from the original delivery address).
- Allow a customer to keep an item if returning it is not cost-effective for the company.
- Select return appointments and consolidate them with exchange appointments, ensuring that the item can be uninstalled and a new item can be installed in the same appointment.
- Create a return based on the container, because a customer may want to return an unopened or damaged package or shipment container.

This section contains a description of the solutions that the Sterling Call Center and Sterling Store provides for creating return orders.

7.13.1.1 Return Line Selection

Sterling Call Center and Sterling Store provides a variety of ways in which a user can search for a line to return or exchange:

- By Order - Users can locate an existing order and find lines to return.
- By Container - Users can search for an order by entering the shipping container tracking number.
- By Items Without an Order (as long as the enterprise allows this) - Users can allow customers to return items not associated with an order.
- By Extra Item - Users can create a return for an item that a customer received by mistake.

For more information about return line selection, see [Section 7.15.1, "Return Line Selection"](#).

7.13.1.2 Identifying the Person Returning an Item.

Sterling Call Center and Sterling Store enables a user to indicate whether an item is being returned by the customer who originally purchased it or by the recipient who received the item as a gift. If the item is being returned by the gift recipient, the application prompts the user to enter the customer identification information. For more information about customer identification, see [Identifying a Customer](#).

7.13.1.3 Adding Lines to a Return

Sterling Call Center and Sterling Store provides a variety of methods to add lines to a return order. For more information, see [Section 7.15.1, "Return Line Selection"](#).

7.13.1.4 Validating Lines and Addresses

After lines have been selected for return and added to the return order, Sterling Call Center and Sterling Store validates the lines and addresses before displaying the Return reason screen. For more information, see [Section 7.15.1, "Return Line Selection"](#).

7.13.1.5 Entering Return Reason

Sterling Call Center and Sterling Store provides a Return Reason screen that enables users to record information such as the reason for the return and whether items are being returned or exchanged. Users may want to add a service line or perform return avoidance measures such as price match and appeasement. They may also want to override the return policy for that item. For more information, see [Section 7.15.2, "Entering Return Reason"](#).

7.13.1.6 Return Reason Rule

A return reason rule for returns can be configured in the common code. For more information about defining return reasons, see [Section 5.16.2, "Defining Return Reasons"](#).

7.13.1.7 Overriding the Return Policy

For each line that is selected for return, Sterling Call Center and Sterling Store displays the return policy. Users can override this return policy. This is permission controlled. For more information, see [Section 7.15.2, "Entering Return Reason"](#).

7.13.1.8 Customer Identification Required

When creating a return, customer information for the return may or may not be available. Typically, when a return is created for an existing sales order, the corresponding customer information is picked up from the sales order and used for the return order. However, if a return is created for Items Without An Order or Extra Items, the customer information should be entered by the end user.

If the customer identification step is required in the return creation process, you can configure the Customer Identification screen to be displayed either before or after the Add Items to Exchange screen.

For more information about configuring this rule, see [Figure 5-11](#), and the information below it.

7.13.1.9 Is Customer Info Present Rule

This rule determines whether the return order header contains all the customer information, and if not, it displays the appropriate customer search screens:

- Customer Identification
- Customer Search
- Advanced Customer Search

On a return or an exchange order, the header address is copied to every line that does not already have an address.

7.13.1.10 Modifying an Exchange

The Sterling Call Center enables users to modify exchange orders, specify the change quantity and Unit of Measure (UOM) on exchange lines, override exchange prices, and select fulfillment options. For more information, see [Section 7.15.3, "Modifying an Exchange"](#).

7.13.1.11 Default Exchange Type Rules

Two rules exist for the default exchange type determine permission control. For more information about the Default Exchange Type Rule for Permission Control and the Default Exchange Type Rule for Change, see [Section 7.15.3, "Modifying an Exchange"](#).

7.13.1.12 Needs Appointments Rule

This rule looks at the exchange order and searches for lines that require a work order to be created for them. This rule looks at a model for exchange work order and a flag in the wizard for return work order. If either one has a work order, the appointment flow is run.

7.13.1.13 Address Info Needed Rule

This rule copies the address from the return to the exchange order when the address is already available for the return order. It also copies the address to any line on the return order or exchange order that does not have an address.

7.13.1.14 Create Reservation Rule

If a user specifies an exchange, this rule reserves the item so that the inventory is not consumed by another customer. See [Section 7.9.25, "Reservations"](#) for more information.

7.13.1.15 Exchange Fulfillment Options

The Sterling Call Center and Sterling Store provides the Exchange Fulfillment Options that enable users to change the fulfillment method, the pickup location, and the shipping and delivery addresses on exchange orders. For more information, see [Section 7.15.4, "Exchange Fulfillment Options"](#)

7.13.1.16 Needs Appointment Rule

The Sterling Call Center and Sterling Store provides an appointment rule to determine when work orders are necessary for return orders. This rule looks at a model for exchange work orders and a flag in the wizard for return work orders. If either one has a work order, the appointment flow is run.

7.13.1.17 Is Customer Info Present Rule

This rule determines whether enough customer information is present to complete a return order, and if not, it displays the appropriate customer search screens:

- Customer Identification
- Customer Search
- Advanced Customer Search

7.13.1.18 Address Info Needed Rule

This rule copies address information to return and exchange orders. It also copies the address to any line on the return or exchange order that does not have an address.

7.13.1.19 Create Reservation Rule

Sterling Call Center and Sterling Store provides a rule that reserves items so that the inventory is not consumed by another customer.

7.13.1.20 Fulfillment Summary

Sterling Call Center and Sterling Store enables users to specify and view the shipping, pickup, and delivery methods for return and exchange orders. For more information, see [Section 7.15.5, "Fulfillment Summary"](#).

7.13.1.21 Select Appointment

Sterling Call Center and Sterling Store provides users with the ability to manage and view return order appointments. For more information, see [Section 7.15.6, "Select Appointment"](#).

7.13.1.22 Payment Summary

Users can view and change payment details on the Payment Summary screen. For more information, see [Section 7.15.7, "Payment Summary"](#).

7.13.2 End-User Impact

This section explains the end-user impact for return order capture.

7.13.2.1 Line Selection

If the Reship rule is set, an icon signifying reshipped lines is displayed. If the Reship rule is not set, a check box is displayed at the top of the screen which, if selected, displays reship details.

If the rule that allows the return of items without an order is set, the Items Without an Order tab is displayed and customers can return an item without an order. If the rule is not set, the Items Without an Order tab is not displayed and customers can return an item only if they have a receipt or the item can be found on an order.

7.13.2.2 Exchange Fulfillment Options

- Disabling Availability Checks - The user is not shown the availability details in any store on the Add Multiple Lines, Order Entry, Change Fulfillment Options, Change Order Addresses, and Item Inquiry screens.
- Changing Pickup Lines - The user is allowed to modify the order lines that have the pickup fulfillment method even after the status is changed to `Released`.
- Changing Delivery Lines - The user is allowed to modify the order lines that have the delivery fulfillment method even after the status is changed to `Released`.

7.13.3 Implementation

This section explains implementation considerations for return order capture.

Return entry is a permission-controlled task. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.13.3.1 Line Selection

To display an icon identifying reshipped lines, turn on the Reship configuration. If the Reship rule is turned off and reship lines exist, a check box displays reshipped details. See [Section 5.16.6, "Configuring Return Entry Rules"](#) for configuration information about the Reship rule.

If your enterprise does not wish to allow returns for items not associated with an order, turn off the rule that allows returning items without an order. In this case, the Items Without an Order tab would not be displayed. For more information, see [Section 5.16.6, "Configuring Return Entry Rules"](#).

7.13.3.2 Return Reason

The rule for the Override Return Policy note type notes pop-up window is configurable.

The reasons for returning an item can be configured in the `RETURN_REASON` common code.

For more information about defining return reasons, see [Section 5.16.2, "Defining Return Reasons"](#).

7.13.3.3 Modify an Exchange

You can configure two exchange type rules for the Add Exchange Items screen that define the enterprise-specific value for the default exchange type and that specify user access to this feature. See [Section 5.16.6, "Configuring Return Entry Rules"](#) for more information.

7.13.3.4 Exchange Fulfillment Options

This section details the rules to be configured to change the fulfillment options.

- **Disabling Availability Checks** - If the Prevent Initial Availability Checks During Order Entry and Order Modifications rule is enabled, the inventory availability check is not performed and the calls to the `getFulfillmentOptionsForLines`, `findInventory`, or any derivation APIs are eliminated. This aids in better performance and pace when capturing the order. For more information, see [Section 5.10.27, "Configuring Availability Check and Reservation Options"](#).
- **Changing Pickup Lines** - To modify the pickup lines that are in the `Released` status or above, check the Allow Modification of Pickup Dates and Store for Pickup Lines after Release box for the Enterprise. For more information, see [Section 5.10.31, "Configuring Special Order Modification Rules"](#).
- **Changing Delivery Lines** - To modify the delivery lines that are in the `Released` status or later, check the Allow Modification of Fulfillment Options for Delivery Lines After Release box for the Enterprise.

Notes entered for this task are saved on the order with `YCD_DELIVERY_OPTIONS` note type. For more information, see [Section 5.10.31, "Configuring Special Order Modification Rules"](#).

7.13.3.5 Fulfillment Summary

For returns, the UI is painted with a summary panel for each delivery method. Delivery methods are suggested by Sterling Call Center and Sterling Store and can be customized through the `YCDgetReturnMethodUE`. The delivery methods are:

- Return Pickup

- Return Shipping
- Items can be kept

The YCDGetReturnMethodUE applies a standard user exit template and passes the result to the user exit. The default implementation is not provided for this user exit. If the user selects the Ship To Return Center return method, the RETURN_FULFILLMENT fulfillment type is used to determine the correct return center to receive the item.

7.13.3.6 Status Changes to a Return or Exchange Order

Enable notes for all status modifications of a return order or an exchange order. This is how Sterling Call Center and Sterling Store records status changes. See [Section 5.16.7, "Defining Return Note Reasons"](#) for more information.

7.13.3.7 Select Appointment

This section explains the configurations for the change service appointment task.

- To change the service appointment calendar view, configure the following rules:
 - Calendar Display
 - Default Appointment Calendar View
 - Capacity Information

For more information about configuring the service appointment calendar view, see [Section 5.6.22, "Configuring the Service Appointment Calendar View"](#).

- Sterling Call Center and Sterling Store allows you to configure the order statuses for which changing service appointment is allowed. For more information about configuring the order modification statuses, see [Section 5.10.6, "Configuring Order Modification Rules"](#).

7.13.4 Reference Implementation

This section explains reference implementation information for return order capture.

7.13.4.1 Return Reason

The reference implementation ships the following return reasons:

- Cargo Damaged
- Change of Mind
- Damaged Items
- Loose Parts
- Lower Price Found
- Missing Parts
- Other

See [Section 5.16.2, "Defining Return Reasons"](#) for more information.

7.13.4.2 Exchange Fulfillment Options

This section explains the reference implementation provided for the following tasks:

- Disabling Availability Checks - The Prevent Initial Availability Checks During Order Entry and Order Modifications rule is defaulted to ensure that availability checks are performed.
- Changing Pickup Lines - The Allow Modification of Pickup Dates and Store for Pickup Lines after Release rule is defaulted to allow modification of lines after release.
- Changing Delivery Lines - The Allow Modification of Fulfillment Options for Delivery Lines after Release rule is defaulted to allow modification of lines after release.

The Allow Cancellation of Delivery Lines after Release rule is also defaulted to allow modification of lines after release.

7.13.4.3 Select Appointment

The section explains the reference implementation provided for the change service appointment task.

- An instruction type called 'DELIVERY' is provided for saving service appointment instructions.

- Sterling Call Center and Sterling Store provides permissions to change service appointments to all users as part of reference implementation.

7.14 Return Order Inquiry

Sometimes customers may inquire information about return orders. For example, a customer may want to cancel a return or change a pickup appointment on the return order. In such situations, call center or store representatives need to search for the appropriate return order and then perform the necessary actions.

7.14.1 Solution

Sterling Call Center and Sterling Store provides a user interface task which enables users to search for return orders.

If a user has access to multiple enterprises, the Enterprise drop-down list is displayed in the Return Order Search Criteria panel of the Return Search screen. The `getOrganizationList` API is called to retrieve the list of enterprises. The `getOrderList` API is called to retrieve the list of orders that match the search criteria. The `getCompleteOrderDetails` API is called to display the details of the return order. The `getExceptionListForOrder` API is called to retrieve the list of alerts on the return order. For more information about alerts, see [Section 7.23, "Alert and Queue Management"](#).

The search results can be sorted in ascending or descending order based on following Order By options:

- Return Order Number
- Return Order Date
- Customer Last Name

Pagination

Sterling Call Center and Sterling Store supports smart retrieval of record sets in the Return Search screen. You can configure if history records need to be automatically fetched while retrieving records. For more information about configuring pagination rules, see [Section 5.19.9, "Configuring Pagination Rules"](#).

For more information about pagination, see [Section 7.22, "Pagination"](#).

7.14.2 End-User Impact

Based on the configuration to search for history orders, the end user will see history orders or recent orders in the search results.

7.14.3 Implementation

This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.14.4 Reference Implementation

Sterling Call Center and Sterling Store provides permissions to search for return orders to all users as part of reference implementation.

7.15 Return Order Maintenance

Sterling Call Center and Sterling Store provides the following return order maintenance features:

- [Return Line Selection](#)
- [Selecting Lines to Return](#)
- [Entering Return Reason](#)
- [Modifying an Exchange](#)
- [Exchange Fulfillment Options](#)
- [Fulfillment Summary](#)
- [Select Appointment](#)
- [Payment Summary](#)
- [Create Exchange Order](#)
- [Report Extra Items](#)
- [Report Wrong Items](#)
- [Report Unexpected Items](#)
- [Issue Refund Now](#)

- [Change Return Address](#)
- [Change Service Appointment](#)
- [Change Return Method](#)
- [Cancel Return Order](#)
- [Payment Confirmation](#)

7.15.1 Return Line Selection

Users need to be able to select one or more lines of items to add to a return order from Order Summary screen or from the Task Panel.

7.15.1.1 Solution

Users can create returns using the following criteria:

- [By Order](#)
- [By Container](#)
- [By Items Without an Order](#) (as long as the enterprise allows this)
- [By Extra Item](#)

By Order

The most common way to create a return order is from a previously placed order. After an order is chosen, either the entire order or select lines from the order can be designated for return. A user can also include lines from multiple orders on the same return.

By selecting the Order tab on the Create Return screen, a user can either enter an order number or search for orders by using the Order Search functionality described in [Section 7.7, "Order Inquiry"](#).

When a user clicks the Order tab and searches for the order or enters the order number, a call is made to the `getOrderLineswithTransactionalQuantity` API to get the order information. When the order is added, the available quantity for return shows only the quantity that can be returned, depending upon the modification rules and the line status of the quantity.

Lines that are not in a returnable status cannot be selected by the user for return. This occurs when the order status shows that the item has not been shipped or has already been returned.

Notes entered for this task are saved on the order with YCD_RETURN_INFO note type.

By Container

A user may need to create a return order based on shipping containers. This requires searching for the container's tracking number. Searching for orders by entering the tracking number enables users to find orders and lines to return.

In the Tracking # tab, when the user enters the tracking number and the Add button, a call is made to `getShipmentContainerList`. If the tracking number matches with an existing tracking number, all the orders (complete or partial) that are part of the searched container are added to the return creation in individual panels, with each line showing only the quantities that are available for return.

For each order, the `getOrderLinesWithTransactionalQuantity` API is called. Each order is displayed in its own collapsible panel. When all the orders have been retrieved, a check takes place for the lines that were shipped in the container. This sets the quantity based on the quantity in the container.

By Items Without an Order

Items that are not associated with an order can also be returned, unless the enterprise has turned off the rule that allows returns without an order. In that case, the Items Without an Order tab will not be displayed.

By selecting the By Items Without an Order tab, a user can create a return for an item that is not associated with an order. When a user scans or enters the Item ID, the `getCompleteItemList` API is called to get the item information and verify whether the ID is valid.

When `getCompleteItemList` returns with only one result, a collapsible panel is created, showing the items not associated with an order. A Remove Line hyperlink enables users to remove the item if they entered it by mistake. If `getCompleteItemList` returns with no result or with multiple results, an error stating that the order could not be identified is displayed.

By Extra Item

On the Extra Items tab, a user can create a return for an item that a customer received by mistake. Because these extra items were not purchased, refunds are not issued.

When a user selects the Extra Item tab and either scans or enters the Item ID, the `getCompleteItemList` API is called to get the item information and verify whether the ID is valid. When `getCompleteItemList` returns, it puts the item in a collapsible panel that shows extra items to return. The user can also remove the line if the ID that was entered is incorrect.

If no results or multiple results are returned, an error is displayed.

Sterling Call Center and Sterling Store provides a line type `YCD_EXTRANEIOUS` which is used as the line type when creating an order line for extra items.

Selecting Lines to Return

After a list containing one or more lines is identified for return, the lines that are added to the return order must have the check box selected to be returned. Blind and extra items displayed will always be returned unless they are removed from the UI.

Selecting by Container

If the order has at least one container, a link is shown at the order level which, when clicked, calls `getCompleteShipmentDetails` and opens a container selection pop-up window. This window displays all the containers on the order along with the items in each container. When a user selects one or more containers and clicks Confirm, all the lines in the container are automatically selected and the quantities increased according to the amount in each container. This creates new, collapsible panels for each order if the container has lines from multiple orders.

Stop Delivery Request

If a line has a stop delivery request placed on it, an icon indicates that the status of this request is open until it is completed, at which point the icon is not displayed and the returnable quantity is reduced.

Open Box

If the line on the original sales order was an open box, the open box icon is displayed only to provide information to the CSR. If a customer requests an exchange for an open box, the exchange item will be a regular (non-open box) item.

Gift Lines

If the line on the original sales order was a gift, the gift icon is displayed only for CSR informational purposes.

Bundles

Only entire bundles are returnable, so a return activity can take place only in the context of the entire bundle. For this reason, only parent lines are displayed in the bundle. For more information about bundles, see [Section 7.2, "Configured Items"](#).

Reship Lines

If the reship configuration rule is turned on, which is the default, a column displays an icon identifying the reshipped lines. If the reship rule is turned off and reship lines exist, a check box is displayed for those lines. Selecting the check box displays reship details.

Reshipped lines are available for return, but the price should be \$0.00 in cases where customers receive items they have asked to be reshipped.

To ensure that refunds are not issued for extra items, define pricing user exits with the line type marked as extra and the price set to \$0.00. The line type is configurable using the rule for extraneous line types.

Collecting and Validating Return Order Information

After a user selects items for return, the system must collect and validate the necessary information to create a return order.

When the user clicks the Next button after line selection, a validation occurs to verify whether there is at least one line on the screen with a check box selected. If yes, input is constructed for the createOrder API, but it is not called until the return policy is checked and the user has entered a return reason, as described in [Section 7.15.2, "Entering Return Reason"](#).

The shipTo and billTo addresses on the sales order lines are copied to the new return line. Also, lines are always copied (except for gift lines). If all the header addresses and customer information are the same, this is copied as well. If two header addresses or customer information differ from one another, no copy takes place. This information is captured later in the flow.

No address is populated on the return order if the item is being returned by a gift recipient.

When these processes are complete, a model is set so that the Return Reason screen can use it. This model is read, modified, and saved to ensure that the correct information is used.

Missing addresses are determined later in the flow.

7.15.1.2 End User Impact

If the Reship rule is set, an icon signifying reshipped lines is displayed. If the Reship rule is not set, a check box is displayed at the top of the screen which, if selected, displays reship details.

If the rule that allows the return of items without an order is set, the Items Without an Order tab is displayed and customers can return an item without an order. If the rule is not set, the Items Without an Order tab is not displayed and customers can return an item only if they have a receipt or if the item can be found on an order.

7.15.1.3 Implementation

To display an icon identifying reshipped lines, turn on the Reship configuration. If the Reship rule is turned off and reship lines exist, a check box displays the reshipped details. See [Section 5.16.6, "Configuring Return Entry Rules"](#) for configuration information about the Reship rule.

If your enterprise does not want to allow returns for items not associated with an order, turn off the rule that allows the return of items without an order. In this case, the Items Without an Order tab will not be displayed. For more information, see [Section 5.16.6, "Configuring Return Entry Rules"](#).

7.15.1.4 Reference Implementation

As part of reference implementation, Sterling Call Center and Sterling Store provides pricing for items in the master data of the catalog.

7.15.2 Entering Return Reason

Users need to record information such as the reason for return and whether items are being exchanged. They may want to add a service line or perform return avoidance through price match and appeasement.

7.15.2.1 Solution

After all the lines that have to be put on the order have been selected, the Return Reason screen enables users to perform the actions described in this section.

Selecting a Return Reason

Users must select a return reason for an item to be returned or exchanged. The Apply to All Items button applies the return reason to the entire return order.

For each line that is selected for return on the Return Reason screen, text is displayed at the top of the screen showing the return policy for that item. If the item cannot be returned, a user can optionally select a link to remove that line from the return order. Alternatively, the user can override the return policy by clicking the Override Return Policy button. If the user does not click the Override Return Policy button, the line will not be added to the return, but will be displayed when the user comes back to the screen.

On the Return Reason screen, there may be some lines that can be returned along with lines that cannot be returned. A panel displays the lines that cannot be returned. This information is maintained throughout the order return process and is always displayed on the Return Reason screen as long as the same instance of the wizard exists and the user has not closed the wizard. If the user comes back to this screen after going forward in the flow, the same information will still be here, unless it has been overridden.

Return Policy

When overriding the return policy is allowed, it is determined by the `getReturnPolicy` API and the `YCDGetReturnPolicyUE`. If the item cannot be

returned, the user can override the return policy by clicking the Override Return Policy button.

An Override Return Policy notes pop-up window requires the user to enter a reason for the override before continuing. The rule for overriding return policy note type is configurable.

Creating Exchanges

The Return Reason screen has two check boxes for exchanges:

- **Exchange Returned Items** (check box at the top of the screen:)
When a user selects this check box, it signifies that an exchange order will be created when the user clicks Next. If none of the exchanges is for the same item, the exchange order is created with no lines. Exchange lines can be specified on the next screen.
- **Exchange for the same item** (check box in the panel on the right:)
When the user selects this check box, the Exchange Returned Items check box at the top of the screen is also automatically selected, and an exchange order is populated automatically with details of the item that has been selected for exchange. These details include the quantity and price for an even exchange on the item. To exchange all the items on the Return Reason screen for the same item, click the Apply to All Items button.

Add Return Service

The Add Return Service link creates a pop-up window (called by the `getCompleteItemList` API) with return services available for the selected item, if applicable. If the service is configured to specify the quantity at the service line, the quantity field is editable. An added return service can be associated to only one product line.

Price Match This Item

The link for Price Match This Item launches the price match flow as a sub-task. If a price match is performed on a line in the Return Reason screen, that line is removed from the screen and is no longer considered a part of the return order. For more information about the price match process and the solution offered by Sterling Call Center and Sterling Store, see [Section 7.9.8, "Price Match"](#).

Create Appeasement

The Create Appeasement link launches the appeasement flow as a sub-task. If a customer appeasement is performed on a line in the Return Reason screen, that line is removed from the screen and is no longer considered a part of the return order. For more information about the customer appeasement process and the solution offered by Sterling Call Center and Sterling Store, see [Section 7.9.7, "Customer Appeasement"](#).

7.15.2.2 End User Impact

None.

7.15.2.3 Implementation

The rule for the Override Return Policy note type pop-up window is configurable.

The reasons for returning an item can be configured in the RETURN_REASON common code.

For more information about defining return reasons, see [Section 5.16.2, "Defining Return Reasons"](#).

7.15.2.4 Reference Implementation

You can configure reasons such as:

- Cargo Damaged
- Change of Mind
- Damaged Items
- Loose Parts
- Lower Price Found
- Missing Parts
- Other

See [Section 5.16.2, "Defining Return Reasons"](#) for more information.

7.15.3 Modifying an Exchange

Users need to specify many types of exchange details.

7.15.3.1 Solution

After the user enters a return reason in the Return Reason screen and specifies an exchange, the Add Exchange Items screen is displayed.

In this screen, users can specify the change quantity and Unit of Measure (UOM) on exchange lines, override the price on an exchange line, select the fulfillment option for the exchange line, and change the exchange type.

All other aspects of creating an exchange order are the same as in order capture, which is described in detail in [Section 7.6, "Order Capture"](#).

Default Exchange Type Rule for Permission Control

Permission control can be configured for the default exchange type, which restricts unauthorized users from changing the default exchange type. The rule is enterprise-specific and has three values:

- Regular
- Advanced
- Prepaid

Default Exchange Type Rule for Change

An additional rule enables your organization to decide whether you want to allow the default exchange type value to be changed at all. If this rule is disabled, only the link is hidden; the exchange type description is still displayed.

7.15.3.2 End User Impact

None.

7.15.3.3 Implementation

You can configure two exchange type rules for the Add Exchange Items screen that define the enterprise-specific value for the default exchange type and that specify user access to this feature. See [Section 5.16.12, "Configuring Extraneous Item/Wrong Item Rules"](#) for more information.

7.15.3.4 Reference Implementation

None.

7.15.4 Exchange Fulfillment Options

Users need to be able to view and change fulfillment details on a return order.

The Exchange Fulfillment Options screen enables a user to change the fulfillment method on an exchange order, change the shipping/delivery address on the exchange lines, and change the pickup location on the exchange lines.

For more information about the Exchange Fulfillment Options screen, see [Section 7.9.19, "Change Fulfillment Options"](#).

7.15.5 Fulfillment Summary

Users need to specify and view the shipping, pickup, and delivery methods for return and exchange lines.

See [Section 7.15.15, "Change Return Method"](#) for a complete description of the Fulfillment Summary.

7.15.6 Select Appointment

Users need to be able to manage and view return-order appointments.

On the Appointment screen, users can view return lines on the exchange or return order and see when they will be delivered. In addition, users can change appointments and add delivery instructions.

Consolidation occurs automatically.

The Select Appointment screen in the return and exchange process is exactly the same as it is in order capture. For more information, see [Section 7.15.14, "Change Service Appointment"](#).

7.15.7 Payment Summary

Users need to view and change payment details for return orders and exchange orders.

7.15.7.1 Solution

On the Payment Summary screen, a user can view payment details for returns and exchanges and view header, line charges, and taxes for returns and exchanges, as well as add a note to the return.

In the top left corner of the Payment Summary screen, the Overall Payment Details are displayed. This panel includes Credits from Returns, New Charges from Exchanges, if any, and the Net Balance of the customer refund amount or the amount due from the customer.

If your enterprise implements its own or a third-party payment system, the Sterling Call Center and Sterling Store Payment Summary screen is not displayed. This option is set through a rule to enter payments externally.

Return Panel

If there is no exchange order, only the Return Order Totals panel on the lower left lists Refunded Charges, Taxes, and Fees for items being returned. For Sterling Call Center and Sterling Store, agents perform these tasks in the background. The payment process and how customers get refunds is not handled by the Sterling Call Center and Sterling Store UI, except to display the amount of money the customer will be refunded.

Through the Return Order Totals panel, users can access pop-up windows and screens that enable them to add or modify return fees, charge categories, charge names, charge amounts, and notes, if necessary. These changes are reflected in the totals on the Overall Payment Details panel in the Payment Summary screen.

Exchange Panel

If there is an exchange, the Exchange Order Totals panel on the lower right lists charges, taxes, and discounts for items being exchanged. Through the Exchange panel, users can access pop-up windows and screens that enable them to add or modify exchange fees, add charges, charge names, charge amounts, and notes, if necessary. These changes are reflected in the totals on the Overall Payment Details panel in the Payment Summary screen.

Payment Methods Panel

Users can enter a payment method in the Payment Methods panel in the top right corner of the Payment Summary screen. Through the Payment Methods panel, users can also supply Payment Type information and the amount to be paid, as well as apply coupons and promotions.

For information about typical payment processing, see [Section 7.10, "Payment Processing"](#) contains a complete description of the entire payment processing interface.

Sterling Call Center and Sterling Store provides functionality to process real-time credit card authorizations while confirming draft orders. For more information about real-time credit card authorizations, see [Section 7.12, "Real-Time Credit Card Authorization"](#).

7.15.7.2 End User Impact

None.

7.15.7.3 Implementation

None.

7.15.7.4 Reference Implementation

None.

