Oracle® Retail Enterprise Inventory Cloud Service

Inbound and Outbound Integration Guide

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Contents

Send Us Your Comments

Preface

Audience xxxii
Documentation Accessibility xxxii
Related Documents xxxii
Improved Process for Oracle Retail Documentation Corrections xxxii
Oracle Retail Documentation at the Oracle Help Center xxxiii
Conventions xxxiii

1 Introduction

2 Retail Home Integration

Launch SIOCS from Retail Home 2-1
Tile Reports 2-3
EICS Endpoints 2-3
    Shop Floor Out of Stock Items 2-3
    Stock Counts - Ready to Authorize 2-4
SIOCS Operational Views 2-4
    Launch SIOCS Operational Views from Tile Report 2-5
Subscription Usage Batch 2-5

3 Retail Integration Cloud Service (RICS) - based Integration

Security Considerations 3-1
Customer Orders 3-2
Picking 3-2
Deliveries 3-2
Reverse Picking 3-2
Multi Leg 3-3
RIB Payloads 3-3

Purchase Orders and Vendor Deliveries 3-3
Inventory Adjustments 3-4
Items 3-5
Stock Counts 3-5
Transfers 3-5
Transfer Creation 3-5
Transfer Messages 3-6
Transfer Shipment Creation 3-6
Transfer Receiving 3-6
Transfer Doc 3-9
Transfer Shipment 3-10
Transfer Receiving 3-10
Vendor Return 3-10
RTV Creation 3-10
RTV Shipment 3-10

4 REST Web Services

REST WEB Services Security Considerations 4-1
REST WEB Services Basic Design Principles 4-4
Requests and Responses 4-4
API Versioning 4-4
Content-Type 4-4
JSON Validation 4-5
Synchronous vs Asynchronous 4-5
Online Documentation 4-5
Configured System Options In EICS 4-7
External vs Internal Attributes 4-7
Dates In Content 4-8
Links In Content 4-8
Hypertext Transfer Protocol Status Codes 4-9
Success Codes 4-9
Client Failure Codes 4-9
System Failure Codes 4-9
JSON Error Element and Error Codes 4-10
Schema — ErrorList 4-10
Example Value 4-11
Error Attribute Definitions 4-11
Integration Error Codes 4-11
Error Code Data Elements 4-12
REST Service: Activity Lock 4-12
Service Base URL 4-13

API Definitions 4-13
API: Find Lock 4-13
API: Create Lock 4-16
API: Delete Lock 4-17
API: Read Lock 4-17
REST Service: Notification 4-18
Service Base URL 4-18
APIs 4-18
API: findNotifications 4-19
API: createNotifications 4-19
Index 4-20
REST Service: Address 4-22
Service Base URL 4-22
API Definitions 4-22
API: Import Address 4-22
API: Delete Address 4-24
API: Read Address 4-24
REST Service: Batch 4-26
Service Base URL 4-26
API Definitions 4-26
API: Execute Batch 4-26
API: Find Batch Jobs 4-27
REST Service: Differentiator 4-29
Service Base URL 4-29
API Definitions 4-29
API: Import Differentiator Types 4-29
API: Import Differentiators 4-30
API: Delete Differentiator Type 4-30
REST Service: Finisher 4-31
Service Base URL 4-31
API Definitions 4-31
API: Import Finishers 4-31
API: Delete Finisher 4-33
API: Import Items 4-33
API: Remove Items 4-34
REST Service: Inventory Adjustment 4-35
Service Base URL 4-35
Find Inventory Adjustment 4-35
Method 4-35
URL 4-35
Request 4-35
Responses 4-36

Create Inventory Adjustment 4-37
Method 4-38
URL 4-38
Request 4-38
Responses 4-39
Read Inventory Adjustment 4-40
Method 4-40
URL 4-40
Request 4-40
Responses 4-41
Update Inventory Adjustment 4-43
Method 4-43
URL 4-43
Request 4-43
Responses 4-45
Confirm Inventory Adjustment 4-45
Method 4-45
URL 4-46
Request 4-46
Response Code: 204 4-46
Response Code: 400 4-46
Cancel Inventory Adjustment 4-46
Method 4-46
URL 4-46
Request 4-46
Responses 4-47
REST Service: Item 4-47
Service Base URL 4-47
API Definitions 4-47
API: Import Items 4-48
API: Remove Items 4-50
API: Import Hierarchies 4-51
API: Remove Hierarchies 4-52
API: Import Related Items 4-52
API: Delete Related Items 4-54
API: Import Image Urls 4-54
API: Delete Image Urls 4-55
REST Service: Item Inquiry 4-57
Service Base URL 4-57
Retrieve Items By Scan 4-57
Method 4-57
URL 4-58

Request 4-58
Responses 4-58
Retrieve Items by Source 4-58
Method 4-58
URL 4-58
Request 4-59
Responses 4-59
Retrieve Items 4-60
Method 4-61
URL 4-61
Request 4-61
Responses 4-61
REST Service: Item Inventory 4-66
Service Base URL 4-66
API Definitions 4-66
API: Find Available Inventory 4-66
API: Find Inventory 4-68
API: Find Expanded Inventory 4-72
API: Find Future Inventory 4-76
API: Find Inventory in Buddy Stores 4-77
API: Find Inventory in Transfer Zone Stores 4-81
REST Service: Item ISN 4-84
APIs 4-84
API: Create ISN 4-84
API: Update ISN 4-85
API: Delete ISN 4-86
API: Find ISNs 4-87
API: Read ISN Types 4-88
REST Service: Item Price 4-88
Service Base URL 4-88
API Definitions 4-88
API: findPrices 4-88
API: findPriceByIds 4-89
REST Service: Item UDA 4-92
Service Base URL 4-92
API Definitions 4-92
API: Import Udas 4-92
API: Delete Udas 4-93
API: Import Item Udas 4-94
API: Delete Item Udas 4-95
API: Find Item Udas 4-95
REST Service: Item UIN 4-97

Service Base URL 4-97
API Definitions 4-97
API: createUin 4-97
API: readUin 4-98
API: findUins 4-99
API: findUinLabels 4-100
API: findUinHistory 4-100
API: generateUins 4-101
REST Service: Manifest 4-103
Service Base URL 4-103
API Definitions 4-103
API: Close Manifest 4-103
REST Service: POS Transaction 4-104
Service Base URL 4-105
Import POS Transaction 4-105
Method 4-105
URL 4-105
Request 4-105
Responses 4-108
REST Service: Product Group 4-108
Service Base URL 4-109
APIs 4-109
API: findProductGroup 4-109
API: readProductGroup 4-110
API: createProductGroup 4-113
API: updateProductGroup 4-123
API Basics 4-123
Input Data Definition 4-124
API: cancelProductGroup 4-128
Index 4-128
REST Service: Security 4-130
Service Base URL 4-130
Scope To Be Used 4-130
API Definitions 4-130
API: Import Users 4-130
API: Delete Users 4-132
REST Service: Reason Code 4-133
Service Base URL 4-133
API Definitions 4-134
API: Find Adjustment Reason Codes 4-134
API: Find Shipment Reason Codes 4-135
REST Service: Shipping 4-137

Service Base URL 4-137
APIs 4-137
API: findCarriers 4-138
API: findCarrierServices 4-138
API: findCartonSizes 4-139
API: findWeightUoms 4-139
API: findMotives 4-140
Index 4-140
REST Service: Stock Count 4-141
Service Base URL 4-141
Find Stock Counts 4-141
Method 4-141
URL 4-141
Request Parameters 4-141
Responses 4-142
Read Stock Count 4-145
Method 4-145
URL 4-145
Request Parameters 4-145
Responses 4-145
Snapshot Stock Count 4-151
Method 4-151
URL 4-151
Request Parameters 4-151
Responses 4-151
Cancel Stock Count 4-152
Method 4-152
URL 4-152
Request Parameters 4-152
Responses 4-152
Read Stock Count Child 4-152
Method 4-153
URL 4-153
Request Parameters 4-153
Responses 4-153
Update Stock Count Child 4-158
Method 4-159
URL 4-159
Request Parameters 4-159
Responses 4-160
Complete Stock Count Child 4-160
Method 4-160

URL 4-161
Request Parameters 4-161
Responses 4-161
REST Service: Store 4-161
Service Base URL 4-161
API Definitions 4-161
API: Import Stores 4-162
API: Delete Store 4-164
API: Read Store 4-164
API: Find Stores 4-166
API: Find Associated Stores 4-168
API: Find Auto Receive Stores 4-170
API: Find Transfer Zone Stores 4-171
REST Service: Store Item 4-172
Service Base URL 4-173
API Definitions 4-173
API: Import Store Items 4-173
API: Remove Store Items 4-175
API: Import Replenishment Items 4-176
API: Remove Replenishment Items 4-177
REST Service: Store Order 4-178
Service Base URL 4-178
Find Store Order 4-178
Method 4-179
URL 4-179
Request Parameters 4-179
Responses 4-179
Create Store Order 4-181
Method 4-181
URL 4-181
Request Parameters 4-181
Responses 4-183
Read Store Order 4-184
Method 4-184
URL 4-184
Request Parameters 4-184
Responses 4-184
Update Store Order 4-189
Method 4-189
URL 4-189
Request Parameters 4-189
Responses 4-190

Approve Store Order 4-191
Method 4-191
URL 4-191
Request Parameters 4-191
Responses 4-191
Cancel Store Order 4-191
Method 4-192
URL 4-192
Request Parameters 4-192
Responses 4-192
Import Store Order 4-192
Method 4-192
URL 4-193
Request Parameters 4-193
Responses 4-194
Find Order Timeslots 4-195
Method 4-196
URL 4-196
Request Parameters 4-196
Responses 4-196
Find Order Context Types 4-197
Method 4-197
URL 4-197
Request Parameters 4-197
Responses 4-197
Find Order Areas 4-198
Method 4-198
URL 4-198
Request Parameters 4-199
Responses 4-199
REST Service: Store Sequencing 4-200
APIs 4-200
API: Find Sequence Areas 4-200
API: Read Sequence Area 4-201
API: Create Sequence Area 4-203
API: Update Sequence Area 4-204
API: Delete Sequence Area 4-206
API: Create Sequence Item 4-206
API: Update Sequence Item 4-207
API: Delete Sequence Item 4-209
Additional Data Definitions 4-209
REST Service: Supplier 4-210

Service Base URL 4-210
API Definitions 4-210
API: Import Suppliers 4-210
API: Delete Supplier 4-212
API: Import Items 4-213
API: Delete Items 4-214
API: Import Item UOMs 4-215
API: Delete Item UOMs 4-217
API: Import Item Countries 4-218
API: Delete Item Countries 4-219
API: Import Item Dimensions 4-220
API: Delete Item Dimensions 4-222
API: Import Item Manufacturers 4-223
API: Delete Item Manufacturers 4-224
REST Service: Ticket 4-225
Service Base URL 4-225
API Definitions 4-225
API: readTicket 4-226
API: findTickets 4-228
API: readArchivedTicket 4-229
API: findArchivedTickets 4-230
API: createTickets 4-231
API: Update Tickets 4-233
API: printTickets 4-234
API: findTicketFormats 4-235
API: findTicketPrinters 4-236
REST Service: Transfer 4-237
Server Base URL 4-238
Find Transfer 4-238
Method 4-238
URL 4-238
Request 4-238
Responses 4-239
Create Transfer 4-241
Method 4-241
URL 4-241
Request 4-241
Responses 4-243
Read Transfer 4-245
Method 4-246
URL 4-246
Request 4-246

Responses 4-246
Update Transfer 4-250
Method 4-250
URL 4-250
Request 4-250
Responses 4-252
Create Request 4-256
Method 4-256
URL 4-256
Request 4-256
Responses 4-258
Update Request 4-259
Method 4-259
URL 4-259
Request 4-259
Responses 4-261
Cancel Request 4-261
Method 4-261
URL 4-261
Request 4-262
Responses 4-262
Release Request 4-262
Method 4-262
URL 4-262
Request 4-262
Responses 4-263
Approve Request 4-263
Method 4-263
URL 4-263
Request 4-263
Responses 4-264
Reject Request 4-264
Method 4-264
URL 4-264
Request 4-264
Responses 4-264
Approve Transfer 4-265
Method 4-265
URL 4-265
Request 4-265
Responses 4-265
Cancel Transfer 4-266

Method 4-266
URL 4-266
Request 4-266
Responses 4-266
Close Transfer 4-266
Method 4-267
URL 4-267
Request 4-267
Responses 4-267
Find Transfer Contexts 4-267
Method 4-267
URL 4-268
Request 4-268
Responses 4-268
Import Transfer 4-268
Method 4-269
URL 4-269
Request 4-269
Responses 4-271
Delete Transfer Import 4-271
Method 4-271
URL 4-271
Request 4-271
Responses 4-272
REST Service: Transfer Delivery 4-272
Server Base URL 4-272
Find Delivery 4-272
Method 4-272
URL 4-273
Request 4-273
Responses 4-273
Create Delivery 4-275
Method 4-275
URL 4-275
Request 4-275
Responses 4-279
Read Delivery 4-280
Method 4-280
URL 4-280
Request 4-280
Responses 4-280
Update Delivery 4-287

Method 4-287
URL 4-287
Request 4-287
Responses 4-288
Receive Delivery 4-288
Method 4-289
URL 4-289
Request 4-289
Responses 4-289
Confirm Delivery 4-289
Method 4-290
URL 4-290
Request 4-290
Responses 4-290
Open Delivery 4-290
Method 4-290
URL 4-291
Request 4-291
Responses 4-291
Create Carton 4-291
Method 4-291
URL 4-291
Request 4-291
Responses 4-294
Update Carton 4-295
Method 4-295
URL 4-295
Request 4-296
Responses 4-298
Receive Carton 4-298
Method 4-298
URL 4-298
Request 4-298
Responses 4-299
Confirm Carton 4-299
Method 4-299
URL 4-299
Request 4-299
Responses 4-300
Cancel Carton 4-300
Method 4-300
URL 4-300

Request 4-300
Responses 4-300
Open Carton 4-301
Method 4-301
URL 4-301
Request 4-301
Responses 4-301
Import ASN Delivery 4-302
Method 4-302
URL 4-302
Request 4-302
Responses 4-305
Import ASN Delete Delivery 4-305
Method 4-305
URL 4-305
Request 4-305
Responses 4-306
REST Service: Transfer Shipment 4-306
Service Base URL 4-306
API Definitions 4-306
API: Read Shipment 4-307
API: Find Transfer Shipment 4-311
API: Submit Shipment 4-312
API: Cancel Submit Shipment 4-313
API: Dispatch Shipment 4-313
API: Cancel Shipment 4-313
API: Confirm Carton 4-314
API: Cancel Carton 4-314
API: Open Carton 4-315
API: createShipment 4-315
API: updateShipment 4-318
API: createCarton 4-319
API: updateCarton 4-321
Index 4-322
REST Service: Translations 4-323
Service Base URL 4-323
API Definitions 4-323
API: Find Locales 4-323
API: Find Translations 4-325
API: Find Items Descriptions 4-326
REST Service: Vendor Delivery 4-327
Service Base URL 4-327

API Definitions 4-327
API: Read Delivery 4-328
API: Find Vendor Delivery 4-331
API: Receive Delivery 4-332
API: Confirm Delivery 4-333
API: Reject Delivery 4-333
API: Cancel Delivery 4-334
API: Submit Carton 4-334
API: Cancel Submit Carton 4-335
API: Confirm Carton 4-335
API: Cancel Carton 4-335
API: Open Carton 4-336
Additional Data Definitions 4-336
REST Service: Vendor Return 4-338
Service Base URL 4-338
Find Return 4-338
Method 4-338
URL 4-338
Request Parameters 4-338
Responses 4-339
Create Return 4-341
Method 4-341
URL 4-341
Request Parameters 4-341
Responses 4-343
Read Return 4-344
Method 4-344
URL 4-344
Request Parameters 4-344
Responses 4-345
Update Return 4-348
Method 4-348
URL 4-348
Request Parameters 4-349
Responses 4-350
Approve Return 4-350
Method 4-350
URL 4-350
Request Parameters 4-350
Responses 4-351
Close Return 4-351
Method 4-351

URL 4-351
Request Parameters 4-351
Responses 4-351
Import Return 4-352
Method 4-352
URL 4-352
Request Parameters 4-352
Responses 4-354
Import Return Delete 4-355
Method 4-355
URL 4-355
Request Parameters 4-355
Responses 4-355
REST Service: Vendor Shipment 4-355
Service Base URL 4-356
Find Shipments — GET 4-356
Method 4-356
URL 4-356
Request 4-356
Responses 4-357
Create Shipment — POST 4-358
Method 4-358
URL 4-359
Request 4-359
Responses 4-362
Read Shipment — GET 4-363
Method 4-363
URL 4-364
Request 4-364
Responses 4-364
Update Shipment — POST 4-370
Method 4-370
URL 4-370
Request 4-370
Responses 4-372
Submit Shipment — POST 4-373
Method 4-373
URL 4-373
Request 4-373
Responses 4-374
Cancel Submit Shipment — POST 4-374
Method 4-374

URL 4-374
Request 4-375
Responses 4-375
Dispatch Shipment — POST 4-375
Method 4-375
URL 4-375
Request 4-375
Responses 4-376
Cancel Shipment — POST 4-376
Method 4-376
URL 4-376
Request 4-376
Responses 4-377
Create Carton — POST 4-377
Method 4-377
URL 4-377
Request 4-377
Responses 4-379
Update Carton — POST 4-380
Method 4-380
URL 4-380
Request 4-380
Responses 4-382
Confirm Carton — POST 4-383
Method 4-383
URL 4-383
Request 4-383
Responses 4-383
Cancel Carton — POST 4-383
Method 4-384
URL 4-384
Request 4-384
Responses 4-384
Open Carton — POST 4-384
Method 4-384
URL 4-385
Request 4-385
Responses 4-385
REST Service: Warehouse 4-385
Service Base URL 4-385
API Definitions 4-385
API: Import Warehouses 4-386

API: Delete Warehouse 4-387
API: Import Items 4-388
API: Delete Items 4-389
API: Import Adjustments 4-390
API: Import Inventory 4-391
REST Service: Item Basket 4-392
Service Base URL 4-393
Find Baskets — GET 4-393
Method 4-393
URL 4-393
Request Parameters 4-393
Responses 4-394
Create Basket 4-395
Method 4-396
URL 4-396
Request Parameters 4-396
Responses 4-398
Read Basket 4-399
Method 4-399
URL 4-399
Request Parameters 4-399
Responses 4-399
Update Basket 4-401
Method 4-401
URL 4-401
Request Parameters 4-401
Responses 4-403
Copy Basket 4-403
Method 4-403
URL 4-403
Request Parameters 4-403
Responses 4-404
Confirm Basket 4-405
Method 4-405
URL 4-405
Responses 4-405
Delete Basket 4-406
Method 4-406
URL 4-406
Request Parameters 4-406
Responses 4-406
Find Basket Types 4-407

Method 4-407
URL 4-407
Request Parameters 4-407
Responses 4-407
REST Service: Product Area 4-408
Service Base URL 4-408
Find Product Areas 4-408
Method 4-408
URL 4-408
Request Parameters 4-409
Responses 4-409
Create Product Area 4-410
Method 4-411
URL 4-411
Request Parameters 4-411
Responses 4-412
Read Product Area 4-413
Method 4-413
URL 4-413
Request Parameters 4-413
Responses 4-413
Update Product Area 4-415
Method 4-415
URL 4-415
Request Parameters 4-415
Responses 4-416
Cancel Product Area 4-416
Method 4-416
URL 4-416
Request Parameters 4-416
Responses 4-417
Confirm Product Area 4-417
Method 4-417
URL 4-417
Request Parameters 4-417
Responses 4-417
REST Service: Product Group Schedule 4-418
Service Base URL 4-418
Find Schedules 4-418
Method 4-418
URL 4-418
Request Parameters 4-418

Responses 4-419
Create Schedule 4-420
Method 4-421
URL 4-421
Request Parameters 4-421
Responses 4-425
Read Schedule 4-427
Method 4-427
URL 4-427
Request Parameters 4-427
Responses 4-427
Update Schedule 4-432
Method 4-432
URL 4-433
Request Parameters 4-433
Responses 4-437
Delete Schedule 4-437
Method 4-437
URL 4-437
Request Parameters 4-437
Responses 4-438
REST Service: Radio Frequency Identification Scanning (RFID) 4-438
Service Base URL 4-438
Find Zones 4-438
Method 4-438
URL 4-439
Request Parameters 4-439
Responses 4-439
Create Zone 4-440
Method 4-440
URL 4-440
Request Parameters 4-441
Responses 4-441
Update Zone 4-443
Method 4-443
URL 4-443
Request Parameters 4-443
Responses 4-444
Delete Zone 4-444
Method 4-444
URL 4-444
Request Parameters 4-445