7.15.8 Create Exchange Order

Customer may want an exchange item for the items being returned. In such situations call center and store representatives may need to create return orders as requested by the customer.

7.15.8.1 Solution

Sterling Call Center and Sterling Store provides a user interface task which enables users to create exchange order for the return order.

This section explains the Create Exchange process and the solution offered by Sterling Call Center and Sterling Store.

Adding Items To The Exchange Order

The Add Items screen enables users to add lines to the exchange order. For more information about adding items to the exchange order, see [Section 7.15.3, "Modifying an Exchange"](#).

Exchange Fulfillment Options

On this screen, users can view and modify the fulfillment options for the exchange order. For more information about exchange fulfillment options, see [Section 7.15.4, "Exchange Fulfillment Options"](#).

Fulfillment Summary

The Fulfillment Summary screen provides the complete scenario of how the exchange order is configured and fulfilled. For more information about fulfillment summary, see [Section 7.15.5, "Fulfillment Summary"](#).

Select Appointment

The Select Appointment screen enables users to create and modify appointments. In addition, it also allows users to enter and modify service instructions. For more information about selecting appointments, see [Section 7.15.6, "Select Appointment"](#).

Payment Confirmation

The Payment Confirmation screen displays the summary of the payment impact on the order as a result of adding exchange items. For more information about viewing and confirming payment details, see [Section 7.15.17, "Payment Confirmation"](#).

7.15.8.2 End User Impact

If an exchange order is already created for a return order and the status of the exchange order is `Created`, the user cannot create another exchange order for the corresponding return order. If the exchange order is in the `Draft` status, the Add Items screen is displayed, which enables users to add items to the exchange order.

7.15.8.3 Implementation

This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.15.8.4 Reference Implementation

As part of reference implementation, Sterling Call Center and Sterling Store provides permissions to create exchange order to all user groups.

7.15.9 Report Extra Items

Sometimes a customer may report that the he has received extra items in their shipment by mistake. For example, if a customer ordered a single shirt and has received two shirts instead. In such situations, the extra items can either be returned back to the enterprise or the CSR can allow the customer to keep the extra items depending on the value of the items.

7.15.9.1 Solution

Sterling Call Center and Sterling Store provides a user interface task which enables users to report extra items.

This section explains the Report Extra Items process and the solution offered by Sterling Call Center and Sterling Store.

Identifying Extra Items And Creating A Return

The Extra Item Identification screen is provided for users to enter data about the extra item. In some instances, the customer and CSR may not be able to identify the specific item that was given to the customer. For example, the extra item may be a blue shirt that the customer is not able to describe well enough for the CSR to find the correct item ID. In this scenario, you can configure the system to allow the CSR to enter an "unknown" item in this screen. Since the application requires you to use a valid item ID, you can configure a temporary item ID to be saved on the return. In this case, the CSR can manually enter a description of the item in this screen. When the item is actually received at the warehouse, the correct item ID can be substituted on the return.

The `getCompleteItemList` is called to validate the item ID, when a product or service item ID or alternate item ID is entered or scanned. The `createOrder` API is called to create a return for the extra items. Sterling Call Center and Sterling Store provides a line type `YCD_EXTRANEIOUS` which is used as the line type when creating an order line for extra items.

Displaying Fulfillment Summary For Return Items

The Fulfillment Summary screen displays the suggest return method for the extra items reported. For more information about fulfillment summary, see [Section 7.15.5, "Fulfillment Summary"](#).

Creating Service Appointment For Return Items

If the user chooses to have the extra item picked up, the Return Service Appointment screen is displayed. For more information about creating service appointments, see [Section 7.15.14, "Change Service Appointment"](#).

7.15.9.2 End-User Impact

None.

7.15.9.3 Implementation

This section explains the configurations for the return extra item task.

- Sterling Call Center and Sterling Store allows you to configure the line type for extraneous items and wrongly shipped items. For more information about configuring the line types for extra items, see [Section 5.16.12, "Configuring Extraneous Item/Wrong Item Rules"](#).
- Sterling Call Center and Sterling Store allows you to configure rules to allow unknown item returns and the item ID to be used for unknown item returns. For more information about allowing unknown item returns and configuring the item ID for unknown item returns, see [Section 5.16.5, "Configuring Rules for Wrongly Shipped Items"](#).
- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.15.9.4 Reference Implementation

This section explains the reference implementation provided as part of the report extra item task.

- Unknown item returns are allowed for XYZ-CORP and XYZ-RETAIL organizations.
- The item ID for a Unknown item is WRONGITEM for XYZ-CORP and XYZ-RETAIL organizations.
- The line type for the return item is set to YCD_EXTRANEIOUS_LINE_TYPE for XYZ-CORP and XYZ-RETAIL organizations.
- As part of reference implementation, Sterling Call Center and Sterling Store provides permissions to report extra items to all user groups.

7.15.10 Report Wrong Items

Sometimes a customer may report that he received different items than what he ordered. For example, the customer may have ordered a black shirt, but received a blue shirt instead. In such situations you may need to reship the items that were ordered and also create a return for the wrong items that were delivered.

7.15.10.1 Solution

Sterling Call Center and Sterling Store provides a user interface task which enables users to report wrong items.

This section explains the Report Wrong Items process and the solution offered by Sterling Call Center and Sterling Store.

Reshipping Items

When a customer reports that he has received wrong items, the originally ordered items need to be reshipped. The `validateReship` API is called to verify if the item can be reshipped. If the items cannot be reshipped, the user can override reship validation only if the user is a supervisor. For more information about reshipping an item, see [Section 7.9.13, "Reship an Item"](#).

Refunding The Amount For Unavailable Items

Sometimes, the ordered items may be out of stock, or the customer might not want the items. In such situations, the CSR may need to refund the amount for the originally ordered items. The Payment Confirmation screen displays the summary of the payment impact on the order as a result of the refund. For more information about payment summary, see [Section 7.15.17, "Payment Confirmation"](#).

Identifying Wrong Items And Creating A Return

The Wrong Item Identification screen is provided for users to enter data about the wrong item. In some instances, the customer and CSR may not be able to identify the specific item that was given to the customer. For example, the wrong item may be a blue shirt that the customer is not able to describe well enough for the CSR to find the correct item ID. In this scenario, you can configure the system to allow the CSR to enter an "unknown" item in this screen. Since the application requires you to use a valid item ID, you can configure a temporary item ID to be saved on

the return. In this case, the CSR can manually enter a description of the item in this screen. When the item is actually received at the warehouse, the correct item ID can be substituted on the return. The createOrder API is called to create a return for the wrong items.

Modifying The Fulfillment Method Of The Return Items

The customer can choose to modify the fulfillment method of the return items. The changeOrder API is called to modify the fulfillment option for the wrong item. For more information about fulfillment summary, see [Section 7.15.5, "Fulfillment Summary"](#).

7.15.10.2 End-User Impact

None.

7.15.10.3 Implementation

This section explains the configurations for the return wrong item task.

- Sterling Call Center and Sterling Store allows you to configure the line type for extraneous items and wrongly shipped items. For more information about configuring the line types for wrong items, see [Section 5.16.12, "Configuring Extraneous Item/Wrong Item Rules"](#).
- Sterling Call Center and Sterling Store allows you to configure rules to allow unknown item returns and the item ID to be used for unknown item returns. For more information about allowing unknown item returns and configuring the item ID for unknown item returns, see [Section 5.16.5, "Configuring Rules for Wrongly Shipped Items"](#).
- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.15.10.4 Reference Implementation

This section explains the reference implementation provided as part of the report wrong item task.

- Unknown item returns are allowed for XYZ-CORP and XYZ-RETAIL organizations.
- The item ID for a Unknown item is WRONGITEM for XYZ-CORP and XYZ-RETAIL organizations.

- The line type for the return item is set to YCD_WRONGLY_SHIPPED_LINE_TYPE for XYZ-CORP and XYZ-RETAIL organizations.
- As part of reference implementation, Sterling Call Center and Sterling Store provides permissions to report wrong items to all user groups.

7.15.11 Report Unexpected Items

Sometimes a customer may report that he did not order for any items and has received some items. For example, the shipping carrier may have dropped the shipment off at the wrong house. In such situations you may need to create a customer and then create a return for the wrongly shipped items.

7.15.11.1 Solution

Sterling Call Center and Sterling Store provides a user interface task which enables users to report unexpected items.

This section explains the Report Unexpected Items process and the solution offered by Sterling Call Center and Sterling Store.

Identifying Customers

When a customer reports that he had not ordered for any items, but has received some items, you need to search if the customer already exists. If the customer does not exist, you may need to create a new customer.

Identifying or Searching for a Customer

Sterling Call Center and Sterling Store provides the functionality to search for a customer, based on three options:

- [Advanced Customer Search](#)
- [Search based on address](#)
- [Basic Customer Search](#)

Advanced Customer Search

This screen is recommended if the user wants to report unexpected items for customers maintained by Sterling Call Center and Sterling Store. This screen provides a full set of features to search against your database. The Advanced Customer Search option enables you to use additional

addresses and payment methods that have been associated to the customer. You must use the Advanced Customer Search if you want to access the customers created in the Sterling Call Center and Sterling Store. All customer information is obtained through a `getCustomerList` API call.

When searching a customer master database, you can enable the search on business customers by configuring the Business Customers Enabled rule. You can also configure the default customer type when searching for a customer. For more information about configuring the display of customer identification screen, see [Section 5.7.5, "Configuring Customer Search Rules"](#).

The user can enter a new address or modify an existing address in this screen. For more information about the address capture screen, see [Section 7.6.4.2, "Address Verification"](#).

When creating a customer from the Advanced Customer Search screen, the create customer wizard is loaded in a pop-up window. [Section 7.16, "Customer Creation"](#) contains more information about this task.

When a new address is added or modified using the Advanced Customer Search screen, the new address is saved against the selected customer record through a `manageCustomer` API call.

The Advanced Customer Search screen contains validations to ensure that the end user enters enough information for a search. If this screen is extended to contain additional fields, these validations are not performed. This enables you to create validations based on the fields that you added. For more information about customizing screens, see the *Selling and Fulfillment Foundation: Customization Guide*.

Search based on address

If you do not maintain a customer database, you can choose to display this screen which allows the user to search among the existing addresses in the system.

The `getPersonInfoList` API is called to retrieve the addresses for the search criteria. The `getConsumerDetails` API is used to retrieve the details of the consumer associated with the address. If a consumer corresponding to the address is not found, and if corporate users are enabled for the enterprise, the system attempts to find a corporate user associated with the address.

The user can enter a new address or modify an existing address in this screen. For more information about the address capture screen, see [Section 7.6.4.2, "Address Verification"](#).

The Address Entry screen contains validations to ensure that the end user enters enough information for a search. If this screen is extended to contain additional fields, these validations are not performed. This enables you to create validations based on the fields that you added. For more information about customizing screens, see the *Selling and Fulfillment Foundation: Customization Guide*.

Basic Customer Search

This screen is not recommended for new installations and is only provided for backward compatibility.

Sterling Call Center and Sterling Store provides a configuration to enable searches based on customer types. You can also configure the default customer type to be used when searching for a customer. For more information about configuring the customer types, see [Section 5.7.5, "Configuring Customer Search Rules"](#).

The `getCustomerList` API is used to retrieve the details of the business customer or consumer customer.

The user can enter a new address or modify an existing address in this screen. For more information about the address capture screen, see [Section 7.6.4.2, "Address Verification"](#).

The Basic Customer Search screen contains validations to ensure that the end user enters enough information for a search. If these screens are extended to contain additional fields, these validations are not performed. This enables you to create validations based on the fields that you added. For more information about customizing screens, see the *Selling and Fulfillment Foundation: Customization Guide*.

Identifying Unexpected Items And Creating A Return

The Unexpected Item Identification screen is provided for users to enter data about the unexpected item. In some instances, the customer and CSR may not be able to identify the specific item that was given to the customer. For example, the item may be a blue shirt that the customer is not able to describe well enough for the CSR to find the correct item ID. In this scenario, you can configure the system to allow the CSR to enter an "unknown" item in this screen. Since the application requires you to

use a valid item ID, you can configure a temporary item ID to be saved on the return. In this case, the CSR can manually enter a description of the item in this screen. When the item is actually received at the warehouse, the correct item ID can be substituted on the return.

The `getCompleteItemList` is called to validate the item ID, when a product or service item ID or alternate item ID is entered or scanned. The `createOrder` API is called to create a return for the unexpected items. Sterling Call Center and Sterling Store provides a line type `YCD_EXTRANEIOUS` which is used as the line type when creating an order line for extra items.

Displaying Fulfillment Summary For Return Items

The Fulfillment Summary screen displays the suggested return method for the unexpected items reported. For more information about fulfillment summary, see [Section 7.15.5, "Fulfillment Summary"](#).

Creating Service Appointment For Return Items

If the user chooses to have the unexpected item picked up, the Return Service Appointment screen is displayed. For more information about creating service appointments, see [Section 7.15.14, "Change Service Appointment"](#)

7.15.11.2 End-User Impact

- The user will see either the Advanced Customer Search screen, Address Search screen or Basic Customer Search screen based on the configuration.
- Users can search for customers based on the customer type, if the configuration for customer type search is enabled and the default customer type during search is Business.

7.15.11.3 Implementation

This section explains the configurations for the return unexpected item task.

- Sterling Call Center and Sterling Store allows you to configure rules to allow unknown item returns and the item ID to be used for unknown item returns. For more information about allowing unknown

item returns and configuring the item ID for unknown item returns, see [Section 5.16.5, "Configuring Rules for Wrongly Shipped Items"](#).

- Sterling Call Center and Sterling Store allows you to configure the type of the customer search screen that needs to be displayed. For more information about configuring the customer search screen, see [Section 5.7.5, "Configuring Customer Search Rules"](#).
- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.15.11.4 Reference Implementation

This section explains the reference implementation provided as part of the report wrong item task.

- Unknown item returns are allowed for XYZ-CORP and XYZ-RETAIL organizations.
- The item ID for a Unknown item is WRONGITEM for XYZ-CORP and XYZ-RETAIL organizations.
- The line type for the return item is set to YCD_EXTRANEIOUS_LINE_TYPE for XYZ-CORP and XYZ-RETAIL organizations.
- As part of reference implementation, Sterling Call Center and Sterling Store provides permissions to report unexpected items to all user groups.

7.15.12 Issue Refund Now

A customer may want the refund to be issued immediately. For example, if the return method of an item is pick up and no representatives from the enterprise arrived to pick up the item, the customer may call the call center or store and demand for an immediate refund. In such situations, the call center and store representatives may need to issue a refund for the items immediately.

7.15.12.1 Solution

Sterling Call Center and Sterling Store provides a user interface task which enables users to issue refund to the customer immediately.

The `getCompleteOrderDetails` API is called to display the details of all order lines of the return order. When the user selects the lines for refund

and clicks Next, the createOrderInvoice API is called to create the invoice for the selected items. The output of the createOrderInvoice API is used to display the header charges, tax breakup, line details and line charges in the Invoice Details screen.

The processOrderPayments API is called to authorize the payment type and refund for the selected items. If the return order line is associated with a sales order, this API processes payments against the corresponding sales order. If the return order line is not associated with a sales order, this API processes payments against the return order.

The getChargeNameList API is called to display the names of the charges and the getChargeCategoryList API is called to display the charge category if the charge name is not displayed.

7.15.12.2 End-User Impact

None.

7.15.12.3 Implementation

This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.15.12.4 Reference Implementation

Sterling Call Center and Sterling Store provides permissions to issue refund for return orders to all users as part of reference implementation.

7.15.13 Change Return Address

A customer may want to change or modify the addresses on a return order. In such situations, call center or store representatives can modify the addresses as requested.

Note: When the order header contains a CustomerContactID, the manageCustomer API saves the addresses to the applicable customer contact.

7.15.13.1 Solution

Sterling Call Center and Sterling Store provides a user interface task which enables users to change the address on a return order.

When the user has to enter an order address for a new customer, or modify an existing address, the validity of the address needs to be verified. For more information about address verification, see [Section 7.6.4.2, "Address Verification"](#).

The changeOrder API is called to change the address. If the return method is pick up, the generateWorkOrder API is called to take a new appointment.

7.15.13.2 End-User Impact

None.

7.15.13.3 Implementation

This section explains the configurations for the change return address task.

- Sterling Call Center and Sterling Store allows you to configure the return order statuses for which changing return address is allowed. For more information about configuring the return order modification statuses, see [Section 5.16.1, "Configuring Return Order Modification Rules"](#).
- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.15.13.4 Reference Implementation

Sterling Call Center and Sterling Store provides permissions to change return address to all users as part of reference implementation.

7.15.14 Change Service Appointment

A customer may want to change the appointment for a return order and an exchange order, if applicable. An appointment needs to be taken with the corresponding enterprise to agree on a time frame for the services to be fulfilled. Additionally, customers may need to provide the enterprise with specific instructions to ensure that the service fulfillment is successful, for example, the customer may request the retailer to deliver the exchange item at the back door.

7.15.14.1 Solution

Sterling Call Center and Sterling Store provides configurable appointment screens, which include the Service Appointment screen and Service Fulfillment Summary screen that allow users modify service appointments and enter service instructions. For more information about configuring the service appointment calendar, see [Section 5.6.22, "Configuring the Service Appointment Calendar View"](#).

Service Fulfillment Summary Screen

The Service Fulfillment Summary screen provides visibility to service appointments pertaining to a return order and exchange order, if applicable. The `getOrderFulfillmentDetails` API is called to display a list of appointments.

The gift options hyperlink is displayed only for the exchange orders. When you select an item as a gift item, the `changeOrder` API is called to modify the gift option.

Service Appointment Screen

A calendar is displayed from which the user can select the appropriate appointment for the customer.

You can also configure the number of weeks to display on the calendar at a time. By default, a complete month is displayed. To improve the performance, reduce the number of weeks to display to two so that only two weeks of data needs to be returned by the `getWorkOrderAppointmentOptions` API.

The `getOrderFulfillmentDetails` API is called to display the details of the appointment and the order lines included in the appointment.

Users can look beyond the initial weeks displayed on the calendar in case there are no acceptable appointments within the initial timeframe. By default, the appointment calendar allows the user to look out infinitely into the future for appointments. However, your capacity system may not have visibility beyond a certain timeframe. You can configure the maximum number of days to allow users to look into the future. After the maximum number of days is reached in the appointment screen, the user will not be able to proceed to the next time period.

When an appointment is saved, the `reserveOrder` API is called for exchange order lines if there are any on this appointment. This API calls

the changeOrder API to make a reservation. If the reservation succeeds, the modifyWorkOrder API is called to save the appointment on the work order.

The return order lines are displayed in the return order lines panel and exchange order lines are displayed in the exchange order lines panel.

7.15.14.2 End-User Impact

None.

7.15.14.3 Implementation

This section explains the configurations for the change service appointment task.

- To change the service appointment calendar view, configure the following rules:
 - Calendar Display
 - Default Appointment Calendar View
 - Capacity Information

For more information about configuring the service appointment calendar view, see [Section 5.6.22, "Configuring the Service Appointment Calendar View"](#).

- Sterling Call Center and Sterling Store allows you to configure the return order statuses for which changing service appointment is allowed. For more information about configuring the return order modification statuses, see [Section 5.16.1, "Configuring Return Order Modification Rules"](#).
- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.15.14.4 Reference Implementation

The section explains the reference implementation provided for the change service appointment task.

- An instruction type called 'DELIVERY' is provided for saving service appointment instructions.

- Sterling Call Center and Sterling Store provides permissions to change service appointments and instructions to all users as part of reference implementation.

7.15.15 Change Return Method

Sometimes a customer may want to change the return method of the return items or fulfillment method for the exchange items. For example, a customer may have agreed to ship the item back to a return center when creating a return, but may call back later to schedule a return pickup appointment.

7.15.15.1 Solution

Sterling Call Center and Sterling Store provides a user interface task which enables users to change the return method of an item.

This section explains the Change Return Method process and the solution offered by Sterling Call Center and Sterling Store.

The `getOrderFulfillmentDetails` API is called to retrieve the fulfillment details of the return items. The `getReturnMethod` API is called to retrieve the return method of all the items.

Delivery methods are suggested by Sterling Call Center and Sterling Store and can be customized through the `YCDGetReturnMethodUE` user exit. The delivery methods are:

- Return Pickup—The items being returned will be picked up at the customer's address.
- Return Shipping—The customer will ship the items back to the return center.
- Items can be kept—The customer can keep the items because the cost of returning items is higher than the value of the item.

When a return line is marked as Items can be kept, the line type is changed to Credit. When an extraneous line is marked as Items can be kept, the line type is changed to `ExtraLine_Credit`.

If there are any exchange items, the `getOrderFulfillmentDetails` API is called again to retrieve the fulfillment details of the exchange items.

After the user's first visit to the Fulfillment Summary screen, if he makes changes to the Return Order and revisits the Fulfillment Summary

screen, it may not contain changes made during the original visit because the Fulfillment Summary screen always chooses options based on the configuration that is set by the enterprise for the items.

For example, originally, a pickup appointment may have been scheduled for three items being returned (two expensive items and one inexpensive item). The customer changes his/her mind and decides to return only the inexpensive item instead. On the second visit to the Fulfillment Summary screen, the customer should be instructed to keep the item instead. To help users remember this, a warning message is displayed on the second and subsequent visits to the Fulfillment Summary screen reminding them to review the information carefully on this screen and ensure that options they set previously are still in effect. They can reset these options, if necessary.

The current delivery method, the delivery methods that are allowed, and the user's privileges decide which return methods are displayed, as determined by the `IsSchedulePickupAllowed`, `IsReturnReturnNodeFound`, and `IsReceiptExpected` attributes. If `IsReceiptExpected` is returned as "N" from the `getReturnMethod` API, then the Customer Can Keep button is displayed, provided the user has privileges.

When the user modifies the return method and clicks Next, the `changeOrder` API is called to update the return method.

The `generateWorkOrder` API checks for order lines marked for delivery and determines if it has a delivery service associated with it, and if not, the `generateWorkOrder` API creates one and then creates a work order. If several work orders are required, `generateWorkOrder` tries to consolidate them.

Handling Bundle Items

Bundles on exchange lines are handled so that if a parent is selected, all the children are also selected. For more information about bundles, see [Section 7.2, "Configured Items"](#).

7.15.15.2 End User Impact

The Customer Can Keep button is displayed only if the user has permissions to Override Return Method To Allow Customer To Keep Items.

7.15.15.3 Implementation

This section explains the configurations for the Change Return Method task.

- The YCDGetReturnMethodUE applies a standard user exit template and passes the result to the user exit. The default implementation is not provided for this user exit.
- If the user selects the Ship To Return Center return method, the RETURN_FULFILLMENT fulfillment type is used to determine the correct return center to receive the item. Ensure that you configure the sourcing rules to select the appropriate return center node for RETURN_FULFILLMENT fulfillment type. For more information about configuring sourcing rules, see the *Sterling Distributed Order Management: Configuration Guide*. The return center node will be displayed on the Return Fulfillment Summary screen so the CSR can tell the customer the correct address to ship the items back to the return center.
- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.15.15.4 Reference Implementation

This section explains the reference implementation provided as part of change return method task.

- Sterling Call Center and Sterling Store provides access to the Customer Can Keep button to all users as part of reference implementation
- Sterling Call Center and Sterling Store provides permissions to change the return method to all users as part of reference implementation.

7.15.16 Cancel Return Order

A customer may want to cancel some of the items or the entire return order. The customer may also want to cancel the exchange order corresponding to the return order.

7.15.16.1 Solution

Sterling Call Center and Sterling Store provides a user interface task which enables users to cancel some of the items or all the items included in the return order and exchange order.

The `getCompleteOrderDetails` API is called to display the details of the order. The `changeOrder` API is called to cancel the item(s).

Selecting The Cancel Quantity

The users can cancel the entire order, or cancel a part of the order as requested by the customer.

Cancelling Related Lines

When the user selects a parent item that has related product or service lines for cancellation, the related lines are automatically selected for cancellation.

Cancellation Reasons For Return

Sterling Call Center and Sterling Store provides a list of common codes to display reasons for cancelling a return item. You can define reasons such as 'change of mind' to allow the Cancel action.

Cancellation Of Exchange Order Corresponding To The Return Order

If the return that is being cancelled has an associated exchange order, Sterling Call Center and Sterling Store enables users to cancel some of the items or all the items in the exchange order. For more information about canceling an exchange order, see [Section 7.9.16, "Cancel Order"](#).

Viewing and Confirming Payment Details

The Payment Confirmation screen displays the summary of the payment impact on the order as a result of cancelling items. For more information

about viewing and confirming payment details, see [Section 7.15.17, "Payment Confirmation"](#).

Note: If the user attempts to cancel a line for which an invoice has been created, the Sterling Call Center and Sterling Store application displays an error, and does not allow the user to cancel the line.

7.15.16.2 End-User Impact

None.

7.15.16.3 Implementation

This section explains the configurations for the cancel return order task.

- Sterling Call Center and Sterling Store allows you to define reason codes that are available during the cancellation process. For more information about defining cancellation reasons, see [Section 5.16.8, "Defining Return Cancellation Reasons"](#).
- Sterling Call Center and Sterling Store allows you to configure the return order statuses for which cancellation of return order lines is allowed. If you allow cancellation of return order lines for a particular status, ensure that you allow cancellation of work order lines for the corresponding status. For more information about configuring the order statuses for modification, see [Section 5.16.1, "Configuring Return Order Modification Rules"](#).
- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign permissions to user groups for this task.

7.15.16.4 Reference Implementation

This section explains the reference implementation provided as part of cancel return order task.

- The following reasons are configured in the "CANCEL_REASON" common code for returns:
 - Change of Mind
 - Others

- Sterling Call Center and Sterling Store provides permissions to cancel return order to all users as part of reference implementation.

7.15.17 Payment Confirmation

Users need to view and change payment details for return orders and exchange orders.

Note: When the order header contains a CustomerContactID, the manageCustomer API saves the payment methods to the applicable customer contact.

7.15.17.1 Solution

On the Payment Summary screen, the user can view payment details for returns and exchanges, view header, line charges, and taxes for returns and exchanges, as well as add a note to the return.

The getCompleteOrderDetails API is called to retrieve the details of the return order and exchange order, if applicable. The getChargeCategoryList API is called to retrieve the list of charge categories. The getChargeNameList API is called to retrieve the list of charge names. The getChargeCategoryList API and getChargeNameList API are called again to retrieve list of charge categories and the list of charge names respectively for the exchange order, if an exchange order exists.

If there is a payment impact, the changeOrder API is called to confirm the payment.

7.15.17.2 End User Impact

If the Exchange Type attribute is set to Regular or Advanced, the user will see a consolidated summary for return orders and exchange orders. If the Exchange Type attribute is set to Advanced Prepaid, the user will see separate summary panels for return orders and exchange orders.

7.15.17.3 Implementation

You should assign permissions to users for the following tasks:

- Add Coupon
- Add/ Modify Charges

- Add Payment Method

7.15.17.4 Reference Implementation

None.

7.16 Customer Creation

Sterling Call Center and Sterling Store enables you to create two types of customers:

- Consumer Customers
- Business Customers

Note: The customer creation feature launches a single wizard that displays different screens depending on the customer type.

7.16.1 Create Consumer Customer

Call center and store representatives must be able to create customer records containing contact and payment information.

Note: Payment information can only be entered if the Customer Payment Method rule is configured to allow customer payment method information to be stored and used through the application.

7.16.1.1 Solution

Sterling Call Center and Sterling Store provides a user interface feature that enables CSRs to create and manage consumer customers. This

section explains the Create Consumer task and the solution offered by Sterling Call Center and Sterling Store.

Note: When a CSR logs in to Sterling Call Center and Sterling Store, the organizations to which the CSR has access are automatically retrieved.

If the CSR has access to only one organization or all the organizations point to the same customer master organization, the Create Consumer screen is immediately displayed at customer creation. However, if the CSR has access to multiple enterprises and the enterprises are associated to more than one customer master organization, the CSR must first select an enterprise before creating a customer for the customer master organization of the selected enterprise.

Create a Contact

A consumer customer consists of a single contact. The only information required for a consumer customer is a consumer contact record, which serves as a unique identifier. The First Name and Last Name of a customer are mandatory.

The Create Consumer screen contains a Login field in which you can enter a User ID.

Note: Login cannot be changed after it has been entered and saved.

When a user ID is entered:

- The createUserHierarchy API creates a user record containing the customer's information, such as the customer's user ID, locale, password, e-mail address, and contact information.