Responses 4-445
Import Events 4-445
Method 4-445
URL 4-445
Request Parameters 4-445
Responses 4-447
REST Service: Shelf Replenishment Gap 4-447
Service Base URL 4-447
Find Gap 4-448
Method 4-448
URL 4-448
Request Parameters 4-448
Responses 4-448
Create Gap 4-450
Method 4-450
URL 4-450
Request Parameters 4-450
Responses 4-451
Read Gap 4-452
Method 4-452
URL 4-452
Request Parameters 4-452
Responses 4-453
Update Gap 4-454
Method 4-455
URL 4-455
Request Parameters 4-455
Responses 4-456
Delete Gap 4-456
Method 4-456
URL 4-456
Request Parameters 4-456
Responses 4-456
REST Service: Purchase Order 4-457
Service Base URL 4-457
Find Orders 4-457
Method 4-457
URL 4-457
Request Parameters 4-457
Responses 4-458
Read Order By ID 4-459
Method 4-460

URL 4-460
Request Parameters 4-460
Responses 4-460
Read Order 4-463
Method 4-463
URL 4-463
Request Parameters 4-463
Responses 4-463
Close Order 4-466
Method 4-466
URL 4-467
Request Parameters 4-467
Responses 4-467
Import Order 4-467
Method 4-467
URL 4-468
Request Parameters 4-468
Responses 4-470
REST Service: Allocation 4-470
Service Base URL 4-470
Find Allocation 4-471
Method 4-471
URL 4-471
Request Parameters 4-471
Responses 4-471
Import Allocation 4-473
Method 4-473
URL 4-473
Request Parameters 4-473
Responses 4-475
Complete Allocation 4-475
Method 4-475
URL 4-475
Request Parameters 4-475
Responses 4-476
Cancel Allocation 4-476
Method 4-476
URL 4-476
Request Parameters 4-476
Responses 4-476
REST Service: Shelf Replenishment 4-477
Service Base URL 4-477

Find Replenishment 4-477
Method 4-477
URL 4-477
Request Parameters 4-477
Responses 4-478
Create Replenishment 4-480
Method 4-480
URL 4-480
Request Parameters 4-480
Responses 4-481
Read Replenishment 4-482
Method 4-483
URL 4-483
Request Parameters 4-483
Responses 4-483
Update Replenishment 4-484
Method 4-484
URL 4-484
Request Parameters 4-484
Responses 4-485
Confirm Replenishment 4-485
Method 4-485
URL 4-485
Request Parameters 4-485
Responses 4-485
Cancel Replenishment 4-486
Method 4-486
URL 4-486
Request Parameters 4-486
Responses 4-486
REST Service: Shelf Adjustment 4-487
Service Base URL 4-487
Find Adjustment 4-487
Method 4-487
URL 4-487
Request Parameters 4-487
Responses 4-488
Create Adjustment 4-489
Method 4-489
URL 4-490
Request Parameters 4-490
Responses 4-491

Read Adjustment 4-492
Method 4-492
URL 4-492
Request Parameters 4-492
Responses 4-492
Update Adjustment 4-494
Method 4-494
URL 4-494
Request Parameters 4-494
Responses 4-494
Confirm Adjustment 4-495
Method 4-495
URL 4-495
Request Parameters 4-495
Responses 4-495
Delete Adjustment 4-495
Method 4-496
URL 4-496
Request Parameters 4-496
Responses 4-496
REST Service: Customer Fulfillment Order 4-496
Service Base URL 4-496
Find Fulfillment Order 4-497
Method 4-497
URL 4-497
Request Parameters 4-497
Responses 4-498
Read Fulfillment Order 4-500
Method 4-500
URL 4-500
Request Parameters 4-500
Responses 4-501
Import Fulfillment Order 4-506
Method 4-506
URL 4-506
Request Parameters 4-506
Responses 4-509
Pickup Fulfillment Order 4-509
Method 4-509
URL 4-510
Request Parameters 4-510
Responses 4-511

Reject Fulfillment Order 4-511
Method 4-511
URL 4-511
Request Parameters 4-511
Responses 4-512
Cancel Fulfillment Order 4-512
Method 4-513
URL 4-513
Request Parameters 4-513
Responses 4-513
Cancel Fulfillment Order Quantities 4-515
Method 4-515
URL 4-515
Request Parameters 4-515
Responses 4-516

5 Sales Integration

POS and Sales Audit Process Flow 5-2
Sales and Return Processing 5-2
Customer Order Processing 5-3
Item Disposition 5-3
Drop Ship 5-3
Item Types 5-3
RFID 5-4

6 Outbound Integration

Integration with Customer Order System 6-1
REST Service: Fulfillment Order Address (External) 6-1
Order Address 6-2
Integration with Manifesting Systems 6-6
Integration for Notifications 6-7
Integration for Sales Forecast 6-7
Integration for Store Order 6-7
Integration for Ticket Printing 6-8
REST Service: Ticket Printing 6-8
API Publish Tickets 6-8

7 File Transfer Services

Overview 7-1

How to Call FTS APIs 7-2
Service Base URL 7-3
FTS Bucket Name 7-3
FTS Endpoints 7-3
Preparing for Authorization 7-4
Retrieving Access Client Token 7-6
FTS API Call Common Headers 7-6
How to Use FTS API to find Object Storage Prefixes 7-7
How to Use FTS APIs to Upload Files to Object Storage 7-7
Step1: Request upload PAR 7-7
Step2: Use PAR to upload data files to Object Storage 7-7
How to Use FTS API to List Files in Object Storage 7-8
How to Use FTS APIs to Download Files from Object Storage 7-8
Step1: Find what files are available for downloads 7-8
Step2: Request Download PAR for downloading data files from Object Storage 7-8
Step3: Download the file using the par returned from step2 7-9
Handling Import Data Files 7-9
Supported Import Data Files 7-9
Upload Import Data Files to Object Storage 7-10
Handling Export Data Files 7-10
Supported Export Data Files 7-11
Steps to Download Export Data Files from Object Storage 7-11
File Transfer Service UI 7-11
FTS API Specifications 7-14
Ping 7-14
List Prefixes 7-15
List Files 7-15
Move Files 7-17
Delete Files 7-18
Request Upload PAR 7-19
Request Download PAR 7-20
File Transfer Service Troubleshooting 7-21
Test FTS API using Postman 7-22
Step 1: Get Client Access Token 7-22
Step 2: Call FTS Endpoints 7-22

8 File Transfer Wrapper Service

Overview 8-1
Service Use Cases 8-2
Prerequisites 8-2
Object Storage Bucket 8-2

File Transfer Wrapper Service URL and Scopes 8-2
OAUTH Security Considerations 8-2
How to Switch Using File Transfer Wrapper Service 8-3
Configure FTS Wrapper Credentials 8-3
Enable File Transfer Wrapper Service 8-3
Update Your External Applications to Use FTS Wrapper Service APIs 8-3
How to Use File Transfer Wrapper Service APIs 8-3
Service Base URL 8-4
Service Endpoints 8-4
Retrieving Access Client Token 8-5
Service Request Headers 8-5
How to Use Service API to find Object Storage Prefixes 8-6
How to Use Service API to List Files in Object Storage 8-6
How to Use Service APIs to Upload Import Data Files to Object Storage 8-6
How to Use Service APIs to Download Data Files from Object Storage 8-7
File Transfer Service UI 8-8
File Transfer Wrapper Service API Specification 8-10
Ping 8-11
List Prefixes 8-11
List Files 8-12
Move Files 8-14
Delete Files 8-14
Request Upload PAR 8-15
Request Download PAR 8-16
File Transfer Wrapper Service Troubleshooting 8-17

9 SOAP Web Services

Security Considerations 9-1
Functionality 9-2
Available Web Services 9-2
Web Services Basic Design Principles 9-3
Internally Managed vs Externally Managed 9-4
Web Service Operation Basic Design Standards 9-5
Interpreting Validation Errors 9-6
Common Error Codes 9-6
Validation Error (Fault Example) 9-7
Business Error (Fault Example) 9-8
Web Services 9-8
ActivityLock 9-8
FulfillmentOrderDelivery 9-9
FulfillmentOrderPick 9-9

FulfillmentOrderReversePick 9-10
InventoryAdjustment 9-11
ItemBasket 9-11
OrderRequest 9-12
POSTransaction 9-13
ProductGroup 9-13
ProductGroupSchedule 9-13
ReplenishmentGap 9-14
RfidInventory 9-14
ShelfAdjustment 9-15
ShelfReplenishment 9-15
StockCount 9-16
Store 9-17
StoreFulfillmentOrder 9-17
StoreInventory 9-18
StoreInventoryISN 9-18
StoreInventoryUIN 9-19
StoreItem 9-19
StoreItemPrice 9-20
StoreNotification 9-20
StoreShipmentManifest 9-20
StoreShipmentReason 9-21
StoreTicket 9-21
StoreTransfer 9-21
TransferDelivery 9-22
TransferShipment 9-24
VendorDelivery 9-25
VendorReturn 9-26
VendorShipment 9-26
Enterprise Documentation 9-28

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Oracle Retail Enterprise Inventory Cloud Service Inbound and Outbound Implementation Guide, Release 25.0.101.0

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Preface

This document describes the administration tasks for Oracle Retail Enterprise Inventory Cloud Service.

Audience

This document is intended for administrators.

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Related Documents

For more information, see the following documents in the Oracle Retail Store Inventory Operations Cloud Services Release 25.0.101.0 documentation set:

- *Oracle Retail Store Inventory Operations Cloud Services Release Notes*
- *Oracle Retail Store Inventory Operations Cloud Services Implementation Guide*
- *Oracle Retail Store Inventory Operations Cloud Services Data Model*
- *Oracle Retail Enterprise Inventory Cloud Service Administration Guide*
- *Oracle Retail Enterprise Inventory Cloud Service Security Guide*
- *Oracle Retail Enterprise Inventory Cloud Service User Guide*
- *Oracle Retail Store Operations Cloud Service User Guide*
- *Oracle Retail Store Operations Cloud Service Mobile Guide*

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Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1

Introduction

This guide describes integration through RIB, batches, web services and file transfer services.

- Retail Home Integration
- Retail Integration Cloud Service (RICS) - based Integration
- REST Web Services
- Sales Integration
- Outbound Integration — Including:
  - Integration with Customer Order System
  - Integration with Manifesting Systems
  - Integration for Notifications
  - Integration for Sales Forecast
  - Integration for Ticket Printing
- File Transfer Services
- SOAP Web Services

2

Retail Home Integration

EICS now supports following integration scenarios with Retail Home:

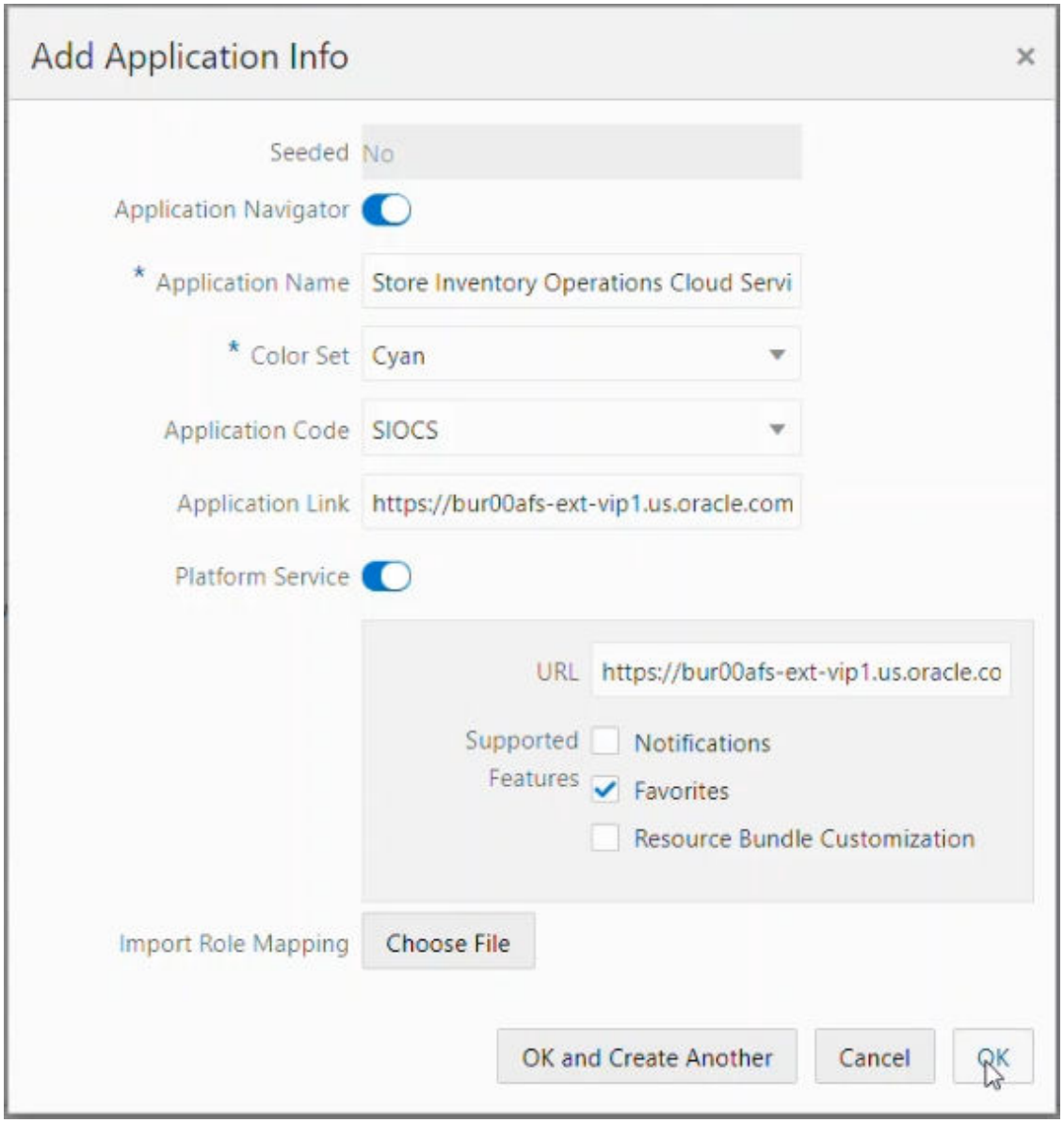
- Launch SIOCS web client from Retail Home
- Launch SIOCS favorites from Retail Home
- Display a tile report for items that are out of stock on shop floor
- Display a tile report for stock counts that are pending authorization
- Launch detailed operational views in SIOCS web client from related tile reports in Retail Home

Launch SIOCS from Retail Home

Launching SIOCS client requires an entry to be made under the application navigator section of Retail Home. It enables the user to launch SIOCS web client in a new browser tab from within Retail Home. Please refer to *Oracle Retail Home Administration Guide* for information on how to work with application navigator in Retail Home.

The SIOCS application configuration should look like this:

Figure 2-1 Add Application Info



- **Seeded**: Disabled and set to No.
- **Application Navigator**: Enable it to launch SIOCS client from Retail Home.
- **Application Name**: The name of the application that is, Store Inventory Operations Cloud.
- **Color Set**: Any color that you want to allocate to SIOCS.
- **Application Code**: Select SIOCS from the drop down.
- **Application Link**: The URL of SIOCS web client.
- **Platform Service**: Enable it to use Favorites feature.
  - **URL**: The base URL of the platform services. The URL would be of the form https://<SIOCS-HOST>/RetailAppsPlatformServices
    <SIOCS-HOST> is the same host in Application Link.

- **Supported Features**: Check only the favorites feature.

The user needs to be part of RETAIL_HOME_ADMIN security group in order to access Application Navigator in Retail Home.

Tile Reports

EICS supports following two types of two metric reports:

- Shop Floor Out of Stock Items
- Stock Counts - Ready to Authorize

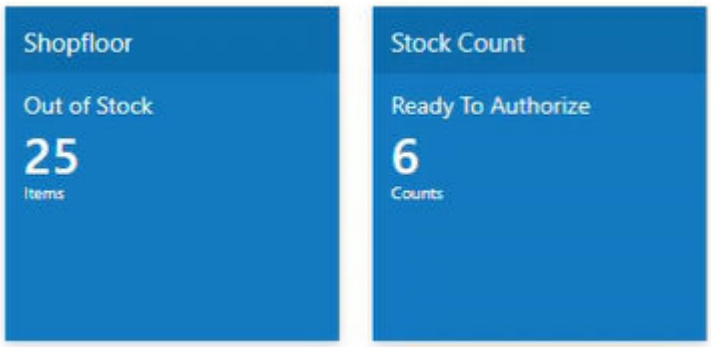
Adding an application navigator entry for SIOCS will automatically configure EICS tiles on Retail Home.

The data seed features do the following:

1. Creates a custom report for EICS tiles on Retail Home.
2. Creates two tiles from the custom report and maps them to retail_home_users IDCS or OCI IAM application role.
3. The data seed features will also configure tile states for the two tiles and hook them up with EICS end points.

After all the configuration, you should be able to see EICS tiles on the dashboard. They should look like the ones below:

Figure 2-2 Example EICS Tiles



EICS Endpoints

EICS exposes following two endpoints:

Shop Floor Out of Stock Items

This endpoint can be used as a data source for **Shop floor Out of Stock** tile state.

The response contains information on number of items that are out of stock across all the stores that are accessible to the user.

If the percentage of out of stock items to total items is greater than the **Shopfloor Out of Stock Items Critical Percentage** system configuration, EICS marks the response as important which displays a '!' mark next to the number on the tile report.

Table 2-1 Shop Floor Out of Stock

Endpoint	Operational View
https://<eics_external_load_balancer_address>/<CUST_ENV>/siocs-client-services/internal/rhreports/outofstock/shopfloor/tile	Shopfloor Out of Stock

Stock Counts - Ready to Authorize

This endpoint can be used as a data source for **Stock Count - Ready to Authorize** tile state.

The response contains information on number of stock counts that are pending authorization across all stores that are accessible to the user.

Table 2-2 Stock Counts - Ready to Authorize

Endpoint	Operational View
https://<eics_external_load_balancer_address>/<CUST_ENV>/siocs-client-services/internal/rhreports/readytoauthorize/tile	Stock Count - Ready To Authorize

The response payloads of both these endpoints confirm to the two metric payload specifications of Retail Home.

User should be a part of retail_home_users IDCS or OCI IAM application role to access these endpoints.

For convenience, EICS also provides a RETAIL HOME security role that captures security permissions required to access these operational views. The user still needs appropriate functional area permissions to navigate to transaction detail screens.

SIOCS Operational Views

EICS has added following operational views that can be hooked with related tiles:

- **Shopfloor Out of Stock Items**

  This view gives a store and item level breakdown of the information that is displayed on the tile. The user can look at item level records for each store and navigate to the item detail screen for any store/item combination provided he or she has the required permissions.

  This view is available under Operations / Operational Views / Shopfloor Out of Stock menu.

- **Stock Count - Ready to Authorize**

  This view gives a store and stock count level breakdown of the information that is displayed on the tile. The user can look at stock count level records for each store and navigate to the stock count detail for any store/count combination provided he or she has the required permissions.

  This view is available under Operations / Operational Views / Stock Count / Ready to Authorize menu.

Launch SIOCS Operational Views from Tile Report

Launching SIOCS operational views from related tile report requires the tile report to be configured with the URL of the related operational view. Once that is done, clicking on tile report header should open the related EICS operational view in a new browser tab.

Subscription Usage Batch

EICS has added a new batch to extract subscription usage for EICS and SOCS respectively during the subscription period. These extracted metrics are pushed to platform services from where Retail Home displays these on the Application Dashboard screen.

This is a restricted batch which by default is scheduled to run every month. The schedule can only be updated by Oracle.

It can also be run as an Adhoc batch from EICS / Admin / Technical Maintenance / Job Admin / Adhoc Job.

3

Retail Integration Cloud Service (RICS) - based Integration

- Security Considerations
- Customer Orders
- Picking
- Deliveries
- Reverse Picking
- Multi Leg
- RIB Payloads
- Purchase Orders and Vendor Deliveries
- Inventory Adjustments
- Items
- Stock Counts
- Transfers
- Transfer Creation
- Transfer Messages
- Transfer Shipment Creation
- Transfer Receiving
- Transfer Doc
- Transfer Shipment
- Transfer Receiving
- Vendor Return

Security Considerations

Customer Administration User must create an IDCS user with the required RIB admin group to access the publisher endpoints.

- ribAdminGroup – For Production environment
- ribAdminGroup_preprod – For Dev/Stage/UAT/test environments

The same user credentials must then be configured on the Credential Administration screen. Refer to Chapter 6 - Technical Maintenance Screens / Credential Administration section for more details.