Note: The Selling and Fulfillment Foundation's IS_GLOBAL_USER rule determines if the UserID on the user record is globally unique or unique to only the customer enterprise.

If the UserID is globally unique, the DisplayUserID, the LoginID stored on the user record, and the UserID stored on the contact record are the same. If the UserID is specific to the customer enterprise, the DisplayUserID is collected on the screen, and an underscore and the organization suffix are appended to the LoginID stored on the user record and the UserID stored on the contact record to make them globally unique.

- The GeneratePassword attribute in the createUserHierarchy API is set to Y to generate a web user password for the customer. The createUserHierarchy API invokes the RESET_PASSWORD.ON_SUCCESS, which triggers a service call to YCD_Send_Generated_Password_8.5. This causes an e-mail, containing the web user's login and password, to be sent to the newly created customer. This functionality is activated through Sterling Call Center and Sterling Store's reference implementation.

Note: If a user ID is provided, the e-mail address is mandatory in order to send an e-mail containing the web user's password to the customer. However, if a user ID is not provided, the e-mail address is not mandatory, and it will be saved to only the customer's contact record.

If a user record already exists, the manageUserHierarchy API is called.

The YCD_DEFAULT_CONSUMER_USER_ROLE rule is provided as part of the Sterling Call Center and Sterling Store factory setup. If a value has been defined for this rule, the defined user role is automatically assigned

to the new user record, providing the user with the required permissions to access the Web channel, if required.

The `manageCustomer` API is called to save the customer record. If the user creating the customer requires permission to access customers, the `manageCustomerAssignment` API is called to assign the customer to the user and his team.

Add a Payment Method

If the Customer Payment Method rule is configured for a customer's enterprise to allow the customer payment method information to be stored and used through the application, a user can add payment methods to the customer's account. For more information about configuring customer payment methods, see [Section 5.7.6, "Configuring Customer Payment Method Rules"](#). The `manageCustomer` API is called to assign the payment methods. These payment methods can be used by the customer when placing orders. The default payment method will be the default option selected on the orders created for the customer.

7.16.1.2 End-User Impact

If the Configure Payment Method rule is configured for a customer's enterprise to allow the customer payment method information to be stored and used through the application, the user will see the Add Payment Method hyperlink. For more information about configuring customer payment methods, see [Section 5.7.6, "Configuring Customer Payment Method Rules"](#).

7.16.1.3 Implementation

If a user wants to add payment methods to a customer record, the Configure Payment Method rule should be configured for the customer's enterprise to allow the customer payment method information to be stored and used through the application, and all the payment methods must be previously defined in the Channel Applications Manager for the organization of the user creating the customer. For more information about configuring the customer payment methods, see [Section 5.7.6, "Configuring Customer Payment Method Rules"](#). For more information about adding payment methods, see the *Sterling Distributed Order Management: Configuration Guide*.

This task is permission controlled. You can launch this task only if you belong to a user group that is assigned the necessary permissions.

7.16.1.4 Reference Implementation

Two consumer customers are provided as reference implementation for the XYZ-CORP organization:

- Susan Queue (susieq)
- John Doe (jdoe)

Note: Consumer_Customer_1 is the variable name for susieq, and Consumer_Customer_2 is the variable name for jdoe. You can modify variables in the ycd_ref_variable.properties file. For more information about the ycd_ref_variable.properties file, see the *Sterling Call Center and Sterling Store: Installation Guide*.

Note: XYZ-CORP is the customer master organization for the XYZ-RETAIL and XYZ-ONLINE organizations.

Each consumer customer has a customer record, contact record, associated address, payment method, and user record.

7.16.2 Create Business Customer

Call center and store representatives must be able to create business customer records containing contact and payment information.

Note: Payment information can only be entered if the Customer Payment Method rule is configured to allow customer payment method information to be stored and used through the application.

7.16.2.1 Solution

Sterling Call Center and Sterling Store provides a user interface feature that enables users to create and manage business customers. This

section explains the Create Business Customer task and the solution offered by Sterling Call Center and Sterling Store.

Note: When a CSR logs in to Sterling Call Center and Sterling Store, the organizations to which the CSR has access are automatically retrieved.

If the CSR has access to only one organization or all the organizations point to the same customer master organization, the Customer Entry screen is immediately displayed at customer creation. However, if the CSR has access to multiple enterprises and the enterprises are associated to more than one customer master organization, the CSR must first select an enterprise before creating a business customer for the customer master organization of the selected enterprise.

Create a Customer

A business customer consists of a Buyer Organization and any number of contacts. The addresses and payment methods can be defined for the customer or for specific contacts. The unique identifier of a business customer is the Customer ID.

Note: The Enterprise Organization suffix defined in the Channel Applications Manager will automatically be appended to the Customer ID, creating the Customer Organization record.

The minimum information required to create a Business Organization is the business customer's ID and name, and a single contact record. The Create Business Customer task enables you to enter this information and other customer and organization-level attributes, as well as the default addresses and contact information pertaining to the customer.

Note: You must define at least one customer contact for a business customer. The First Name and Last Name of the customer contact are mandatory.

The Contact Entry screen contains a Login field in which you can enter a user ID.

Note: Login cannot be changed after it has been entered and saved.

When a user ID is entered:

- The createUserHierarchy API creates a user record containing the customer's information, such as the customer's user ID, locale, password, e-mail address, and contact information.

Note: The Selling and Fulfillment Foundation's IS_GLOBAL_USER rule determines if the UserID on the user record is globally unique or unique to only the customer enterprise.

If the UserID is globally unique, the DisplayUserID, the LoginID stored on the user record, and the UserID stored on the contact record are the same. If the UserID is specific to the customer enterprise, the DisplayUserID is collected on the screen, and an underscore and the organization suffix are appended to the LoginID stored on the user record and the UserID stored on the contact record to make them globally unique.

- The GeneratePassword attribute in the createUserHierarchy API is set to Y to generate a web user password for the customer. The createUserHierarchy API invokes the RESET_PASSWORD.ON_SUCCESS event, which triggers a service call to YCD_Send_Generated_Password_8.5. This causes an e-mail, containing the web user's login and password, to be sent to the newly created customer. This functionality is activated through Sterling Call Center and Sterling Store's reference implementation.

Note: If a user ID is provided, the e-mail address is mandatory in order to send an e-mail containing the user's password to the customer. However, if a user ID is not provided, the e-mail address is not mandatory, and it will be saved to only the customer's contact record.

If a user record already exists, the `manageUserHierarchy` API is called.

You can assign user roles to the new user record by selecting the appropriate check boxes in the Customer Account panel. The `getUserGroupList` API populates the list of available user roles based on the organization and the "EXTERNAL" group type. The "EXTERNAL" group type limits the list of user groups to those groups exposed for web use.

The `getCurrencyList` API is called to populate the Default Currency drop-down list. As part of the customer creation process, you can define only one currency for the customer. You can define additional currencies and set a default currency at a later time using the Manage Customer Information task.

The `getCommonCodeList` API is called to populate the drop-down options for Status, Relationship Type, Customer Level, and Vertical. This data is cached, as described in [Section 10.3, "Cached Data"](#).

All addresses created in the customer entry screen are created at the customer level, and are accessible by all contacts of the customer record. All addresses created in the contact screen are created specifically for that contact. The `manageCustomer` API is called to save the customer record. If the user requires permission to access customers, the `manageCustomerAssignment` API is called to assign the customer to the user and the user's team.

Add a Payment Method

If the Customer Payment Method rule is configured for a customer's enterprise to allow the customer payment method information to be stored and used through the application, a user can add payment methods to the customer's account. For more information about configuring the customer payment methods, see [Section 5.7.6, "Configuring Customer Payment Method Rules"](#). The `manageCustomer` API is called to assign the payment methods. These payment methods can be used by the customer when placing orders. The default payment method will be the default option selected in the orders created for the customer.

7.16.2.2 End-User Impact

If the Customer Payment Method rule is configured for a customer's enterprise to allow the customer payment method information to be stored and used through the application, the user will see the Add

Payment Method hyperlink. For more information about configuring the customer payment methods, see [Section 5.7.6, "Configuring Customer Payment Method Rules"](#).

7.16.2.3 Implementation

If the user wants to add payment methods to a customer record, the Customer Payment Method rule should be configured for the customer's enterprise to allow the customer payment method information to be stored and used through the application, and all the payment methods must be previously defined in the Channel Applications Manager for the organization of the user creating the customer. For more information about configuring the customer payment methods, see [Section 5.7.6, "Configuring Customer Payment Method Rules"](#). For more information about adding payment methods, see the *Sterling Distributed Order Management: Configuration Guide*.

This task is permission controlled. You can launch this task only if you belong to a user group that is assigned the necessary permissions.

7.16.2.4 Reference Implementation

Two business customers are provided as reference implementation for the XYZ-CORP organization:

- Acme
- Paperclips

Note: Business_Customer_1 is the variable name for Acme, and Business_Customer_2 is the variable name for Paperclips. You can modify variables in the ycd_ref_variable.properties file. For more information about the ycd_ref_variable.properties file, see the *Sterling Call Center and Sterling Store: Installation Guide*.

Note: XYZ-CORP is the customer master organization for the XYZ-RETAIL and XYZ-ONLINE organizations.

Acme is the parent customer of Paperclips. Each business customer has two contact records, a default address record, and a default customer

account record. All the contacts can use the addresses and payment methods of their respective customers. Each contact for Acme has an address that is specific to that contact; however, the address is not defaulted for all address types. Also, the first contact created for Acme has a payment method that is specific to that contact. By default, the currency for all the customers and contacts is USD, and standard enterprise defaults are used for scheduling preferences.

7.17 Customer Details

Users need the ability to view customer details for both business and consumer customers.

7.17.1 Solution

Sterling Call Center and Sterling Store provides the ability to view customer details for both business and consumer customers.

The `getCustomerDetails` API is called to display customer details screens. The `getCustomerDetails` API launches a single wizard that displays different screens depending on the customer type. For a consumer customer, the Consumer Details screen is displayed. For a business customer, the Business Customer Details screen is displayed.

Consumer Details Screen

The Consumer Details screen displays the name, status, contact information, Bill To address, and Ship To address of the consumer customer. It also contains five tabs: Draft Orders, Order History, Return History, Addresses, and Payment Methods. In addition, an Important Notes panel is displayed at the bottom of the Consumer Details screen.

The `getCustomerDetails` API is called to populate the Consumer Details screen with the name, status, contact information, Bill To address, and Ship To address of the consumer customer, as well as information in the Addresses and Payment Methods tabs. In addition, it populates the Important Notes panel with notes pertaining to the consumer customer. When you click the View/Add Notes hyperlink in the Important Notes panel, the `getCommonCodeList` API is called to retrieve the note types and contact methods for the customer.

The getOrderList API is called to populate the Draft Orders, Order History, and Return History tabs with the customer's orders.

Note: The Draft Orders, Order History, and Return History tabs support pagination.

The Order History tab provides search capabilities, enabling the user to search for orders by hold type, status, or both hold type and status. Searching by hold type displays orders that have a specific hold applied to the orders. When searching by status:

- **Open** displays all orders.
- **Backordered** displays orders that have a status of backordered or extended (1500).
- **Shipped** displays orders that have a status of shipped or greater than shipped (3700).

Note: Extended statuses are also considered when searching by status.

The Order History tab also provides the ability to toggle between recent orders and orders in the history table.

Business Customer Details Screen

The Business Customer Details screen displays the name, ID, status, Bill To address, Ship To address, and Sold To address of the business customer. The customer's name is a link to the customer's Web site, if available, which will open in the default browser. The Business Customer Details screen also contains seven tabs: Contacts, Draft Orders, Order History, Return History, Addresses, Payment Methods, and Child Customers. An Important Notes panel is displayed at the bottom of the Business Customer Details screen.

The getCustomerDetails API is called to populate the Business Customer Details screen with the name, ID, status, Bill To address, Ship To address, and Sold To address of the business customer, as well as information in the Addresses and Payment Methods tabs. In addition, the getCustomerDetails API populates the list of contacts in the Contacts tab. In the Contacts tab, information about the selected contact is displayed

in the panel on the right of the screen. When you double-click a contact, the `getCustomerDetails` API, `getUserGroupList` API, `getUserHierarchy` API, and `getLocaleList` API are called to populate the Contact Details screen for the selected contact. Finally, the `getCustomerDetails` API populates the Important Notes panel with notes pertaining to the business customer. When you click the View/Add Notes hyperlink in the Important Notes panel, the `getCommonCodeList` API is called to retrieve the note types and contact methods for the customer.

Note: If a customer or contact does not have default addresses or payment methods defined, the default addresses or payment methods of the closest customer in the customer hierarchy are used.

The `getOrderList` API is called to populate the Draft Orders, Order History, and Return History tabs with the customer's orders.

Note: The Draft Orders, Order History, and Return History tabs support pagination.

The Order History tab provides search capabilities, enabling the user to search for orders by hold type, status, or both hold type and status. Searching by hold type displays orders that have a specific hold type applied to the orders. When searching by status:

- **Open** displays all orders.
- **Backordered** displays orders that have a status of backordered or extended (1500).
- **Shipped** displays orders that have a status of shipped or greater than shipped (3700).

Note: Extended statuses are also considered when searching by status.

The Order History tab also provides the ability to toggle between recent orders and orders in the history table.

When the Child Customers tab is selected, the `getCustomerList` API is called to retrieve a list of the child customers, if any, of the current

customer. In addition, if a parent customer exists for the current customer, a link to the parent customer's Business Customer Details screen is displayed. When you double-click a child customer or the Parent Customer link, the `getCustomerDetails` API is called to display the Business Customer Details screen for the applicable child customer or parent customer.

7.17.2 End-User Impact

The end user can search for consumer customers or business customers against the customer database already in the database.

7.17.3 Implementation

None.

7.17.4 Reference Implementation

None.

7.18 Customer Inquiry

Users need the ability to perform customer inquiry for both business and consumer customers.

7.18.1 Solution

Sterling Call Center and Sterling Store provides the ability to search and view two types of customers:

- Consumer Customers
- Business Customers

Sterling Call Center and Sterling Store provides two ways to search for customers:

- Quick Access—The user can select the customer type and enter the customer's e-mail ID, user ID, day phone number, and the business name in case of a business customer and search for the customer.
- Advanced Customer Search—The user can enter more restrictive search criteria to search for the customer.

If a user has access to multiple enterprises, the Enterprise drop-down list is displayed in the Customer Search Criteria panel of the Advanced Customer Search screen. The `getOrganizationList` API is called to retrieve the list of enterprises. If the search results in a single record, the Customer Details screen is displayed. If the search criteria results in multiple records being retrieved, the Search and List screen is displayed.

The `getCustomerList` API is called to retrieve the customer records. The `getCustomerList` API supports case-insensitive searches for system defined columns. For more information about enabling the `getCustomerList` API to support case-insensitive searches for search tasks in the Sterling Call Center and Sterling Store applications, see the *Selling and Fulfillment Foundation: Extending the Database Guide*. For more information about the `getCustomerList` API, see the *Sterling Call Center and Sterling Store: Javadocs*.

Pagination

Sterling Call Center and Sterling Store supports smart retrieval of record sets in the Customer Search screen.

For more information about pagination, see [Section 7.22, "Pagination"](#).

Note: If searching by address for business customers is enabled, special performance considerations need to be evaluated to ensure that this type of query is fast enough.

7.18.2 End-User Impact

The end user can search for Consumer Customers or Business Customers against the customer database or addresses already in the database.

7.18.3 Implementation

Sterling Call Center and Sterling Store allows you to configure search for business customers and consumer customers. For more information about configuring customer search options, see [Section 5.10.1, "Configuring Order Entry Rules"](#).

7.18.4 Reference Implementation

Sterling Call Center and Sterling Store provides two consumer customers and two business customers as part of reference implementation for XYZ-CORP organization. For more information about these customers, see [Section 7.16.1.4, "Reference Implementation"](#) and [Section 7.16.2.4, "Reference Implementation"](#).

7.19 Customer Maintenance

Sterling Call Center and Sterling Store provides the ability to manage a customer's business information, contacts, addresses, and payment methods.

7.19.1 Manage Contacts

CSRs must be able to manage customer records from Sterling Call Center and Sterling Store.

7.19.1.1 Solution

Sterling Call Center and Sterling Store enables you to manage the contacts of a consumer or business customer. You can add contacts, modify contact records, modify contact addresses, manage contact payment methods, and delete contacts that are no longer active.

A consumer customer can have only one contact record associated to that customer. For a business customer, multiple contact records can be available for modification, creation, or deletion.

The `getCustomerDetails` API is called to display the list of customer contact records, and the `manageCustomer` API is called to modify the contact details.

Consumer Customer

The Manage Contact Information task, which is accessible from the Consumer Details screen, enables a CSR to modify the contact

information pertaining to a consumer customer. When the CSR selects this task, the `getCustomerDetails` API is called.

Note: First Name, Last Name, and Status are mandatory fields in the Manage Contact Information screen. Also, if a login ID is entered in the Login field, E-mail Address and Locale are mandatory fields.

Updates to the user record are exposed and saved with the `createUserHierarchy` API or `modifyUserHierarchy` API. If the `createUserHierarchy` API is called, the `GeneratePassword` attribute is set to Y to generate a web user password for the customer. The `createUserHierarchy` API invokes the `RESET_PASSWORD.ON_SUCCESS`, which triggers a service call to `YCD_Send_Generated_Password_8.5`. This causes an e-mail, containing the web user's login and password, to be sent to the newly created customer. This functionality is activated through Sterling Call Center and Sterling Store's reference implementation.

For information about the `IS_GLOBAL_USER` rule, which determines if the user ID on the user record is globally unique or unique to only the customer enterprise, see [Section 7.16.1, "Create Consumer Customer"](#).

The `manageCustomer` API is called to save the modified contact details.

Business Customer

Multiple contacts can be defined for a business customer. The tasks that are available to manage contacts can be accessed from the Business Customer Details screen, and all the business customer-related screens.

When the View Contact Details hyperlink in the Business Customer Details screen is clicked, the details pertaining to the selected contact are displayed.

Note: After a contact is created or modified, if the customer associated to that contact has an editor open, the editor will be closed and the Customer Details screen will be reopened so that the update is immediately visible.

- **Add Contacts**

The Create Customer Contact task enables a CSR to add a new contact. In the Create Customer Contact screen, the CSR can enter contact information such as first name, last name, e-mail address, login ID, locale, status, phone numbers, user roles, contact spending limit, and approvers.

Note: First Name, Last Name, and Status are mandatory fields in the Create Customer Contact screen. Also, if a login ID is entered in the Login field, E-mail Address and Locale are mandatory fields.

Updates to the user record are exposed and saved with the createUserHierarchy API or modifyUserHierarchy API. If the createUserHierarchy API is called, the GeneratePassword attribute is set to Y to generate a web user password for the customer. The createUserHierarchy API invokes the RESET_PASSWORD.ON_SUCCESS, which triggers a service call to YCD_Send_Generated_Password_8.5. This causes an e-mail, containing the web user's login and password, to be sent to the newly created customer. This functionality is activated through Sterling Call Center and Sterling Store's reference implementation.

For information about the IS_GLOBAL_USER rule, which determines if the user ID on the user record is globally unique or unique to only the customer enterprise, see [Section 7.16.2, "Create Business Customer"](#).

The manageCustomer API is called to save the contact details.

- **Modify Contacts**

The Manage Customer Contact task enables a CSR to modify the details of a customer contact.

From the Contact Details screen, which can be accessed by selecting a contact and clicking the View Contact Details hyperlink in the Business Customer Details screen, a CSR can select the Manage Customer Contact task. The fields in the Manage Customer Contact screen are identical to the fields in the Create Customer Contact

screen, except the fields in the Manage Customer Contact screen are populated with data.

Note: First Name, Last Name, and Status are mandatory fields in the Manage Customer Contact screen. If a login ID is entered in the Login field, E-mail Address and Locale are mandatory fields. If a login ID was previously entered, a user record already exists and the Login field is disabled.

For information about the IS_GLOBAL_USER rule, which determines if the user ID on the user record is globally unique or unique to only the customer enterprise, see [Section 7.16.2, "Create Business Customer"](#).

The getCustomerDetails API is called to retrieve the customer contact record. Based on the contact's CustomerContactID, the CustomerContact element is extracted from the input. The getUserGroupList API is called to populate the User Roles panel with the available user groups that have a user type of external. The getUserHierarchy API is called to retrieve the customer's locale values, and the getLocaleList API is called to populate the Locale drop-down list.

Updates to the user record are exposed and saved with the createUserHierarchy API or modifyUserHierarchy API. If the createUserHierarchy API is called, the GeneratePassword attribute is set to Y to generate a web user password for the customer. The createUserHierarchy API invokes the RESET_PASSWORD.ON_SUCCESS, which triggers a service call to YCD_Send_Generated_Password_8.5. This causes an e-mail, containing the web user's login and password, to be sent to the newly created customer. This functionality is activated through Sterling Call Center and Sterling Store's reference implementation.

The manageCustomer API is called to save the modified contact details.

- **Delete Contacts**

The Delete Customer Contact task, which can be accessed from the Contact Details screen, enables a CSR to delete a contact. A pop-up window is displayed, which prompts the CSR to confirm the deletion. When the CSR confirms the deletion, the contact is removed from the

Business Customer Details screen. The manageCustomer API is called to save the changes.

For information about managing customer addresses, see [Section 7.19.3, "Manage Customer Addresses"](#). For information about managing customer payment methods, see [Section 7.19.4, "Manage Payment Methods"](#).

7.19.1.2 End-User Impact

These tasks are permission controlled. You can launch these tasks only if you belong to a user group that is assigned the necessary permissions.

7.19.1.3 Implementation

These tasks are permission controlled. If you do not have access to the customer details record, these tasks are not available, regardless of resource permissions.

7.19.1.4 Reference Implementation

None.

7.19.2 Manage Business Customer Information

Users must be able to manage business customer information from Sterling Call Center and Sterling Store.

7.19.2.1 Solution

Sterling Call Center and Sterling Store enables you to manage business customer information, such as a customer's business name, Web site, status, shipping preferences, and tax information. In addition, you can manage business customer classifications, such as the customer's relationship type and customer level. You can access the Manage Customer Information task from the Business Customer Details screen.

Note: In the Manage Customer Information screen, the Customer ID field is disabled. In addition, Business Name and Default Currency are mandatory fields.

The `getCustomerDetails` API is called to populate the fields in the Manage Customer Information screen. The `getCommonCodeList` API is called to populate the drop-down options for Status, Relationship Type, Customer Level, and Vertical. The `getCurrencyList` API is called to retrieve the list of currencies. The `manageCustomer` API is called to save the changes to the customer record.

7.19.2.2 End-User Impact

This task is permission controlled. You can launch this task only if you belong to a particular user group that is assigned permissions.

7.19.2.3 Implementation

This task is permission controlled. If the user does not have access to the customer details record, this task is not available, regardless of the user's resource permission.

7.19.2.4 Reference Implementation

None.

7.19.3 Manage Customer Addresses

Users may need to define multiple addresses for a customer.

7.19.3.1 Solution

Sterling Call Center and Sterling Store enables users to define addresses for a customer. Users can define addresses either at the contact level or at the customer level, and provide a description for the addresses. A user can also define default Ship To, Bill-To and Sold To addresses to be used during ordering. If a contact has no defaults selected, then the customer default addresses will be used.

You can define and manage addresses for business contacts from any of the business customer contact screens.

The `getCustomerDetails` API is called to display the list of customer addresses. The `manageCustomer` API is called to modify the customer addresses.

7.19.3.2 End-User Impact

This task is permission controlled. Users can launch this task only if the user belongs to a particular user group that is assigned permissions.

7.19.3.3 Implementation

This task is permission controlled. If the user does not have access to the customer details record, this task is not available, regardless of the user's resource permission.

7.19.3.4 Reference Implementation

None.

7.19.4 Manage Payment Methods

There may be situations when users have to define payment methods for customers so that the customer can choose these payment methods while placing an order without having to enter the payment details again. Payment methods can be defined only if the Customer Payment Method rule is configured for the customer's enterprise to allow the customer payment method information to be stored and used through the application. If the rule is not configured, the Manage Customer Payment Methods hyperlink will not be displayed. For more information about configuring customer payment methods, see [Section 5.7.6, "Configuring Customer Payment Method Rules"](#).

7.19.4.1 Solution

The Sterling Call Center and Sterling Store enables you to define payment methods for a customer. You can define payment methods at the contact level or at the customer level.

You can define and manage payment methods for business contacts from any of the business customer contact screens.

You can modify the attributes of a payment method.

Note: Attributes that are unique identifiers are displayed but cannot be modified. Encrypted attributes are not displayed.

For the Customer Account payment method, Customer Account # is a unique identifier. For the Credit Card payment method, Credit Card # is a unique identifier. For the other payment methods, the payment reference numbers are unique identifiers.

The `getCustomerDetails` API is called to display the list of payment types available for the customer. The `manageCustomer` API is called to create or modify the payment method.

7.19.4.2 End-User Impact

This task is permission controlled. You can launch this task only if you belong to a particular user group that is assigned permissions.

Note: Billing address will not be directly tied to the credit card records stored against the customer. In order to relate them, this needs to be defined during ordering.

Available payment types created against customer records are not limited.

If the Customer Payment Method rule is configured for a customer's enterprise to allow the customer payment method information to be stored and used through the application, the user will see the Manage Customer Payment Methods hyperlink. For more information about configuring customer payment methods, see [Section 5.7.6, "Configuring Customer Payment Method Rules"](#).

7.19.4.3 Implementation

If the user wants to add payment methods to a customer record, the Customer Payment Method rule should be configured for the customer's enterprise to allow the customer payment method information to be stored and used through the application, and all payment methods must

be previously defined in the Channel Applications Manager for the Organization of the user creating the customer. For more information about adding payment methods, see *Sterling Distributed Order Management: Configuration Guide*.

If the additional attributes of a credit card are encrypted, such as the name on the card or the expiration date, they will not be visible from the Payment Method display panel.

This task is permission controlled. If the user does not have access to the customer details record, this task is not available, regardless of the user's resource permission.

7.19.4.4 Reference Implementation

None.

7.19.5 Reset User Passwords

Sometimes, customers may forget their user passwords and, consequently, may be unable to access their Web user accounts. CSRs must be able to reset a user's password from Sterling Call Center and Sterling Store.

7.19.5.1 Solution

Sterling Call Center and Sterling Store enables a CSR to reset a user's password, if a user ID is associated to the corresponding user's record. This section explains the Reset User Password feature, and the solution offered by Sterling Call Center and Sterling Store.

For a consumer customer, the Reset User Password feature can be accessed from the Consumer Details screen. For a business customer contact, the Reset User Password feature can be accessed from the Contact Details screen. When a CSR selects the Reset User Password task and confirms that the user wants to have the password reset, the requestPasswordReset API is called, which performs the following tasks:

- Generates a RequestId, which can later be used by the changePassword API to change the user's password to a temporary password to allow the user to log in to the Web channel and manually change their password.

- Invokes the RESET_PASSWORD.ON_REQUEST event, which provides a location from which an e-mail can be sent. This event outputs a UserID, ResetType, and RequestId. With this information, the YCD_Send_Reset_Password_8.5 sample service generates an e-mail containing a link to a URL with the RequestId that can be used to modify the user password. The URL provided in this sample e-mail must be changed to link to a valid URL for a password reset Web page that must exist in your Web application. This Web page must be accessible by the customer so that the customer can finish the password reset process.

"Email" is the default reset type value for the requestPasswordReset API call.

7.19.5.2 End-User Impact

This task is permission controlled. You can launch this task only if you belong to a user group that is assigned the necessary permissions.

The user receives an e-mail containing the new password. In addition, the e-mail states that the user should change the password the next time the user logs in to the Web site.

7.19.5.3 Implementation

This task is permission controlled. If you do not have access to the corresponding customer details record, this task is not available, regardless of the resource permissions provided.

You should modify the sample e-mail template to match your needs. This includes changing the URL that the customers will use to finish the reset password process. The URL must link to a valid Web page that is accessible by the customer.

7.19.5.4 Reference Implementation

As part of reference implementation, Sterling Call Center and Sterling Store provides a simple password policy, which is configured for the enterprise, that allows passwords to be reset when the reset type is "Email".

The RESET_PASSWORD.ON_REQUEST event is activated through the reference implementation provided by the Sterling Call Center and Sterling Store application.