Customer Orders

- Customer Order Create is used for Customer Orders that are a type of Web Order integrated through a message (FulfilOrdDesc). These integrations are used for the customer order from the Order Management System (OMS).
- The Customer Order Create failure message (FulfilOrdCfmDesc) is a message that will be sent out to external system when we get a Customer Order that comes into the system through the RIB and fails due to validation issues such as an invalid item. The purpose of the create failure is so other systems will know it has failed when it came in and that it is not being processed.
- The Stock Order Status message (SOStatusDesc) will be sent out with an SI upon reserving inventory for the customer order.

Picking

- A Stock Order Status message (SOStatusDesc) is sent out with a type of SI upon reserving inventory. This happens when more is picked than what was on the order due to tolerances. This could also occur when a substitute item is added during the picking process.
- The Stock Order Status message (SOStatusDesc) with a type of SD will be published to un-reserve the original items inventory when a substitute item has been added during picking.
- A Stock Order status message (SOStatusDesc) is sent out with a type of PP when picking is completed.
- Item Substitutes are sent to EICS from the merchandising system through the item message (ItemDesc).

Deliveries

- An ASN Out message (ASNOutDesc) is sent out upon dispatching of the Delivery. This will be done for pick-ups and for shipments.
- The Stock Order Status message (SOStatusDesc) with a type of PP will be published for the pick quantity in the scenario that more was delivered than what was picked.
- The Stock Order Status message (SOStatusDesc) with a type of SI will be published for the reserved quantity. This will occur when more was delivered than what was reserved. This can happen when picking was not required, the reservation occurs upon receipt of a delivery, and the full amount had not been received, therefore not reserved.

Reverse Picking

- Customer Order Cancellations (FulfilOrdRef) will come into EICS from external system such as an OMS through the RIB. This service will perform all the validations to determine if it should create a reverse pick and whether or not that reverse pick should be auto completed.
- Customer Order Cancellation Confirmation (FulfilOrdRef) is a message to send to OMS upon completing of the system-generated reverse pick.

- Stock Order Status message (SOStatusDesc) with a type of SD will be published for the reserved quantity to un-reserve the inventory for the reverse pick for system-generated picks.
- Stock Order Status message (SOStatusDesc) with a type of PU will be published for the reverse picked quantity to un-pick the inventory for system-generated picks.

Multi Leg

The following integrations are in addition to the standard integrations that already exist such as receipt message, and so on:

- The Stock Order Status message (SOStatusDesc) with a type of SI will be published for the reserved quantity.
- The Stock Order Status message (SOStatusDesc) with type of PP will be published for the picked quantity.

RIB Payloads

RIB payloads are used to communicate information to external systems through RIB Integration.

RIB Payload	Description
FulfilOrdDesc	RIB payload that contains information about a new web order type of fulfillment order to be created in.
FulfilOrdCfmDesc	RIB payload sent from EICS that contains fulfillment order information when that order creating in EICS failed
FulfilOrdRef	RIB payload that contains information about a fulfillment order cancelation. It is sent to EICS to convey a cancelation request and sent from EICS to convey actual cancellations.
SOStatusDesc	Sent from EICS to convey changes in item status for a specific fulfillment order. Such changes of status include (un)reservation and (un)picking.
ASNOutDesc	Sent from EICS to convey a delivery for specified fulfillment order.

Purchase Orders and Vendor Deliveries

MERCHANDISING publishes the Purchase Orders created for the direct store deliveries using RIB messages. EICS subscribes to these messages and stores them in the EICS database to enable receipt against Purchase Orders.

MERCHANDISING publishes the unit cost of the item at the item/supplier/country level for EICS to use in the receiving process.

EICS publishes the receipts done against the Purchase Order to the merchandising system (Receiving message).

EICS publishes the DSD receipts created in EICS without a Purchase Order to the merchandising system (DSDReceipts and DSD Deals messages).

EICS publishes the receiver unit adjustment done for the deliveries that are already confirmed (receiving message).

EICS is also capable of subscribing to the vendor EDI ASNs through RIB using the ASN In message format.

RIB payloads are used to communicate information from EICS to external systems and from external system to EICS through RIB Integration.

RIB Payload (Subscriber)	Description
PORef	RIB payload that contains reference level information of a purchase order.This payload is used for removal of purchase orders.
PODesc	RIB payload that contains detailed information of a purchase order.This payload is used for creation and modification of purchase orders.
ASNInRef	RIB payload that contains reference level information of an ASN. This payload is used for removal of an ASN.
ASNInDesc	RIB payload that contains detailed information about the ASN. This payload is used for creation of a direct delivery (document type= 'P') or a warehouse delivery (document type= 'D'). EICS consumes this payload from warehouse when source and/or destination for ASN is a warehouse system.

RIB Payload	Description
ReceiptDesc	RIB payload that contains detailed information of the direct delivery receipt. This is published when the purchase order is not null. EICS also consumes this payload for warehouse receiving.
DSDReceiptDesc	RIB payload that contains detailed information of the direct delivery receipt. This is published when the purchase order is null.
SOStatusDesc	RIB payload sent from EICS to convey changes in item status for a specific fulfillment order. EICS also consumes this payload from warehouse for stock movements originating at the warehouse.
InvAdjustDesc	RIB payload that contains information about destination of the adjustment and an InvAdjustDtl.

Inventory Adjustments

Inventory adjustments integrate to MERCHANDISING at the item level using the RIB. EICS creates the adjustments and groups them together by a header with multiple items, but for integration purposes they are published out at an item level.

Inventory adjustments are published for all manual and external system generated adjustments where the Publish indicator for the reason code is checked. Adjustments are also published for other types of transactions in EICS where the merchandise system is expecting an adjustment for stock on hand updates, for example, receiving a DSD with damaged goods. An adjustment is created behind the scenes only for publishing purposes to notify the merchandising system to move the goods into the unavailable bucket. These system type adjustments are not considered an adjustment within EICS; however, they are published as such for integration purposes.

EICS subscribes to inventory adjustment messages from warehouse systems and updates the warehouse inventory buckets in EICS.

RIB payloads are used to communicate to external systems through RIB Integration.

The following table shows the list of RIB Payloads available for inventory adjustments.

RIB Payload	Description
InvAdjustDesc	RIB payload that contains information about destination of the adjustment and an InvAdjustDtl.
InvAdjustDtl	Contains detailed information about the item adjustment.

Items

Items come to EICS from a merchandising system through the RIB (items, item loc messages). EICS also gets information about items associated to a supplier through the RIB. Extended attributes are not received or sent on RIB payloads.

RIB Payload	Description
ItemDesc	This payload contains information about an item. It contains a wide variety of information about the item including suppliers, UPCs, ticketing information, image information, UDAs, and related items
ItemLocDesc	This payload contains information about an item at a specific location.
ItemSupDesc	This payload contains information about an item for a specific supplier.
ItemSupCtyDesc	This payload contains information about an item for a specific supplier within a specific country.

Stock Counts

Stock counts generate inventory adjustment when completed.

RIB payloads are used to communicate to external systems through RIB.

RIB Payload	Description
InvAdjustDesc	RIB payload that contains information about destination of the adjustment and an InvAdjustDtl.
InvAdjustDtl	Contains detailed information about the item adjustment.

EICS does not integrate using a web service to any other Oracle Retail products for stock counts.

Transfers

The Transfer Shipping allows for creating shipment, dispatching shipment, canceling shipment, creating container, approving container, adjusting container, and canceling the container.

The Transfer Receiving dialog allows for confirming receipt, copying misdirected container, receiving container and detailed receiving.

This section covers creating transfer documents which are then included in a transfer shipment and dispatched to another store, warehouse, or finisher.

Transfer Creation

Transfer documents can be created in the following ways:

- Requesting store can create a transfer request.
- Sending store can initiate a transfer by creating a transfer.
- Merchandising can create a transfer request.

Each transfer document will have one or more items.

Transfer Messages

EICS will publish messages to Merchandising when the following happen:

- Transfer is rejected.
- Transfer is approved.
- Transfer quantity is updated from the shipment.

Transfer Shipment Creation

Transfer Shipment describes the containers and the items for the shipment taking place. The shipment may be for one or more transfer documents if the transfer is going to the same destination. Dispatching a shipment will update the transfer document.

The user can create a shipment without referencing existing transfers or can create a new transfer on fly (Ad hoc transfer) based on the shipment information.

Transfer Receiving

This transaction captures a delivery that took place from a warehouse, store, or finisher to the store receiving the delivery. It describes the containers and the items of the delivery that should be received by the store. Receiving a container of the delivery will update the transfer document.

Figure 3-1 Transfer Request Flow

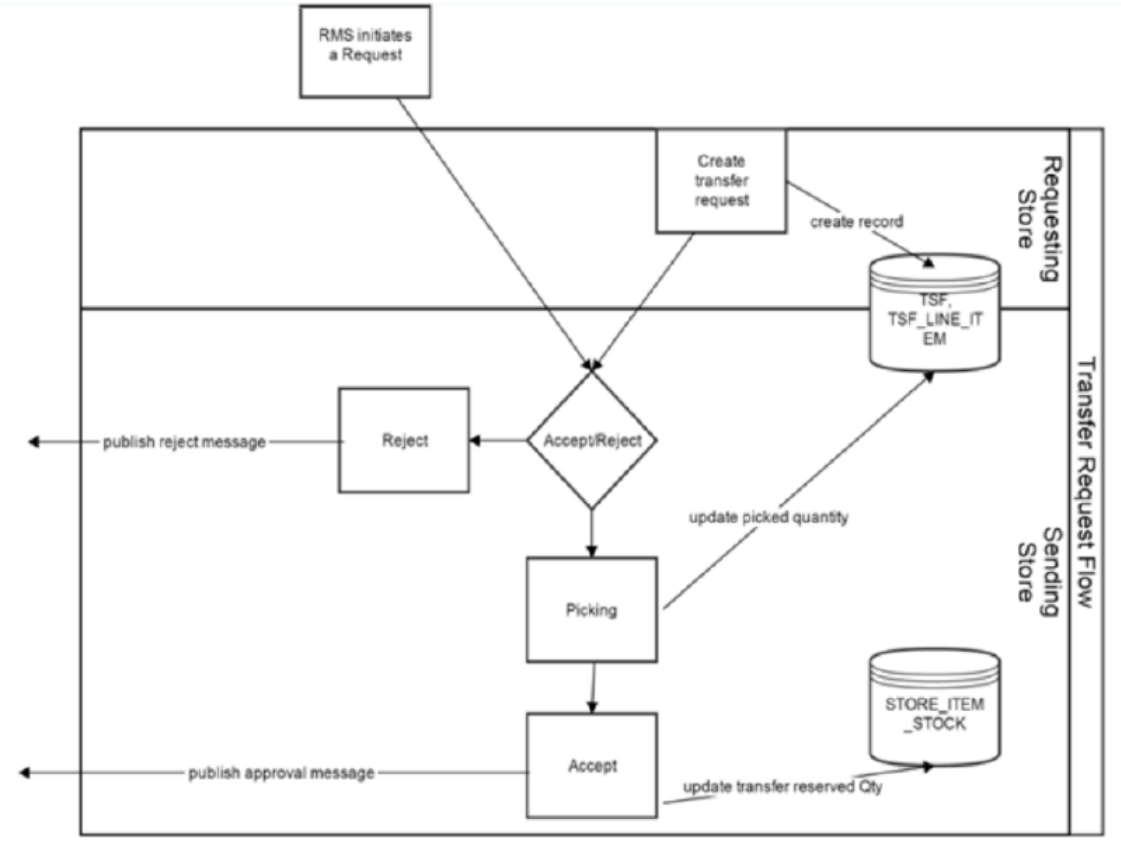


Figure 3-2 Transfer Create Flow

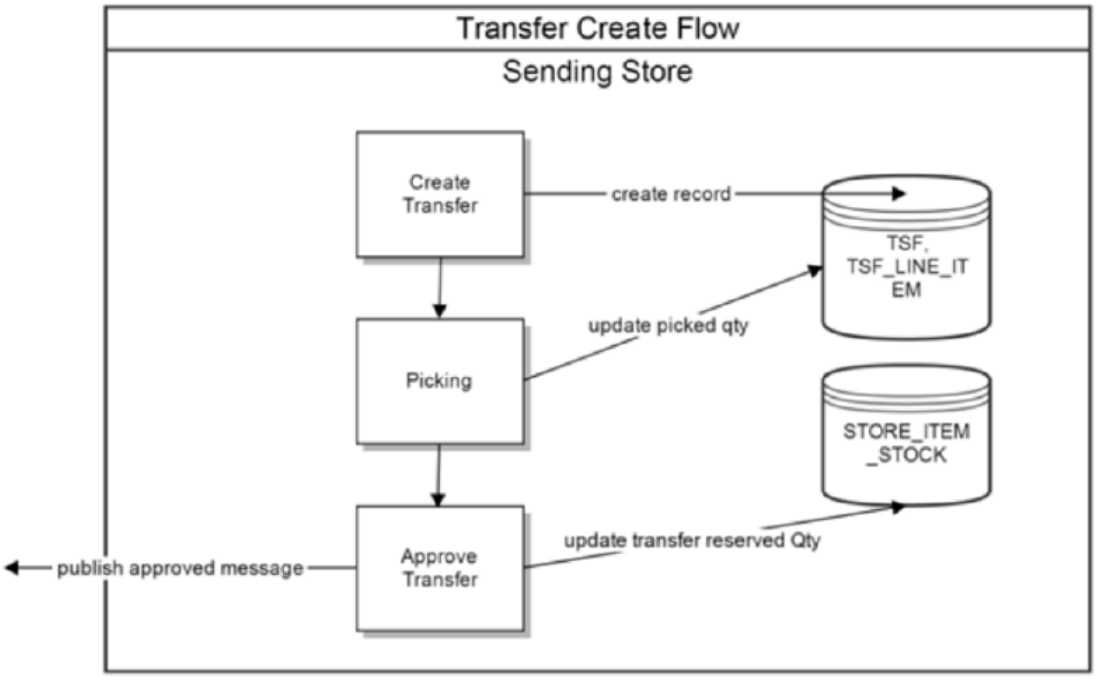


Figure 3-3 Transfer Shipment Creation Flow

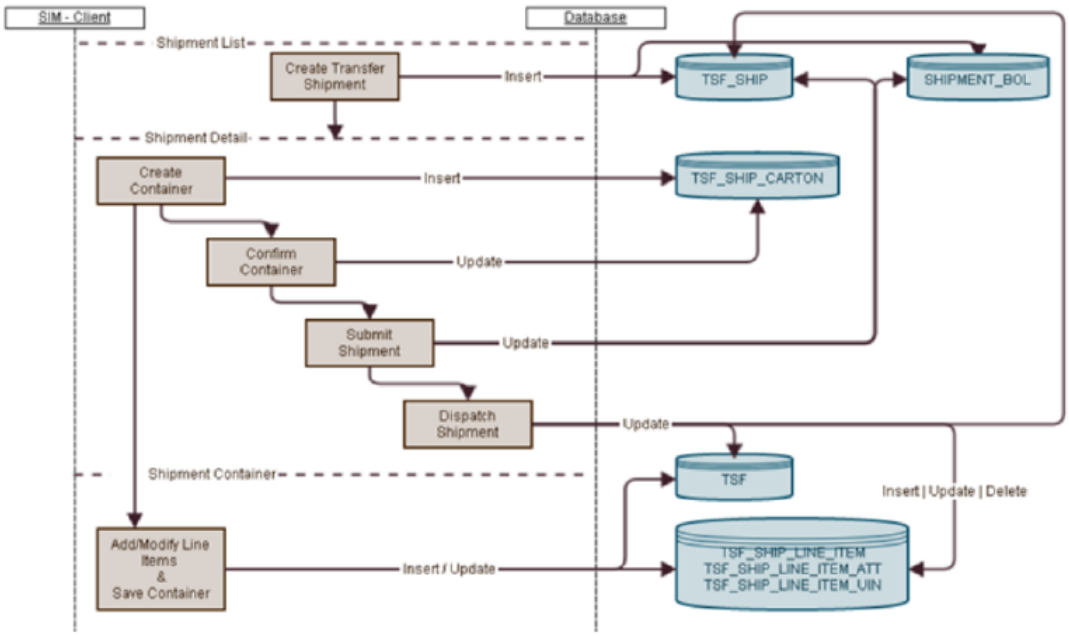
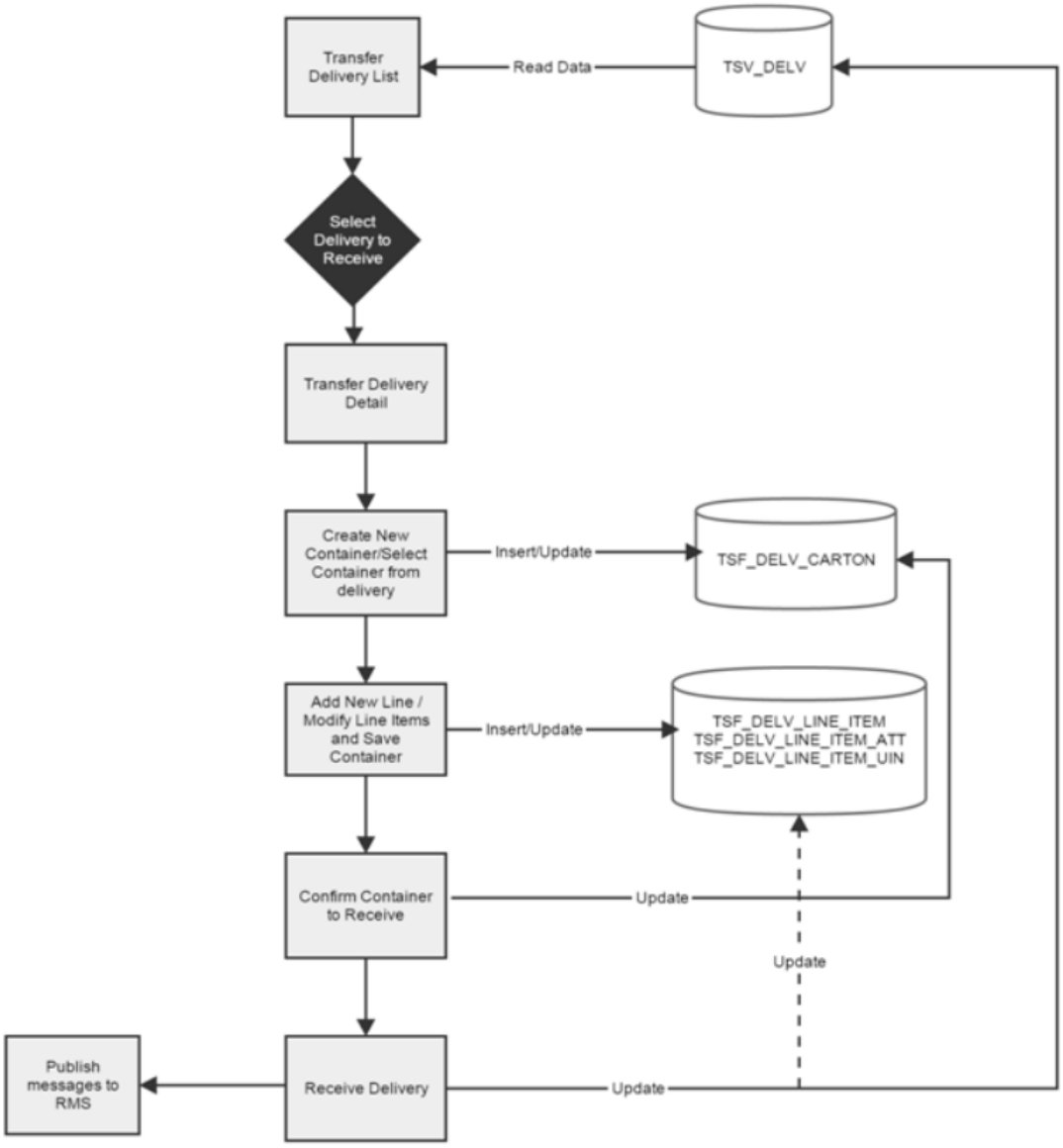


Figure 3-4 Transfer Receiving Process Flow



Transfer Doc

RIB Payload	Description
SODesc	This message is received from external systems when a stock order/ transfer has been created
SOStatusDesc	This message is received from external systems when a stock order/ transfer has been modified.
SORef	This message is received from external systems when a stock order/ transfer has been deleted.

Transfer Shipment

RIB Payload	Description
ASNOutDesc	This message is sent to external systems when the transfer shipment is dispatched.
ManifestCloseVo	This message is received from an external system to indicate physical shipment has been accepted. This will attempt to auto-close the transfer shipment if all items are shipped.
ManifestDesc	This message is sent to an external system when manifesting is activated, and a transfer shipping container is confirmed.
ShipInfoDesc	This message is sent to an external system when pre-shipment notifications are active, and a transfer shipment is either submitted or dispatched (without previously being submitted).
SOStatusDesc	This message is sent to an external system when a transfer shipment container is saved with shipping quantities. It is also sent when a transfer shipment container is canceled but had shipping quantities. Increase and decrease of quantities is indicated by the SI or SD codes.