Note: In the reference implementation provided by Sterling Call Center and Sterling Store, customer passwords are never exposed to users of the Sterling Call Center and Sterling Store. Sterling Call Center and Sterling Store assumes that a Web site exists in which the customer can reset the password after the request has been made.

7.19.6 Customer Team Assignments

Sterling Call Center and Sterling Store provides the ability to assign customers to a team, once the customer is created. A supervisor can assign a customer from his team to any of his immediate sub teams.

7.19.6.1 Solution

The getTeamList API is called to retrieve a list of sub teams assigned to the supervisor. The getCustomerAssignmentList API is called to retrieve a list of the teams already assigned to the customer that are part of the list of sub teams with which the supervisor is working. The manageCustomerAssignment API is called to assign the customer to the selected team.

7.19.6.2 End-User Impact

None.

7.19.6.3 Implementation

The teams (data security groups) must be defined in the Channel Applications Manager and users must be associated to the teams.

The only purpose of this task is to further distribute a customer to sub teams. Therefore, the supervisor's team should also have sub teams defined in the Channel Applications Manager. For more information about creating teams and data security groups, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

7.19.6.4 Reference Implementation

As part of reference implementation, Sterling Call Center and Sterling Store provides the YCD_Update_Customer_Assignment_8.0 service. This service calls the updateCustomerAssignmentsLookup API when the On_Assignments_Change event is raised for a Customer_Definition transaction.

Note: This task will not be accessible if the user is not a supervisor and the user's team does not require Customer Assignments, even if the user has permission to access this related task.

7.19.7 Customer User Assignments

Supervisors need the ability to assign a customer to selected users on his team.

7.19.7.1 Solution

Sterling Call Center and Sterling Store provides the ability to assign customers to a user, once the user is created and assigned to a team. A supervisor can search for users from his team. The getUserList API is called to retrieve a list of users assigned to the supervisor's team, to limit the results. After a user is selected, the Customer Assignment screen is displayed. This screen provides the supervisor with a view into the customers that a selected user already has access to, and provides the ability to perform a search for additional customers that the supervisor can assign to the user.

7.19.7.2 End-User Impact

If the user is not a supervisor or the user is a member of a team that does not require customer assignments, or the rule to manually assign customers to users is disabled, the related task will not be displayed, even if the user has access permissions.

7.19.7.3 Implementation

The teams (data security groups) need to be defined in the Channel Applications Manager, users must be associated to the teams, and the user must be a supervisor.

The purpose of this task is to assign customers to users. Therefore, to access this task the supervisor must be on a team that requires customer assignments and the rule to manually assign customers to users must be enabled.

To define customer access mode, call the `manageTeam` API to set the `customerAccessMode` to 02, which is the Requires Customer Assignment permission.

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

7.19.7.4 Reference Implementation

As part of reference implementation, Sterling Call Center and Sterling Store provides the `YCD_Update_Customer_Assignment_8.0` service. This service calls the `updateCustomerAssignmentsLookup` API when the `On_Assignments_Change` event is raised for a `Customer_Definition` transaction.

7.19.8 Customer Self Assignments

Users sometimes may need to assign themselves to customers.

7.19.8.1 Solution

The Sterling Call Center and Sterling Store provides the ability for users to assign customers to themselves. When a user searches for customers, the `getUserHierarchy` API is called to retrieve the maximum number of customers assignments for the user. The `getCustomerAssignmentList` API is called to retrieve a list of customers. A user can search among customers that are already assigned to his team and assign one to himself. If a customer is selected, the `manageCustomerAssignments` API is called to assign the customer to the user.

7.19.8.2 End-User Impact

If the user is on a team that does not require customer assignment and manual assignment of customers to users is not required, then even if the user has permission to view this task, the related task will not be displayed.

7.19.8.3 Implementation

The teams (data security groups) need to be defined in the Channel Applications Manager, and users must be associated to the teams.

The purpose of this task is to assign customers to users. Therefore, to access this task the user must be on a team that requires customer assignments and the rule to manually assign customers to users must be enabled.

To define customer access mode, call the `manageTeam` API to set the `customerAccessMode` to 02, which is the Requires Customer Assignment permission.

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

7.19.8.4 Reference Implementation

As part of reference implementation, Sterling Call Center and Sterling Store provides the `YCD_Update_Customer_Assignment_8.0` service. This service calls the `updateCustomerAssignmentsLookup` API when the `On_Assignments_Change` event is raised for a `Customer_Definition` transaction.

7.19.9 Customer Notes

A user may have to enter notes about a customer, such as when the customer can be contacted if queries are raised about an order.

7.19.9.1 Solution

Customer notes can be either system-generated or entered by a user. Users can add notes from the details screen of the customer or contact. Additionally, a user can track important customer-related information by viewing previously logged customer notes.

Sterling Call Center and Sterling Store provides the following features:

- A Customer Notes screen, where a user can view and add notes about a customer.
- An Important Notes panel, where a user can add notes. The Important Notes panel is displayed at the bottom of the Customer Details screen.

Customer Notes Screen

Sterling Call Center and Sterling Store provides a Customer Notes screen, which can be launched from the customer details screen.

Users can limit the notes that are displayed in the Customer Notes screen based on the following criteria:

- Note Type
- Contact Method
- Priority
- System-Generated or Manually Entered
- Internal Notes

The `getCommonCodeList` API is called to retrieve the note types and contact methods for the customer. The `getCustomerDetails` API is called to retrieve the customer notes, which are filtered on the client. The `manageCustomer` API is called to save the notes.

Adding Notes to Customer Details

Sterling Call Center and Sterling Store provides a Customer Notes screen to enable users to add notes.

The `getCommonCodeList` API is called to retrieve the note types and contact methods for the customer. The Sterling Call Center and Sterling Store application also enables users to mark the note as an internal note.

Customer Contact Notes

Users can enter notes about a customer contact. This feature can be accessed from the Contact Details screen. The Customer Notes screen for contacts is identical to the Customer Notes screen for customers.

7.19.9.2 End-User Impact

The notes that have been configured to be logged automatically will be visible to the end users in the Customer Notes screen.

7.19.9.3 Implementation

None.

7.19.9.4 Reference Implementation

The Customer Notes screen uses the same Note Types and Contact Types used by order notes. For information about attributes for customer notes, see the information provided under Reference Implementation in [Section 7.9.18, "Order Notes"](#).

7.20 User Creation

Sterling Call Center and Sterling Store representatives may need to create and modify users. For example, a CSR Lead may have to create a new CSR user.

Note: A user is an employee of the enterprise organization who can log in to the Sterling applications.

7.20.1 Create a User

Call Center and Store representatives may have to create a user.

7.20.1.1 Solution

Sterling Call Center and Sterling Store provides a user interface task that enables CSRs to create users. This section explains the wizard-based Create User task and the solution offered by Sterling Call Center and Sterling Store.

Privileges Required

CSRs who can access the Create User task have the necessary privileges to create users for the organizations to which they have access.

Note: When assigning user permissions to new users, the CSR can assign permissions to only those groups to which the CSR is assigned. This means that a CSR cannot grant permission to any resource that the CSR does not have access to.

Create a User Record

To create a user, the CSR must populate the mandatory Organization, Login, Name, E-mail Address, Menu Group, Theme, and Locale fields in the User Entry screen. Initially, the `getOrganizationList`, `getMenuList`, `getThemeList`, and `getLocaleList` APIs are called. When the user's Organization is selected, the `getTeamList` API is called and the Department drop-down list is populated from the selected organization's defined departments. The `getTeamList` API populates the Team drop-down list with all the teams configured for the user's organization and the user's customer master organization.

Additional information that can be entered in this screen includes whether the user is classified as an active user, whether the user is classified as a supervisor, the maximum number of customers who can be assigned to the user, the user's contact address, the user's billing address, and the user's assignment to user roles which defines the user's access to Sterling applications.

After the information is entered and the CSR clicks the Next button, the `createUserHierarchy` API is executed and the corresponding user is created. This user is added to the wizard model so that if the CSR returns to this screen later, the `modifyUserHierarchy` API is called instead of the `createUserHierarchy` API.

When a user record is created, the `GeneratePassword` attribute in the `createUserHierarchy` API is set to Y to generate a web user password for the customer. The `createUserHierarchy` API invokes the `RESET_PASSWORD.ON_SUCCESS` event, which triggers a service call to `YCD_Send_Generated_Password_8.5`. This causes an e-mail, containing the web user's login and password, to be sent to the newly created

customer. This functionality is activated through Sterling Call Center and Sterling Store's reference implementation.

Assign Queues

The second screen in the wizard is the Queue Selection screen, which allows the CSR to define the queues to which the new user will be assigned in order to receive alerts. The left panel lists the queues that are available to the user, and the right panel lists the queues that are assigned to the user.

A `getQueueList` API is called to retrieve the available queues from the user's organization and the default organization, and the results are placed in the Available Queues panel. For a newly created user, the Assigned Queues panel will be empty. For an existing user, the queue subscriptions will be pulled from the `getUserHierarchy` API, and will be manually removed from the output of the `getQueueList` API.

When the CSR clicks the Confirm button, the `modifyUserHierarchy` API is called to save the queue subscription results to the user's record. The `modifyUserHierarchy` must be called with the Reset flag to ensure that the queues that have been removed have actually been removed. The `modifyUserHierarchy` API then takes the source model for the Assigned Queues table and saves those queues against the user.

7.20.1.2 End-User Impact

None.

7.20.1.3 Implementation

This task is permission controlled. You can launch this task only if you belong to a user group that is assigned the necessary permissions.

7.20.1.4 Reference Implementation

The existing users provided by the reference implementation (that is, CSR, CSR Lead, Store Manager, Store Associate) will be visible for the organizations they are created for through the reference implementation.

7.20.2 Modify a User

Sterling Call Center and Sterling Store representatives may have to modify a user's information. For example, a CSR may need to be

assigned to an additional queue to start working on different types of alerts.

7.20.2.1 Solution

Sterling Call Center and Sterling Store provides a user interface task that enables CSRs to modify other users. The task is similar to the Create User task, except that the CSR must first search for the user whose information needs to be modified.

This section explains the wizard-based Modify User task and the solution offered by Sterling Call Center and Sterling Store.

Privileges Required

CSR users who can access the Create User task have the required privileges to modify users for the organizations to which they have access.

Search for the User

The first screen in this wizard-based task is a search screen, which enables the CSR to search for the user whose details have to be modified. The search criteria are Organization, User ID, Name, and Status. The results are displayed in the User Search Results panel.

Modify the User Information

After the user is selected, the following screens are almost identical to the screens described in [Section 7.20.1, "Create a User"](#).

The Modify User task opens a similar screen to the Create User task, but the `getUserHierarchy` API is called, which populates the screen with information pertaining to the selected user. Additionally, the Queue Subscription screen is populated with the user's previously assigned queues.

7.20.2.2 End-User Impact

None.

7.20.2.3 Implementation

See [Section 7.20.1.3, "Implementation"](#).

7.20.2.4 Reference Implementation

None.

7.21 User Team Creation

Sterling Call Center and Sterling Store enables you to create and manage user teams. Teams are created to assign CSR users to a set of customers. This assignment enables customers to maintain a relationship with specific CSRs so that customers receive better customer service.

Note: A user team is a collection of users who have common data and user interface access requirements. User teams can have access to specific document types, enterprises, ship nodes, customers, and screens within the user interfaces.

7.21.1 Create a User Team

Sterling Call Center and Sterling Store representatives may have to create a user team, and assign customers to that team.

7.21.1.1 Solution

Sterling Call Center and Sterling Store enables users to create a user team and assign customers to that team. This section explains the Create User Team task and the solution offered by Sterling Call Center and Sterling Store.

Create a User Team

To create a user team, the user must populate the mandatory fields in the Team Information panel of the Create User Team task. These include the Team ID, Description, Parent Team, and Organization fields, and the selection of the Customer Access Mode.

Note: The Organization field is displayed only if the user has access to more than one customer master organization. When the Organization field is displayed, the getOrganizationList API is called to populate the list of organizations in the Organization drop-down list.

The user team inherits most of its permissions from a pre-existing parent team. The `getTeamList` API is called to populate the list of parent teams in the Parent Team drop-down list, and the user selects a parent team from this list. The parent team determines which enterprises and document types that the user will have access to when assigned to this team. Typically, the initial parent team will be created in the Channel Applications Manager first.

When selecting the Customer Access Mode:

- If Assigned Customers is selected, the ability to assign specific customers to the user team is provided in this screen.
- If User To Customer Assignment Required is selected, the ability to assign customers to the user team is provided in this screen. It is expected that customers assigned to the team will be assigned to specific users on the team later.
- If All Customers is selected, the portion of the screen that enables you to assign customers to the team will not be visible, and the team will automatically have access to all the customers.

Assign Customers to the Team

To assign customers to a user team, the user enters the corresponding customer search criteria in the Find Existing Customer panel. The `getCustomerList` API is called to retrieve the customer records, and the results are displayed in the Customer Search Results panel. The user can then select customers to assign to the user team. For more information about the `getCustomerList` API, see the *Sterling Call Center and Sterling Store: Javadocs*.

Save the Team

The Assigned Customers panel is not populated initially. After the user completes and confirms the entries in the Create User Team screen, the `manageTeam` API saves the user team record and generates a `TeamKey`. If the user has assigned customers to the user team, the `manageCustomerAssignment` API is called, which saves the customer assignments against the newly created user team.

7.21.1.2 End-User Impact

None.

7.21.1.3 Implementation

This task is permission controlled. You can launch this task only if you belong to a user group that is assigned the necessary permissions.

7.21.1.4 Reference Implementation

None.

7.21.2 Manage a User Team

Sterling Call Center and Sterling Store representatives may have to manage user teams.

7.21.2.1 Solution

Sterling Call Center and Sterling Store provides a user interface task that enables users to manage user teams. This task is similar to the Create User Team task, except that the user must first search for the team.

This section explains the wizard-based Manage User Team task and the solution offered by Sterling Call Center and Sterling Store.

Search for the User Team

The first screen in this wizard-based task is a search screen that enables the user to search for an existing user team. The team search criteria are Team ID, Description, Parent Team, and Organization. The search is performed using the `getTeamList` API call.

Note: The Organization field is displayed only if the user has access to more than one customer master organization.

If only one search result is returned, the user is taken directly to the next screen, where the user can make changes to the user team. If multiple results are returned, the user must first select a team from the list before being taken to the next screen. The `getTeamList` API retrieves and displays the Team ID, Description, Parent Team, and Customer Access Mode for the selected team. The `getCustomerAssignmentList` API retrieves and displays all the customers assigned to the team.

Manage the User Team

After the team is selected, the next screen in this wizard-based task enables the user to make modifications to the team details.

The Manage User Team screen is almost identical to the Create User Team screen, with the following differences:

- The Team ID field is disabled.

Note: This field is enabled for editing only during team creation.

- The Organization field is not displayed.
- The screen is populated with team and customer assignment information as a result of the `getTeamList` API and the `getCustomerAssignmentList` API being called.
- When the user clicks the Confirm button, the `manageTeam` API is called with a `TeamKey`, which updates the existing user team record instead of creating a new user team record.

7.21.2.2 End-User Impact

None.

7.21.2.3 Implementation

See [Section 7.21.1.3, "Implementation"](#).

7.21.2.4 Reference Implementation

None.

7.22 Pagination

When users perform inquiries, they need the information to be retrieved in a minimum amount of time and to be displayed as efficiently as possible.

7.22.1 Solution

Sterling Call Center and Sterling Store supports smart retrieval of record sets in all of its search and list screens. These include:

- Order search
- Price Match search
- Competitor search
- Alert search
- Customer search
- Item search
- Return order search
- Advanced shipment search

For large record sets, smart retrieval enables a CSR to display the records as a full, complete set. Pagination is performed by using the YRCPaginationData object, which transforms an API call into a getPage call, and retrieves the first page of records for display. If more records that fit the criteria exist, the CSR can click the Get More Records link to retrieve them, one list of records at a time. Each time this is done, records are appended to the existing record list, until the complete set of records is displayed. The most recent set of records returned is highlighted. In addition, in the Order Search and Return Order Search tasks, an Order By pull-down window allows for sorting returned data by Order Number, Order Date, or Customer Last Name.

The Order Search and Return Order Search tasks also enable the CSR to view history orders. This is performed through a link on the display, which toggles between displaying recent orders and history orders. This requires two different YRCPaginationData objects, as described in the *Selling and Fulfillment Foundation: Customization Guide*.

7.22.2 End-User Impact

Record display screens have different links, depending on how record handling is configured. The CSR might see the following links at the bottom of the screen:

- Total Available link - can be configured to allow users to request the total number of records to display, to always display the total number

of records, or to never display the total number of records. If configured so that the user can request the total number of records, as the CSR repeatedly clicks on the Get More Records link, each successive set of records is displayed until none are left.

- View History Orders/View Recent Orders - this link is applicable only to Order Search and Return Order Search tasks. If configured, this link toggles between automatically displaying the total number of history records available for the search criteria and displaying recent order records that fit the search criteria.

7.22.3 Implementation

Pagination uses the following configuration options:

- When a CSR performs searches, the number of records retrieved is specified by the following properties in the `yfs_propertierties_ysc_ext` file:
 - `yfs.rcp.ui.PageSize` - number of records to retrieve
 - `yfs.ui.queryTimeout` - number of seconds for each SQL statement to execute before console timeout

The default values for these properties are extensible through the `YRCPaginationData` object, as described in the *Selling and Fulfillment Foundation: Customization Guide*.

- Configure pagination rules as described in [Section 5.19.9, "Configuring Pagination Rules"](#).

Note: Sterling Call Center and Sterling Store recommends that you do not configure pagination to automatically display the total number of records. This count can affect the performance of the application server as well as all of the clients.

7.22.4 Reference Implementation

None.

7.23 Alert and Queue Management

The Alert Management task provides the ability for the user to create, resolve, and assign alerts. Alerts are generated automatically when the system raises certain events happen, or they may be manually created by the users. For example, when a payment authorization fails for an order, the system generates an alert. The user can then call the customer and request for a different payment method. Alternatively, the user can create an alert for the supervisor when the customer requests a price match that exceeds the 'No Hassle' price match check. Sterling Call Center and Sterling Store provides the comprehensive visibility to alerts assigned to users, move alerts to a different queue, and so on. Alerts are also referred to as exceptions.

7.23.1 Solution

Sterling Call Center and Sterling Store provides features that enable you to create appropriate types of alerts and process them in a timely and efficient manner.

You can configure whether to notify user whenever an alert is assigned to the current user or notify users whenever an alert is added to a queue the user is subscribed. The `getExceptionListForOrder` API is used to poll for new alerts in the Sterling Call Center and Sterling Store client.

If you have configured to notify users whenever an alert is added to a queue the user is subscribed, alert notifications will notify a user when an alert is created in the user's queues in the last polling time. The user will not be notified of alerts moved to the user's queues during that time.

If you have configured to notify user whenever an alert is assigned to the current user, the user will be notified of alerts assigned to them since the last polling time.

Alert Creation

Sterling Call Center and Sterling Store enables users to create alerts in the system.

Users who have access to multiple enterprises can create alerts for a specific enterprise by selecting the corresponding enterprise from the Enterprise drop-down list in the Create Alert screen.

Using the Alert Type configuration, you can define the types of alerts that can be raised in a system. Users can then select the appropriate alert

type from the Alert Type drop-down list in the Create Alert screen. The `getExceptionTypeList` API is called to retrieve the list of alert types. Users can also assign a priority for an alert.

Queues can be used to group related alerts. The Queue drop-down list will display the list of queues available for the DEFAULT enterprise and the enterprise selected by the user from the Enterprise drop-down list. The `getQueueList` API is called to retrieve the list of queues.

Alerts can also be assigned to internal users during alert creation. If a user is specified while creating the alert, the user will be validated using the `getUserList` API.

The `createException` API is called to create the alert.


Designing Custom Alert Resolution Panels

Sterling Call Center and Sterling Store provides visibility to alerts and resolve them using the Alert Details screen. This screen is unique and displays different alert resolution panels in the screen depending on the alert type that is being viewed. For example, if you are viewing a duplicate order alert (an alert raised when the system detects that two or more orders have been entered in the system that may be duplicates because they have similar attributes), the Alert Detail screen lists the orders that are potential duplicates so that the users can view the order details and cancel appropriate orders.

Sterling Call Center and Sterling Store provides pre-defined alert types. Additionally, you can define new resolution panels for your own custom alert types.

Alert Notification

Sterling Call Center and Sterling Store notifies a user about the latest Priority 1 alerts that are open. The user is notified of the alerts in one of the following ways:

- The  (alerts) icon is displayed on the CSR message panel, which also displays:
 - Open alerts that are assigned to the current user.
 - Priority 1 alerts that are added to the queues to which the current user is subscribed.

The `getExceptionListForOrder` API is called to retrieve all open and priority 1 alerts, consolidate them, and display the number of open alerts.

Note: If there are no priority 1 alerts assigned to the queue to which the user is subscribed, the total number of follow-up alerts are displayed.

- The Alert Notification panel is displayed at the specified time interval based on the configuration. This is indicated by a beep. The `getExceptionListForOrder` API is called to retrieve the latest open and priority 1 alerts, consolidate them, and display the number of open alerts.

Based on user permissions, the Do Not Notify check box is either displayed or hidden in the Alert Notification panel.

7.23.2 End-User Impact

The users can view popup notifications of new alerts based on the configuration. Only users with necessary permissions can turn off further alert notifications.

7.23.3 Implementation

- You can define alert types as needed. When configuring your alert type, in the alert type configuration, you can specify a java class that is an instance of the SWT composite class (`org.eclipse.swt.widgets.Composite`) as the resolution form. You must create this composite and include components that helps the users to resolve alerts for that specific alert type. You can call APIs within the composite if you require additional information in that panel. If you do not want to design a new composite for any of the custom alert types, you can leave the Resolution Form field blank in the alert type configuration. If you do not enter any information in this field, the default resolution panel are used. The default resolution panel displays the data from the Alert Details column of the alert table (`YFS_INBOX`).

- You can group similar type of alerts into queues and assign them to the users. For more information about assigning alerts and queues, see [Section 5.17, "Configuring Alert Management"](#).
- Configure the following rules to notify users about the alerts raised:
 - Notify User Whenever an Alert is Assigned to the Current User
 - Notify Users Whenever an Alert is Added to a Queue The User is Subscribed
 - Never Notify Users About Alerts
 - Poll for New Alerts Every <number_of_minutes> MinutesFor more information about alert notification, see [Section 5.17, "Configuring Alert Management"](#).
- You can provide permissions to users to enable them to turn off further alert notifications by selecting the Do Not Notify check box in the Alert Notification panel, if necessary. For more information about administering user group permissions, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.
- Notes entered for this task are saved with YCD_CREATE_ALERT note type.

7.23.4 Reference Implementation

By default, the following alert types are provided:

- YCD_VERIFY_ADDRESS
- YCD_PAYMENT_FAILURE
- YCD_DUPLICATE_ORDER
- YCD_ORDER_CANCEL_NOTICE
- YCD_PRICE_MATCH
- YCD_RESHIP
- YCD_STOP_DELIVERY

The resolution types provided for the following alert types are:

- YCD_VERIFY_ADDRESS
- YCD_PAYMENT_FAILURE

- YCD_DUPLICATE_ORDER
- YCD_ORDER_CANCEL_NOTICE

Alerts types, queues, and queue subscriptions are defined for the "XYZ-CORP" organization.

By default, the following note type is provided for the "XYZ-CORP" organization and "XYZ-RETAIL" organization:

- YCD_CREATE_ALERT

By default, the Do Not Notify check box in the Alert Notification panel is displayed to all users.

7.24 Announcements

CSRs may sometimes want to provide useful information or timely messages to other CSRs, for example, to convey the information that the delivery of goods to a certain region is delayed because of bad weather conditions. In such situations, users may want to relay the information to other users.

7.24.1 Solution

Sterling Call Center and Sterling Store provides a feature that enables users to create an announcement to post messages or useful information to other users. Users can view the announcements in the Announcement panel provided in the Quick Access screen. Users will also be notified when a new announcement is created.

Create Announcement

Users who belong to a user group that has the necessary permissions can create announcements. The announcements that are created are stored as alerts. When an announcement is created, the alert type that is saved on the announcement is determined by the alert type used in the Configuring Announcements rule.

An announcement can be created for all the users or specific users, using the concept of queues. When creating an announcement, the user must select the queue for which the announcement has to be created. The list of available queues that a user can select from the Send To drop-down list while creating an announcement is determined through the Queue


Group specified on the queue. All the available queues are assumed to have the same priority. In order to display the queue in the Send To drop-down list, the Queue Group must be set to "Announcement Queue Group" and the priority must be set to 1. All users who are subscribed to the queue will be able to view the announcement.

When an announcement is created, the expiration days for an announcement is set to the difference between the Expiration Date and the date when the announcement is created. If this difference is lesser than or equal to 0, the value of the expiration days will be set to 1. If the difference is greater than 0, the value of the expiration days will be set to the difference.

The createException API is called to create the announcement.

Announcement Notification

The Sterling Call Center and Sterling Store application notifies users about the new announcements that are available. A user can view an announcement only if the announcement has been created for a queue to which the user is subscribed.

An  (announcements) icon is displayed on the CSR Message panel, and the number adjacent to the icon is periodically refreshed based on the polling interval specified in the Channel Applications Manager. The Announcements hyperlink displays the number of latest announcements available since the last polling interval.

The getExceptionList API is called to retrieve the latest announcements available since the last polling interval.

Viewing and Closing Announcements

Users can view the list of announcements created in the Announcements panel of the Quick Access screen. The getExceptionList API is called to retrieve the list of available announcements that are created in the queues to which the user is subscribed. Announcements that have expired since the last polling interval will not be removed from the Announcements panel until the user restarts the application.

Users can view the Announcement Details screen by clicking the View Details hyperlink on the corresponding announcement. The getExceptionDetails API is called to display the Announcement Details screen. Additionally, users who belong to a particular user group that has

the necessary permissions can cancel an announcement from the Announcement Details screen.

The `resolveException` API is called to cancel the announcement. Announcements that are cancelled will be removed from the Announcements panel when the next polling occurs, or when the user restarts the application.

Purging Announcements

When an announcement is created, it is stored in the `YFS_INBOX` table. Since the entries in the `YFS_INBOX` table are purged by the `INBOXPRG` purge agent, announcements will also be purged when the `INBOXPRG` agent is executed. The purge criteria for announcements depends on the configurations defined for `INBOXPRG` purge agent. For more information about `INBOXPRG` purge agent, see *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

7.24.2 End-User Impact

A user can create, view, and cancel announcements if the user belongs to a user group that has the corresponding permissions.

7.24.3 Implementation

This section explains the configurations for the Announcements task.

- You can define the queues for which an announcement has to be created. While defining queues, ensure that the Queue Group is set to "Announcement Queue Group" and the priority of the queue is set to 1. For more information about defining queues, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.
- Sterling Call Center and Sterling Store enables you to configure the alert type that will be saved on the announcements when they are created. For more information about configuring alert types, see [Section 5.19.10, "Configuring Announcement Rules"](#).
- Sterling Call Center and Sterling Store enables you to configure the polling interval for announcements. For more information about configuring the polling interval, see [Section 5.19.10, "Configuring Announcement Rules"](#).
- Configure the `INBOXPRG` purge agent to purge the announcements.

- The Announcements task is permission controlled. You can assign permissions to user groups for creating, viewing, and cancelling announcements.

7.24.4 Reference Implementation

This section explains the reference implementation provided for the Announcement task.

- By default, CSR Leads and Store Managers are provided permissions to create announcements.
- By default, permission to view the announcements are provided to all the users.
- By default, a queue with the YCD_ANNOUNCEMENT_QUEUE queue ID, and for which an announcement has to be created, is provided.
- By default, an Announcement alert type is provided that will be used while creating an announcement.

7.25 User Preferences

When viewing the Sterling Call Center and Sterling Store application, the user may want to personalize the appearance of the screen. A novice user may also wish to view additional help messages while performing a task.

7.25.1 Solution

Sterling Call Center and Sterling Store provides a user interface task to set user preferences. The user can set preferences such as display of alert notifications, additional help messages, keyboard shortcuts, customer message panel, CSR message/customer message panel, position of scratch pad, and the position of related tasks. The user can also set preferences to remember pagination preference, and to display the scratch pad soon after logging in to the application.

The getProperty API is called to retrieve the preferences of the user when the user preferences screen is opened. The following properties are updated:

- YCDAlertNotification—To display alert notifications

- YCDAddtnlHlpMsgsIcons—To display additional help messages and icon legends
- YCDRelatedTaskShortcut—To display keyboard shortcuts
- YCDCustomerCSRMessages—To display collapsible customer message panel
- YCDSavePaginationSort—To remember the pagination preferences
- YCDRelatedTaskPosition—To position the related task panel
- YCDCustomrCSRMsgPnlPsn—To position the CSR message panel
- YCDScratchPadDisplay—To display the scratch pad in the Related Tasks panel or in a pop-up window
- YCDScratchPadEnabled—To display the scratch pad after logging in to the application

The `manageProperty` API is called to update the properties.

7.25.2 End-User Impact

This section explains the end-user impact for setting the user preferences.

- Based on the preferences set, the user will see alert notifications, additional help messages, keyboard shortcuts.
- The related tasks, CSR message/customer message panels, and scratch pad are positioned based on the user preferences.
- Based on the preferences set, the user will be notified when new records are inserted in an already sorted or filtered table.
- Based on the preference set, the user will view the scratch pad soon after logging in to the application.

7.25.3 Implementation

None.

7.25.4 Reference Implementation

This section explains the reference implementation provided as part of the setting user preferences task.

- By default, the Alert Notification panel is displayed.
- By default, the Additional Helpful Text Messages are displayed.
- By default, the keyboard shortcuts for the related tasks are displayed.
- By default, the Customer Message panel is displayed.
- By default, the position of CSR Message/Customer Message panel is Top.
- By default, the Pagination Preference is not saved.
- By default, the Scratch Pad is displayed within the Related Task panel.
- By default, the Scratch Pad is displayed soon after a user logs in to the application.
- By default, the position of the Related Tasks panel is Left.

7.26 Viewing the Documentation Library

When using the Sterling Call Center and Sterling Store application, users may want to access the product documentation library to get information about the Sterling Call Center and Sterling Store application from the Sterling Call Center and Sterling Store documents.

7.26.1 Solution

Sterling Call Center and Sterling Store enables users to view the product documentation library to get additional information about the Sterling Call Center and Sterling Store application. The documentation library can be hosted either by Sterling Commerce or locally by your enterprise. During installation of Selling and Fulfillment Foundation, you can select whether you want to enable an Online Documentation Library or a Local Documentation Library. You can also change this selection after installation. For more information about selecting the type of documentation library, see the *Selling and Fulfillment Foundation: Installation Guide*.

Users can access the documentation library by selecting the Documentation Library option from the Help Menu.

7.26.2 End-User Impact

A user can access the documentation library if the user belongs to a user group that has the permission to view the product documentation.

7.26.3 Implementation

This task is permission controlled. Sterling Call Center and Sterling Store enables you to assign permissions to user groups for this task.

7.26.4 Reference Implementation

As part of reference implementation, Sterling Call Center and Sterling Store provides permissions to all the user groups to view the product documentation.

7.27 Deploying the Sterling Call Center Clients in Phases

As new versions of Sterling Call Center and Sterling Store introduce new business processes and capabilities, some enterprises may want to deploy the new versions of the application to only specific users, and retain the earlier version of the application for other users. Users accessing an earlier version of the application should be allowed to access only those business processes and capabilities pertaining to the version the user is currently using. For example, an enterprise may want to display the Basic Fulfillment Summary Screen to users who are using an earlier version of the application and display the Advanced Fulfillment Summary Screen to users who are using the new version of the application. Also, by deploying the new version of the application to only specific users, the enterprise will have more time to train existing users on the new functionalities.

7.27.1 Solution

Sterling Call Center and Sterling Store enables enterprises to deploy the application in a phased manner. When a new version of the application is released, the application server must be updated with that version of the application. The new version of the application client can be made available for specific users, while the earlier version of the application client can be used by the other users. The functionality that is available

to the users is based on the version of the application deployed on the clients.

Version-Specific Business Rules

Sterling Call Center and Sterling Store enables you to configure different values for specific rules depending on the version of the application accessing the rule. The following rules can be configured in different ways based on the application's version:

- Configuring the way the Fulfillment Summary screen is displayed. For more information about configuring the display of the Fulfillment Summary screen, see [Section 5.10.37, "Configuring Display of Fulfillment Summary Screen"](#).
- Changing the tax options for a business customer. For more information about changing the tax options for a business customer, see [Section 5.10.1, "Configuring Order Entry Rules"](#).
- Scheduling the rule for the Additional Shipping option. For more information about selecting the scheduling rule, see [Section 5.10.37, "Configuring Display of Fulfillment Summary Screen"](#).

For more information about configuring different values for a rule. See [Section 5.19.14, "Configuring Version-Specific Rules"](#).

Compatibility of Order with Different Application Client Versions

If the application client is deployed in phases, two different versions of the application client may simultaneously access the application server. Therefore, orders created in the new version of the application client might have features on the order that make it unusable in the earlier version of the application client. To prevent order modifications in an earlier version of the application that is incompatible with the order, you can define a qualifier for the order. A qualifier can be defined over a range of client application versions. The qualifier determines the compatibility level of the order with a given version of the application. For more information about defining qualifiers for an order, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

Based on the qualifier defined for an order, the `getCompleteOrderDetails` API returns a `SupportLevel` attribute that indicates whether the order is

compatible with the version of the application accessing the order. For more information about the display of orders based on compatibility levels, see [Order Summary](#). For more information about the `getCompleteOrderDetails` API, see the *Sterling Call Center and Sterling Store: Javadocs*.

Version-Specific Common Codes

Sterling Call Center and Sterling Store enables you to define common codes that are specific to a particular version of the application client. An enterprise may introduce a new common code that is applicable to only a particular version. In order to implement this, you can define qualifiers for the common codes. For more information about defining qualifiers for the common codes, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*. For more information about configuring the values of the common codes based on the version of the application, see [Section 5.19.15, "Configuring Version-Specific Common Codes for Sales Orders"](#). The `CANCEL_REASON` common code type can have values that are specific to a version of the application.

7.27.2 End-User Impact

This section explains the end-user impact if the Sterling Call Center and Sterling Store application is deployed in phases.

- If different values have been defined for a specific rule in different versions, users will see different types of behavior in the application depending on the version of the application the user is using.
- Based on the compatibility level of an order with a particular version of the application client, the appropriate Order Summary screen is displayed. For more information about the different compatibility levels of an order, see [Order Summary](#).
- Based on the common code values that are configured for a particular version of the application, appropriate common codes are displayed depending on the version of the application being used.

7.27.3 Implementation

This section explains the configuration for deploying the Sterling Call Center and Sterling Store application in phases.

- Sterling Call Center and Sterling Store enables you to define qualifiers for a rule. For more information about defining qualifiers for a rule, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*. For more information about configuring different values for a rule, see [Section 5.19.14, "Configuring Version-Specific Rules"](#).
- Sterling Call Center and Sterling Store enables you to define qualifiers for an order to indicate the compatibility of an order with a particular version of the application. For more information about defining qualifiers, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.
- Sterling Call Center and Sterling Store enables you to define qualifiers for the common codes. For more information about defining qualifiers for the common codes, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*. For more information about configuring different values for the common codes, see [Section 5.19.15, "Configuring Version-Specific Common Codes for Sales Orders"](#).

7.27.4 Reference Implementation

None.

7.28 Helpful Text Messages

When using the Sterling Call Center and Sterling Store application, a novice user may want to view additional help messages which guide the user to perform a task.

7.28.1 Solution

Sterling Call Center and Sterling Store provides a help assistant screen for each task. The Sterling Call Center and Sterling Store Assistant is launched when a screen is loaded and it displays a hyperlink for each task that can be performed on the corresponding screen. On clicking a hyperlink, detailed instructions for the selected task is displayed. Help Assistant is available for the following screens:

- Create Order: Select Customer
- Add Lines to Order

- Change Fulfillment Options
- Pickup Select Store Pop-up
- Take Appointment
- Take Appointment: Resolve Line Problems
- Delivery Fulfillment Summary
- Ship/Pickup Fulfillment Summary
- Price Match: Price Match Details
- Create Return: Select Lines
- Create Return: Return Reason
- Create Return: Fulfillment Summary
- Create Return: Take Appointment
- Create Return: Change Appointment

The content for helpful text messages may reside on a different server and can be retrieved when needed. You can configure the server URL where the content for helpful text messages reside. A `taskhelp.xml` is provided which contains the help content for each screen.

The `taskhelp.xml` must adhere to the following structure:

```
<Screens>
<Screen ID=" ">
<HelpTasks>
<HelpTask TaskID=" " BundleKey=" " Url=" "/>
</HelpTasks>
</Screen>
</Screens>
```

Sterling Call Center and Sterling Store also allows you to add more questions to a screen for which content is already provided. You can also customize and localize the titles that appear on the Help Assistant screen.

Sterling Call Center and Sterling Store also allows you to add content for new screens.

The user can configure whether the help assistant screen should be displayed when the screens are launched. For more details on user preferences, see [Section 7.25, "User Preferences"](#).

7.28.2 End-User Impact

Based on user preferences, the user will see additional helpful text messages.

7.28.3 Implementation

This section explains the configurations for helpful text messages.

- Sterling Call Center and Sterling Store allows you to configure the server URL from where the content for the Help Assistant screens is retrieved. To configure the URL, set the value for the `yfs.ycd.help.baseurl` property in the `<INSTALL_DIR>/properties/customer_overrides.properties` file.
- Sterling Call Center and Sterling Store allows you to add content for existing screens.

To add more questions to an existing screen:

- a. Create a new folder where the customized file will be located.
 - b. Copy the `reference\help\taskhelp.xml` file to the new folder created in [Step a](#).
 - c. Modify the `taskhelp.xml` file to include additional `HelpTask` elements under the screen for which more helpful messages are added.
 - d. In the `plugin.xml` file, implement the extension point `com.yantra.pca.ycd.rcp.YCDTaskHelpContent`. Create an extension `HelpFileName`. In the `Name` field, specify the relative path to the new file created in [Step b](#).
- Sterling Call Center and Sterling Store allows you to customize and localize the titles that appear on the Help Assistant screen. For more information about customizing the titles that appear on the Help Assistant screens, see [Section A.2.1, "Resource Bundles"](#).

7.28.4 Reference Implementation

None.

7.29 Integrating with Business Center

In some implementations, call center and store representatives may have to access screens and functionality from the Business Center application. For example, call center and store representatives may have to configure pricing rules in Business Center.

7.29.1 Solution

Sterling Call Center and Sterling Store provides a user interface task that enables users to launch Business Center from within Sterling Call Center and Sterling Store. When the task is selected, the Business Center application is launched in an embedded Web browser. The location of the application server running the Business Center must be defined in the `locations.ycfg` file. For more information about the `locations.ycfg` file, see the *Sterling Call Center and Sterling Store: Installation Guide*.

Sterling Call Center and Sterling Store provides a single sign-on capability to Business Center, enabling the user to access both the Item Administration and Pricing Administration applications. To log in, the user must belong to the following:

- A user group that has permission to launch Business Center from within Sterling Call Center and Sterling Store. This user interface task is permission controlled.
- A user group that has permission to the Business Center application and its screens.
- A menu group that can access both the Sterling Call Center and Sterling Store and Sterling Business Center.

For information about using Business Center, see the *Sterling Business Center Pricing Administration Guide* and the *Sterling Business Center Item Administration Guide*.

7.29.2 End-User Impact

Users will not be able to access Business Center unless they belong to the menu group and user groups described in [Section 7.29.1, "Solution"](#).

7.29.3 Implementation

This section explains the configurations for the Business Center task.

- Business Center can be deployed on an application server that is different from the Sterling Call Center and Sterling Store server. To enable the launch of a Web browser for Business Center, the location of the Business Center application server must be defined in the `locations.ycfg` file. For more information about the `locations.ycfg` file, see the *Sterling Call Center and Sterling Store: Installation Guide*.
- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign the necessary permissions to the corresponding user groups for performing this task.

7.29.4 Reference Implementation

None.

Implementing the Sterling Store Features

This chapter describes the store features supported by Sterling Store.

8.1 Item Inquiry

A user may want to search for product items or service items and also view the details for them such as fulfillment methods, availability, promotions, associations, price. An enterprise may want to model items based on distinct attributes such as style, size and color and enable users to search and view details of stylized items. For more information about item inquiry, see [Section 7.1, "Item Inquiry"](#).

8.2 Configured Items

In some retail environments may fulfill orders comprising of configured items. A configured item is a group of items which are related such as a computer which comprises of the processor, keyboard, mouse, and monitor. Configured items are also referred to as bundles. For more information about configured items, see [Section 7.2, "Configured Items"](#).

Bundles are supported in the following flows:

- [Shipment Inquiry](#)
- [Backroom Pick](#)
- [Undo Backroom Pick](#)
- [Customer Pick](#)

8.3 Alternate Item Identifier

The alternate item identifier can be used to scan and search for product or service items in the store application. For more information about alternate item identifiers, see [Section 7.3, "Alternate Item Identifier"](#).

The Order Print tasks provided by Sterling Store do not display alternate item identifiers, even if you have configured alternate item identifiers. For more information about order prints, see [Section 8.28, "Order Print Tasks"](#).

8.4 Item Display Options Configuration

Sterling Call Center and Sterling Store enables you to configure which item attributes need to be displayed throughout the user interface. For more information about configuring item display options, see [Section 7.4, "Item Display Options Configuration"](#).

8.5 Alternate Store Pickup Locations Search

Sterling Call Center and Sterling Store provides an ability to search for availability of items for pickup across stores. For more information about alternate stores, see [Section 7.5, "Alternate Store Pickup Locations Search"](#).

8.6 Order Capture

Data must be captured for fulfilling an order in a store. The order capture process includes order creation and order validation. For more information about order capture, see [Section 7.6, "Order Capture"](#).

Adding Open Box Items

Sterling Store provides the ability to add open box items to an order and to view the open box items on existing orders. For more information about open box items, see [Section 8.9.7, "Open Box Items"](#).

8.7 Order Inquiry

A customer may walk into a store to inquire about any order placed in the store. In such situations, Sterling Call Center and Sterling Store

needs to respond to order inquiries by publishing information about the orders captured to the external systems. The order inquiry process and implementation supported in a store is similar to the order inquiry process in a call center.

The order inquiry process in the Sterling Store scenario enables you to search for draft orders and orders that are created in a store. For more information about order inquiry, see [Section 7.7, "Order Inquiry"](#).

8.8 Order Monitoring

Once orders are captured, they need to be monitored so that the customers are notified about the order status. For more information about order monitoring, see [Section 7.8, "Order Monitoring"](#).

8.9 Order Maintenance

You can modify orders that are created and captured in Sterling Call Center and Sterling Store. The following order maintenance features are supported in the Sterling Store scenario:

- [Apply Hold](#)
- [Resolve Holds](#)
- [Change Payment Method](#)
- [Add Multiple Items to an Order](#)
- [Change Gift Options](#)
- [Customer Appeasement](#)
- [Open Box Items](#)
- [Add Coupon](#)
- [Cancel Order](#)
- [Track an Item](#)
- [Return Order Capture](#)
- [Order Notes](#)
- [Change Fulfillment Options](#)
- [Change Service Instructions](#)

- [Change Service Appointments](#)
- [Fulfillment Summary](#)
- [Reservations](#)
- [Price Match](#)
- [Increase Order Line Quantity](#)
- [Schedule and Release an Order](#)
- [View Procurement Orders](#)
- [Change Order Address](#)
- [Launch Application Console](#)
- [Change an Item's Style](#)
- [Change Tax Options](#)
- [Copy Order](#)
- [E-Mail Order Information](#)

8.9.1 Apply Hold

Sterling Call Center and Sterling Store enables users to apply holds on an order after order creation. Based on user permissions and status modification rules, users can apply holds on an entire order or a specific order line. For more information about applying holds, see [Section 7.9.1, "Apply Hold"](#).

8.9.2 Resolve Holds

Sterling Call Center and Sterling Store provides visibility to holds applied to an entire order or to just certain order lines, and enables you to remove them. An order can be placed on hold with various hold types, either automatically or manually. For more information about removing holds, see [Section 7.9.2, "Remove Holds"](#).

8.9.3 Change Payment Method

Different types of payment are supported in the Sterling Store scenario. For more information about the process and implementation of changing a payment method, see [Section 7.9.3, "Change Payment Method"](#).

8.9.4 Add Multiple Items to an Order

Once an order is created, the customer may want to add a few more product or service items to that order. Sterling Store enables you to add multiple items to an order. For more information about adding multiple items, see [Section 7.9.5, "Add Multiple Items to an Order"](#).

8.9.5 Change Gift Options

You can identify certain items as gifts in an order. You can configure which of the fulfillment methods allow gift options to be recorded in the user interface. For more information about changing gift options, see [Section 7.9.6, "Change Gift Options"](#).

8.9.6 Customer Appeasement

When a customer is not satisfied or has had a bad experience with any of the services that were provided, you can present them with the option to appease them. For example, a customer may walk in to a store to report having received a damaged item. In such situations, you need to perform an appeasement task to make amends for the bad experience. For more information about customer appeasement, see [Section 7.9.7, "Customer Appeasement"](#).

8.9.7 Open Box Items

Open box items are display items that are returned with minute defects and are sold at a discounted rate. You can add the open box items to an order.

8.9.7.1 Solution

Sterling Call Center and Sterling Store provides the ability to add open box items to an order and to view the open box items on existing orders.

Typically, open box items are assigned a unique identifier to differentiate them from the other items. In Sterling Call Center and Sterling Store, the unique identifiers for the available open box items are stored as item tag attributes. For more information about defining a product item's inventory information, see the *Sterling Catalog Management: Configuration Guide*.

Open box items must be assigned a different product class to ensure that they do not appear in normal item availability inquiries and are not promised to orders for regular items.

Open box identifiers can be entered in the user interface in the create order and add line screens. The `getCompleteOrderDetails` API retrieves the sales order details that contain the `OrderLineInvAttRequest` element as an output template. The user interface uses the `getTagListForOrdering` API to validate the open box ID and get the corresponding item information for that open box ID such as the Item ID, Unit of Measure, Product Class, and Price Details. The `createOrder` or `changeOrder` APIs are called with open box unique identifiers and passed to the `OrderLineInvAttRequest` element as input.

8.9.7.2 End-User Impact

None.

8.9.7.3 Implementation

This section explains the configuration needed to add an open box item to an order.

1. Log in to the Channel Applications Manager. For more information about logging in to the application, see [Section 2.1, "Starting the Channel Applications Manager"](#).
2. In the Applications Manager, set the following rules:
 - Allow Addition of Open Box Items to Orders—Enable this rule to allow open box items to be added to orders.
 - Tag Identifier for Open Box ID—Select the appropriate item tag attribute that is used to track the unique open box identifier from the drop-down list.

Note: In the user role configuration, you can grant or revoke permission to the "Add Open Box" resource if you want to control the capability to add open box items at a user level.

- Product Class for Open Box Items—Select the appropriate product class that represents open box items from the drop-down list. This

product class is used to differentiate open box items from regular availability checks and order promising.

- Fulfillment Methods Supported for Open Box Items—Select the appropriate fulfillment method to use for open box items. The following types of fulfillment method are supported for open box items:
 - Pickup
 - Shipping
 - Delivery

8.9.7.4 Reference Implementation

A new item, AOE4357 Computer Game CD is added to the XYZ-CORP organization with Batch No as the open box unique identifier.

8.9.8 Add Coupon

This feature allows a user to add coupons or promotion codes for an order that has been placed. For more information about adding coupons to orders, see [Section 7.9.15, "Add Coupon"](#).

8.9.9 Cancel Order

A customer may want to cancel an entire order, or just certain product or service items on the order. The items on an order can be cancelled as long as they have not been shipped. For example, you can cancel items that are included in the shipment but still present in the store.

In the Sterling Store scenario, depending on the store enterprise configurations, a store representative can cancel the order lines that are not shipped from a local store, even if permissions are not assigned. The `getCompleteOrderDetails` API determines whether or not an order line can be cancelled. If the cancellation request has some items beyond `Released` status, the store representative must first validate if the items can be cancelled. The order lines can be cancelled even after the order lines with the pick up fulfillment method are moved to the `Released` status. The `changeOrder` API is called to cancel the lines on the order and release, if associated with the order line. The `changeShipment` API is called to cancel the shipment lines associated with the order line. This API is called only when the shipment line is associated with an order line.

As a part of Cancel Order task implementation:

1. Log in to the Channel Applications Manager.
For more information about logging in to the Channel Applications Manager, see [Section 2.1, "Starting the Channel Applications Manager"](#).
2. From the Channel Applications Manager, select Configure Order Administration > Configure Order Modification Rules. The Modification Rules: Order Fulfillment screen is displayed.
3. In Group By drop-down list, select Modification Type.
4. From Order Fulfillment > Add Note > Line, right-click Sent To Store.
5. Select Allow Modification.
6. From Order Fulfillment > Add Note > Order, right-click Sent To Store.
7. Select Allow Modification.

For more information about cancelling an order, see [Section 7.9.16, "Cancel Order"](#).

8.9.10 Track an Item

The customers may sometimes need to know the status of the orders. For example, if a customer does not receive items that were ordered, then the customer can call the CSR to enquire about the shipment status. For more information about tracking an item, see [Section 7.9.17, "Track an Item"](#).

8.9.11 Order Notes

A user may need to enter notes to an order or order line, describing the actions performed against that order or order line, for future reference.

As part of the reference implementation, the following Contact Types are configured:

- Phone
- E-mail
- In Person

For more information about adding notes to an order, see [Section 7.9.18, "Order Notes"](#).

8.9.12 Change Fulfillment Options

You can use this task to change fulfillment options for orders that are associated with the delivery lines.

The `getShipmentList` API returns a list of shipments associated with the order for a particular node.

If an item has to be delivered or picked up from a local store for which the order status is greater than `Released` and not shipped, the item is most likely to be present in the store. In such situations, the store representative can verify whether the item is present in the store and modify the fulfillment options as requested by the customer by using the `getCompleteOrderDetails` API.

For more information about changing the fulfillment options, see [Section 7.9.19, "Change Fulfillment Options"](#).

Note: You can configure the user interface to never show the pick up fulfillment method if the enterprise does not support that fulfillment method.

8.9.13 Fulfillment Summary

Sometimes, Sterling Call Center and Sterling Store users may have to view the fulfillment summary of an order to get a complete picture of the way the order is being fulfilled. In a B2B scenario, customers may place orders for large quantities of items, and this may result in the items being available on multiple dates. In such a situation, Sterling Call Center and Sterling Store users may require a better visibility into the way the orders are fulfilled.

For more information about viewing the fulfillment summary, see [Section 7.9.20, "Fulfillment Summary"](#).

8.9.14 Delivery and Service Grouping

When a complex order pertaining to numerous products, provided services, and delivery services exists, users can group the order lines into smaller groups to ensure that appointments are available for the

various services. For more information about grouping order lines, see [Section 7.9.21, "Delivery and Service Grouping"](#).

8.9.15 Change Service Instructions

At the time of delivery, if a customer requests to change the service instructions for a product or service item, you can modify the service instructions as requested. For more information about changing service instructions, see [Section 7.9.22, "Change Service Instructions"](#).

8.9.16 Change Service Appointments

When a customer wants to change the date and time of delivery of the ordered items, you can modify the service appointments. For more information about changing service appointments, see [Section 7.9.23, "Change Service Appointment"](#).

8.9.17 Reservations

The reservation of items is performed to confirm availability and resolve issues when handling multiple customers simultaneously. For more information about reservations, see [Section 7.9.25, "Reservations"](#).

8.9.18 Price Match

A customer may sometimes find that an item is available at a cheaper price from a different retailer. In such situations, the store representative can investigate the customer's claims and perform the necessary price match action. For more information about price matching an item, see [Section 7.9.8, "Price Match"](#).

8.9.19 Competitor Search

Sterling Call Center and Sterling Store provides the ability the search and view competitor records. While performing a price match, you can search if the competitor already exists in the database. For more information about searching for a competitor, see [Section 7.9.9, "Competitor Search"](#).

8.9.20 Price Match Search

Sterling Call Center and Sterling Store provides the ability the search and view existing price match records. During the price match process, a user may want to search for an existing price match. Based on the search criteria, a list of price matches is displayed. For more information about searching for a price match, see [Section 7.9.10, "Price Match Search"](#).

8.9.21 Create or Modify a Competitor Record

Sterling Call Center and Sterling Store provides the functionality to create a new competitor, if the competitor does not already exist in the database, and also allows you to modify an existing competitor record. For more information about creating or modifying a competitor record, see [Section 7.9.11, "Create or Modify a Competitor Record"](#).

8.9.22 Create or Modify a Price Match Record

Sterling Call Center and Sterling Store provides the functionality to create a new price match, if the price match does not already exist in the database, and also allows you to modify an existing price match record. For more information about creating or modifying a price match record, see [Section 7.9.12, "Create or Modify a Price Match Record"](#).

8.9.23 Increase Order Line Quantity

When a customer wants to increase the quantity of one or more items on an order that is already placed, the user can increase the order line quantity as requested. For more information about increasing an order line quantity, see [Section 7.9.26, "Increase Order Line Quantity"](#).

In the Sterling Store application, while increasing the order line quantity, if the order line is in the `Released` status, a warning message which prompts the user to manually check whether the items are present in the store is displayed.

8.9.24 Schedule and Release an Order

Sterling Call Center and Sterling Store enables a user to schedule and release an order. For more information about scheduling and releasing an order, see [Section 7.9.27, "Schedule and Release an Order"](#).

8.9.25 View Procurement Orders

Sterling Call Center and Sterling Store enables a user to view procurement orders (Purchase Orders and Transfer Orders) that are created for a sales order. For more information about viewing procurement orders, see [Section 7.9.28, "View Procurement Orders"](#).

8.9.26 Change Order Address

A customer may want to change or modify the addresses on an order after placing the order. In such situations, you can modify the addresses as requested by the customer. For more information about changing the order address, see [Section 7.9.29, "Change Order Address"](#).

8.9.27 Launch Application Console

In some implementations, call center and store representatives may need to access screens and functionality from the Application Console. For example, call center and store representatives may need to access the detailed order audit screens available in the Application Console.

For more information about launching the Application Console, see [Section 7.9.30, "Launch Application Console"](#).

8.9.28 Change an Item's Style

After placing an order for a stylized item, a customer may want to change the attributes of the item. Sterling Call Center and Sterling Store enables you to change an item's style once the item is added to the order. For more information about changing an item's style, see [Section 7.9.31, "Change an Item's Style"](#).

8.9.29 Change Tax Options

A business customer may want to request tax exemptions on an order after placing the order. For example, after placing an order, if a business customer decides to give away the items ordered to a charity organization, Sterling Call Center and Sterling Store enables the store representative to allow tax exemptions on the order. For more information about changing tax options, see [Section 7.9.32, "Change Tax Options"](#).

8.9.30 Copy Order

When creating an order or viewing an order that was placed earlier, a customer may decide to use that order to create new orders in the future, where applicable. For example, a customer may place an order for a particular list of items every month, with the list varying only slightly from month to month. Sterling Call Center and Sterling Store provides the Copy Draft Order related task, which enables a user to copy an existing draft order, and the Order Again related task to create a new draft order from a confirmed order, based on the permissions provided to the user. For more information about copying orders, see [Section 7.9.33, "Copy Order"](#).

8.9.31 E-Mail Order Information

At times, a customer may request a store representative to send information about an order by e-mail. For example, a customer may want to review the items that have been included in the order. Sterling Call Center and Sterling Store provides the Send Order E-mail related task to enable users to send information pertaining to an order to the e-mail address of the customer. For more information about e-mailing order information, see [Section 7.9.34, "E-Mail Order Information"](#).

8.10 Payment Processing

In the Sterling Store scenario, each order has to be paid when it is placed. The customer can use different types of payment to pay for an order. For more information about payment processing and implementation, see [Section 7.10, "Payment Processing"](#).

8.11 Payment Inquiry

Sterling Call Center and Sterling Store enables users to view payment information pertaining to an order, such as order total, refunds, and pending charges. For more information about payment inquiry, see [Section 7.11, "Payment Inquiry"](#).

8.12 Return Order Capture

Sterling Store implements the same Return Order functionality that is in Sterling Call Center, as described in [Section 7.13, "Return Order"](#)

[Capture](#)". This section contains the few exceptions that apply to Sterling Store for creating returns, entering return reasons, and viewing or changing the Fulfillment Summary and Payment Summary.