Transfer Receiving

RIB Payload	Description
ASNInDesc	Sent from external system to indicate a delivery is tracking place. It creates a transfer delivery record within EICS when a store location is involved.
ReceiptDesc	Sent to external system when a transfer delivery is confirmed. Sent from external warehouse system when a transfer delivery is received at the warehouse.

Vendor Return

RTV Creation

RTVs can only be created by a request from MERCHANDISING:

Each vendor return will have one or more items.

RTV Shipment

Each RTV shipment will tie back to a single vendor return document.

RTV shipment can be created in two ways:

- From an externally initiated approved vendor return document.
- Creation of ad hoc vendor return shipment which will create an approved vendor return on the fly.

Each vendor return shipment will have one or more containers; each container in turn will have one or more items.

EICS may publish messages when the following happens:

- RTV shipment container is updated, and saved (Return To Vendor Publish)
- RTV shipment is cancelled or rejected (Return To Vendor Publish)
- RTV shipment is dispatched (Return to Vendor Publish and Ship Info Desc Publish, if dispatched without submitting)
- RTV shipment is submitted (Ship Info Desc Publish)
- RTV shipment container is confirmed (RTV manifesting, if configured)
- RTV shipment is submitted (Pre-shipment notification, if configured)

Figure 3-5 RTV Creation Flow

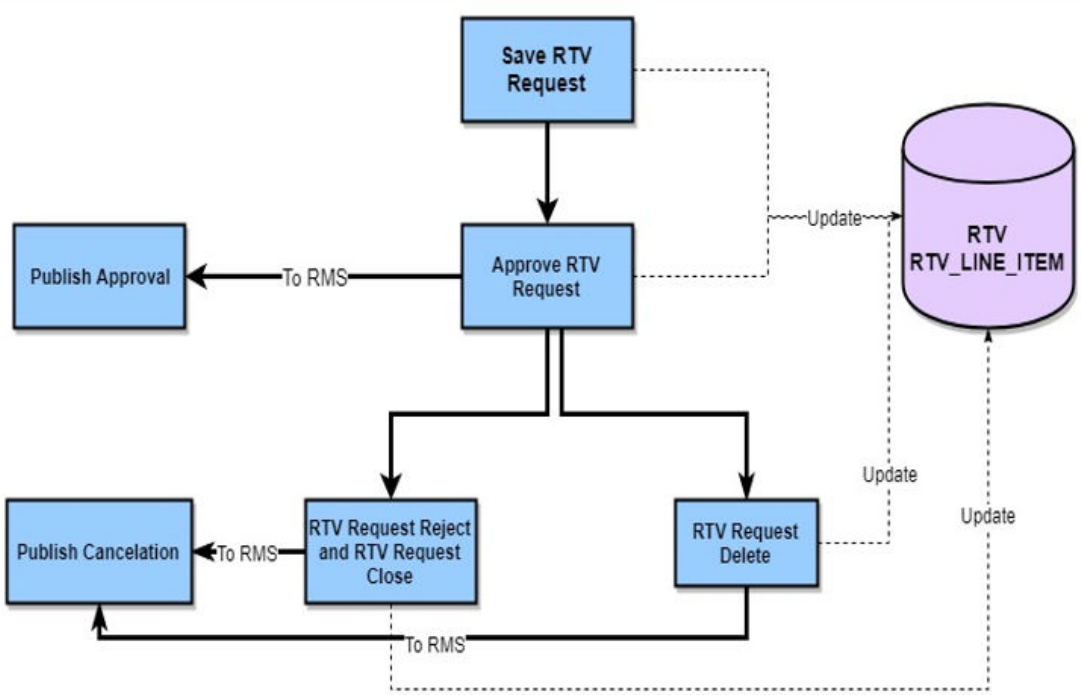


Figure 3-6 RTV Shipment Flow

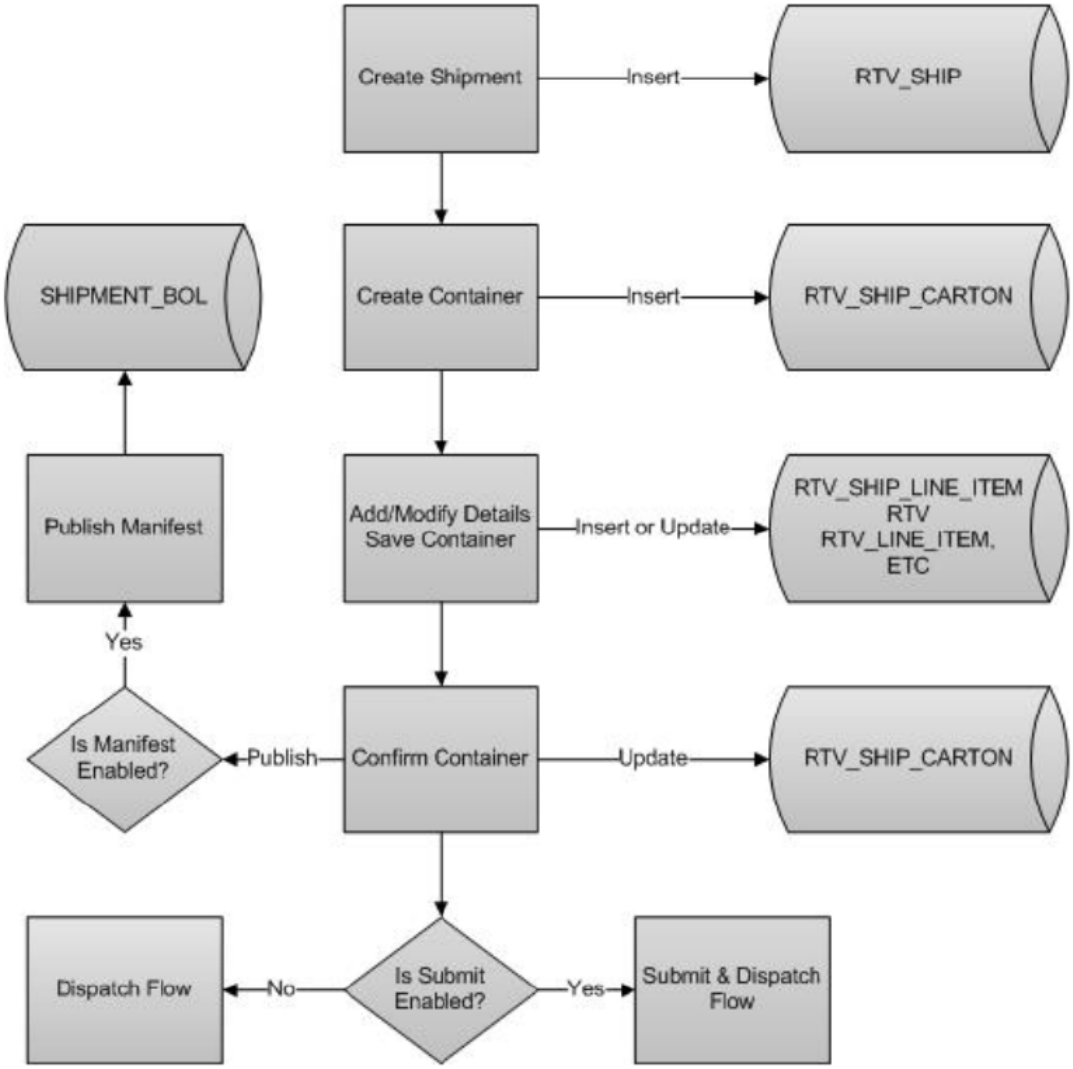


Figure 3-7 RTV Shipment Submit and Dispatch Flow

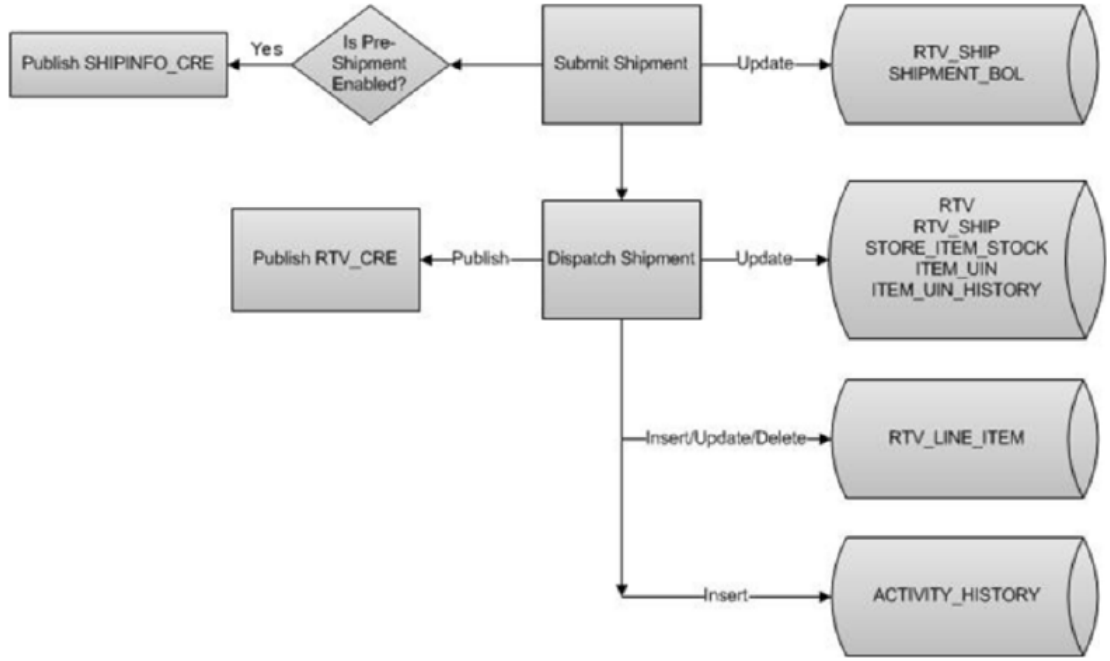
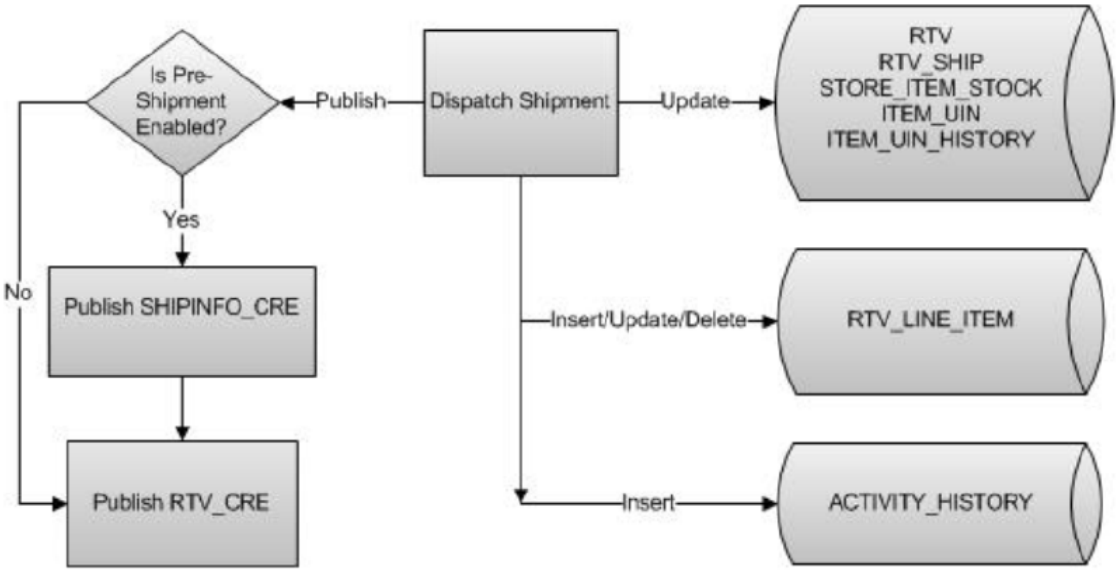


Figure 3-8 RTV Shipment Dispatch Flow



The following payloads are used in RTV operations.

RIB Payload	Description
RTVReqDesc	This payload is sent from an external system to indicate a request for a vendor return. It creates or updates a vendor return document within EICS. It contains a series of RTVReqDtl.

RIB Payload	Description
RTVReqDtl	This payload contains the detailed information about the items on the vendor return.
RTVReqRef	This payload contains reference information about a vendor return when an external system wishes to attempt to cancel the return.
RTVDesc	This payload is sent from EICS to external systems when an RTV shipment is dispatched. This payload is sent from external warehouse system for vendor returns originating at warehouse.

4

REST Web Services

Web services are intended for integration to allow a system using those services to control the flow and processing of data within EICS. There are multiple types of data involved in this integration. Data that is managed by other systems and needs to get into our system, but that EICS does not manage. This includes such concepts as item, stores, and point-of-sale transaction. Data that is managed by EICS includes such ideas as inventory adjustments, transfers, deliveries, and stock counts. Some services will provide ability for external data to get into EICS, some are intended to be used real time such as approving, picking, and dispatching shipments.

- REST WEB Services Security Considerations
- REST WEB Services Basic Design Principles
- Hypertext Transfer Protocol Status Codes
- JSON Error Element and Error Codes
- Integration Error Codes
- Error Code Data Elements

REST WEB Services Security Considerations

The REST web services provided by EICS are secured using OAuth2 tokens and require SSL.

The supported OAuth2 security requires a token requested for the *client_credentials* grant with the EICS integration scope (for example, *rgbu:siocs:integration*).

Note that the scope name differs for each environment.

REST Web Service OAuth2 Requests

This section will describe how to call an EICS web service using the OAuth2 protocol. The target audience is developers who are looking to write code that calls the web service.

Using the OAuth Protocol

The OAuth protocol is relatively straightforward:

- Get an access token from the authentication provider
- Pass the access token along with the web service request

In this case, the authentication provider is Oracle Identity Cloud Service (IDCS). Every customer who purchases a subscription to EICS gets a subscription to IDCS as part of their purchase.

Obtaining a Token

REST APIs use OAuth2.0 for authorization.

To generate a token from IDCS, an IDCS application client will need to be created for you to use.

The Customer Administration users must create their own client credential IDCS application using the Oracle Retail Home Cloud Service. For additional details, refer to Oracle® Retail Home Administration Guide- Chapter: Oauth Application Configuration chapter – Section: Creating OAuth Client Applications.

The App name and scope that should be used for IDCS application creation should be environment specific using the format :

App Name- RGBU_SIOCS_<ENV>_EICS_INT

Scope 1- rgbu:siocs:integration-<ENV>

Scope 2 - rgbu:siocs:security-<ENV>

Please note that the integration scope is the default and other scopes are needed when specified.

Example:

App Name- RGBU_SIOCS_STG1_ EICS_INT

Scope 1 - rgbu:siocs:integration-STG1

Scope 2 - rgbu:siocs:security-STG1

You will need the following information about the IDCS application client to request a token:

- IDCS URL
- Client Id
- Client Secret
- Scope Name

> **Note:**
>
> the application client must be assigned the scope from the EICS IDCS cloud service in order to request the token. This assignment is performed when the application client is created.

The scope name will differ for each environment. Please ensure the correct value is used for your environment.

To generate a token, you will need to invoke the appropriate IDCS REST API. The curl command in Linux that describes the POST that will return a token is as follows:

```
curl -H 'Authorization: Basic <base64(clientId:clientSecret)>' -H 'Content-Type:
application/x-www-form-urlencoded;charset=UTF-8' --request POST <IDCS URL>/
oauth2/v1/token -d 'grant_type=client_credentials&scope=<EICS Scope>'
```

In Windows, use double-quotes, as follows:

```
curl -H "Authorization: Basic <base64(clientId:clientSecret)>" -H "Content-Type:
application/x-www-form-urlencoded;charset=UTF-8" --request POST <IDCS URL>/
oauth2/v1/token -d "grant_type=client_credentials&scope=<EICS Scope>"
```

This is a standard REST POST, with the following details:

- <IDCS URL> is the IDCS URL the retailer provided

- Include the Client Id and Client Secret as a Basic Authentication header
- Specify the Content Type as application/x-www-form-urlencoded;charset=UTF-8
- Specify the body as grant_type=client_credentials&scope=<EICS Scope>

The service will respond with the following JSON message:

{

"access_token": "<TOKEN>",

"token_type": "Bearer",

"expires_in": 3600

}

Note that the response will return how long the token is valid for. You should reuse the same token until it expires in order to minimize calls to IDCS to get a token.

If the token request fails, you will receive the following JSON response:

{

"error":"<error>",

"error_description":"<error description>",

"ecid":"u….."

}

The most common errors are:

- **Invalid Client**. This means that the client information you send in is not correct. The error description will expand on the reason:
  - **Client Authentication Failed** means that the client is valid, but the client secret is incorrect.
  - **Invalid OAuth Client <CLIENT>** means that the client id is not valid, and the invalid client will be listed in the error message.
- **Invalid Request**. Some part of the inbound request is not valid. The error description is usually descriptive about what the actual error condition is

Calling the EICS Web Service

To invoke the web service with an OAuth2 token, you must add an **Authorization** header to the request. The value of the Authorization header must be **Bearer <token>**, that is:

- The word **Bearer**
- A space
- A valid token

For a REST service call, the request might look something like this:

```
curl -X POST -H 'Content-Type: application/json' -H 'Authorization: Bearer
<TOKEN>' -i https://CloudServiceURL --data '{PAYLOAD}'
```

Remember that the token will expire after a specific amount time, and to be more efficient you should always use a token so long as it's valid. It is your responsibility to make sure that you are keeping track of whether the token is still valid. Your pattern should be:

- Check to see if you have a valid token that has not expired.
- If not, call to IDCS and get a new token. Store it and its expiration time.
- Send the request into the web service with the token in the **Authorization** header as a **Bearer** token.

REST WEB Services Basic Design Principles

- Requests and Responses
- API Versioning
- Content-Type
- JSON Validation
- Synchronous vs Asynchronous
- Configured System Options In EICS
- External vs Internal Attributes
- Dates In Content
- Links In Content

Requests and Responses

When making requests and processing responses from REST web services it is important for the client to handle headers correctly.

The client should always use *Accept* for the appropriate content type when making requests.

The client should always check the response status code and *Content-Type* header before processing a response body.

When reading a payload from the response body, the *Content-Length* header must be used safely and securely along with the *Content-Type*.

This is important even for error responses. It is possible for errors to occur outside of the REST API layer, which may produce different content for the error. In these cases, it is common to get text or HTML content for the response body.

API Versioning

Accept-Version

The REST end points have an optional API versioning feature allowing the client to specify an API version to be accepted.

This may be used by the client to ensure that no calls may be made to a web service that uses an incorrect version number.

For example: *Accept-Version: 22.1.301*

If the web service does not support this API version, then the server will produce a *400 Bad Request* error response.

Content-Type

application/json

The content type of both REST input and returned output is *application/json*.

In the case that no content is included, a content type may not be assigned.

When handling REST service responses, the client must always check the returned *Content-Type* and *Content-Length* before processing the payload.

JSON Validation

When consuming a REST service end point that requires a request payload as JSON, the client is responsible for verifying that the JSON is valid. If invalid data is sent in a request, there may be a server error processing the JSON or it may ignore some fields if the JSON is valid but does not map correctly to the API payload definition.

Always make sure that the client sends valid JSON that is designed to satisfy the API payload definition.

Synchronous vs Asynchronous

Each service API will be defined as synchronous or asynchronous. Both perform JSON validation as described above. If the API is synchronous, the remaining data validation and live updating of the data will take place immediately and the call will be rejected if any business errors occur. If the API is asynchronous, the data is set aside to be processed later and the REST service is successfully returned noting that the data has been accepted. In the case of asynchronous processing, business error and failed data recovery is monitored and the dealt with outside of the REST web service.

Online Documentation

EICS has exposed Swagger JSON files for customers to download and use with the Swagger application as online documentation. The table below contains the files name for access. The file can accessed on the server at:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/public/api/
file.json
```

The server path that ends with public/api/file.json should be public/api/*file*.json with italics on the file. Most coders immediately understand that italics words are replaced by another word.

activitylock
address
allocation
batch
differentiator
finisher
fts
fulfillmentorder
inventoryadjustment
item
itembasket

iteminquiry
iteminventory
itemisn
itemprice
itemuda
itemuin
manifest
notification
postransaction
productarea
productgroup
productgroupschedule
purchaseorder
reasoncode
rfid
security
shelfadjustment
shelfreplenishment
shelfreplenishmentgap
shipping
stockcount
store
storeitem
storeorder
storesequence
supplier
ticket
transfer
transferdelivery
transfershipment
translation
vendordelivery
vendorreturn
vendorshipment
warehouse

For external APIs that must be implemented by the customer for EICS to access, the files can be accessed on the server at:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/public/api-external/file.json
```

fulfillmentorderaddress-external

fulfillmentorderstatus-external
inventoryadjustment-external
manifest-external
notification-external
shipment-external
storeorder-external
ticketprint-external
transferdeliverreceipt-external
transferstatus-external
vendordeliveryreceipt-external
vendorreturn-external

Configured System Options In EICS

Web services apply system configuration to the request that are coming in through a web service but assumes that all in-put validation that requires user interaction to confirm has been completed by the third party system prior to accessing the service. It operates as if the user confirmed any activity. However, if a system option is a fixed restriction that does not require user interaction, and the input fails the restriction, this is always considered an error.