Maintaining returns is described in [Section 8.14, "Return Order Maintenance"](#). This includes tasks such as reporting extra items, wrong items, and unexpected items, issuing immediate refunds, changing return addresses, and canceling return orders.

8.12.1 Create Return

This section describes only the Sterling Store functionality for creating a return. For more information about creating returns, see [Section 7.13, "Return Order Capture"](#).

To scan an item for return, a user selects the By Order tab, which shows an Item ID field. When the user scans the item, the Item ID is displayed in the Item ID field. If the item scanned is not on the order, an error message is displayed indicating that the Item ID was not found.

A scanned item is automatically marked in hand when it is scanned. Returns without a receipt and returns by Extra Item (items that the customer received by mistake) are also assumed to be in hand by the system. Certain aspects of the return process, such as return methods and appointments, are unnecessary if an item is in hand.

If an item is not scanned, the return panel contains a check box for "Item is in Hand" and a check box for "All Selected Items Are Present."

When scanning items, the last scanned item is always visible on the screen.

Sterling Store provides the capability to record items that were in hand when the return was created.

8.12.2 Return Reason

This section describes only the Sterling Store functionality for the Return Reason screen. For more information about entering the Return Reason screen, see [Section 7.15.2, "Entering Return Reason"](#).

For an item that was marked in hand on the Line Selection screen, the Return Reason screen contains a drop-down for the Return Disposition Code, which enables the user to specify the condition of the item when it

was returned. If the user does not have any items in hand, he will not be able to enter the Disposition Code. This code is required only for an item in hand to continue the return process flow. The value for this field is stored in YFS_ORDER_LINE, as described in [Table 9-2, "YFS_ORDER_LINE Extensions"](#).

As a part of the reference implementation, the following Return Disposition Codes are configured for the Create Store Return task:

- Sent For Repair
- Scrapped
- Restocked

To apply the same Disposition Code to all items in hand that are being returned, click the Apply to All Items button on the Return Reason Screen. For more information about returns and exchanges, see [Section 7.13, "Return Order Capture"](#).

8.12.2.1 All Items Are In Hand Rule

After the Address Info Needed rule described in [Section 7.15.4, "Exchange Fulfillment Options"](#) is run, the "All Items Are in Hand" rule will be run. This rule checks whether all the lines on the order are marked as in hand or if there is an exchange order. If either is true, the flow continues to the Fulfillment Summary screen.

If no exchange order is created and every item in the return order is in hand, the flow goes to the Payment screen because no lines are being returned by shipping or being picked up, and no reservations or appointments are needed.

If no exchange order is created on the Return Reason screen or if there is a return order with any line that is not in hand, the returns flow proceeds to the Fulfillment Summary screen.

If there is no exchange order, the flow proceeds to the Fulfillment Summary screen.

8.12.3 Fulfillment Summary

This section describes only the Sterling Store functionality for the Fulfillment Summary screen. For more information about entering the Fulfillment Summary screen, see [Section 7.15.5, "Fulfillment Summary"](#).

When this screen is displayed, a call to the `getReturnMethod` API is made, which determines whether the line needs to be displayed in a pickup panel, a shipping panel, or whether the customer can keep the item.

The same process collects lines that are already received or are in hand, and displays them in their own panel, so that the user can see their status. This status cannot be changed.

8.12.4 Payment Processing

This section describes only the Sterling Store functionality for the Payment Summary screen. For more information about entering the Payment Summary screen, see [Section 7.15.7, "Payment Summary"](#).

Instead of calling the `confirmOrder` API to process payments, Sterling Store calls a user exit called `processReturnCompletionUE`. This user exit calls a list of APIs based on the return or exchange lines. The default implementation of these APIs tries to push the order through the pipeline as far possible, receiving the items that are in hand and setting the items that are to be picked up or shipped to `Released` status. When items that are not in hand are received at the warehouse, a receipt is started so that the customer receives a refund.

8.13 Return Order Inquiry

Sometimes customers may inquire information about return orders. For example, a customer may want to change the return address or appointment on the return order. In such situations, call center or store representatives need to search for the appropriate return order and then perform the necessary actions. For more information about return order inquiry, see [Section 7.14, "Return Order Inquiry"](#).

In Sterling Store, the `SellerOrganizationCode` attribute is passed to the `getOrderList` API.

8.14 Return Order Maintenance

Sterling Call Center and Sterling Store provides the following return order maintenance features:

- [Report Extra Items](#)

- [Report Wrong Items](#)
- [Report Unexpected Items](#)
- [Issue Refund Now](#)
- [Change Return Address](#)
- [Cancel Return Order](#)

8.14.1 Report Extra Items

Sometimes a customer may report that the customer has received extra items. For example, if a customer ordered for a TV and has received 2 TV's instead of 1. In such situations, the extra items can either be returned back or you can allow the customer to keep the extra items. For more information about reporting extra items, see [Section 7.15.9, "Report Extra Items"](#).

8.14.2 Report Wrong Items

Sometimes a customer may report that the customer did not receive the items that were ordered. In such situations you may need to reship the items that were ordered and also create a return for the wrong items that were delivered. For example, if a customer ordered for TV and has received a DVD player instead of the TV, you need to create a return for the DVD player and reship the TV. For more information about reporting wrong items, see [Section 7.15.10, "Report Wrong Items"](#).

8.14.3 Report Unexpected Items

Sometimes a customer may report that he did not order for any items and has received some items. In such situations you may need to create a customer and then create a return for the wrongly shipped items. For more information about reporting unexpected items, see [Section 7.15.11, "Report Unexpected Items"](#).

8.14.4 Issue Refund Now

A customer may call to inquire about why he has not been refunded for the items which have already been returned. In such situations, you may need to issue a refund for the items immediately. For more information about issuing a refund, see [Section 7.15.12, "Issue Refund Now"](#).

8.14.5 Change Return Address

A customer may want to change or modify the addresses on a return order. In such situations, you can modify the addresses as requested. For more information about changing the return address, see [Section 7.15.13, "Change Return Address"](#).

8.14.6 Cancel Return Order

A customer may want to cancel some of the items or the entire return order. The customer may also want to cancel the exchange order corresponding to the return order. For more information about canceling a return order, see [Section 7.15.16, "Cancel Return Order"](#).

8.15 Customer Creation

Sterling Call Center and Sterling Store enables you to create two types of customers:

- Consumer Customers
- Business Customers

Note: The customer creation feature launches a single wizard that displays different screens depending on the customer type.

8.15.1 Create Consumer Customer

A Consumer Customer consists of a single contact. The only information required for a consumer customer is a consumer contact record, which serves as a unique identifier for the customer. For more information about creating a consumer customer, see [Section 7.16.1, "Create Consumer Customer"](#).

8.15.2 Create Business Customer

A Business Customer consists of a Buyer Organization and any number of contacts. The addresses and payment methods can be defined for all contacts, or for specific contacts, depending on where they are created. The unique identifier of a Business Customer is the Customer ID. For

more information about creating a business customer, see [Section 7.16.2, "Create Business Customer"](#).

8.16 Customer Details

Sterling Call Center and Sterling Store enables you to view customer details for both business and consumer customers. For more information about viewing customer details, see [Section 7.17, "Customer Details"](#).

8.17 Customer Inquiry

Sterling Call Center and Sterling Store provides the ability to search and view two types of customers:

- Consumer Customers
- Business Customers

For more information about customer inquiry, see [Section 7.18, "Customer Inquiry"](#).

8.18 Customer Maintenance

Sterling Call Center and Sterling Store provides the ability to manage a customer's contacts, addresses, and payment methods.

8.18.1 Manage Contacts

Sterling Call Center and Sterling Store enables you to manage the contacts of a consumer or business customer. You can add contacts, modify contact records, modify contact addresses, manage contact payment methods, and delete contacts that are no longer active.

For a consumer customer, Sterling Call Center and Sterling Store prompts you to modify the single contact that is associated to the consumer. A consumer customer can have only one contact record associated to that customer. For a business customer, multiple contact records can be available for modification, creation, or deletion. For more information about managing contacts, see [Section 7.19.1, "Manage Contacts"](#).

8.18.2 Manage Business Customer Information

Sterling Call Center and Sterling Store enables you to manage business customer information, such as a customer's business name, Web site, status, shipping preferences, and tax information. In addition, you can manage business customer classifications, such as the customer's relationship type and customer level. For more information about managing business customer information, see [Section 7.19.2, "Manage Business Customer Information"](#).

8.18.3 Manage Customer Addresses

Sterling Call Center and Sterling Store enables you to define multiple addresses for a customer. You can define addresses at the contact level or at the customer level. You can also define default Ship To, Bill-To and Sold To addresses to be used during ordering. If a contact has no defaults selected, then the customer default addresses will be used. For more information about managing customer addresses, see [Section 7.19.3, "Manage Customer Addresses"](#).

8.18.4 Manage Payment Methods

Sterling Call Center and Sterling Store enables you to define multiple payment methods for a customer. You can define payment methods at the contact level or at the customer level. You can also define a default payment method at the contact level or customer level. For more information about managing payment methods, see [Section 7.19.4, "Manage Payment Methods"](#).

8.18.5 Reset User Passwords

Sterling Call Center and Sterling Store enables you to reset a user's password, if a user ID is associated to the user's record. For more information about resetting a user's password, see [Section 7.19.5, "Reset User Passwords"](#).

8.18.6 Customer Team Assignments

Sterling Call Center and Sterling Store provides the ability to assign customers to a team once the customer is created. A supervisor can assign a customer from his team, to any of his immediate sub teams. For

more information about assigning a customer to a team, see [Section 7.19.6, "Customer Team Assignments"](#).

8.18.7 Customer User Assignments

Sterling Call Center and Sterling Store provides the ability to assign customers to a user, once the user is created and assigned to a team. A supervisor can search for users from his team and assign the customer to the selected user. For more information about assigning a customer to a user, see [Section 7.19.7, "Customer User Assignments"](#).

8.18.8 Customer Self Assignments

A user with permissions can assign himself to customers that is available to his/her team. Users can assign customers to themselves up to a maximum limit and also remove customers that they are no longer working with. For more information about assigning a customer, see [Section 7.19.8, "Customer Self Assignments"](#).

8.18.9 Customer Notes

A user may have to enter notes about a customer, such as when the customer can be contacted if queries are raised about an order. For more information about customer notes, see [Section 7.19.9, "Customer Notes"](#).

8.19 User Creation

Sterling Call Center and Sterling Store enables you to create and modify users. For example, a store representative may have to create a new store representative user.

Note: A user is an employee of the enterprise organization who can log in to the Sterling applications.

For more information about creating and managing users, see [Section 7.20, "User Creation"](#).

8.20 User Team Creation

Sterling Call Center and Sterling Store enables you to create and manage user teams. Teams are created to assign store representatives to a set of customers. This assignment enables customers to maintain a relationship with specific store representatives so that customers receive better customer service.

Note: A user team is a collection of users who have common data and user interface access requirements. User teams can have access to specific document types, enterprises, ship nodes, customers, and screens within the user interfaces.

For more information about creating and managing user teams, see [Section 7.21, "User Team Creation"](#).

8.21 Pagination

When users perform inquiries, they need the information to be retrieved in a minimum amount of time and to be displayed as efficiently as possible. For more information about pagination, see [Section 7.22, "Pagination"](#).

8.22 Alert and Queue Management

The alert management task enables the user to create, assign, and resolve alerts. The new alerts that are raised can be notified to the user based on certain configurations, such as poll time. Sterling Call Center and Sterling Store provides a comprehensive visibility to the alerts assigned to users, alerts moved to a different queue, and so on.

If your enterprise has configured queues common to various stores, you may want store users to look at alerts intended only for his store.

8.22.1 Solution

Sterling Store provides a way to filter alerts based on the user's current store based on a configuration. If the rule is enabled the store user will be able to see alerts assigned only to his store. If this rule is enabled, the

ShipnodeKey is passed to the APIs when retrieving alerts in the following screens:

- Alert Search
- View My Alerts and Queues
- Alert Notification Panel

For more information about alert and queue management, see [Section 7.23, "Alert and Queue Management"](#).

8.22.2 End-User Impact

None.

8.22.3 Implementation

Sterling Store allows you to configure user alert notification. For more information about configuring user alert notification, see [Section 5.17.3, "Configuring User Alert Notifications"](#).

8.22.4 Reference Implementation

None.

8.23 Announcements

Sterling Call Center and Sterling Store enables users to post messages or other useful information pertaining to users. Users who belong to a user group that has the necessary permission can create, view, and cancel announcements. Announcements created in Sterling Store by a store user for a particular store will have the ship node of the store stamped on the announcement. However, announcements created in Sterling Call Center will not have the ship node of the store stamped on the announcement, and therefore, will not be displayed in Sterling Store. For more information about announcements, see [Section 7.24, "Announcements"](#).

8.24 User Preferences

Sterling Call Center and Sterling Store enables you to set user preferences such as the display of alert notifications, additional help

messages, keyboard shortcuts, customer message panel, position of related tasks, CSR message/customer message panel, and scratch pad. For more information about user preferences, see [Section 7.25, "User Preferences"](#).

Note: If the `-DhideStoreCustomerMessage` value in the `som.ini` file is set to `true`, the Customer Message panel is not displayed irrespective of whether the Hide customer message panel check box in the User Preferences is selected or not. For more information about the `som.ini` file, see the *Sterling Call Center and Sterling Store: Installation Guide*.

8.25 Viewing the Documentation Library

Sterling Call Center and Sterling Store enables users to view the product documentation library to get additional information about the Sterling Call Center and Sterling Store application. For more information about the product documentation, see [Section 7.26, "Viewing the Documentation Library"](#).

8.26 Deploying Sterling Store Clients in Phases

Sterling Call Center and Sterling Store enables enterprises to deploy the application in a phased manner. The functionality available to the users is based on the version of the application deployed on the clients. For more information about deploying the Sterling Store application in phases, see [Section 7.27, "Deploying the Sterling Call Center Clients in Phases"](#).

8.27 Helpful Text Messages

When using the Sterling Call Center and Sterling Store applications, a novice user may want to view additional help messages which guide the user to perform a task. For more information about helpful text messages, see [Section 7.28, "Helpful Text Messages"](#).

8.28 Order Print Tasks

A customer may visit a store to either place an order or make some modifications to an existing order that may result in some payment changes. In such situations, you must issue an order slip of the transaction to the customer.

Printers are configured as devices. For more information about defining devices, see the *Sterling Warehouse Management System: Configuration Guide*.

8.28.1 Create Order and Order Summary Prints

When you confirm a draft order, you must issue the customer a Order Sales Slip that has a snapshot of the order. Typically, the snapshot displays order lines and payment details.

The Order Sales Slip is also printed from the Order Summary screen when the customer needs the summary of the order.

8.28.1.1 Solution

On confirming the draft order, the system invokes the print service component. Whenever a customer requests for an order slip, you can click the Print Order Summary related task to print the Order Sales Slip.

8.28.1.2 End-User Impact

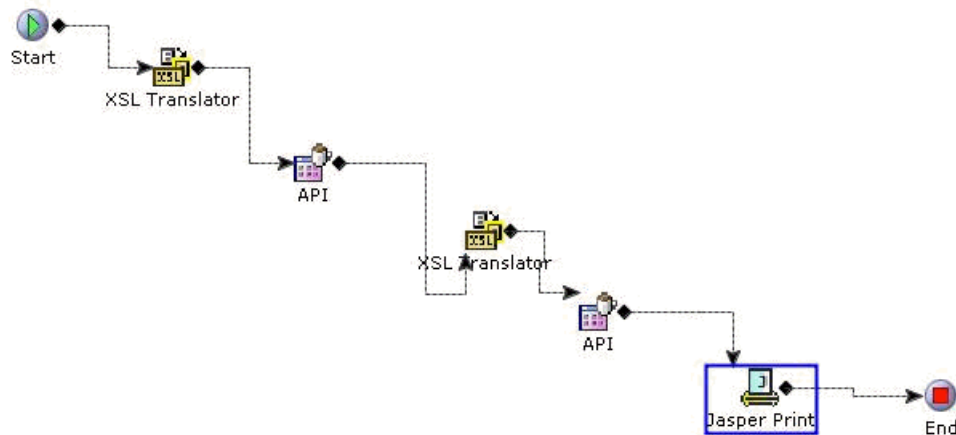
None.

8.28.1.3 Implementation

The following service can be found in the `COM Print` transaction of the Applications Manager:

`YCD_PrintOrderSummary_3.0` service—This service is used to print the Sales Order Slip. It is invoked by the `callPrintOrderSummaryService` event of the `COM` transaction. [Figure 8-1](#) illustrates this service.

Figure 8–1 YCD_PrintOrderSummary_3.0 service



8.28.1.4 Reference Implementation

None.

8.28.2 Change Order Print

When you make modifications such as order cancellation, adding a coupon, increase in the order line quantity, changes in the fulfillment options, and so forth to an existing order, the Change Order Slip is generated.

8.28.2.1 Solution

After performing the order modifications, the print service component is invoked.

8.28.2.2 End-User Impact

None.

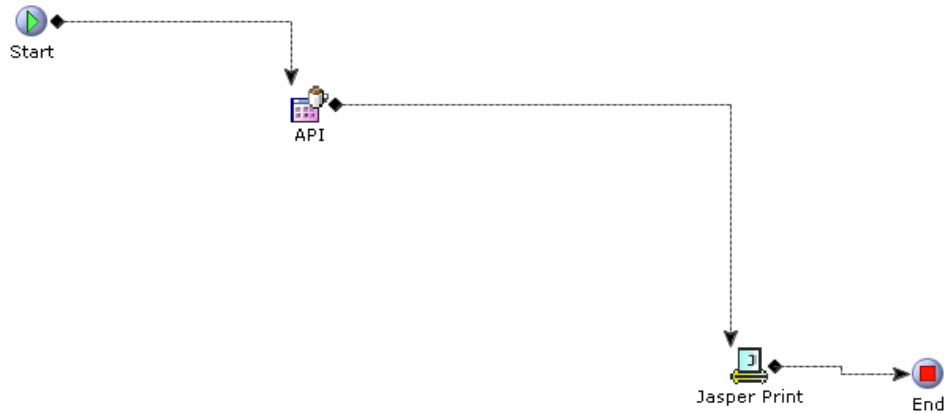
8.28.2.3 Implementation

The following service can be found in the `COM Print` transaction of the Applications Manager:

YCD_PrintChangeOrderSummaryPrintReport_3.0 service—This service is used to print the Change Order Slip. It is invoked by the

callPrintChangeOrderService event of the Sterling Call Center and Sterling Store transaction. Figure 8–2 illustrates this service.

Figure 8–2 YCD_PrintChangeOrderSummaryPrintReport_3.0



8.28.2.4 Reference Implementation

None.

8.28.3 Return or Exchange Order Prints

When a customer returns items to a store, a Return Order Slip must be printed. If the customer has requested for exchange of items, the Exchange Order Slip provides information about the exchange order.

8.28.3.1 Solution

When a customer returns items to a store or exchanges any item, the print service component is invoked.

8.28.3.2 End-User Impact

None.

8.28.3.3 Implementation

The following services can be found in the Sterling Call Center and Sterling Store Print transaction of the Applications Manager:

YCD_PrintReturnOrderSummary_3.0 service—This service is used to print the Return Order Slip. It is called by the callPrintReturnOrderSummaryService event of the COM transaction. [Figure 8-1](#) illustrates this service.

YCD_PrintExchangeOrderSummary_3.0 service—This service is used to print the Exchange Order Slip. It is called by the callPrintExchangeOrderSummaryService event of the COM transaction. [Figure 8-1](#) illustrates this service.

8.28.3.4 Reference Implementation

None.

8.29 User Security

User Security enables you to ensure that users access only the required information for carrying out their tasks. This requires you to set up user groups and associate users to the user groups. The Channel Applications Manager enables you to create users and user groups and assign permissions.

8.29.1 Solution

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

Changing a Password

A user can change a password in the Change Password screen. The modifyUserHierarchy API is invoked to change the password. [Table 8-1](#) describes the various validations that the system performs before changing the password.

For more information about the modifyUserHierarchy API, see the *Selling and Fulfillment Foundation: Javadocs*.

Table 8–1 *Change Password Validations*

Validation	Result
If the old password and the new password match	An error message is displayed.
If the new password and the confirmed password do not match	An error message is displayed.
If the old password is incorrect	An error message is displayed.
If the old password field is blank	An error message is displayed.

Managing Users

A store administrator can either change the credentials of a user or transfer a user to another store. To get a list of all users, the `getUserList` API is invoked. To get the list of all user groups, the `getUserGroupList` API is called. The `modifyUserHierarchy` API is invoked, to apply the changes made to user credentials.

To transfer a store user from one store to another, the `getOrganizationHierarchy` API is called which validates the store to which the user was transferred. However, the store administrators cannot choose to transfer themselves to another store.

8.29.2 End-User Impact

None.

8.29.3 Implementation

None.

8.29.4 Reference Implementation

None.

8.30 In-Store Pick-up Tasks

Many retailers want to provide customers the option of ordering items online and picking them up at the store sometimes even on the same day. Sterling Store provides functionality to achieve this with the ability to search for shipments, print pick tickets, perform backroom pick and customer pick. It also enables users to undo a backroom pick.

8.30.1 Shipment Inquiry

A store associate may need to search for shipments for various tasks such as printing a pick ticket, recording a backroom pick, customer pick or undo a backroom pick.

8.30.1.1 Solution

Sterling Store provides a user interface task which enables users to search for shipments which need to be picked up by the customer from the current store. This section explains the Shipment Search process and the solution offered by Sterling Store.

Searching for Shipments

The store associate can search for shipments based on certain search criteria. The `getShipmentList` API is used to retrieve the list of all the shipments that match the search criteria.

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

Shipment Details

The store associate can view shipment details, such as items in the shipment, quantity of items, and unit price of the item. The `getSortedShipmentDetails` API is called to retrieve the shipment details. If activities are specified for a container, the [View Container Activities](#) hyperlink is displayed in the Shipment Details screen. On clicking this hyperlink, the Container Activities pop-up window is displayed. A user can view information such as the activity code, timestamp, additional information pertaining to the activity, and the user who created the activity.

Handling Bundle Items

If the Display Bundle Components on Order Summary Screen rule is enabled, the bundle component items are displayed on the Shipment Details screen else the bundle parent item is displayed.

8.30.1.2 End-User Impact

None.

8.30.1.3 Implementation

This section explains the configurations for the shipment inquiry task.

- Sterling Store allows you to configure the Display Bundle Components on Order Summary Screen rule to display bundle component items on the Shipment Details screen. For more information about configuring the display of bundle components, see [Section 5.10.36, "Configuring Bundle Components Display"](#).
- This task is permission controlled. The Sterling Store allows you to assign permissions to user groups for this task.

8.30.1.4 Reference Implementation

As part of reference implementation, Sterling Store provides permissions to search shipments to all user groups.

8.30.2 Print Pick Ticket

Employees at the store need to know which items to move to the customer pickup area before the customer arrives at the store. Pick ticket is a sheet containing the list of items that need to be moved from the backroom pick location to the customer pick location.

8.30.2.1 Solution

Sterling Store provides a user interface task which enables users to print pick ticket. This section explains the Print Pick Ticket process and the solution offered by Sterling Store.

The `getShipmentList` API is called to retrieve the list of shipments with status less than `Shipment Shipped` and for which pick ticket is not printed.

The YCD_PrintPickTicket_8.0 service is used to print the pick ticket of the selected shipment on the user interface.

Note: The Shipment Details screen has a related task for printing a pick ticket just incase a pick ticket for a shipment needs to be reprinted.

8.30.2.2 End-User Impact

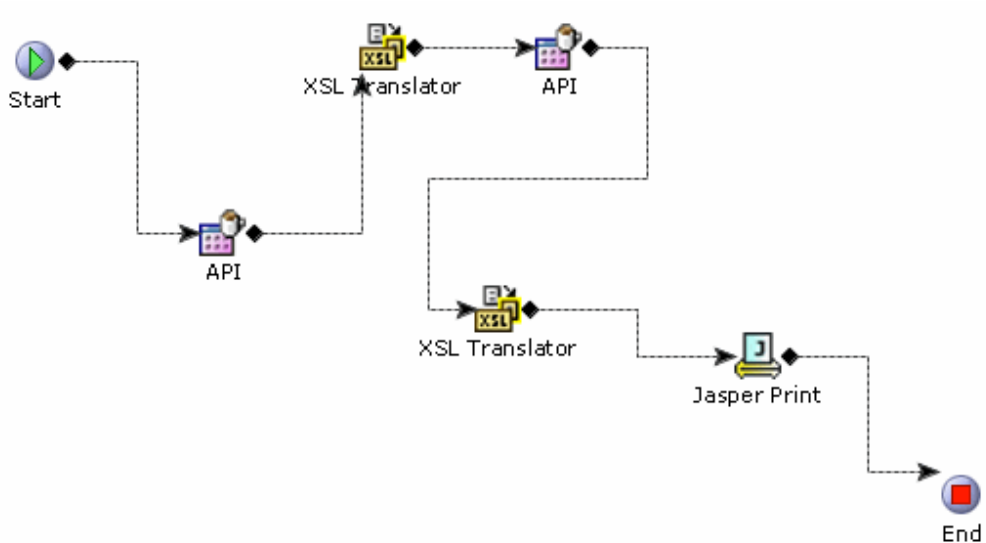
None.

8.30.2.3 Implementation

This section explains the configurations for the print pick ticket task.

- You need to configure the printer to print the Pick Ticket. Printers are configured as devices. For more information about defining devices, see the *Sterling Warehouse Management System: Configuration Guide*.
- You need to associate the configured printer with PRINT_PICK_TICKET print document. For more information about defining print documents, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.
- The YCD_PrintPickTicket_8.0 service can be found in the COM Print transaction of the Applications Manager. This service is invoked to print the pick ticket. It is invoked by the callPrintPickTicketService event of the COM Print transaction. [Figure 8-3](#) illustrates this service.

Figure 8–3 YCD_PrintPickTicket_8.0 service



- This task is permission controlled. Sterling Store allows you to assign permissions to user groups for this task.

8.30.2.4 Reference Implementation

As part of reference implementation, the Sterling Store provides permissions to print pick ticket to all user groups.

8.30.3 Backroom Pick

The movement of items from backroom to the customer service area needs to be tracked in a store. Based on the store configuration, Sterling Store supports the recording of backroom picks for a store.

8.30.3.1 Solution

Sterling Store provides a user interface task which enables users to record a backroom pick. This section explains the Backroom Pick process and the solution offered by Sterling Store.

Recording Backroom Pick

Sterling Store provides the following extended statuses of `Shipment Created` status:

- `Ready For Customer`
- `Ready For Backroom Pick`

Sterling Commerce strongly recommends you to not delete these statuses.

Sterling Store provides the `Store Backroom Pick` (`BaseTransactionKey="Change_Shipment_Status"`) transaction with `Pickup Status` as `Ready For Backroom Pick` and the `drop status` as `Ready For Customer`.

The `Process Shipment for Backroom Pick` (`BaseTransactionKey="Change_Shipment_Status"`) transaction is introduced to change the shipment status from `Shipment Created` to either `Ready For Backroom Pick` status or `Ready For Customer` status based on the `Is Backroom Pick Required` rule.

Store associates can scan the items to be picked or enter the Item ID in the screen provided. If the `Enable Scanning Of Items Using Barcode` rule is selected in `Configure Item Search Options` of the `Channel Applications Manager`, the `translateBarCode` API is called to translate the barcode entered. The Item ID entered is validated to ensure whether the item belongs to the shipment. The quantity being picked is validated against the quantity available to pick.

During the recording of a backroom pick, the `changeShipment` API is called to save the picked quantity in the `BackroomPickedQuantity` attribute of the shipment line. When the shipment status needs to be changed from `Ready for Backroom Pick` to `Ready for Customer`, the `changeShipmentStatus` API is called with transaction as `Store Backroom Pick`. The `YCDUpdateLocationInventoryUE` user exit is called to update the inventory when moving inventory from the backroom pick location to the customer pick location.

Shortage Resolution

If there is a shortage due to inadequate inventory, the resolution for the shortage is reported as either "Inventory Shortage" or "Will Pick Later". The [Table 8-2](#) provides the list of shortage resolutions and the corresponding system behavior.

Table 8–2 Shortage Resolution and Actions

Shortage Resolution	System Behavior
Inventory Shortage	Items are backordered from the shipment by calling the <code>changeShipment</code> API with the value of the <code>BackOrderRemovedQuantity</code> flag set to "Y".
Will Pick Later	No Impact on shipment status. Only the recorded quantity is updated as <code>BackroomPickedQuantity</code> on the corresponding shipment line. It is expected that the store associate will pick up the remaining quantity at a later time.

Handling Bundle Items

On the Backroom Pick screens, all the bundle components are displayed. If there is a shortage for any component of the bundle, an action is taken as follows:

- Inventory Shortage—Appropriate quantity of the bundle component item is backordered.
- Will Pick Later—Shipment is updated with the picked quantity of the bundle components.

If there is shortage for some of the bundle components in such a way that the configured bundle component ratio is broken

- If the bundle item is configured as ship independent:
 - If the shortage resolution is Inventory Shortage, the shortage quantity of the bundle component item is backordered and the picked quantity is updated as `BackroomPickRequired` on the corresponding shipment line.
 - If the shortage resolution is Will Pick Later, the picked quantity is updated as `BackroomPickRequired` on the corresponding shipment line.
- If the bundle item is configured as ship together:
 - If the shortage resolution is Inventory Shortage, the entire bundle item is backordered.
 - If the shortage resolution is Will Pick Later, the picked quantity of the components is updated as `BackroomPickRequired` on the corresponding shipment lines.

8.30.3.2 End-User Impact

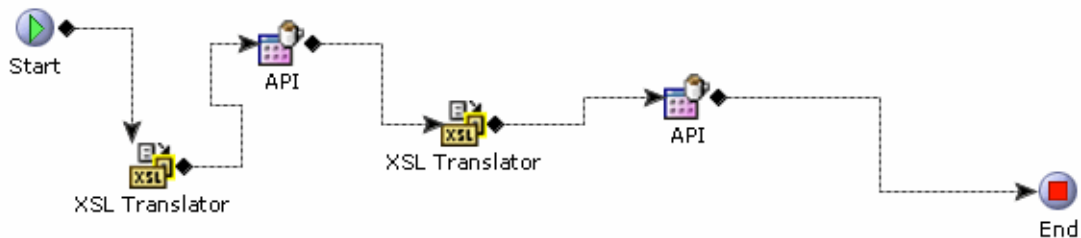
None.

8.30.3.3 Implementation

This section explains the various implementation steps required for recording backroom pick.

- Sterling Store allows you to configure the Is Backroom Pick Required rule. For more information about configuring the Is Backroom Pick Required rule, see [Section 5.21.7, "Configuring Backroom Pick Rules"](#).
- Process Modeling—Invoke the Change Shipment Status to Backroom Pick action on the ON_SUCCESS event of Create Shipment transaction. This action in turn invokes the YCD_Change_Status_Backroom_Pick_8.0 service. This service calls the getRuleDetails API to retrieve rule value of Is Backroom Pick Required rule. If the rule value is set to "Y", the Process Shipment for Backroom Pick (BaseTransactionKey="Change_Shipment_Status") transaction changes the status of the shipment to Ready For Backroom Pick. If the rule value is set to "N", the transaction changes the status of the shipment to Ready For Customer. [Figure 8–4](#) illustrates this service.

Figure 8–4 YCD_Change_Status_Backroom_Pick_8.0 service



- Implement the YCDUpdateLocationInventoryUE user exit to update the inventory stored in an external system after the backroom pick process.

- Notes entered for this task are saved on the order with YCD_BACKROOM_PICK_SHORTAGE note type.
- This task is permission controlled. Sterling Store allows you to assign permissions to user groups for this task.

8.30.3.4 Reference Implementation

This section explains the reference implementation provided as part of the backroom pick task.

- The ON_SUCCESS event of Create Shipment transaction invokes the Change Shipment Status to Backroom Pick action for XYZ-RETAIL enterprise.
- The Is Backroom Pick Required rule is set to "Y" for XYZ_S1 store and "N" for XYZ_S11 store.
- Sterling Store provides permissions to record a backroom pick to all user groups.

8.30.4 Undo Backroom Pick

After performing the backroom pick, the customer may decide not to pick up the order. The store associate needs to undo the backroom pick process so that the items can be moved back.

8.30.4.1 Solution

Sterling Store provides a user interface task which enables users to undo backroom pick. This section explains the Undo Backroom Pick process and the solution offered by Sterling Store.

The Undo Store Backroom Pick (BaseTransactionKey="Change_Shipment_Status") transaction is introduced between the Ready For Customer and Ready For Backroom Pick statuses.

The undoBackRoomPick API is called to perform undo backroom pick. This API changes the status of the shipment from Ready for Customer to Ready for Backroom Pick.

Handling Bundle Items

Bundle parent and component items are displayed on the Undo Backroom Pick screen but the table rows corresponding to the parent items are disabled.

8.30.4.2 End-User Impact

None.

8.30.4.3 Implementation

This section explains the configurations for the undo backroom pick task.

- Notes entered for this task are saved on the order with YCD_UNDO_PICK note type.
- This task is permission controlled. Sterling Store allows you to assign permissions to user groups for this task.

8.30.4.4 Reference Implementation

As part of reference implementation, Sterling Store provides permissions to undo backroom pick to all user groups.

8.30.5 Customer Pick

When a customer walks into a store to pick up the ordered items, Sterling Store enables you to record customer pick.

8.30.5.1 Solution

Sterling Store provides a user interface task which enables users to record a customer pick. This section explains the Customer Pick process and the solution offered by Sterling Store.

Searching for a Shipment

The Advanced Shipment Search or Customer Pick task can be used to search the shipment for which the customer pick needs to be performed. The getShipmentList API is called to search the shipment based on the search criteria.

Verification of the Customer

The `getSortedShipmentDetails` API is called to retrieve the details that must be displayed on the various screens pertaining to the Customer Pick flow.

The store associate must first validate whether the person who walked into the store is actually the intended recipient of the item.

Credit card verification type is built into the application. You can configure your own verification types such as license verification, address verification. For more information about configuring verification types, see [Section 5.11.2, "Configuring Verification Criteria"](#). In case of credit card verification, the last 4 digits of the credit card number are validated against the last 4 digits of credit card number of the order for which customer pick is being performed.

All the verification types are stored as common codes for the enterprise with the code type as "YCD_CUST_VERFN_TYP". The `getCommonCodeList` API is called to retrieve the verification types. The verification types displayed on the Customer Verification screen are sorted in the alphabetical order.

Whenever a customer is verified during the customer pick process, a note is logged by calling the `changeOrder` API.

Identifying Items for Customer Pick

If the `Enable Scanning Of Items Using Barcode` rule is selected in `Configure Item Search Options` of the Channel Applications Manager, store associates can scan the items to be picked or enter the Item ID in the field provided. The `translateBarCode` API is called to translate the barcode that is entered. The Item ID entered is validated to ensure whether the item belongs to the shipment. The quantity being picked is validated against the quantity available to pick.

Resolving Shortages

If there are shortages of items, the shortage resolution screen displays the shortage resolutions. The [Table 8-3](#) provides the list of shortage resolutions and the corresponding system behavior.

Table 8–3 Shortage Resolution and Actions

Shortage Resolution	System Behavior
Inventory Shortage	Items are backordered from the shipment by calling the changeShipment API with the value of the BackOrderRemovedQuantity flag set to "Y".
Cancel Remaining	Items are cancelled from the shipment by calling the changeShipment API with the value of the CancelRemovedQuantity flag set to "Y".
Customer Preference	No Impact on shipment status. Only the recorded quantity is updated on the corresponding shipment line and a new shipment is created by calling the splitShipment API. It is assumed that the customer will pickup the remaining quantity later.

Recording Customer Pick

At the end of the Customer Pick process, following API's are called:

- recordCustomerPick
- raiseEvent

The recordCustomerPick API does the following:

- Calls the changeOrder API to save the note for customer verification.
- Calls various API's to take appropriate actions for shortage resolution as mentioned in [Table 8–3](#).
- Calls YCDUpdateLocationInventoryUE user exit to update the location inventory.

The raiseEvent API invokes handler for the callPrintCustomerPickAknwlgmntService event of the COM Print transaction.

Handling Bundle Items

On the Customer Pick screens, only the bundle parent item is displayed. If there is a shortage for any bundle parent quantity, an action is taken as follows:

- Inventory Shortage—shortage quantity of the bundle component item is backordered.
- Will Pick Later—Shipment is split and new shipment is created for the shortage quantity of the bundle item.
- Cancel—Shortage quantity is removed from the shipment and order.

8.30.5.2 End-User Impact

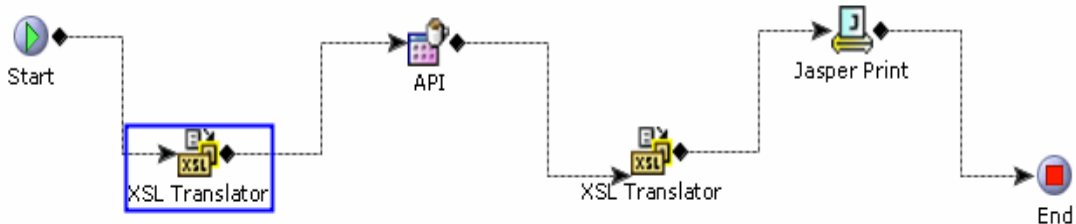
None.

8.30.5.3 Implementation

This section explains the configurations for the customer pick task.

- Sterling Store allows you to configure the verification types to be used for customer verification step during Customer Pick. For more information about configuring verification types, see [Section 5.11.2, "Configuring Verification Criteria"](#).
- Notes for customer verification are saved on the order with YCD_CUSTOMER_VERIFICATION note type.
- Process Modeling—Invoke the Print Customer Pick Acknowledgement action on the callPrintCustomerPickAcknwlgmntService event of the COM Print transaction. This action in turn invokes the YCD_PrintCustomerPickAcknowledgement_8.0 service. This service calls the getSortedShipmentDetails API to retrieve the details of the picked items. This service also calls the getPrinter API to find a printer to print the acknowledgement, and the getCurrencyList API to display the currency details on the acknowledgement. [Figure 8–5](#) illustrates this service.

Figure 8–5 YCD_PrintCustomerPickAcknowledgement_8.0 service



- This task is permission controlled. Sterling Store allows you to assign permissions to user groups for this task.

8.30.5.4 Reference Implementation

This section explains the reference implementation for the customer pick task.

- Sterling Store provides the following verification types for XYZ-RETAIL enterprise:
 - Address verification
 - License verification
 - Passport verification
 - Other Verification
- Sterling Store provides permissions to record customer pick to all user groups.

8.31 Integrating with Business Center

In some implementations, call center and store representatives may have to access screens and functionality from the Business Center application. For example, call center and store representatives may have to configure pricing rules in Business Center.

8.31.1 Solution

Sterling Call Center and Sterling Store provides a user interface task that enables users to launch Business Center from within Sterling Call Center and Sterling Store. When the task is selected, the Business Center application is launched in an embedded Web browser. The location of the application server running the Business Center must be defined in the `locations.ycfg` file. For more information about the `locations.ycfg` file, see the *Sterling Call Center and Sterling Store: Installation Guide*.

Sterling Call Center and Sterling Store provides a single sign-on capability to Business Center, enabling the user to access both the Item Administration and Pricing Administration applications. To log in, the user must belong to the following:

- A user group that has permission to launch Business Center from within Sterling Call Center and Sterling Store. This user interface task is permission controlled.
- A user group that has permission to the Business Center application and its screens.
- A menu group that can access both the Sterling Call Center and Sterling Store and Sterling Business Center.

For information about using Business Center, see the *Sterling Business Center Pricing Administration Guide* and the *Sterling Business Center Item Administration Guide*.

8.31.2 End-User Impact

Users will not be able to access Business Center unless they belong to the menu group and user groups described in [Section 8.31.1, "Solution"](#).

8.31.3 Implementation

This section explains the configurations for the Business Center task.

- Business Center can be deployed on an application server that is different from the Sterling Call Center and Sterling Store server. To enable the launch of a Web browser for Business Center, the location of the Business Center application server must be defined in the `locations.ycfg` file. For more information about the `locations.ycfg` file, see the *Sterling Call Center and Sterling Store: Installation Guide*.

- This task is permission controlled. Sterling Call Center and Sterling Store allows you to assign the necessary permissions to the corresponding user groups for performing this task.

8.31.4 Reference Implementation

None.

Summary of Components

This chapter explains the various components that are included in Sterling Call Center and Sterling Store. It is assumed that the user is familiar with the Selling and Fulfillment Foundation and understands which components need to be added or modified.

This chapter explains the following components:

- [Database Extensions for Sterling Call Center and Sterling Store](#)
- [APIs and User Exits](#)
- [Services](#)
- [Monitor Events](#)
- [XSL Files](#)
- [Hold Types](#)
- [Transactions](#)
- [Time-Triggered Purge Transactions](#)
- [Events](#)
- [Agents](#)

9.1 Database Extensions for Sterling Call Center and Sterling Store

To implement Sterling Call Center and Sterling Store, the following tables have been extended:

- [YFS_ORDER_HEADER](#)
- [YFS_ORDER_LINE](#)

- YFS_SHIPMENT
- YFS_PRICE_MATCH
- YFS_PRICE_MATCH_H
- YFS_COMPETITOR
- YFS_ORDER_LINE_PRICE_MATCH
- YFS_ASSC_RELATIONSHIP
- YFS_EVENT_AUDITOR

YFS_ORDER_HEADER

Table 9–1 YFS_ORDER_HEADER Extensions

Column Name	Data Type	Description
ALL_ADDRESSES_VERIFIED	Char (1)	This flag determines whether or not the addresses in this order have been verified by an address verification program.
COMPL_GIFT_BOX_QTY	Number (3)	The number of complimentary gift boxes to be given with the order.
NO_OF_AUTH_STRIKES	Number (1)	Indicates the number of failed credit card authorizations with HARD_DECLINE as reason code for the order.
SOURCE_IP_ADDRESS	Varchar2 (20)	The IP address of the system from which the customer placed order.
CUSTOMER_FIRST_NAME	Varchar2 (40)	The first name of the customer who placed the order.
CUSTOMER_LAST_NAME	Varchar2 (40)	The last name of the customer who placed the order.

Table 9–1 YFS_ORDER_HEADER Extensions

Column Name	Data Type	Description
CUSTOMER_PHONE_NO	Char (40)	The daytime phone number of the customer who placed the order.
CUSTOMER_ZIP_CODE	Varchar2 (35)	The address postal code of the customer who placed the order.

YFS_ORDER_LINE*Table 9–2 YFS_ORDER_LINE Extensions*

Column Name	Data Type	Description
BACKORDER_NOTIFICATION_QTY	Number (14,4)	Indicates the backordered quantity for which the last customer notification was sent.
IS_PRICE_MATCHED	Char (1)	This flag determines whether the price match was performed for the item.
ITEM_IS_IN_HAND	Char (1)	Specifies whether the item was in hand when it was returned.
IS_PICK_UP_NOW	Char (1)	This flag determines whether price match was performed for the item.
DISPOSITION_CODE	Char (40)	The disposition code for the return line.

YFS_SHIPMENT*Table 9-3 YFS_SHIPMENT Extensions*

Column Name	Data Type	Description
NOTIFICATION_SENT	Char (1)	This flag determines whether or not the customer has been informed about this shipment.
PICKTICKET_PRINTED	Char (1)	This flag indicates whether or not the pick ticket has been printed.
BACKROOM_PICK_REQ UIRED	Char (1)	This flag indicates whether or not backroom pick is required.

YFS_SHIPMENT_LINE*Table 9-4 YFS_SHIPMENT_LINE Extensions*

Column Name	Data Type	Description
BACKROOM_PICKED_QTY	Number (14,4)	Indicates the backroom picked quantity for the shipment line.

YFS_PRICE_MATCH*Table 9-5 YFS_PRICE_MATCH Extensions*

Column Name	Data Type	Description
PRICE_MATCH_KEY	Char (24)	The primary key for the YFS_PRICE_MATCH table.
STATUS	Varchar2 (100)	Indicates the status of the price match record.
PRICE_MATCH_DESC RIPTION	Varchar2 (2000)	The description of the price match.
ENTERPRISE_CODE	Char (24)	Enterprise for which the price match is created.
COMPETITOR_KEY	Char (24)	Indicates the foreign key to the YFS_COMPETITOR table.

Table 9–5 YFS_PRICE_MATCH Extensions

Column Name	Data Type	Description
COMPETITOR_UNIT_PRICE	Number (15,2)	Indicates the competitor's unit price.
COMPETITOR_DISCOUNTS	Number (15,2)	Indicates the competitor's discount.

Sterling Call Center and Sterling Store supports data security for the price match entity based on the ENTERPRISE_CODE column.

YFS_PRICE_MATCH_H

Table 9–6 YFS_PRICE_MATCH_H Extensions

Column Name	Data Type	Description
PRICE_MATCH_KEY	Char (24)	The primary key for the YFS_PRICE_MATCH table.
STATUS	Varchar2 (100)	Indicates the status of the price match record.
PRICE_MATCH_DESCRIPTION	Varchar2 (2000)	The description of the price match.
ENTERPRISE_CODE	Char (24)	Enterprise for which the price match is created.
COMPETITOR_KEY	Char (24)	Indicates the foreign key to the YFS_COMPETITOR table.
COMPETITOR_UNIT_PRICE	Number (15,2)	Indicates the competitor's unit price.
COMPETITOR_DISCOUNTS	Number (15,2)	Indicates the competitor's discount.

Sterling Call Center and Sterling Store supports data security for the price match history entity based on the ENTERPRISE_CODE column.

YFS_COMPETITOR*Table 9–7 YFS_COMPETITOR Extensions*

Column Name	Data Type	Description
COMPETITOR_KEY	Char (24)	The primary key for the YFS_COMPETITOR table.
COMPETITOR_NAME	Varchar (40)	The competitor's name who offered a lower price of the item.
COMPETITOR_DESC	Varchar2 (2000)	The description of the competitor.
ENTERPRISE_CODE	Char (24)	Enterprise the competitor belongs to.
WEB_ADDRESS	Varchar2 (255)	Indicates the web address of the competitor.
STATUS	Char (40)	Indicates the status of the competitor.
PERCENT_PRICE_MATCH	Number (5,2)	Indicates the price match percentage.
CREATETS	sysdate	Indicates the timestamp when the record was created.
MODIFYTS	sysdate	Indicates the timestamp when the record was last modified.
CREATEUSERID	Varchar2 (40)	Indicates the user who created the record.
MODIFYUSERID	Varchar2 (40)	Indicates the user who modified the record.
CREATEPROGID	Varchar2 (40)	Indicates the program that created the record.
MODIFYPROGID	Varchar2 (40)	Indicates the program that modified the record.
LOCKID	Number (5)	Indicates the integer used to track and prevent concurrent modifications.

Sterling Call Center and Sterling Store supports data security for the competitor entity based on the ENTERPRISE_CODE column.

YFS_ORDER_LINE_PRICE_MATCH*Table 9–8 YFS_ORDER_LINE_PRICE_MATCH Extensions*

Column Name	Data Type	Description
ORDER_LINE_PRICE_MATCH_KEY	Char (24)	The primary key for the YFS_ORDER_LINE_PRICE_MATCH table.
ORDER_LINE_KEY	Char (24)	The primary key of the YFS_ORDER_LINE table which relates the price match to an order line.
ORDER_HEADER_KEY	Char (24)	The primary key of the YFS_ORDER_HEADER table which relates the price match to an order.
PRICE_MATCH_KEY	Char (24)	The primary key of the YFS_PRICE_MATCH table which relates the price match to an order line.
EXISTING_UNIT_PRICE	Number (15,2)	This is the unit price of an item used for price match.
EXISTING_DISCOUNTS	Number (15,2)	This is the discounts for an item used for price match.
EXISTING_CHARGES	Number (15,2)	This is the charges for an item used for price match.
COMPETING_CHARGES	Number (15,2)	Indicates the competitor's charges.

YFS_ASSC_RELATIONSHIP*Table 9–9 YFS_ASSC_RELATIONSHIP Extensions*

Column Name	Data Type	Description
ASSC_RELATIONSHIP_KEY	Char (24)	The primary key for the YFS_ASSC_RELATIONSHIP table.
ENTERPRISE_CODE	Char (24)	Enterprise for which the association types are configured to be displayed.
ASSOCIATION_TYPE	Varchar2 (20)	The association type to be displayed.

Table 9–9 YFS_ASSC_RELATIONSHIP Extensions

Column Name	Data Type	Description
RELATIONSHIP_TYPE	Varchar (20)	The relationship type indicates the relationship between the order lines.
SHOW_IN_UI	Char (1)	This attribute indicates whether or not the association type has to be displayed.
CREATETS	sysdate	Indicates the timestamp when the record was created.
MODIFYTS	sysdate	Indicates the timestamp when the record was last modified.
CREATEUSERID	Varchar2 (40)	Indicates the user who created the record.
MODIFYUSERID	Varchar2 (40)	Indicates the user who modified the record.
CREATEPROGID	Varchar2 (40)	Indicates the program that created the record.
MODIFYPROGID	Varchar2 (40)	Indicates the program that modified the record.
LOCKID	Number (5)	Indicates the integer used to track and prevent concurrent modifications.
INVENTORY_CHECK_REQUIRED	Char (1)	This attribute indicates whether or not the inventory check has to be performed.
ASSC_FUNCTION	Varchar2 (40)	This indicates whether the associated item will replace the original item, or will be added as its related item.

YFS_EVENT_AUDITOR

Table 9–10

Column Name	Data Type	Description
EVENT_AUDITOR_KEY	Char (24)	The primary key for the YFS_EVENT_AUDITOR table.
ORGANIZATION_CODE	Char (24)	Organization for which the event auditor record is created.
EVENT_AUDITOR_TYPE	Char (24)	Indicates the event auditor type. The available options are: <ul style="list-style-type: none"> TRANSACTION_EVENT HOLD_ADDED_EVENT HOLD_RESOLVED_EVENT HOLD_REJECTED_EVENT APPLICATION_EVENT
TRANID	Varchar2 (40)	Indicates the transaction ID the auditor record corresponds to for a transaction event.
EVENTID	Varchar2 (40)	Indicates the event ID the auditor event corresponds to for a hold event.
HOLD_TYPE	Char (20)	Indicates the hold type the auditor event corresponds to for a transaction event.
NOTE_TYPE	Varchar2 (40)	Indicates the reason code for the note that has been logged.
TRANSFORMATION_FILE	Varchar2 (100)	Indicates the XSL file used to transform the XML data to notes text.
ACTIVE	Char(1)	Indicates whether or not the auditor event is active.

9.2 APIs and User Exits

Table 9–11 and Table 9–12 provide the list of APIs and user exits introduced in Sterling Call Center and Sterling Store, and the features that are affected.

Table 9–11 APIs

API	Features Affected
getAssociationRelationshipList	Order Creation
verifyAddress	Address Verification
getCompleteOrderDetails	Cancel Order, Change Fulfillment Options, Increase Order Line Quantity, Order Creation, Add Multiple Items to an Order
getCompleteOrderInvoiceDetails	Payment Inquiry
getCompleteItemList	Order Creation, Item Inquiry, Add Line
checkDuplicateOrder	Duplicate Order Validation
checkFraudOnOrder	Fraud Check
getReturnMethod	Return Order Capture, Change Return Method
getOrderLinesWithTransactionQuantity	Return Order Capture
applyPriceMatch	Price Match
checkNoHasslePriceMatch	Price Match
checkOrderPriceMatch	Price Match
getPriceMatchCompetitors	Price Match
managePriceMatch	Price Match
getCompetitorList	Price Match
manageCompetitor	Price Match
getCompetitorDetails	Price Match
getPriceMatchList	Price Match
managePriceMatch	Price Match
getPriceMatchDetails	Price Match
getOrderLinesForPriceMatch	Price Match
listCarrierService	Change Fulfillment Options

Table 9–11 APIs

API	Features Affected
manageServiceGrouping	Delivery and Service Grouping
getOrderFulfillmentDetails	Fulfillment Summary, Change Service Appointment
reserveOrder	Change Service Appointment
getEventAuditorList	Order Notes
getUserGroupList	Managing Users
getCompleteShipmentDetails	Track an Item
getSortedShipmentDetails	Shipment Inquiry, Customer Pick, Track an Item
undoBackRoomPick	Undo Backroom Pick
recordCustomerPick	Customer Pick

Table 9–12 User Exits

User Exit	Features Affected
UpdateLocationInventoryUE	Backroom Pick, Customer Pick
YCDPromotionValidationUE	Add Coupon
YCDVerifyAddressWithAVSUE	Address Verification
YCDProcessReturnCompletionUE	Return Order Capture
YCDGetAppeasementOffersUE	Customer Appeasement
YCDSendFutureOrderCustomerAppeasementUE	Customer Appeasement
YCDProcessDuplicateOrderCheckUE	Duplicate Order Validation
YCDProcessOrderFraudCheckUE	Fraud Check
YCDGetReturnPolicyUE	Return Order Capture, Change Return Method
YCDGetReturnMethodUE	Return Order Capture
YCDCanPriceMatchBePerformedUE	Price Match

Table 9–12 User Exits

User Exit	Features Affected
YCDCheckNoHasslePriceMatchUE	Price Match
YCDCheckOrderPriceMatchUE	Price Match
YCDGetPriceMatchCompetitorsUE	Price Match
YCDManagePriceMatchUE	Price Match
YCDgetCompetitorListUE	Price Match
YCDGetCompetitorDetailsUE	Price Match
YCDGetPriceMatchListUE	Price Match
YCDGetPriceMatchDetailsUE	Price Match
YCDGetTrackingNumberURLUE	Track an Item
YCDOverrideDeliveryMethodUE	Order Creation, Change Fulfillment Options
YCDValidateCreditCardInfoUE	Change Payment Method
YCDEmailOrderUE	E-Mail Order Information

For more information about these APIs and user exits, see the *Sterling Call Center and Sterling Store: Javadocs*.

9.3 Services

The following services are introduced in Sterling Call Center and Sterling Store, and can be found in the service definitions of the `Sales Order` document type:

- [Order Maintenance Services](#)
- [Order Pricing Services](#)
- [Customer Services](#)
- [Order Capture Services](#)
- [Payment Processing Services](#)
- [Order Printing Services](#)

- [FTC Compliance Services](#)

9.3.1 Order Maintenance Services

Table 9–13 Order Maintenance Services

Service	Feature Affected
YCD_ResolveAddressHold_1.0	Address Verification
YCD_ResolveOrderAlerts_1.0	Address Verification
YCD_SetOrderDefaultsOnChange_2.0	Federal Trade Commission Compliance
YCD_UpdateBackorderOnCancel_1.0	Federal Trade Commission Compliance
YCD_StopDeliveryRequest_UpdateQty_8.0	Cancel Order
YCD_StopDeliveryRequest_Alert_8.0	Cancel Order
YCD_LogNotesForOrderHistory_8.0	Order Notes
YCD_Change_Status_Backroom_Pick_8.0	In-Store Pick-up Tasks
YCD_Populate_Order_Email_8.5	E-Mail Order Information
YCD_Send_Order_Email_8.5	E-Mail Order Information
YCD_Trigger_Customer_Limit_Adjustment_8.5	Credit Limit Exceeded

9.3.2 Order Pricing Services

The following customer notification services are introduced in the Sterling Multi-Channel Selling Solution Integration implementation.

Table 9–14 Order Pricing Services

Service	Feature Affected
YCD_Coupon_Validation_UE_8.0	This feature enables a user to add coupons or promotion codes for an order that has been placed. The Sterling Multi-Channel Selling Solution integration provides an implementation of this feature, as described in Pricing Integration Using the Sterling Multi-Channel Selling Solution .
YCD_Order_Repricing_UE_8.0	Pricing Integration Using the Sterling Multi-Channel Selling Solution

9.3.3 Customer Services

The following customer services are introduced in Sterling Call Center and Sterling Store.

Table 9–15 Customer Services

Service	Feature Affected
YCD_CancelOrderNotification_1.0	Federal Trade Commission Compliance
YCD_ShipmentNotificationEmail_1.0	Shipment Notification
YCD_Update_Customer_Assignment_8.0	Team and User Assignment

9.3.4 Order Capture Services

The following order capture services are introduced in Sterling Call Center and Sterling Store.