Examples of configurations being applied include:

Shipping inventory when inventory is less than 0 can be allowed by a user of EICS. The web services assumes that the application accessing the service did prompt the user or that their business always allows the user to this activity.

Adding a non-ranged item requires both a system configuration option to be enabled and the user to confirm the addition of the item. If the system configuration does not allow it, the web service will block the transaction and return an error (un-less processing asynchronously). If the system configuration does allow adding non-ranged items, it will automatically assume that a user confirmed this addition and processing will allow the addition of the item.

Allowing Receiver Unit Adjustments is dependent on a period of time. If a receiver unit adjustment were to come into EICS after that period of time, it would automatically be rejected, and the web service would return an error regardless of presentation or confirmation of user done by the external system.

External vs Internal Attributes

EICS web services are EICS centric and track information from an internal application point-of-view. This has ramifications on three types of data: identifiers, dates, and users.

Almost all paths and information will contain an identifier. In almost all cases, this will be an EICS internal identifier generated within our system. If external identifiers also exist for the date, they will be defined as such in the information. For example, you might encounter transferId and externalTransferId as attributes. In some cases, an API only takes an internal identifier, and you may need to use lookup APIs to retrieve an internal identifier using an external identifier as search criteria.

Timestamps are captured at the time an event occurs within EICS as part of EICS's internal tracking and state management. For example, we capture the timestamp when a shipment is created, last updated, and when it is dispatched. These timestamps occur at the time this

occurred within EICS. When a REST service is called to create a transaction, such as a shipment, the create timestamp of the shipment will be the moment that service is called. If the shipment is dispatched using the web service, the dispatch date will be the moment that service is called. So if an external system dispatched a shipment two days earlier, and is just now calling the web service, it will not capture the external dispatch time. In some places, you will encounter a date that can be entered as part of the input information (for example, an externalDispatchDate, or simple a transactionTimestamp). If it is part of the input information, then it will be captured as that attribute defined in the API.

The user responsible for actions is often captured as part of transaction information with EICS. Some examples might be the user that created the data, the user the last updated it, or perhaps the user that approved it. In these cases, the user is considered an internal user as is assigned the current session user at the time the activity takes place. When accessing the REST service, the user will be fiwed as an “External User” to indicate it came from an external system, and not the user that manipulated the information in an external system. If external users are to be captured by the data, there will be independent attribute fields such as externalCreateUser that capture the identity of a user in an external system.

Dates In Content

Dates includes in JSON must be in the following format: 2022-04-19T23:59:59-05:00

Dates included as a query parameter must be in the following format: 220227152543-0700

> **Note:**
>
> After the format permissible length, any additional trailing characters will be ignored and the date will still be processed.

Links In Content

JSON information for a data object may include links. These are self-referential APIs that defined other APIs that are available with the information. In the example below, when reading an activity lock, the following links were included that define a path to accomplish other calls. HRef lists the basic reference and the “rel” the remainder of the path. So, when you read activity lock (1), you get a delete reference that maps to */activitylock/1/delete*, defining the REST path to delete that lock.

[{

"links" : [{

"href" : "/activitylocks/1",

"rel" : "self"

}, {

"href" : "/activitylocks/1",

"rel" : "delete"

}],

Hypertext Transfer Protocol Status Codes

The following information documents the HTTP status codes that Oracle returns via web services calls.

Success Codes

Successful codes are returned whenever the accessing client call was made without any error in the form or content.

Code	Description
200 OK	The information supplied by the customer was in a correct form. This code is returned when reading a resource or querying information about an existing resource or schema. This response code is used when the access is synchronous.
202 Accepted	The information supplied by the customer as in a correct form. This code is returned when access is asynchronous.
204 No Content	The information supplied by the customer was in a correct form. The request was successful but the API itself never provides information as a response.

Client Failure Codes

Client failure codes indicate the client made an error in their service access and must correct their code or its content to fix the failure.

Code	Description
400 Bad Request	If this code is returned, it indicates the customer made a call with invalid syntax or violated the defined properties of the input information. Detailed information may be returned that further identifies the error.
401 Unauthorized 403 Forbidden	If either of these codes are returned, it indicates the access to service was denied. This may occur if no OAuth2 token was provided, or the token had expired, or the identity the token was generated for did not have sufficient access.
404 Not Found	If this code is returned, it indicates the customer made an erroneous access call against a resource or schema that is not defined.
405 Method Not Allowed	If this code is returned, it indicates that the wrong HTTP method was used to make the call. Please check the API.
406 Not Acceptable	If this code is returned, it indicates the wrong Accept header value was used to make the call. Please check the API.
409 Too Many Requests	If this code is returned, it indicates that the web service has received too many service requests recently. This may indicate a cloud issue requiring support to address or the client is making too many calls too frequently and a solution may be required to avoid the issue.

System Failure Codes

System failure codes are returned whenever the processing server encounters an unexpected or severe failure.

Code	Description
500 Internal Server Code	A server error occurred that did not allow the operation to complete.
502 Bad Gateway 503 Service Unavailable 504 Gateway Timeout	If any of these codes are returned, it indicates an issue with the network or cloud services, which may occur due to either client or cloud networking or infrastructure issues, such as outages.

JSON Error Element and Error Codes

If an error occurs in the form of the content, or during processing of the content, an HTTP response code (400 Bad Request) will be returned along with JSON structure defined by the ErrorList schema.

Schema — ErrorList

This section describes the ErrorList schema.

Table 4-1 ErrorList — Object

Element Name	Required	Data Type	Description
errors	NA	object	Information about the errors.

The table below describes the information about the error. See the *Oracle Retail Enterprise Inventory Cloud Service Administration Guide* for further information.

Table 4-2 Error — Object

Element Name	Required	Data Type	Description
code	NA	number example: 1	The code error type.
description	NA	string example: AN_ERROR_TOOK_PLACE	A brief description of the error type (an error key).
dataElement	NA	string example: item	The attribute or element that caused the failure.
dataValue	NA	string example: 1234	The value of the attribute or element that failed, or a piece of information about that element.
referenceElement	NA	string example: inventory adjustment	An attribute or element that may help further identify the error. Most often this is a containing element one level above the failed element.
referenceValue	NA	string example: 123	The value of the reference attribute or element, often something to identify the specific reference element.

Example Value

```
[
  {
    "errors": [
      {
        "code": 1,
        "description": "AN_ERROR_TOOK_PLACE",
        "dataElement": "item",
        "dataValue": "1234",
        "referenceElement": "inventory adjustment",
        "referenceValue": "123"
      }
    ]
  }
]
```

Error Attribute Definitions

Attribute	Definition
Code	A numeric code indicates the issue. See Integration Error Codes table.
Description	The name of the error or issue.
DataElement	The name of an attribute or element of the JSON structure that failed.
DataValue	The value of the attribute or element that failed, or a piece of information about the element that failed (such as a maximum value).
ReferenceElement	The name of an attribute or element that will help further identify the data element. Most often the containing element one level above the failed elements (such as a transaction header).
ReferenceValue	The value of the attribute or element that will help further identify the data element.

Integration Error Codes

The following table contains a listing of the error codes that can be found within returned error information.

Code	Name	Issue
1	Business Error	A business processing error prevent the service from completing.
2	Date Range Error	The date range has a problem (usually indicates end date is earlier than start date in a date range.
3	Duplicate Error	Indicates duplicate element within the data is not permitted.
4	Forbidden	Access is not allowed to the service.
5	Internal Server Error	A severe error occurred with the service attempting to process the request.
6	Invalid Input	Most often this indicates that input was included that is not allowed or not needed, however it also doubles a kind of catch-all category.

Code	Name	Issue
7	Invalid Format	An input was in an invalid format (most often a date string in a query parameter not being in a valid date format).
8	Invalid Status	A transaction or entity is not in a valid status to proceed with the request.
9	Missing Path Element	A path element defining the path of the resource URL was not present.
10	Missing Attribute	A required attribute was missing on the input to the service.
11	Not Found	A data element in the input could not be found in the system (most often an invalid identifier).
12	No Data Input	No input exists for a service that requires input.
13	No Query Input	No query input exists at all for a query that requires at least one input.
14	Element Too Large	An input was too large (exceeded maximum count or maximum size).
15	Results Too Large	The results of the service were too large to return.

Error Code Data Elements

The following table contains a listing of likely or possible data elements that would be matched with a code. Data element and value may not be returned in all cases.

Code	Name	Data Element	Data Value
1	Business Error	Business exception name/key	Data Value
2	Date Range Error	Date element name	Value of date
3	Duplicate Error	Duplicate element name	Duplicated Value
4	Forbidden	N/A	-
5	Internal Server Error	N/A	-
6	Invalid Input	Element name	Value of element
7	Invalid Format	Element name	Value of element
8	Invalid Status	Element name	Status of element
9	Missing Path Element	Missing element	-
10	Missing Attribute	Required element name	-
11	Not Found	Element not found	Value of element not found
12	No Data Input	Missing element	-
13	No Query Input	N/A	-
14	Element Too Large	Element name	Allowed size limit
15	Results Too Large	N/A	-

REST Service: Activity Lock

This service allows the creation, removal, and finding of activity locks.

An activity lock is a record indicating the user, time, and a piece of information (a transaction) that should be considered "locked". All server processing validates that the accessing user has

a lock on the information before updating, notifying the current user if someone else has modified the information while they were locked and preventing the stale update.

Developers should create locks on transactional information prior to performing update calls and delete locks when the update if finished. For example, create a lock on inventory adjustment with ID 123 with the ActivityLock service, then use `saveInventoryAdjustment`in the Inventory Adjustment service with Adjustment 123, and then delete the activity lock using the ActivityLock service. If you do not gain the lock, you will receive an error when attempting to save an inventory adjustment.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/activitylocks

API Definitions

API	Description
Find Lock	Search for activity lock information based on a set of criteria.
Create Lock	Create a user activity lock.
Delete Lock	Remove a user activity lock.
Read Lock	Retrieve complete information about an activity lock.

API: Find Lock

Searches for locks based on input criteria. At least one input criteria should be provided.

If the number of activity locks found exceeds 10,000, a maximum limit error will be returned. Additional or more limiting search criteria will be required.

API Basics

Endpoint URL	{base URL}/find
Method	POST
Successful Response	200 OK
Processing Type	Synchronous
Input	Criteria
Output	List of activity locks
Max Response Limit	10,000

Input Data Definition

Attribute	Data Type	Required	Description
activityType	String (40)	No	A type of activity that is locked (see Additional Data Definition).
sessionId	String (128)	No	The unique identifier of the session that owns the lock.

Attribute	Data Type	Required	Description
deviceType	Integer (4)	No	The device type (see Additional Data Definition).
userName	String (128)	No	The unique identifier of the user that owns the lock.
lockDateFrom	Date	No	Start date of a range during which the activity was locked.
lockDateTo	Date	No	End date of a range during which the activity was locked.

Example Input

{

"activityType": "3",

"sessionId": "sessionTest",

"deviceType":3

}

Output Data Definition

Attribute	Data Type	Description
lockId	Long	The identifier of an activity lock.
sessionId	String	The identifier of the session that owns the lock.
activityId	String	The identifier of the activity that is locked.
activityType	Integer	The type of activity that is locked.
deviceType	Integer	The device type.
userName	String	The identifier of the user that owns the lock.
lockDate	Date	The date the activity was locked.

Example Output

[{

"links" : [{

"href" : "/activitylocks/1",

"rel" : "self"

}, {

"href" : "/activitylocks/1",

"rel" : "delete"

}],

"lockId" : 1,

"sessionId" : "sessionTest",

"activityId" : "2",

"activityType" : 3,

"deviceType" : 3,

"userName" : "admin",

"lockDate" : "2023-01-04T08:59:41-06:00"

}]

Additional Data Definitions

Location Type

Value	Definition
1	Bill Of Lading
2	Direct Delivery Invoice
3	Fulfilment Order
4	Fulfilment Order Delivery
5	Fulfilment Order Pick
6	Fulfilment Order Reverse Pick
7	Inventory Adjustment
8	Inventory Adjustment Reason
9	Item Basket
10	Item Request
11	POS Transaction Resolution
12	Price Change
13	Product Basket
14	Product Group
15	Product Group Schedule
16	Replenishment Gap
17	Shelf Adjustment
18	Shelf Replenishment
19	Shipment Reason
20	Stock Count Child
21	Store Order
22	Ticket
23	Ticket Format Basket
24	Transaction Event
25	Transfer
26	Transfer Delivery Carton
27	Transfer Shipment Carton
28	Vendor Delivery Carton
29	Vendor Shipment Carton
30	Vendor Return

Device Type

Value	Definition
1	Client
2	Server
3	Integration Service

API: Create Lock

Used to create a new user transaction activity lock. This prevents two users from simultaneously changing the same data.

API Basics

Endpoint URL	{base URL}
Method	POST
Successful Response	200 OK
Processing Type	Synchronous
Input	Activity Lock object
Output	Activity lock identifier
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
sessionId	String(128)	Yes	The unique identifier of the session that owns the lock.
activityId	String(128)	Yes	The unique identifier of the activity that is locked. This is often a primary identifier of a transaction.
activityType	Integer	Yes	The type of activity that is locked. This is often a transaction type (see Additional Data Definition).

Example Input

{

"activityType": 5,

"sessionId": "session01",

"activityId":"35"

}

Output Data Definition

Attribute	Data Type	Required	Description
lockId	Long	Yes	The unique identifier if a new activity lock is created, or null if the lock already exists.

Example Output

{

"lockId" : 2

}

API: Delete Lock

Used to remove a lock and indicates the activity should no longer be restricted and another user can now begin activity on that data.

It will remove the lock if it exists and perform no action if the lock does not currently exist. In either case, it returns 204 No Content.

API Basics

Endpoint URL	{base URL}/{activityLockId}
Method	DELETE
Successful Response	204 No Content
Processing Type	Synchronous
Input	None
Output	None

Attribute	Description
activityLockId	The activity lock identifier to be removed.

API: Read Lock

Used to retrieve full information about a lock.

API Basics

Endpoint URL	{base URL}/{activityLockId}
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	None
Output	Activity Lock record
Max Response Limit	N/A

Attribute	Description
activityLockId	The activity lock identifier to be read.

Output Data Definition

Attribute	Data Type	Description
lockId	Long	The identifier of an activity lock.
sessionId	String	The identifier of the session that owns the lock.
activityId	String	The identifier of the activity that is locked.
activityType	Integer	The type of activity that is locked.
deviceType	Integer	The device type.
userName	String	The identifier of the user that owns the lock.
lockDate	Date	The date the activity was locked.

Example Output

{

"lockId": 4,

"sessionId": "session01",

"activityId": "37",

"activityType": 5,

"deviceType": 3,

"userName": "dev",

"lockDate": "2023-01-04T23:52:08-06:00"

REST Service: Notification

This page captures the service APIs related to accepting notification from an external system.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/notifications

APIs

API	Description
findNotifications	Find notifications
createNotifications	Create a series of notifications

API: findNotifications

API is used to search for notifications.

Table 4-3 API Basics

Endpoint URL	{base URL}
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	Query parameters
Output	Collection of notifications
Max Response Limit	20,000

Table 4-4 Query Parameters

Attribute	Type	Definition
storeId	Long(10)	Include only records with this store identifier.
notificationType	Integer(4)	Include only records with this notification type.
transactionType	Integer(4)	Include only records with this transaction type.
status	Integer(4)	Include only records with this status.
createDateFrom	Date	Include only records with a create date on or after this date.
createDateTo	Date	Include only records with a create date on or before this date.

Attribute	Type	Definition
notificationId	Long(15)	The unique identifier of the notification.
notificationType	Integer(4)	The type of notification. See Index.
storeId	Long(10)	The store identifier.
subject	String(400)	The title or subject of the notification.
message	String(2000)	The message text of the notification.
status	Integer(4)	The current status of the notification.
transactionType	Integer(4)	The type of a transaction associated to the notification. See Index.
transactionId	Long(15)	The identifier of a transaction associated to the notification.
createDate	Date	The date the notification was originally created.
createUser	String(128)	The user that created the notification.

API: createNotifications

Create one or more notifications within the system.

Payload	Type	Req	Definition
notifications	Collection	X	The list of notifications to create.

Table 4-5 Notification

Attribute	Type	Req	Definition
storeId	Long(10)	X	The store identifier.
notificationType	Integer(4)	X	The type of notification. See Index.
subject	String(400)	X	The title or subject of the notification.
message	String(2000)	X	The message text of the notification.
transactionType	Integer(4)	X	The type of a transaction associated to the notification. See Index.
transactionId	Long(15)	X	The identifier of a transaction associated to the notification.
createDate	Date		The date the notification was originally created. This will default to current date if not supplied.
createUser	String(128)		The user that created the notification. This will default to integration user if not supplied.

Example

```
{
    "notifications": [
        {
            "storeId": 5000,
            "subject": "New
Subject 2",
            "message": "New
Message 2",
            "notificationType":
8,
            "transactionType":
6,
            "transactionId":
5555,
            "createDate":
"2024-02-16T12:00:00-06:00"
        }
    ]
}
```

Index

Table 4-6 Notification Type

ID	Description

Table 4-6 (Cont.) Notification Type

1	Customer Order (New)
2	Customer Order Reauthorization
3	Customer Order Pick Reminder
4	Customer Order Pickup
5	Customer Order Receipt
6	Customer Order Reminder
7	Fulfillment Order Reverse Pick (New)
8	UIN Items on Incoming ASN Failed
9	Return To Vendor Expiration Approaching
10	Transfer Delivery Damaged
11	Transfer Delivery Receiving Discrepancy
12	Transfer Delivery Carton Misdirected
13	Transfer Delivery Overdue
14	Transfer Delivery UIN Discrepancy (From Finisher)
15	Transfer Delivery UIN Discrepancy
16	Transfer Delivery Auto-Receive Failure (From Finisher)
17	Transfer Delivery Auto-Receive Failure (From Warehouse)
18	Transfer Delivery Auto-Receive Failure (From Store)
19	Transfer Request Approved
20	Transfer Request Quantity Unavailable
21	Transfer Request Expiration Approaching
22	Transfer Request Submitted
23	Transfer Request Rejected
24	UIN Store Unexpectedly Altered
25	Vendor Delivery Over Received Quantity
26	Vendor Return Quantity Unavailable

Table 4-7 Transaction Type

ID	Description
1	Customer Order
2	Customer Order Pick
3	Customer Order Delivery
4	Customer Order Reverse Pick
5	Direct Store Delivery Receiving
6	Inventory Adjustment
7	Item Basket
8	Return To Vendor
9	Return To Vendor Shipment
10	Shelf Adjustment

Table 4-7 (Cont.) Transaction Type

11	Shelf Replenishment
12	Shelf Replenishment Gap
13	Stock Count
14	Store Order
15	Transfer
16	Transfer Shipment
17	Transfer Receiving

Table 4-8 Notification Status

ID	Description
1	Unread
2	Read

REST Service: Address

This service integrates address foundation data. Asynchronous address integration is processed through staged messages and is controlled by the MPS Work Type: DcsStore.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/addresses

API Definitions

API	Description
readAddress	Read the information about a single address.
importAddress	Create or update the information about a single address.
deleteAddress	Deletes a single address.

API: Import Address

Import a series of addresses. This allows up to 1,000 addresses before an input too large error is returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/import
Method	POST

Successful Response	202 Accepted
Processing Type	Asynchronous
Input	Addresses list
Output	None
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
addresses	List of details	Yes	A list of addresses to import.