Table 9–16 Order Capture Services

Service	Feature Affected
YCD_DuplicateOrderAlert_1.0	Duplicate Order Validation
YCD_ProcessCustOrdMgmtHolds_1.0	Duplicate Order Validation

Table 9–16 Order Capture Services

Service	Feature Affected
YCD_ProcessDuplicateOrderCheck_1.0	Duplicate Order Validation
YCD_SetOrderDefaults_2.0	Federal Trade Commission Compliance
YCD_VerifyAddressFailedAlert_1.0	Address Verification

9.3.5 Payment Processing Services

The following payment processing services are introduced in Sterling Call Center and Sterling Store.

Table 9–17 Payment Processing Services

Service	Feature Affected
YCD_ExecuteCollectionCreditCard_Proxy_1.0	Payment Processing
YCD_ExecuteCollectionRefundCheck_Proxy_1.0	Payment Processing
YCD_ExecuteCollectionSVC_Proxy_1.0	Payment Processing
YCD_PaymentAuthRetryLimitAlert_1.0	Payment Processing
YCD_PaymentDeclinedAlert_1.0	Payment Processing
YCD_PaymentHardDeclinedAlert_1.0	Payment Processing
YCD_PaymentServiceUnavailableAlert_1	Payment Processing
YCD_ProcessCollectionFailure_1	Payment Processing

9.3.6 Order Printing Services

The following order printing services are introduced in Sterling Call Center and Sterling Store.

Table 9–18 Order Printing Services

Service	Feature Affected
YCD_PrintOrderSummary_3.0	Create Order and Order Summary Prints
YCD_PrintReturnOrderSummary_3.0	Return or Exchange Order Prints

Table 9–18 Order Printing Services

Service	Feature Affected
YCD_PrintExchangeOrderSummary_3.0	Return or Exchange Order Prints
YCD_PrintChangeOrderSummaryPrintReport_3.0	Change Order Print
YCD_PrintPickTicket_8.0	Print Pick Ticket

9.3.7 FTC Compliance Services

The following FTC compliance services are introduced in Sterling Call Center and Sterling Store.

Table 9–19 FTC Compliance Services

Service	Feature Affected
YCD_FTC_AUTO_RESOLVE	Federal Trade Commission Compliance
YCD_FTC_CANCEL_ORDER_LINES	Federal Trade Commission Compliance
YCD_FTC_DELAY_ALERT	Federal Trade Commission Compliance
YCD_FTC_DELAY_EMAIL	Federal Trade Commission Compliance
YCD_FTC_FIRST_DELAY_ALERT	Federal Trade Commission Compliance
YCD_FTC_FIRST_DELAY_EMAIL	Federal Trade Commission Compliance
YCD_FTC_INDEFINITE_DELAY_ALERT	Federal Trade Commission Compliance
YCD_FTC_INDEFINITE_DELAY_EMAIL	Federal Trade Commission Compliance
YCD_FTC_SEND_NOTIFICATION	Federal Trade Commission Compliance

9.4 Monitor Events

The following monitor events are introduced in Sterling Call Center and Sterling Store.

Table 9–20 Monitor Events

Monitor Event	Feature Affected
YCD_FTC_Auto_Resolve	Federal Trade Commission Compliance
YCD_FTC_Cancel_Lines	Federal Trade Commission Compliance
YCD_FTC_Delay_Alert	Federal Trade Commission Compliance
YCD_FTC_Delay_Email	Federal Trade Commission Compliance
YCD_FTC_First_Delay_Alert	Federal Trade Commission Compliance
YCD_FTC_First_Delay_Email	Federal Trade Commission Compliance
YCD_FTC_Indefinite_Delay_Alert	Federal Trade Commission Compliance
YCD_FTC_Indefinite_Delay_Email	Federal Trade Commission Compliance

9.5 XSL Files

The following sample XSL translation files have been provided by Sterling Call Center and Sterling Store to support the customization and localization of information.

Table 9–21 XSL Translators

XSL File	Feature Affected
<INSTALL_DIR>/repository/xapi/template/merged/exception_console/YCD_FTC_Alert_Template_5.0.xsl.sample	Federal Trade Commission Compliance
<INSTALL_DIR>/repository/xapi/template/merged/exception_console/YCD_FTC_Email_Alert_Template_5.0.xsl.sample	Federal Trade Commission Compliance

Table 9–21 XSL Translators

XSL File	Feature Affected
<INSTALL_DIR>/repository/xapi/template/merged/service/ycd/YCD_Log_Note_On_Hold_Status_Change_8.0.xsl.sample	Order Notes
<INSTALL_DIR>/repository/xapi/template/merged/service/ycd/YCD_Log_Note_On_Back_Order_8.0.xsl.sample	Order Notes
<INSTALL_DIR>/repository/xapi/template/merged/service/ycd/YCD_Log_Note_On_Confirm_Shipment_8.0.xsl.sample	Order Notes
<INSTALL_DIR>/repository/xapi/template/merged/service/ycd/YCD_Log_Note_On_Appointment_Completion_8.0.xsl.sample	Order Notes
<INSTALL_DIR>/repository/xapi/template/merged/service/ycd/YCD_Log_Note_On_Appointment_Failure_8.0.xsl.sample	Order Notes
<INSTALL_DIR>/repository/xapi/template/merged/service/ycd/YCD_Log_Note_For_Order_BackOrdered_2.0.xsl.sample	Order Notes
<INSTALL_DIR>/repository/xapi/template/merged/service/ycd/YCD_Log_Note_On_Chained_Order_Created_2.0.xsl.sample	Order Notes
<INSTALL_DIR>/repository/xapi/template/merged/service/ycd/YCD_Get_Backroom_Flag_8.0.xsl.sample	Backroom Pick
<INSTALL_DIR>/repository/xapi/template/merged/service/ycd/YCD_Set_Backroom_Flag_8.0.xsl.sample	Backroom Pick

9.6 Hold Types

The following hold types are introduced in Sterling Call Center and Sterling Store.

Table 9–22 Hold Types

Hold Type	Feature Affected
YCD_DUPLICATE_ORDER	Duplicate Order Validation
YCD_VERIFY_ADDRESS	Address Verification
YCD_FRAUD_CHECK	Fraud Check
YCD_CREDIT_LIMIT	Credit Limit Exceeded

9.7 Transactions

The following transactions are introduced in Sterling Call Center and Sterling Store.

Table 9–23 Transactions

Transaction Name	Feature Affected	Events
Duplicate Order	Duplicate Order Validation	On Duplicate Order
Address Verification	Address Verification	Address Verification Failed
Shipment Notification	Shipment Notification	Send Notification
COM PRINT	Create Order and Order Summary Prints	Print Order Summary
COM PRINT	Return or Exchange Order Prints	Print Return Order Summary
COM PRINT	Return or Exchange Order Prints	Print Exchange Order Summary
COM PRINT	Change Order Print	Print Change Order
COM PRINT	Print Pick Ticket	Print PickTicket

Table 9–23 Transactions

Transaction Name	Feature Affected	Events
COM PRINT	Customer Pick	Customer Pick Acknowledgement
YCD_UNDO_BACKROOM_PICK	Backroom Pick	None
YCD_BACKROOM_PICK	Backroom Pick	None

9.8 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.

Sterling Call Center and Sterling Store provides the following time-triggered purge transactions:

- [Price Match Purge](#)
- [Price Match History Purge](#)

9.8.1 Price Match Purge

This purge removes price match data from the system. If the expiry date of a price match record is less than or equal to (current day - retention days), the agent moves the price match records to the price match history table. Sterling Call Center and Sterling Store provides the YCDPRICEMATCHPRG purge agent which purges the price match records from the YFS_PRICE_MATCH table. If a price match record is still present in the YFS_ORDER_LINE_PRICE_MATCH table, the price match record cannot be purged. In such a situation, the price match record will be purged only after the record is purged from the YFS_ORDER_LINE_PRICE_MATCH table by running the Order Purge time-triggered transaction. For more information about Order Purge, see the *Sterling Distributed Order Management: Configuration Guide*.

Attributes

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

Table 9–24 Price Match Purge Attributes

Attribute	Value
Base Transaction ID	YCDPRICEMATCHPRG
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 9–25 Price Match Purge Criteria Parameters

Criteria Parameters	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Live	Optional. Mode in which to run. Valid values are: <ul style="list-style-type: none"> 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.
Enterprise Code	Optional. The organization for which the Alert Purge 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.

Table 9–25 Price Match Purge Criteria Parameters

Criteria Parameters	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 System Management Console.
ColonyID	Required in a multi schema deployment when the YFS_PRICE_MATCH table may exist in multiple schemas. Runs the agent for the colony.

Statistics Tracked

The following statistics are tracked for this transaction:

Table 9–26 Price Match Purge Statistics

Statistic Name	Description
NumPriceMatchPurged	Number of price match records purged.

9.8.2 Price Match History Purge

This purge removes price match history data from the system. Sterling Call Center and Sterling Store provides the YCDPRICEMATCHHISTPRG purge agent which purges the price match history records from the YFS_PRICE_MATCH_H table.

Attributes

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

Table 9–27 Price Match History Purge Attributes

Attribute	Value
Base Transaction ID	YCDPRICEMATCHHISTPRG
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 9–28 Price Match History Purge Criteria Parameters

Criteria Parameters	Description
Action	Required. Triggers the transaction. If left blank, it defaults to Get, the only valid value.
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.
Live	Optional. Mode in which to run. Valid values are: <ul style="list-style-type: none"> 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.
Enterprise Code	Optional. The organization for which the Alert Purge 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.
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 System Management Console.
ColonyID	Required in a multi schema deployment when the YFS_PRICE_MATCH_H table may exist in multiple schemas. Runs the agent for the colony.

Statistics Tracked

The following statistics are tracked for this transaction:

Table 9–29 Price Match History Purge Statistics

Statistic Name	Description
NumPriceMatchHistory Purged	Number of price match history records purged.

9.9 Events

The following transaction events are implemented in Sterling Call Center and Sterling Store.

Table 9–30 Events

Transaction	Event
Change Order	On Cancel
Change Order	On Success
Change Order Release	On Backorder
Change Order Release	On Cancel
Confirm Draft Order	On Success
Create Order	On Success
Release Order	On Cancel
Release Order	On Backorder
Schedule Order	On Backorder
Return Receipt	On Success
Create Shipment	On Success

9.9.1 Event Call Back Handlers

The following pre-event call back handlers are implemented in Sterling Call Center and Sterling Store.

Table 9–31 Pre-event Call Back Handlers

Transaction	Event	Feature Affected
Confirm Shipment	On Success	Order Notes
Schedule Order	On Backorder	Order Notes

Table 9–31 Pre-event Call Back Handlers

Transaction	Event	Feature Affected
Release Order	On Backorder	Order Notes
Confirm Work Order	On Work Order Completion	Order Notes
Confirm Work Order	On Work Order Execution Failure	Order Notes

For more information about pre-event call back handlers, see the *Selling and Fulfillment Foundation: Application Platform Configuration Guide*.

9.10 Agents

The following agents are implemented in Sterling Call Center and Sterling Store.

Table 9–32 Agents

Agent	Feature Affected
YCDPRICEMATCHPRG	Purging Of Price Match Records
YCDPRICEMATCHHISTPRG	Purging Of Price Match History Records

10

Performance Tuning

This chapter explains the steps you need to take to fine-tune Sterling Call Center and Sterling Store for optimal performance.

10.1 Database Management

For Database Management, Sterling Commerce recommends that you add the following custom indices to the YFS_PERSON_INFO table:

- A new custom index on the following columns:
 - UPPER (LAST_NAME)
 - UPPER (FIRST_NAME)
- A new custom index on the DAY_PHONE column.

If you want to enable users to search for the Manufacturer's name in the Quick Access screen, Sterling Commerce recommends that you add a new custom index in the MANUFACTURER_NAME column in the YFS_ITEM table. Also ensure that you add custom indices for all item attributes for which searches are enabled.

If you want to default the City and State fields based on the postal code, on the address panel, Sterling Commerce recommends you to add a new custom index in the YFS_REGION_DETAIL column of the FROM_ZIP and TO_ZIP tables.

For more information about custom indices, see the *Selling and Fulfillment Foundation: Performance Management Guide*.

10.2 Enabling Reference Data Caching

The caching feature is enabled using the `yfs.dbcache.classes` parameter in the `yfs.properties` file. Sterling Commerce recommends that you add

`com.yantra.yfs.dbclasses.YFS_Assc_RelationshipDBCACHEHOME` and `com.yantra.yfs.dbclasses.YFS_Event_Auditor_DBCACHEHOME` to the `yfs.dbcache.classes` parameter value. For more information about enabling reference data caching, see the *Selling and Fulfillment Foundation: Performance Management Guide*.

10.3 Cached Data

Sterling Call Center and Sterling Store caches the results of APIs that are called repeatedly in an application. The cached data is stored (in the client's memory) by the Enterprise, if it is Enterprise-level data.

Sterling Call Center and Sterling Store caches the following data:

- All rules
- The results of the `getCurrencyList` API call, which populates the Currency and Default Currency drop-down lists with defined currencies
- The results of the `getLocalList` API call, which populates the Locale drop-down list with defined locales
- The results of the `getPaymentTypeList` API call, which populates the Payment Type drop-down list with defined payment types
- Common code types

The values for the following common code types are cached:

- `RELATIONSHIP_TYPE`

The `getCommonCodeList` API is called to populate the Relationship Type drop-down list with defined values.

- `CUSTOMER_LEVEL`

The `getCommonCodeList` API is called to populate the Customer Level drop-down list with defined values.

- `VERTICAL`

The `getCommonCodeList` API is called to populate the Vertical drop-down list with defined values.

- CUSTOMER_STATUS

The `getCommonCodeList` API is called to populate the Status drop-down list with defined values.

- COUNTRY

The `getCommonCodeList` API is called to populate the Country drop-down list with defined values. When a country is selected from the Country drop-down list, the `getRegionList` API is called to populate the State drop-down list with defined values.

When the APIs are initially called, Sterling Call Center and Sterling Store stores the results of the API calls in cache memory. When the data for the API calls is requested again, Sterling Call Center and Sterling Store applications retrieve the information from cache memory instead of making repeated API calls. The cached data is persisted until the user logs out or closes the application.

For information about enabling reference data caching, see [Section 10.2, "Enabling Reference Data Caching"](#).

A

Localizing the Application

This chapter explains how to localize Sterling Call Center and Sterling Store.

A.1 User Interface Themes

The user interface theme files specify the screen colors, display fonts, and images to use. The display fonts are dependent on the languages that need to be supported. However, some fonts may not support all languages. When setting up a theme, choose a font that displays the specific language you need or choose a font that displays for a particular locale. For example, when setting up a Japanese locale, customize the theme to use a font that displays Japanese characters such as Hiragana.

To localize Sterling Call Center and Sterling Store user interface, save `com.yantra.pca.ycd_sapphire.ythm`, `com.yantra.pca.ycd_earth.ythm`, `com.yantra.pca.ycd_ice.ythm`, and `com.yantra.pca.ycd_jade.ythm` files that are located in the `<INSTALL_DIR>/rcp/COM/reference` folder to `RCP_EXTN_FOLDER`.

For more information about localizing a theme, see the *Selling and Fulfillment Foundation: Localization Guide*.

A.2 Literals

Sterling Call Center and Sterling Store uses resource bundles that contain literals or text displayed on the screens. Sterling Call Center and Sterling Store enables you to customize and localize resource bundles based on the user's locale. In addition, literals used in the customized screens have their own resource bundles, and are considered during the localization process.

For more information about literals, see the *Selling and Fulfillment Foundation: Localization Guide*.

If you have customized Sterling Call Center and Sterling Store applications, you must localize those customizations also. For more information about customizing the Rich Client Platform Interface, see the *Selling and Fulfillment Foundation: Customization Guide*.

Note: Literals cannot be localized in the following places:

- Condition Builder
 - Order/Shipment Monitor
 - Hard-coded literals in APIs
-
-

A.2.1 Resource Bundles

Sterling Call Center and Sterling Store always releases complete resource bundles in the `com.yantra.pca.ycd_bundle.properties` file with the localized versions of Sterling Call Center and Sterling Store. Incremental updates are not provided. If you localize Sterling Call Center and Sterling Store, it is your responsibility (or that of your third-party localization company) to compare and validate the differences between the resource bundles shipped with the product to those you have localized.

Note: The client resource bundle files have some entries having '&' in the value. These values are used for mnemonic key support in the application. When localizing, ensure that all the literals on any screen have a unique mnemonic key.

The Selling and Fulfillment Foundation Sterling Call Center and Sterling Store application uses the resource bundle files to define literals for the user interface.

To localize the client application resource bundles:

1. Save the:

- a. `com.yantra.pca.ycd_bundle.properties` bundles as `com.yantra.pca.ycd_bundle_[language]_[country]_[variant].properties` located in the `<INSTALL_DIR>/resources` folder.

For example, in the case of French customers, `com.yantra.pca.ycd_bundle.properties` should be saved as `com.yantra.pca.ycd_bundle_fr_FR.properties`, where *fr* indicates the language, that is French, *FR* indicates the country, France, and assuming that France does not have any variants.

- b. `com.yantra.pca.ycd_Message_bundle.properties` as `com.yantra.pca.ycd_Message_bundle_[language]_[country]_[variant].properties` located in the `<INSTALL_DIR>/resources` folder.
- c. `com.yantra.pca.ycd_format_bundle.properties` as `com.yantra.pca.ycd_format_bundle_[language]_[country]_[variant].properties` located in the `<INSTALL_DIR>/resources` folder.
- d. `com.yantra.pca.ycd.rcp_1.0.0_plugin.properties` as `com.yantra.pca.ycd.rcp_1.0.0_plugin_[language]_[country]_[variant].properties` located in the `<INSTALL_DIR>/resources` folder.

To localize the titles that appear on the Help Assistant Screen:

1. Save the:

- a. `com.yantra.pca.ycd_HelpMessages_bundle.properties` as `com.yantra.pca.ycd_HelpMessages_bundle_[language]_[country]_[variant].properties` located in the `<INSTALL_DIR>/resources`.

Here, language is the language to which you want to localize, country is the Country Code, and variant is the Time Zone or the Variant Component.

Note: After saving the bundle files as mentioned above, you must create Sterling Call Center and Sterling Store client applications. For more information about creating a client application, see the *Sterling Call Center and Sterling Store: Installation Guide*.

For more information about resource bundles, see the *Selling and Fulfillment Foundation: Localization Guide*.

To localize the resource bundles server application:

1. Copy the:
 - a. `<INSTALL_DIR>/resources/ycdbundle.properties` file and save it as `<INSTALL_DIR>/resources/ycdbundle_<language>_<country>.properties`.
2. Re-create the Selling and Fulfillment Foundation EAR package.

A.3 Localizing Address and Store Node Information

When the Address and Store Node information are provided, a bundle key is also provided for all single line displays.

- For a Store Node:

The standard display is formatted as per the `Common_Binding_Store_Node` key in `com.yantra.pca.ycd_bundles.properties`. For example, a bundle record looks like:

```
Common_Binding_Store_Node={8}, {9} ({1})
```

The `Common_Binding_Store_Node` key is passed to the following method in `YRCPlatformUI`:

```
getFormattedString (String key, String[] data) along with the String[] array whose contents should match the place holders defined in the Common_Binding_Store_Node key.
```

- For Address Records:

The standard display is formatted as per the `Common_Binding_Address` key in `com.yantra.pca.ycd_bundles.properties`. For example, a bundle record looks like:

```
Common_Binding_Address={0} - {6}, {7}
```

The `Common_Binding_Address` key is passed to the following method in `YRCPlatformUI`:

`getFormattedString` (String key, String[] data) along with the String[] array whose contents should match the place holders defined in the `Common_Binding_Address` key.

A.4 Factory Setup Data

Besides storing your transactional data, the database also stores configuration data, such as error codes and item descriptions of various attributes. This means that the database may need to store values in a language-specific format. If these database literals are not localized, screen literals display inconsistently, with some displaying in the localized language and others displaying in English.

The following files are available in the localization kit:

- `ycdriliterals2translate.properties`—This file contains all the Sterling Call Center and Sterling Store RI literals that need to be localized.
- `ycdfcaddinliterals2translate.properties`—This file contains all the Sterling Call Center and Sterling Store factory setup Addin literals that need to be localized.
- `ycdfcpcaliterals2translate.properties`—This file contains all the Sterling Call Center and Sterling Store factory setup literals except the Addin literals that need to be localized.

To localize these files:

1. Localize and merge the `ycdfcpcaliterals2translate.properties` file and the `ycdfcaddinliterals2translate.properties` file.
2. Rename the merged file as `en_US_ycdfclocalizedstrings_<language>_<country>.properties`.
3. Rename the `ycdriliterals2translate.properties` file to `en_US_ycdrilocalizedstrings_<language>_<country>.properties`.

For example, in the case of French customers, `ycdriliterals2translate.properties` should be renamed to `en_US_ycdrilocalizedstrings_fr_FR.properties`, where *fr* indicates the language, that is French, and *FR* indicates the country, France.

4. Copy the following files to the
<INSATLL_DIR>\installed_data\sscap\components\complete_installation\factorysetup\XMLS\<language>_<country> folder.
 - en_US_ycdrilocalizedstrings_<language>_<country>.properties
 - en_US_ycdfclocalizedstrings_<language>_<country>.properties

For more information about loading the language pack translations, see the *Sterling Call Center and Sterling Store: Installation Guide*.

A

- Add Items screen
 - viewing price breakdown, 235
 - viewing unit price details, 235
- add multiple items to order
 - validating new items, 317
- additional order information
 - field capture, 247
- address information
 - field capture, 243
- address verification, 254
 - address verification agent, 258
 - end-user impact, 261
 - implementation, 261
 - introduction, 254
 - solution, 255
- address verification agent, 258
- Address Verified Flag field, 244
- AllAddressesVerified flag, 257
- Allow Addition of Open Box Items to Orders field, 91
- Alternate Item Identifier, 211
- American Express credit card, 312
- APPROVED response code, 410

B

- bank hold payment failure, 410
- BANK_HOLD response code, 410
- bill to ID, 253

C

- Carrier Service Level field, 247
- Carte Blanche credit card, 312
- Changing Delivery Lines, 364
- Changing Fulfillment Options, 361
- Changing Order Address, 389
- Changing Pickup Lines, 364
- changing service appointments, 377
- Channel Applications Manager
 - actions
 - on-line help, 5
 - special characters, 6
 - troubleshooting, 5
 - starting, 3
- Channel field, 247
- check
 - account number, 415
 - amount, 415
 - payment method, 404
 - reference, 415
- check account number, 404
- check amount, 404
- check reference, 404
- COLLECTION_FAILED event, 415, 416
- configuring store tasks, 153
 - barcodes
 - configuring, 154
 - data security
 - configuring, 153
 - store devices
 - configuring, 153
 - store prints
 - configuring, 153

- store users
 - defining, 153
- credit card, 307
 - implementation, 408
 - payment method, 402
- credit card validation
 - end-user impact, 310
 - implementation, 311
 - introduction, 307
- customer ID. See bill to ID
- customer information
 - field capture, 244

D

- data
 - overview, 603
- declined payment failure, 413
- DECLINED response code, 413
- Diners Club credit card, 312
- Disabling Availability Checks, 363
- Disabling Fulfillment Methods, 363
- Disabling Pick up from Store for all Items, 363
- Discover credit card, 312
- draft orders
 - entering names, 239
- duplicate order validation, 249
 - bill to ID, 253
 - end-user impact, 253
 - enterprise code, 253
 - implementation, 254
 - introduction, 249
 - IP address, 253
 - order date, 253
 - solution, 250
 - total amount, 253

E

- e-mail notification, 295
- enterprise code, 253
- Enterprise Code field, 247
- environment variable
 - YANTRA_HOME, xxxix
- executeCollection API, 402, 406, 408, 411, 413

F

- field capture
 - additional order information, 247
 - address information, 243
 - customer information, 244
 - fulfillment information, 247
 - item and line information, 245
 - pricing and payment information, 246
- fraud check, 262
 - end-user impact, 265
 - implementation, 265
 - introduction, 262
 - solution, 262
- FTC Compliance
 - promised delivery dates, 276
 - solution, 276
- FTC compliance, 275
- fulfillment information
 - field capture, 247
- Fulfillment Methods Supported for Open Box Items
 - field, 91
- Fulfillment Option field, 247
- Fulfillment Summary, 367
 - viewing, 368

H

- hard decline payment failure, 410, 418
- HARD_DECLINE response code, 410, 418
- holds
 - resolving, 300

I

- Increasing Order Line Quantity, 384
- IP address, 253
- IP Address field, 244
- IsAddressVerified flag, 257
- item information
 - field capture, 245
- Item Promised Date field, 246

J

JCB credit card, 312

L

line information

field capture, 245

List of Promotions Applied to the Order field, 246

Luhn's algorithm, 309

M

Master Card, 312

N

NOTIFICATION_SENT flag, 292

O

ON_CANCEL event, 295

order cancellation notification

end-user impact, 297

implementation, 297

introduction, 295

solution, 295

order creation, 219

order date, 253

order delay, 248

end-user impact, 248

implementation, 248

introduction, 248

solution, 248

order inquiry, 269

order validation, 249

address verification, 254

duplicate order validation, 249

fraud check, 262

verifying items, 266

Orders

e-mailing details to customer, 396

orders

adding coupons, 345

adding related items, 234

adding upsell items, 234

copying, 395, 537

e-mailing details to customer, 537

P

participants, 143

Payment Auth Retry Limit Reached queue, 410

Payment Declined queue, 411, 413

Payment Hard Declined queue, 410

payment information

field capture, 246

payment processing

end-user impact, 406

implementation, 406

introduction, 399

solution, 399

payment processing error handling, 415

payment service unavailable, 411, 413

Payment Service Unavailable queue, 411, 413

Pre-paid payment method, 404

price match rules

configuring, 81

pricing information

field capture, 246

Product Class for Open Box Items field, 91

promised delivery dates, 276

R

refund check

payment method, 405

register number, 404

requestCollection API, 402

Reservations, 382

return check

implementation, 413

S

security management, 141

SEND_NOTIFICATION event, 292

service appointments

- modifying delivery lines after release, 379
- service unavailable payment failure, 411, 413
- services
 - delivery and provided services, 51
- SERVICE_UNAVAILABLE response code, 411, 413
- shipment alert consolidation, 292
- shipment notification, 292
 - end-user impact, 294
 - implementation, 294
 - introduction, 292
 - solution, 292
- Shipment Notification agent, 293
- soft declined payment failure, 410
- SOFT_DECLINED response code, 410
- Special Care Flag field, 244
- store tender type, 404
- stored value card
 - implementation, 411
 - payment method, 403
- strike limit configuration, 418
- System-generated notes, 357

T

- Tag Attributes for Open Box ID field, 91
- total amount, 253
- transaction number, 404

V

- validateCoupon API, 345
- Visa credit card, 312

Y

- YANTRA_HOME, xxxix
- YCDemailOrderUE user exit, 397
- YCDOnCollectionFailure action, 415
- YCDPromotionValidationUE user exit, 345
- YCD_CancelOrderNotification_1.0 service, 295
- YCD_ExecuteCollectionCreditCard_Proxy_1.0 service, 408, 409
- YCD_ExecuteCollectionCreditCard_1.0

- service, 408
- YCD_ExecuteCollectionRefundCheck_Proxy_1.0 service, 413, 414
- YCD_ExecuteCollectionRefundCheck_1.0 service, 413, 414
- YCD_ExecuteCollectionSVC_Proxy_1.0 service, 411, 412
- YCD_ExecuteCollectionSVC_1.0 service, 411, 412
- YCD_OrderConfirmationEmail_1.0 service, 297
- YCD_PaymentAuthRetryLimitAlert_1.0 service, 410
- YCD_PaymentDeclinedAlert_1.0 service, 410, 413
- YCD_PaymentHardDeclinedAlert_1.0 service, 410
- YCD_PaymentServiceUnavailableAlert_1.0 service, 411, 413
- YCD_Populate_Order_Email_8.5 service, 397
- YCD_ProcessCollectionFailure_1.0 service, 416
- YCD_ProcessFailure_1.0 service, 415
- YCD_Send_Order_Email_8.5 service, 397
- YCD_SetOrderDefaultsOnChange_2.0 service, 287
- YCD_SetOrderDefaults_2.0 service, 287
- YCD_ShipmentNotificationEmail_1.0 service, 293, 294
- YFSCollectionCreditCardUE user exit, 402, 408
- YFSCollectionOthersUE user exit, 413
- YFSCollectionStoredValueCardUE user exit, 403, 411
- YFSGetFundsAvailableUE user exit, 403