Address Detail Data Definition

Attribute	Data Type	Required	Description
addressId	String(25)	Yes	The external identifier of the address.
entityType	Integer	Yes	Donates the type of location of the entity (see Additional Data Definition).
entityId	Long(10)	Yes	The external identifier of the entity (this will also match internal identifiers).
addressType	Integer	Yes	The type of address: (see Additional Data Definition).
primary	Boolean		True if this is the primary address of the entity, false otherwise
addressLine1	String(240)	Yes	The first line of the address
addressLine2	String(240		The second line of the address
addressLine3	String(240)		The third line of the address
city	String(120)	Yes	The city of the address
state	String(3)		The state of the address
countryCode	String(3)	Yes	The country code of the address (used by supplier)
postalCode	String(30)		The postal code of the address
county	String(250)		The county of the address
companyName	String(120)		A company name associated with that address
contactName	String(120)		Contact name for that address
contactPhone	String(20)		Contact phone number for that address
contactFax	String(20)		Contact fax number for that address
contactEmail	String(100)		Contact email for that address

firstName	String(120)	A first name of a contact at that address
lastName	String(120)	A last name of the contact at that address
phoneticFirstName	String(120)	A phonetic spelling of a first name of a contact at that address
phoneticLastName	String(120)	A phonetic spelling of a last name of a contact at that address
supplierLocation	String(120)	Supplier location information

API: Delete Address

Deletes a single address.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/{addressId}/delete
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	None
Output	None
Max Response Limit	N/A

Path Parameter Definitions

Attribute	Description
addressId	The address identifier to be removed

API: Read Address

Used to read a single address.

API Basics

Endpoint URL	{base URL}/{addressId}
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	None
Output	Address record

Max Response Limit	N/A

Path Parameter Definitions

Attribute	Description
addressId	The address identifier to be removed

Output Data Definition

Attribute	Data Type	Description
addressId	String	The external identifier of the address.
entityType	Integer	Donates the type of location of the entity (see Additional Data Definition).
entityId	Long	The external identifier of the entity (this will also match internal identifiers).
addressType	Integer	The type of address: (see Additional Data Definition)
primary	Boolean	True if this is the primary address of the entity, false otherwise
addressLine1	String	The first line of the address
addressLine2	String	The second line of the address
addressLine3	String	The third line of the address
city	String	The city of the address
state	String	The state of the address
countryCode	String	The country code of the address (used by supplier)
postalCode	String	The postal code of the address
county	String	The county of the address
companyName	String	A company name associated with that address
contactName	String	Contact name for that address
contactPhone	String	Contact phone number for that address
contactFax	String	Contact fax number for that address
contactEmail	String	Contact email for that address
firstName	String	A first name of a contact at that address
lastName	String	A last name of the contact at that address
phoneticFirstName	String	A phonetic spelling of a first name of a contact at that address
phoneticLastName	String	A phonetic spelling of a last name of a contact at that address
supplierLocation	String	Supplier location information

Additional Data Definitions

Entity Type

Value	Definition
1	Store
2	Supplier
3	Warehouse
4	Finisher

Address Type

Value	Definition
1	Business
2	Postal
3	Return
4	Order
5	Invoice
6	Remittance
7	Billing
8	Delivery
9	External

REST Service: Batch

This service allows an external system to schedule an *adhoc* batch job for execution.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/batches

API Definitions

API	Description
executeBatch	Schedules the batch for immediate execution.
findBatchJobs	Finds all the batch jobs available to schedule.

API: Execute Batch

Schedules the specified batch job for immediate execution.

If parameter date and/or parameter identifier are entered, they are passed as parameters to the batch job identified by the batch name.

See Batch guide for definition of data set identifiers for various batches.

API Basics

Endpoint URL	{base URL}
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	Batch information
Output	None
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
batchName	String (256)	Yes	The name of the batch job to execute.
storeId	Long(10)		A store identifier to run the batch for. If included, it will run the batch processing for a single store. If not included, the batch will run for all stores based on functional description of the batch processing.
parameterDate	Date		A parameter date passed to the batch job (see SIOCS adhoc batch documentation).
parameterId	String		A parameter identifier passed to the batch job (see SIOCS adhoc batch documentation).

API: Find Batch Jobs

Finds all the batch jobs available to schedule.

API Basics

Endpoint URL	{base URL}
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	None
Output	List of batch jobs
Max Response Limit	N/A

Output Data Definition

Attribute	Data Type	Description

jobName	String	The job name used to execute the batch.
shortDescription	String	A short description of the batch job.
longDescription	String	A long description of the batch job.
jobParamHint	String	Some hint text for what parameter values might be.
jobInterval	Integer	The execution interval of the batch job (see Additional Data Definition).
batchType	Integer	The type of batch job (see Additional Data Definition).
storeRelated	Boolean	Y indicates the batch job requires store level processing.
enabled	Boolean	Y indicates the batch job is currently enabled and scheduled. This will not prevent batch execution via this service.
lastExecutionTime	String	The timestamp of the last execution of the batch job.
updateDate	String	The last time this record was updated by SIOCS.

Additional Data Definitions

Batch Type

Value	Definition
1	Cleanup
2	Operation
3	System
4	System Cleanup
5	Data Seed
6	Archive

Batch Interval Type

Value	Definition
1	30 Minutes
2	1 Hour
3	2 Hours
4	3 Hours
5	4 Hours
6	6 Hours
7	8 Hours
8	12 Hours
9	24 Hours
10	Monthly

REST Service: Differentiator

This service integrates differentiator foundation data. Asynchronous differentiator integration is processed through staged messages and is controlled by the MPS Work Type: DcsDiff.

This service replaces the RIB flow for differentiators.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/differentiators

API Definitions

API	Description
importDifferentiatorTypes	Create or update differentiator types.
importDifferentiators	Create or update differentiators.
deleteDifferentiatorType	Delete a differentiator type and all associated differentiators.
deleteDifferentiator	Delete a differentiator.

API: Import Differentiator Types

Imports a differentiator type by writing a staged message and processing through DCS consumer.

If the number of records exceed 1000, an input too large error is returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/types/import
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	Differentiator Type information
Output	None
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
differenatiorTypes	List of details	Yes	The differentiator types to import.

Detail Data Definition

differenatiorTypeId	String (10)	Yes	The differentiator type identifier.
description	String (255)	Yes	The differentiator type description (not translated).

API: Import Differentiators

Imports a differentiator.

If the number of records exceed 1000, an input too large error is returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/import
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	Differentiator information
Output	None
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
differenatiors	List of details	Yes	The differentiators to import.

Detail Data Definition

Attribute	Data Type	Required	Description
differenatiorId	String (10)	X	The differentiator type identifier.
differenatiorTypeId	String (10)	X	The differentiator type identifier.
description	String (255)	X	The differentiator type description (not translated).

API: Delete Differentiator Type

Deletes a differentiator type and all associated differentiators.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/types/{differenatiorTypeId}/delete
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	None
Output	None
Max Response Limit	N/A

Path Parameter Definitions

Attribute	Description
differentiatorId	The differentiator Id to be removed

REST Service: Finisher

This service integrates finisher and finisher item foundation data. Asynchronous finisher integration is processed through staged messages and is controlled by the MPS Work Type: DcsPartner. Asynchronous finisher item integration is processed through staged messages and is controlled by the MPS Work Type: DcsItemLocation.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/finishers

API Definitions

API	Description
importFinishers	Imports a collection of finishers.
deleteFinisher	Deletes a finisher.
importItems	Imports a collection of finisher items.
removeItems	Marks finisher items for deletion.

API: Import Finishers

Imports finishers. This allows 500 finishers per service call.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/import
Method	POST

Successful Response	202 Accepted
Processing Type	Asynchronous
Input	List of finisher import
Output	None
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
finishers	List of details	Yes	A list of finishers to import

Detail Data Definition

Attribute	Data Type	Required	Description
finisherId	Long (10)	Yes	The finisher identifier.
name	String (240)		The finisher name.
status	Integer		Finisher Import Status (see Additional Data Definition).
currencyCode	String (3)		ISO currency code used by the finisher
countryCode	String (3)		The ISO country code assigned to the finisher.
languageCode	String (6)		The ISO language code of the finisher
contactName	String (120)		Name of the finisher's representative contact.
contactPhone	String (20)		Phone number of the finisher's representative contact.
contactFax	String (20)		Fax number of the finisher's representative contact.
contactTelex	String (20)		Telex number of the finisher's representative contact.
contactEmail	String (100)		Email address of the finisher's representative contact.
manufacturerId	String (18)		Manufacturer's identification number
taxId	String (18)		Tax identifier number of the finisher.
transferEntityId	String (20)		Identifier of the transfer entity that the finisher belongs to.

paymentTerms	String (20)	Payment terms for the partner
importCountryCode	String (3)	The ISO country code of the import authority.
importPrimary	Boolean	True Indicates the code is the primary import authority of the import country.

API: Delete Finisher

Deletes a finisher.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/{finisherId}/delete
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	None
Output	None
Max Response Limit	N/A

Path Parameter Definitions

Attribute	Description
finisherId	The finisher identifier to be removed.

API: Import Items

Imports finisher items. This allows 5000 items per service call.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/{finisherId}/items/import
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	Finisher Item list
Output	None
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
items	List of details	Yes	A list of items to import.

Detail Data Definition

Attribute	Data Type	Required	Description
itemId	String (25)	Yes	The item identifier.
status	Integer	Yes	Finisher Item Import Status (see Additional Data Definition).

API: Remove Items

Marks finisher items for later deletion. This allows 5000 items per service call.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/{finisherId}/items/remove
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	Items list
Output	None
Max Response Limit	N/A

Path Parameter Definitions

Attribute	Description
finisherId	The finisher identifier to be removed.

Input Data Definition

Attribute	Data Type	Required	Description
itemIds	List<String>	Yes	A list of items to remove.

Additional Data Definitions

Finisher Import Status

Value	Definition
1	Active
2	Inactive

Finisher Item Import Status

Value	Definition
1	Active
2	Discontinued
3	Inactive

REST Service: Inventory Adjustment

Inventory Adjustments allow a user to change the number of units in stock or mark them as non-sellable due to damage. Reason codes are defined on the desktop. When creating a reason code, a disposition is assigned to the reason code and it defines how the stock will be moved. So, adjustments are made to different buckets depending on the reason code's disposition. For example, a reason code of Stock - In has a disposition of + Stock on Hand which moves inventory from Out of the store to Available inventory where as, a Reason if Damaged - Hold has a disposition of + Unavailable that moves inventory from Available to Unavailable. See Reason Codes REST service for the ability to retrieve reason code. The service defines operations to manage inventory adjustment information by integration with an external system.

Service Base URL

The Cloud service base URL follows the format:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Find Inventory Adjustment

This section describes the Find Inventory Adjustment API. This API finds up to a maximum of 10,000 inventory adjustments headers based on input search criteria. No items or detailed information is returned via this search.

Method

```
GET
```

URL

```
/invadjustments
```

Request

Table 4-9 Find Inventory Adjustment — Request Parameters

Name	Required	Data Type/Example	Description
referenceId	NA	number ($int12) (query)	Include only records with this reference identifier.
status	NA	integer ($int4) (query)	Include only records with this inventory adjustment status. Valid values are: 1 - In Progress 2 - Completed 3 - Canceled *Available values* : 1, 2, 3 --123
adjustmentDateFrom	NA	string ($date-time) (query)	Include only records with an adjustment date on or after this date.
adjustmentDateTo	NA	string ($date-time) (query)	Include only records with an adjustment date on or before this date.
updateDateFrom	NA	string ($date-time) (query)	Include only records with an update date on or after this date.
updateDateTo	NA	string ($date-time) (query)	Include only records with an update date on or before this date.
itemId	NA	string ($text25) (query)	Include only records of adjustments containing this item.
reasonId	NA	number ($int12) (query)	Include only records of adjustments containing this reason.

Responses

This section describes responses of the Find Inventory Adjustment API.

Response Code: 200

The response has been successful.

The media type is application/json.

Example Value


```
[
  {
    "adjustmentId": 11111,
    "storeId": 1234,
    "referenceId": 7890,
    "externalId": "AB87656",
    "adjustmentDate": "2024-09-11T13:30:40.820Z",
    "status": 1,
    "createDate": "2024-09-11T13:30:40.820Z",
    "updateDate": "2024-09-11T13:30:40.820Z",
    "approveDate": "2024-09-11T13:30:40.820Z"
```

```
    }
]
```

Schema — InventoryAdjustmentHeaderIdo

This section describes the InventoryAdjustmentHeaderIdo schema.

Table 4-10 InventoryAdjustmentHeaderIdo — Object

Element Name	Required	Data Type/Example	Description
adjustmentId	NA	number($int12) example: 11111	The unique identifier of the inventory adjustment.
storeId	NA	number($int10) example: 1234	The store identifier of the inventory adjustment.
referenceId	NA	number($int12) example: 7890	Identifier of original adjustment it was copied from.
externalId	NA	string($text120) example: AB87656	A unique identifier of the adjustment in an external system.
adjustmentDate	NA	string($date-time)	The timestamp the inventory if officially considered to have been adjusted.
status	NA	integer($int4) example: 1	The current status of the inventory adjustment. Valid values are 1 - In Progress 2 - Completed 3 - Canceled Enum: [1, 2, 3]
createDate	NA	string($date-time)	The date the adjustment was created in EICS.
updateDate	NA	string($date-time)	The date the adjustment was lasted updated in EICS.
approveDate	NA	string($date-time)	The date the adjustment was approved in EICS.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Create Inventory Adjustment

This section describes the Create Inventory Adjustment API. This API creates a new manual inventory whose status will be "In Progress". If more than 5,000 items are included, an error response will be returned. When adding items to the adjustment a reason code with a disposition associated to it determines stock movement of the item.

Method

```
POST
```

URL

```
/invadjustments
```

Request

There are no request parameters.

The request body is application/json.

The inventory adjustment to create.

Example Value

```
{
  "storeId": 1234,
  "referenceId": 7890,
  "externalId": "AB87656",
  "externalUser": "AB87656",
  "adjustmentDate": "2024-09-12T13:07:55.023Z",
  "comments": "This is a comment.",
  "lineItems": [
    {
      "itemId": "55001234",
      "reasonId": 5678,
      "caseSize": 5,
      "quantity": 2,
      "uins": [
        111222333,
        444555666
      ]
    }
  ]
}
```

Schema — InventoryAdjustmentCreateIdo

Table 4-11 InventoryAdjustmentCreateIdo — Object

Element Name	Required	Data Type/Example	Description
storeId	Yes	number($int10) example: 1234	The store identifier of the inventory adjustment.

Table 4-11 (Cont.) InventoryAdjustmentCreateIdo — Object

Element Name	Required	Data Type/Example	Description
referenceId	NA	number($int12) example: 7890	Identifier of original adjustment it was copied from.
externalId	NA	string($text128) example: AB87656	A unique identifier of the adjustment in an external system.
externalUser	NA	string($text128) example: AB87656	A non-EICS user that created the inventory adjustment in an external system.
adjustmentDate	NA	string($date-time)	The timestamp the inventory if officially considered to have been adjusted. If left blank, it will default to the creation date of the record.
comments	NA	string($text2000) example: This is a comment.	Comments associated to the adjustment. Comments will be trimmed down to 2000 characters if the entry is larger.
lineItems	Yes	object	A collection of line items attached to the adjustment.

Table 4-12 InventoryAdjustmentCreateLineItemIdo — Object

Element Name	Required	Data Type/Example	Description
itemId	Yes	string($text25) example: 55001234	The SKU level item identifier.
reasonId	Yes	number($int12) example: 5678	The unique identifier of the reason code associated to the adjustment.
caseSize	NA	number($decimal10, 2) example: 5	The case size of this line item.
quantity	Yes	number($decimal20, 4) example: 2	The quantity of this line item. For UINS, the quantity must match the number of UINs.
uins	NA	string($text128) example: List [111222333, 444555666]	The UINs to attach to this line item.

Responses

This section describes the responses of the Create Inventory Adjustment API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value

```
[
  {
    "adjustmentId": 1234
  }
]
```

Schema — InventoryAdjustmentRefIdo

Table 4-13 InventoryAdjustmentRefIdo— Object

Element Name	Required	Data Type/Example	Description
adjustmentId	NA	number($int12) example: 1234	The newly created inventory adjustment identifier.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Read Inventory Adjustment

The Read Inventory Adjustment API retrieves all the details about an inventory adjustment.

Method

```
GET
```

URL

```
/invadjustments/{adjustmentId}
```

Request

Table 4-14 Read Inventory Adjustment — Request Parameters

Name	Required	Data Type/Example	Description
adjustmentId	Yes	number($int12) (path)	The unique identifier of the inventory adjustment.

Responses

This section describes the responses of the Read Inventory Adjustment API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "adjustmentId": 11111,
    "storeId": 1234,
    "referenceId": 7890,
    "externalId": "AB87656",
    "adjustmentDate": "2024-09-17T13:47:31.101Z",
    "status": 1,
    "comments": "This is a comment.",
    "createDate": "2024-09-17T13:47:31.101Z",
    "createUser": "userAbc",
    "updateDate": "2024-09-17T13:47:31.101Z",
    "updateUser": "userAbc",
    "approveDate": "2024-09-17T13:47:31.101Z",
    "approveUser": "userAbc",
    "externalCreateUser": "userAbc",
    "externalUpdateUser": "userAbc",
    "lineItems": [
      {
        "lineId": 1234,
        "itemId": "55001234",
        "reasonId": 5678,
        "caseSize": 5,
        "quantity": 2,
        "uins": [
          111222333,
          444555666
        ]
      }
    ]
  }
]
```


Schema — InventoryAdjustmentIdo

This section describes the InventoryAdjustmentIdo schema.

Table 4-15 InventoryAdjustmentIdo — Object

Element Name	Required	Data Type/Example	Description
adjustmentId	NA	number($int12) example: 11111	The unique identifier of the inventory adjustment.
storeId	NA	number($int10) example: 1234	The store identifier of the inventory adjustment.
referenceId	NA	number($int12) example: 7890	Identifier of original adjustment it was copied from.
externalId	NA	string($text120) example: AB87656	A unique identifier of the adjustment in an external system.
adjustmentDate	NA	string($date-time)	The timestamp the inventory if officially considered to have been adjusted.
status	NA	integer($int4) example: 1	The current status of the inventory adjustment. lid values are: 1 - In Progress 2 – Completed 3 – Canceled Enum: [1, 2, 3]
comments	NA	string($text2000) example: This is a comment.	Comments associated to the adjustment.
createDate	NA	string($date-time)	The date the adjustment was created in EICS.
createUser	NA	string($text128) example: userAbc	The user that created the adjustment in EICS.
updateDate	NA	string($date-time)	The date the adjustment was lasted updated in EICS.
updateUser	NA	string($text128) example: userAbc	The user that last updated the adjustment in EICS.
approveDate	NA	string($date-time)	The date the adjustment was approved in EICS.
approveUser	NA	string($text128) example: userAbc	The user that approved the adjustment in EICS.
externalCreateUser	NA	string($text128) example: userAbc	A non-EICS user that created the adjustment in an external system.
externalUpdateUser	NA	string($text128) example: userAbc	A non-EICS user that last updated the adjustment in an external system.
lineItems	NA	object	line items

Table 4-16 InventoryAdjustmentLineItemIdo — Object

Element Name	Required	Data Type/Example	Description
lineId	NA	number($int12) example: 1234	The unique identifier of the line item.

Table 4-16 (Cont.) InventoryAdjustmentLineItemIdo — Object

Element Name	Required	Data Type/Example	Description
itemId	NA	string($text25) example: 55001234	The SKU level item identifier.
reasonId	NA	number($int12) example: 5678	The unique identifier of the reason code associated to the adjustment.
caseSize	NA	number($decimal10,2) example: 5	The case size of this line item.
quantity	NA	number($decimal20,4) example: 2	The quantity of this line item.
uins	NA	string($text128) example: List [111222333, 444555666]	The UINs associated to this line item.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Update Inventory Adjustment

The Update Inventory Adjustment API updates the details of an inventory adjustment that is currently "In Progress".

Method

```
POST
```

URL

```
/invadjustments/{adjustmentId}
```

Request

The inventory adjustment to update.

The request body is application/json.

Table 4-17 Update Inventory Adjustment — Request Parameters

Name	Required	Data Type/Example	Description
adjustmentId	Yes	number($int12) (path)	The unique identifier of the inventory adjustment.

Example Value

```
{
  "referenceId": 7890,
  "externalUser": "AB87656",
  "adjustmentDate": "2024-09-18T08:36:13.027Z",
  "comments": "This is a comment.",
  "lineItems": [
    {
      "itemId": "55001234",
      "reasonId": 5678,
      "caseSize": 5,
      "quantity": 2,
      "uins": [
        111222333,
        444555666
      ]
    }
  ]
}
```

Schema — InventoryAdjustmentUpdateIdo

This section describes the InventoryAdjustmentUpdateIdo schema.

Table 4-18 InventoryAdjustementUpdateIdo — Object

Element Name	Required	Data Type/Example	Description
referenceId	NA	number($int12) example: 7890	Identifier of original adjustment it was copied from.
externalUser	NA	string($text128) example: AB87656	A non-EICS user that created the inventory adjustment in an external system.
adjustmentDate	NA	string($date-time)	The timestamp the inventory if officially considered to have been adjusted. If left blank, it will default to the creation date of the record.
comments	NA	string($text2000) example: This is a comment.	Comments associated to the adjustment. These comments will replace any previous comments Comments will be trimmed down to 2000 characters if the entry is larger.
lineItems	Yes	object	A collection of line items attached to the adjustment.

Table 4-19 InventoryAdjustmentUpdateLineItemIdo — Object

Element Name	Required	Data Type/ Example	Description
itemId	Yes	string($text25) example: 55001234	The SKU level item identifier. If SKU is already present, its line item will be updated. Otherwise, a new line item will be added.
reasonId	Yes	number($int12) example: 5678	The unique identifier of the reason code associated to the adjustment. The reason code is not modifiable on an update, but it will be used if a new item is added.
caseSize	NA	number($decimal10,2) example: 5	The case size of this line item.
quantity	Yes	number($decimal20,4) example: 2	The quantity of this line item. For UINS, the quantity must match the number of UINs. If the quantity is set to 0, the system will attempt to remove the line item from the adjustment.
uins	NA	string($text128) example: List [111222333, 444555666]	The UINs to attach to this line item.

Responses

This section describes the responses of the Update Inventory Adjustment API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Confirm Inventory Adjustment

This section describes the Confirm Inventory Adjustment API. This API confirms an inventory adjustment, finalizing it and processing the inventory movement.

Method

`POST`

URL

```
/invadjustments/{adjustmentId}/confirm
```

Request

Table 4-20 Confirm Inventory Adjustment — Request Parameters

Name	Required	Data Type/Example	Description
adjustmentId	Yes	number($int12) (path)	The unique identifier of the inventory adjustment.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Cancel Inventory Adjustment

This section describes the Cancel Inventory Adjustment API. This API cancels an inventory adjustment.

Method

```
POST
```

URL

```
/invadjustments/{adjustmentId}/cancel
```

Request

Table 4-21 Cancel Inventory Adjustment — Request Parameters

Name	Required	Data Type/Example	Description
adjustmentId	Yes	number($int12) (path)	The unique identifier of the inventory adjustment.

Responses

This section describes the responses of the Cancel Inventory Adjustment API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

REST Service: Item

This service integrates the item foundation data with an external application. Asynchronous item integration is processed through staged messages and is controlled by the MPS Work Types.

Note that this is item level foundational data. To lookup or access item information, use the item inquiry REST service.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/items

API Definitions

API	Description
importItems	Import items into the system.
removeItems	Mark items for deletion at some point in the future when no records are using them.
importHierarchies	Imports item hierarchies into the system.
removeHierarchies	Marks hierarchies for deletion at some point in the future when no records are using them.
importRelatedItems	Imports the associations of related items.
deleteRelatedItems	Deletes an association of related items.

importImageUrls	Imports image URLs associated to the item.
deleteImageUrls	Delete image URLs associated to the item.

API: Import Items

Imports items.

This flow is managed in MPS system with the following family: DcsItem.

If the input exceeds more than 100 records, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/import
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	List of Items to import
Output	None
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
finishers	List of details	Yes	A list of items to import

Detail Data Definition

Attribute	Data Type	Required	Description
itemId	String (25)	Yes	The unique item identifier (sku number).
transactionLevel	Long	Yes	Number indicating which of the three levels transactions occur for the item. Items may only be used on transactions with inventory tracked if the transaction level and item level match.
itemLevel	Long	Yes	Number indicating which of the three levels an item resides at. Items may only be used on transactions with inventory tracked if the transaction level and item level match.
departmentId	Long (12)	Yes	The merchandise hierarchy department identifier.
classId	Long (12)		The merchandise hierarchy class identifier.

subclassId	Long (12)	The merchandise hierarchy subclass identifier.
shortDescription	String (255)	A short description of the item.
longDescription	String (400)	A long description of the item.
differentiator1	String (10)	The first differentiator identifier.
differentiator2	String (10)	The second differentiator identifier.
differentiator3	String (10)	The third differentiator identifier.
differentiator4	String (10)	The fourth differentiator identifier.
status	Integer	Item Import Status (see Additional Data Definition).
parentId	String (25)	The unique identifier of the item at the next level above this item.
pack	Boolean	True if the item is pack, false otherwise.
simplePack	Boolean	True if the item is a simple pack, false otherwise.
sellable	Boolean	True if the item is sellable, false otherwise.
orderable	Boolean	True if the item can be ordered from a supplier, false otherwise.
shipAlone	Boolean	True if the item must be shipped in separated packaging, false otherwise.
inventoriable	Boolean	True if the item is inventoried, false otherwise.
notionalPack	Boolean	True indicates the inventory is held at the component level. All notional pack are marked as inventoriable in SIOCS.
estimatePackInventory	Boolean	True if the item allows estimating pack inventory from component positions, false otherwise.
primaryReferenceItem	Boolean	True indicates it the primary sub-translation level item.
orderAsType	Boolean	True indicates a buyer pack is receivable at the pack level. N means at the component level.
standardUom	String (4)	The unit of measure that inventory is tracked in.
packageUom	String (4)	The unit of measure associated with a package size.
packageSize	Double	The size of the product printed (will be printed on the label).

eachToUomFactor	BigDecimal	The multiplication factor to convert 1 EA to the equivalent standard unit of measure.
barcodeFormat	String (4)	The format of a barcode (used for Type 2 barcode items).
barcodePrefix	Long (9)	The barcode prefix used in association with the Type 2 barcode of this item.
wastageType	Integer	Waste Type (see Additional Data Definition).
wastagePercent	BigDecimal	Wastage percent.
wastagePercentDefault	BigDecimal	Default wastage percent.
suggestedRetailCurrency	String (3)	The currency of the manufacturer suggested retail price.
suggestedRetailPrice	BigDecimal	Manufacturer suggested retail price.
brand	String (30)	Brand name of the brand the item belongs to.
brandDescription	String (120)	Brand description of the brand the item belongs to.
components	List of components	A list of components for the item (if the item is a pack)

Component Data Definition

Attribute	Data Type	Required	Description
componentItemId	String (25)	Yes	The item identifier of the component item within the pack.
quantity	BigDecimal	Yes	The quantity of component item within the pack

API: Remove Items

Deactivate items.

This flow is managed in MPS system with the following family: DcsItem.

If the input exceeds more than 500 records, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/remove
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	Items list to remove

Output	None
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
items	List of details	Yes	A list of item reference to update to a non-active status.

Detail Data Definition

Attribute	Data Type	Required	Description
itemId	String (25)	Yes	The unique item identifier
status	Integer	Yes	Item Remove Status (see Additional Data Definition).

API: Import Hierarchies

Imports item hierarchies.

This flow is managed in MPS system with the following family: DcsHierarchy.

If the input exceeds more than 500 records, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/hierarchies/import
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	Items hierarchy list
Output	None
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
hierarchies	List of details	Yes	The hierarchies to import.

Detail Data Definition

Attribute	Data Type	Required	Description
departmentId	Long (12)	Yes	The hierarchy department identifier.

departmentName	String (360)	The hierarchy department name.
classId	Long (12)	The hierarchy class identifier.
className	String (360)	The hierarchy class name.
subclassId	Long (12)	The hierarchy subclass identifier.
subclassName	String (360)	The hierarchy subclass name.

API: Remove Hierarchies

Deactivates item hierarchies. Once no information is associated to the item hierarchies, a cleanup batch will remove them from the database.

This flow is managed in MPS system with the following family: DcsHierarchy.

If the input exceeds more than 500 records, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/hierarchies/remove
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	Items hierarchy list
Output	None
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
hierarchies	List of details	Yes	The images to remove.

Detail Data Definition

Attribute	Data Type	Required	Description
departmentId	Long (12)	Yes	The hierarchy department identifier.
classId	Long (12)		The hierarchy class identifier.
subclassId	Long (12)		The hierarchy subclass identifier

API: Import Related Items

Imports item relationships that an item may belong to.

This flow is managed in MPS system with the following family: DcsItem.

If the input exceeds more than 500 records, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/related/import
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	Items Relationship list
Output	None
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
relationships	List of details	Yes	The relationships to import.

Detail Data Definition

Attribute	Data Type	Required	Description
relationshipId	Long (20)	Yes	The identifier of the relationship.
relationshipType	Integer	Yes	Relationship Type (see Additional Data Definitions).
name	String (120)		The name of the relationship.
itemId	String (25)	Yes	The item whose related records are being recorded.
mandatory	Boolean	Yes	True if the relationships are mandatory.
relatedItems	List of related items	Yes	The related items.

Related Item Data Definition

Attribute	Data Type	Required	Description
itemId	String (25)	Yes	The item that is related.
effectiveDate	Date		Date at which this relationship becomes active.
endDate	Date		Last date at which this relationship is active.

priorityNumber	Long (4)	Number defining priority in the case of multiple substitute items.

API: Delete Related Items

Deletes relationships between items.

This flow is managed in MPS system with the following family: DcsItem.

If the input exceeds more than 500 records, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/related/delete
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	None
Output	None
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
relationshipIds	List<Long>	Yes	The relationship identifiers to remove.

API: Import Image Urls

Import image URLs associated to the item.

This flow is managed in MPS system with the following family: DcsItem.

If the input exceeds more than 500 records, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/images/import
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	Items Image list
Output	None

Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
images	List of details	Yes	The images to import.

Detail Data Definition

Attribute	Data Type	Required	Description
itemId	String (25)	Yes	The item identifier/sku number.
imageType	Integer	Yes	Image Type (see Additional Data Definitions).
storeId	Long (10)		The store identifier. This is required only if the image type is QR_CODE.
imageName	String (120)	Yes	The name of the image.
imageSize	String (6)		The size of the image: (T) thumbnail. Other than (T), any text is accepted and there is no definition to validate against, but the text has no meaning.
url	String (1000)	Yes	The universal resource locator of the image.
displaySequence	Integer (2)		The sequence the item should be displayed in.
startDate	Date		The date the image becomes active.
endDate	Date		The date the image ceases being active.

API: Delete Image Urls

Deletes image URLs.

This flow is managed in MPS system with the following family: DcsItem

If the input exceeds more than 500 records, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/images/delete
Method	POST
Successful Response	202 Accepted

Processing Type	Asynchronous
Input	Items Image list
Output	None
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
images	List of details	Yes	The images to remove.

Detail Data Definition

Attribute	Data Type	Required	Description
itemId	String (25)	Yes	The item identifier/sku number.
imageName	String (120)	Yes	The name of the image.
imageType	Integer	Yes	Image Type (see Additional Data Definitions).

Additional Data Definitions

Item Status

Value	Definition
1	Active
2	Discontinued
3	Inactive
4	Deleted
5	Auto Stockable
6	Non Ranged

Item Import Status

Value	Definition
1	Active
5	Auto Stockable
6	Non Ranged

Item Remove Status

Value	Definition
2	Discontinued
3	Inactive
4	Deleted

Wastage Type

Value	Definition
1	Sales Wastage
2	Spoilage Wastage

Relationship Type

Value	Definition
1	Related
2	Substitute
3	Up-Sell
4	Cross-Sell

Image Type

Value	Definition
1	Image
2	QRCode

REST Service: Item Inquiry

The service provides an external system the ability to retrieve information about items (with the exception of inventory information).

Service Base URL

The Cloud service base URL follows the format:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Retrieve Items By Scan

The Retrieve Items By Scan API searches for item information by an unknown identifier, most likely a scan. It first searches for the item using the searchScan as a potential item, and if found will return records based on that. It then searches as a UPC, barcode, or UIN, in that order, halting if it finds potential matches. An optional store identifier can be included as well.

Method

```
GET
```

URL

```
/iteminquiries/scan/{searchScan}
```

Request

Table 4-22 Retrieve Items By San Request — Request Parameters

Name	Required	Data Type/ Example	Description
searchScan	Yes	string($text128) (path)	A scan or entered item information.
storeId	NA	integer($int10) (query)	The identifier of a store to search within.

Responses

This section describes the responses of the Retrieve Items By Scan API.

Response Code: 200

The request has been successful.

The media type is application/json.

Response Code: 400

Bad Request

The media type is application/json.

Retrieve Items by Source

The Retrieve Items by Source API searches for summary information about an item based on search criteria, primarily hierarchy and source location.

Method

```
GET
```

URL

```
/iteminquiries/source
```

Request

Table 4-23 Retrieve Items By Source — Request Parameters

Name	Required	Data Type/Example	Description
description	NA	string($text255) (query)	Include only items with description text matching this description.
sourceType	NA	integer($int4) (query)	Include only items available from this source type. Valid values are: 1 - Supplier 2 - Warehouse 3 - Finisher Available values : 1, 2, 3
sourceId	NA	integer($int10) (query)	Include only items available from this source. If source id is included, then sourceType is also required.
departmentId	NA	integer($int12) (query)	Include only items associated to this merchandise hierarchy department.
classId	NA	integer($int12) (query)	Include only items associated to this merchandise hierarchy class.
subclassId	NA	integer($int12) (query)	Include only items associated to this merchandise hierarchy subclass.
storeId	NA	integer($int10) (query)	Include only items ranged to this particular store.

Responses

This section describes the responses of the Retrieve Items By Scan API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "itemId": "1111111",
    "storeId": 5000,
    "type": 1,
    "status": 1,
    "shortDescription": "Shoe",
    "longDescription": "Steel-toed Shoe (two-tone)",
    "departmentId": 1000,
    "classId": 2000,
    "subclassId": 3000
```

```
    }
]
```

Schema — ItemSummaryIdo

Table 4-24 ItemSummaryIdo — Object

Element Name	Required	Data Type/Example	Description
itemId	NA	string($text25) example: 1111111	The item identifier.
storeId	NA	integer($int10) example: 5000	The store identifier (if passed in as query parameter).
type	NA	integer($int2) example: 1	The item type. Valid values are: 1 - Item 2 - Simple Pack 3 - Complex Pack 4 - Simple Breakable Pack 5 - Complex Breakable Pack Enum: [1, 2, 3, 4, 5]
status	NA	integer($int2) example: 1	The status of the item. Valid values are: 1 - Active 2 - Discontinued 3 - Inactive 4 - Deleted 5 - Auto-Stockable Non-Ranged Enum: [1, 2, 3, 4, 5, 6]
shortDescription	NA	string($text255) example: Shoe	The short description of the item.
longDescription	NA	string($text400) example: Steel-toed Shoe (two-tone)	The long description of the item.
departmentId	NA	number($int12) example: 1000	The identifier of the department the item belongs to.
classId	NA	number($int12) example: 2000	The identifier of the class the item belongs to.
subclassId	NA	number($int12) example: 3000	The identifier of the subclass the item belongs to.

Response Code: 400

Bad Request

The media type is application/json.

Retrieve Items

The Retrieve Items API searches for detailed information about the items using the specified input. If the number of items found exceeds 10,000, a maximum limit error will be returned. Additional limiting input criteria will be required.

Method

```
POST
```

URL

```
/iteminquiries
```

Request

There are no request parameters.

The store and items to find information for.

Example Value

```
{
  "storeId": 5000,
  "itemIds": [
    333000,
    444001
  ]
}
```

Schema — ItemInquiryCriteriaIdo

Table 4-25 ItemInquiryCriteria — Object

Element Name	Required	Data Type/ Example	Description
storeId	Yes	integer($int10) example: 5000	The store identifier (if passed in as query parameter).
itemIds	Yes	string($text25) example: List [333000, 444001]	A list of items to retrieve information for.

Responses

This section describes the responses of the Retrieve Items API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "itemId": "1111111",
    "storeId": 5000,
    "type": 1,
    "status": 1,
    "shortDescription": "Shoe",
    "longDescription": "Steel-toed Shoe (two-tone)",
    "departmentId": 1000,
    "classId": 2000,
    "subclassId": 3000
  }
]
```


Schema — ItemInquiryIdo

Table 4-26 ItemInquiryIdo — Object

Element Name	Required	Data Type/ Example	Description
itemId	NA	string($text25) example: 1111111	The unique item identifier (SKU number).
transactionLevel	NA	integer($int1) example: 2	Number indicating which of the three levels transactions occur for this item. Items may only be used on transactions with inventory tracked if the transaction level and item level match.
itemLevel	NA	integer($int1) example: 2	Number indicating which of the three levels an item resides at. Items may only be used on transactions with inventory tracked if the transaction level and item level match.
departmentId	NA	number($int12) example: 1000	The merchandise hierarchy department identifier.
classId	NA	number($int12) example: 2000	The merchandise hierarchy class identifier.
subclassId	NA	number($int12) example: 3000	The merchandise hierarchy subclass identifier.
shortDescription	NA	string($text255) example: 12p-Water	A short description of the item.
longDescription	NA	string($text400) example: 12-Pack of Water	A long description of the item.

Table 4-26 (Cont.) ItemInquiryIdo — Object

Element Name	Required	Data Type/ Example	Description
differentiator1	NA	string($text10) example: Color 01	The first differentiator identifier.
differentiator2	NA	string($text10) example: Size 06	The second differentiator identifier.
differentiator3	NA	string($text10) example: Flavor 08	The third differentiator identifier.
differentiator4	NA	string($text10) example: Fruit 04	The fourth differentiator identifier.
parentId	NA	string($text25) example: 567000333	The unique ientifier of the item at the next level about this item.
pack	NA	boolean example: false	True if the item is a pack, false otherwise.
simplePack	NA	Boolean example: false	True if the item is a simple pack, false otherwise.
sellable	NA	boolean example: true	True if the item is a sellable, false otherwise.
orderable	NA	boolean example: true	True if the item can be ordered from a supplier, false otherwise.
shipAlone	NA	boolean example: false	True if the item must be shipped in separated packaging, false otherwise.
inventoriable	NA	boolean example: true	True if the item is inventoried, false otherwise.
notionalPack	NA	boolean example: false	True indicates that the inventory is held at the component level, false otherwise. Take special note that all notional packs are automatically marked as invertoriable in SIOCS.
estimatePackInventory	NA	boolean example: false	True if the item alows estimating pack inventory from component positions, false otherwise.
primaryReferenceItem	NA	boolean example: false	True indicates the item is the primary sub-transaction level item.
orderAsType	NA	boolean example: false	True indicates a buyer pack is receivable at the pack level. False indicates it is receivable at the component level.
standardUom	NA	string($text4) example: EA	The unit of measure that inventory is tracked in.
packageUom	NA	string($text4) example: a	The unit of measure associated with the package size.
packageSize	NA	number($text) example: EA	The size of the product printed (or will be printed on the label).

Table 4-26 (Cont.) ItemInquiryIdo — Object

Element Name	Required	Data Type/ Example	Description
eachToUomFactor	NA	number($decimal20,10) example: a	The multiplication favtor to convert 1 EA to the equivalent standard unit of measure.
barcodeFormat	NA	string($text4) example: a	The format of a barcode (used for Type 2 barcode items).
barcodePrefix	NA	number($int9) example: a	The barcode prefix used in association with the Type 2 barcode of this item.
wastageType	NA	integer($int4) example: 1	The type of wastage. Validate value are: 1 - Sales Wastage 2 - Spoilage Wastage Enum: [1, 2]
wastagePercent	NA	number($decimal12,4) example: 1.5	The wastage percent.
wastagePercentDefault	NA	number($decimal12,4) example: 1.5	The default wastage percent.
suggestedRetailCurrency	NA	string($text3) example: USD	The currency of the manufacturer suggested retail price.
suggestedRetailPrice	NA	number($decimal20,4) example: 9.99	The manufacturer suggested retail price.
brand	NA	string($text30) example: Brand A	Brand name of the brand the item belongs to.
brandDescription	NA	string($text120) example: Brand A Full Descriptio	Brand description of the brand the item belongs to.
createDate	NA	string($date-time)	The date the item was created in EICS.
updateDate	NA	string($date-time)	The date the item was created in EICS.
storeId	NA	integer($int10) example: 4000	The store identifier
status	NA	integer($int1) example: 1	The status of the item. Valid values are: 1 - Active 2 - Discontinued 3 - Inactive 4 - Deleted 5 - Auto-Stockable Non-Ranged Enum: [1, 2, 3, 4, 5, 6]
primarySupplierId	NA	integer($int10) example: 40001	The unique identifier of the primary supplier of the item to this store location.

Table 4-26 (Cont.) ItemInquiryIdo — Object

Element Name	Required	Data Type/ Example	Description
storeControlPricing	NA	boolean example: true	True indicates the item price can be controlled by the store.
rfid	NA	boolean example: false	True indicates the item is RFID tagged.
defaultCurrencyCode	NA	string($text3) example: USD	The default currency fo the item's price at this store.
purchaseType	NA	integer($int2) example: 1	The purchase type. Valid values are: 1 - Consignment 2 - Concession Enum: [1, 2]
uinType	NA	integer($int2) example: 1	1 - Serial Number 2 - AGSN Enum: [1, 2]
uinCaptureTime	NA	integer($int2) example: 1	The UIN capture time. Valid values are: 1 - Sale 2 - Store Receiving Enum: [1, 2]
uinLabelId	NA	integer($int12) example: 876544	The unique identifier of the UIN label.
uinExternalCreateAllowed	NA	boolean example: true	True if an external system can create a UIN, false otherwise.
replenishmentMethod	NA	string($text6) example: SO	The replenishment method. (SO) Store Orders has specific processing in the system, otherwise this is any text.
rejectStoreOrder	NA	boolean example: false	True indicates store orders must be on or after the next delivery date or should be rejected.
multipleDeliveryPerDayAllowed	NA	boolean example: false	True indicates the itemm allows multiple deliveries per day at the location.
nextDeliveryDate	NA	string($date-time)	The next delivery date of the time based on its replenishment type.
toleranceType	NA	integer($int1) example: 1	If not include, will default to unit. Valid values are: 1 - Unit 2 - Percent Enum: [1, 2]
toleranceUnit	NA	integer($decimal12,4) example: 5.5	The unit tolerance amount.
tolerancePercent	NA	integer($decimal12,4) example: 2	The percent tolerance amount.

Response Code: 400

Bad Request

The media type is application/json.

REST Service: Item Inventory

This service retrieves information about item inventory.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/inventory

API Definitions

API	Description
Find Available Inventory	Search for available inventory information by multiple items and multiple locations.
Find Inventory	Searches for standard inventory information by multiple items and multiple locations.
Find Expanded Inventory	Searches for expanded inventory information by multiple items at a single store.
Find Future Inventory	Searches for future inventory delivery information by a single item and a single store.
Find Inventory In Buddy Stores	Searches for inventory information at buddy stores by single input store and multiple items.
Find Inventory In Transfer Stores	Searches for inventory information at transfer zone stores by single input store and multiple items.

API: Find Available Inventory

Searches for available inventory quantity about an item in requested locations. Only transaction-level items are processed, and only current available inventory is returned. The multiplied combination of items and locations within the input criteria cannot exceed 10,000. Invalid items or locations will not cause this API to fail. Inventory is returned for any item and locations found and is not returned invalid or not found items or locations.

API Basics

Endpoint URL	{base URL}/available
Method	POST
Successful Response	200 OK
Processing Type	Synchronous
Input	Criteria
Output	List of items

Max Response Limit	10,000

Input Data Definition

Attribute	Data Type	Required	Description
itemIds	List of Strings	Yes	A list of items to retrieve available inventory for.
locationIds	List of Longs	Yes	A list of location identifiers to retrieve available inventory for.
locationType	Integer	Yes	A location type: See Location Type

Example Input

{
"itemIds": [
"100637156",
"100637172",
"100653105"
],
"locationIds": [
5000,
5001,
5005
],
"locationType": 1
}

Output Data Definition

Attribute	Data Type	Required	Description
itemId	String	Yes	The item identifier.
locationId	Long	Yes	The location identifier.
locationType	Integer	Yes	The location type: See Location Type.
availableQuantity	BigDecimal	Yes	The amount of available inventory.
unitOfMeasure	String	Yes	The unit of measure of the available inventory.
estimatedPack	Boolean	Yes	True if this is an estimated pack quantity, false otherwise.

Example Output

[

{
"itemId": "100637113",
"locationId": 5000,
"locationType": 1,
"availableQuantity": 200.0000,
"unitOfMeasure": "EA",
"estimatedPack": false
},
{
"itemId": "100637113",
"locationId": 5001,
"locationType": 1,
"availableQuantity": 200.0000,
"unitOfMeasure": "EA",
"estimatedPack": false
},
}

Additional Data Definitions

Location Type

Value	Definition
1	Store
2	Warehouse

API: Find Inventory

Query lookup of detailed inventory information about a multiple item in multiple stores. The multiplied combination of items and locations within the input criteria cannot exceed 10,000. Invalid items or locations will not cause this API to fail. Inventory is returned for any item and locations found and is not returned invalid or not found items or locations.

API Basics

Endpoint URL	{base URL}/positions
Method	POST
Successful Response	200 OK
Processing Type	Synchronous
Input	Criteria
Output	List of inventory of item at stores

Max Response Limit	10,000

Input Data Definition

Attribute	Data Type	Required	Description
itemIds	List of Strings	Yes	A list of items to retrieve inventory for.
storeIds	List of Longs	Yes	A list of store identifiers to retrieve inventory for.
sellingUnitOfMeasure	Boolean	-	True indicates an attempt to use the selling unit of measure of the item, false indicates to use the standard unit of measure. If conversion cannot take place, it defaults back to standard unit of measure.

Example Input

{

"itemIds": [

"100637156",

"100637172",

"100668091"

],

"storeIds": [

5000,

5001,

5002

],

"sellingUnitOfMeasure": true

}

Output Data Definition

Attribute	Data Type	Required	Description
itemId	String	Yes	The item identifier.
storeId	Long		The store identifier if the item is ranged to a store.
ranged	Boolean	Yes	True if the item is ranged to the store, false otherwise.
estimated	Boolean	Yes	True if the quantities are estimated, false otherwise.
unitOfMeasure	String	Yes	The unit of measure of the quantities.
caseSize	BigDecimal	Yes	The default case size of the item.

Attribute	Data Type	Required	Description
quantityStockOnHand	BigDecimal	Yes	The stock on hand quantity.
quantityBackroom	BigDecimal	Yes	The quantity located in the back room area.
quantityShopfloor	BigDecimal	Yes	The quantity located on the shop floor.
quantityDeliveryBay	BigDecimal	Yes	The quantity located in the delivery bay.
quantityAvailable	BigDecimal	Yes	The available to sell quantity.
quantityUnavailable	BigDecimal	Yes	The unavailable to sell quantity.
quantityNonSellable	BigDecimal	Yes	The total non-sellable quantity.
quantityInTransit	BigDecimal	Yes	The quantity currently in transit.
quantityCustomerReserved	BigDecimal	Yes	The quantity reserved for customer orders.
quantityTransferReserved	BigDecimal	Yes	The quantity reserved for transfers.
quantityVendorReturn	BigDecimal	Yes	The quantity reserved for vendor returns.
nonSellableQuantities	List of Non-Sellable Quantities	-	A collection containing the specific quantity in each non-sellable quantity type bucket.

Non-Sellable Quantity Data Definition

Attribute	Data Type	Required	Description
nonsellableTypeId	Long	Yes	The non-sellable type unique identifier.
quantity	quantity	Yes	The quantity in this particular non-sellable type bucket.

Example Output

[

{

"itemId": "100637156",

"storeId": 5000,

"ranged": true,

"estimated": false,

"unitOfMeasure": "EA",

"caseSize": 100.00,

"quantityStockOnHand": 10.0000,

"quantityBackroom": 10.0000,

"quantityShopfloor": 0.0000,

"quantityDeliveryBay": 0.0000,

"quantityAvailable": 10.0000,

"quantityUnavailable": 0.0000,

"quantityNonSellable": 0.0000,
"quantityInTransit": 0.0000,
"quantityCustomerReserved": 0.0000,
"quantityTransferReserved": 0.0000,
"quantityVendorReturn": 0.0000
},
{
"itemId": "100637172",
"storeId": 5000,
"ranged": true,
"estimated": false,
"unitOfMeasure": "EA",
"caseSize": 100.00,
"quantityStockOnHand": 10.0000,
"quantityBackroom": -10.0000,
"quantityShopfloor": 0.0000,
"quantityDeliveryBay": 0.0000,
"quantityAvailable": -10.0000,
"quantityUnavailable": 20.0000,
"quantityNonSellable": 20.0000,
"quantityInTransit": 0.0000,
"quantityCustomerReserved": 0.0000,
"quantityTransferReserved": 0.0000,
"quantityVendorReturn": 0.0000,
"nonSellableIdos": [
{
"nonsellableTypeId": 1,
"quantity": 15.0000
},
{
"nonsellableTypeId": 2,
"quantity": 5.0000
}
]

}

}

API: Find Expanded Inventory

Searches for expanded inventory information about multiple items within a single store.

API Basics

Endpoint URL	{base URL}/{storeId}/expanded
Method	POST
Successful Response	200 OK
Processing Type	Synchronous
Input	Criteria
Output	List of inventory of items
Max Response Limit	2,500

Path Parameter Definitions

Attribute	Description
storeId	The store identifier of the store to process items for.

Input Data Definition

Attribute	Data Type	Required	Description
itemIds	List of Strings	Yes	A list of items to retrieve expanded inventory for.

Example Input

{

"itemIds": [

"100637156",

"100637172",

"100695081"

]

}

Output Data Definition

Attribute	Data Type	Required	Description
itemId	String	Yes	The item identifier.
storeId	Long		The store identifier if the item is ranged to a store.

Attribute	Data Type	Required	Description
ranged	Boolean	Yes	True if the item is ranged to the store, false otherwise.
estimated	Boolean	Yes	True if the quantities are estimated, false otherwise.
unitOfMeasure	String	Yes	The unit of measure of the quantities.
caseSize	BigDecimal	Yes	The default case size of the item.
quantityStockOnHand	BigDecimal	Yes	The stock on hand quantity.
quantityBackroom	BigDecimal	Yes	The quantity located in the back room area.
quantityShopfloor	BigDecimal	Yes	The quantity located on the shop floor.
quantityDeliveryBay	BigDecimal	Yes	The quantity located in the delivery bay.
quantityAvailable	BigDecimal	Yes	The available to sell quantity.
quantityUnavailable	BigDecimal	Yes	The unavailable to sell quantity.
quantityNonSellable	BigDecimal	Yes	The total non-sellable quantity.
quantityInTransit	BigDecimal	Yes	The quantity currently in transit.
quantityCustomerReserved	BigDecimal	Yes	The quantity reserved for customer orders.
quantityTransferReserved	BigDecimal	Yes	The quantity reserved for transfers.
quantityVendorReturn	BigDecimal	Yes	The quantity reserved for vendor returns.
firstReceivedDate	Date	-	The first date the item was received into stock.
lastReceivedDate	Date	-	The date the item last received inventory into stock.
lastReceivedQuantity	BigDecimal	-	Total amount of inventory received on the last date it was received.
openStockCounts	Integer	-	The number of stock counts open for the item at this store.
lastStockCountType	Integer	-	The type of stock count (see Additional Data Definition).
lastStockCountApprovedDate	Date	-	The date this item was last approved on a stock count at this store.
lastStockCountTimeframe	Integer	-	The stock count timeframe (see Additional Data Definition).
uinProblemLine	Boolean	Yes	True indicates it is UIN problem line item, false otherwise.
lastRequestedQuantity	BigDecimal	-	The quantity last requested for this item.
lastUpdateDate	Date	Yes	The timestamp of the last time this record was updated.
nonSellableQuantities	Collection of Non-Sellable Quantities	-	The specific quantities in each non-sellable quantity type bucket.

Non-Sellable Quantity Data Definition

Attribute	Data Type	Required	Description
nonsellableTypeId	Long	Yes	The non-sellable type unique identifier.

Attribute	Data Type	Required	Description
quantity	quantity	Yes	The quantity in this particular non-sellable type bucket.

Example Output

[
{
"itemId": "100637113",
"storeId": 5000,
"ranged": true,
"estimated": false,
"unitOfMeasure": "EA",
"caseSize": 100.00,
"quantityStockOnHand": 200.0000,
"quantityBackroom": 200.0000,
"quantityShopfloor": 0.0000,
"quantityDeliveryBay": 0.0000,
"quantityAvailable": 200.0000,
"quantityUnavailable": 0.0000,
"quantityNonSellable": 0.0000,
"quantityInTransit": 0.0000,
"quantityCustomerReserved": 0.0000,
"quantityTransferReserved": 0.0000,
"quantityVendorReturn": 0.0000,
"quantityLastReceived": 0.0000,
"quantityLastRequested": 0.0000,
"openStockCounts": 0,
"lastStockCountTimeframe": 3,
"uinProblemLine": false,
"lastUpdateDate": "2022-07-15T06:23:27-05:00"
},
{
"itemId": "100637121",
"storeId": 5000,

"ranged": true,
"estimated": false,
"unitOfMeasure": "EA",
"caseSize": 100.00,
"quantityStockOnHand": 200.0000,
"quantityBackroom": 180.0000,
"quantityShopfloor": 0.0000,
"quantityDeliveryBay": 0.0000,
"quantityAvailable": 180.0000,
"quantityUnavailable": 20.0000,
"quantityNonSellable": 20.0000,
"quantityInTransit": 0.0000,
"quantityCustomerReserved": 0.0000,
"quantityTransferReserved": 0.0000,
"quantityVendorReturn": 0.0000,
"quantityLastReceived": 0.0000,
"quantityLastRequested": 0.0000,
"openStockCounts": 0,
"lastStockCountTimeframe": 3,
"uinProblemLine": false,
"lastUpdateDate": "2022-07-15T06:23:27-05:00",
"nonSellableIdos": [
{
"nonsellableTypeId": 1,
"quantity": 15.0000
},
{
"nonsellableTypeId": 2,
"quantity": 5.0000
}
]
}
}

API: Find Future Inventory

Searches for future delivery records for a single store and single item.

API Basics

Endpoint URL	{base URL}/{storeId}/{itemId}/future
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	None
Output	List of delivery records
Max Response Limit	N/A

Path Parameter Definitions

Attribute	Description
storeId	The store identifier to retrieve future inventory for.
itemId	The item identifier to retrieve future inventory for.

Output Data Definition

Attribute	Data Type	Required	Description
itemId	String (25)	Yes	The item identifier.
storeId	Long	Yes	The store identifier.
deliveries	List of deliveryIds	-	A list of delivery information if it exists.

Delivery Data Definition

Attribute	Data Type	Required	Description
sourceLocationType	Integer	Yes	Item Location Type (see Additional Data Definition).
sourceLocationId	Long	Yes	The unique identifier of the source location of the delivery.
deliveryType	Integer	Yes	Item Delivery Type (see Additional Data Definition).
expectedDate	Date	Yes	The date the inventory is expected to arrive.
quantityInbound	BigDecimal	Yes	Amount of inventory inbound on the delivery.
quantityOrdered	BigDecimal	Yes	Amount of inventory on order.

Example Output

{

"itemId": "100637121",

"storeId": 5000,
"deliveryIdos": [
{
"sourceLocationType": 1,
"sourceLocationId": 5001,
"deliveryType": 3,
"quantityInbound": 30.0000,
"quantityOrdered": 0.0000
}
]
}

Additional Data Definitions

Item Delivery Type

Value	Definition
1	Allocation
2	Purchase Order
3	Transfer
-	-

Item Location Type

Value	Definition
1	Store
2	Supplier
3	Warehouse
4	Finisher

API: Find Inventory in Buddy Stores

Searches for inventory information at buddy stores by single input store and multiple items.

API Basics

Endpoint URL	{baseUrl}/{storeId}/associated
Method	POST
Successful Response	200 OK
Processing Type	Synchronous
Input	List of items
Output	List of inventory records
Max Response Limit	N/A

Path Parameter Definitions

Attribute	Description
storeId	The store identifier to find buddy stores for.

Input Data Definition

Attribute	Data Type	Required	Description
itemIds	List of Strings	Yes	A list of items to retrieve inventory for.
sellingUnitOfMeasure	Boolean	-	True indicates an attempt to use the selling unit of measure of the item, false indicates to use the standard unit of measure. If conversion cannot take place, it defaults back to standard unit of measure.

Example Input

{

"itemIds": [

"100637156",

"100637172",

"100668091"

],

"sellingUnitOfMeasure": true

}

Output Data Definition

Attribute	Data Type	Required	Description
itemId	String	Yes	The item identifier.
storeId	Long		The store identifier if the item is ranged to a store.
ranged	Boolean	Yes	True if the item is ranged to the store, false otherwise.
estimated	Boolean	Yes	True if the quantities are estimated, false otherwise.
unitOfMeasure	String	Yes	The unit of measure of the quantities.
caseSize	BigDecimal	Yes	The default case size of the item.
quantityStockOnHand	BigDecimal	Yes	The stock on hand quantity.
quantityBackroom	BigDecimal	Yes	The quantity located in the back room area.
quantityShopfloor	BigDecimal	Yes	The quantity located on the shop floor.
quantityDeliveryBay	BigDecimal	Yes	The quantity located in the delivery bay.
quantityAvailable	BigDecimal	Yes	The available to sell quantity.

Attribute	Data Type	Required	Description
quantityUnavailable	BigDecimal	Yes	The unavailable to sell quantity.
quantityNonSellable	BigDecimal	Yes	The total non-sellable quantity.
quantityInTransit	BigDecimal	Yes	The quantity currently in transit.
quantityCustomerReserved	BigDecimal	Yes	The quantity reserved for customer orders.
quantityTransferReserved	BigDecimal	Yes	The quantity reserved for transfers.
quantityVendorReturn	BigDecimal	Yes	The quantity reserved for vendor returns.
nonSellableQuantities	List of Non-Sellable Quantities	-	A collection containing the specific quantity in each non-sellable quantity type bucket.

Non-Sellable Quantity Data Definition

Attribute	Data Type	Required	Description
nonsellableTypeId	Long	Yes	The non-sellable type unique identifier.
quantity	quantity	Yes	The quantity in this particular non-sellable type bucket.

Example Output

[

{

"itemId": "100637156",

"storeId": 5000,

"ranged": true,

"estimated": false,

"unitOfMeasure": "EA",

"caseSize": 100.00,

"quantityStockOnHand": 10.0000,

"quantityBackroom": 10.0000,

"quantityShopfloor": 0.0000,

"quantityDeliveryBay": 0.0000,

"quantityAvailable": 10.0000,

"quantityUnavailable": 0.0000,

"quantityNonSellable": 0.0000,

"quantityInTransit": 0.0000,

"quantityCustomerReserved": 0.0000,

"quantityTransferReserved": 0.0000,

"quantityVendorReturn": 0.0000
},
{
"itemId": "100637172",
"storeId": 5000,
"ranged": true,
"estimated": false,
"unitOfMeasure": "EA",
"caseSize": 100.00,
"quantityStockOnHand": 10.0000,
"quantityBackroom": -10.0000,
"quantityShopfloor": 0.0000,
"quantityDeliveryBay": 0.0000,
"quantityAvailable": -10.0000,
"quantityUnavailable": 20.0000,
"quantityNonSellable": 20.0000,
"quantityInTransit": 0.0000,
"quantityCustomerReserved": 0.0000,
"quantityTransferReserved": 0.0000,
"quantityVendorReturn": 0.0000,
"nonSellableIdos": [
{
"nonsellableTypeId": 1,
"quantity": 15.0000
},
{
"nonsellableTypeId": 2,
"quantity": 5.0000
}
]
}
}

API: Find Inventory in Transfer Zone Stores

Searches for inventory at transfer zone stores by single input store and multiple items.

API Basics

Endpoint URL	{baseUrl}/{storeId}/transferzone
Method	POST
Successful Response	200 OK
Processing Type	Synchronous
Input	List of items
Output	List of inventory records
Max Response Limit	N/A

Path Parameter Definitions

Attribute	Description
storeId	The store identifier to find transfer zone stores for.

Input Data Definition

Attribute	Data Type	Required	Description
itemIds	List of Strings	Yes	A list of items to retrieve inventory for.
sellingUnitOfMeasure	Boolean	-	True indicates an attempt to use the selling unit of measure of the item, false indicates to use the standard unit of measure. If conversion cannot take place, it defaults back to standard unit of measure.

Example Input

{
"itemIds": [
"100637156",
"100637172",
"100668091"
],
"sellingUnitOfMeasure": true
}

Output Data Definition

Attribute	Data Type	Required	Description
itemId	String	Yes	The item identifier.
storeId	Long		The store identifier if the item is ranged to a store.
ranged	Boolean	Yes	True if the item is ranged to the store, false otherwise.
estimated	Boolean	Yes	True if the quantities are estimated, false otherwise.
unitOfMeasure	String	Yes	The unit of measure of the quantities.
caseSize	BigDecimal	Yes	The default case size of the item.
quantityStockOnHand	BigDecimal	Yes	The stock on hand quantity.
quantityBackroom	BigDecimal	Yes	The quantity located in the back room area.
quantityShopfloor	BigDecimal	Yes	The quantity located on the shop floor.
quantityDeliveryBay	BigDecimal	Yes	The quantity located in the delivery bay.
quantityAvailable	BigDecimal	Yes	The available to sell quantity.
quantityUnavailable	BigDecimal	Yes	The unavailable to sell quantity.
quantityNonSellable	BigDecimal	Yes	The total non-sellable quantity.
quantityInTransit	BigDecimal	Yes	The quantity currently in transit.
quantityCustomerReserved	BigDecimal	Yes	The quantity reserved for customer orders.
quantityTransferReserved	BigDecimal	Yes	The quantity reserved for transfers.
quantityVendorReturn	BigDecimal	Yes	The quantity reserved for vendor returns.
nonSellableQuantities	List of Non-Sellable Quantities	-	A collection containing the specific quantity in each non-sellable quantity type bucket.

Non-Sellable Quantity Data Definition

Attribute	Data Type	Required	Description
nonsellableTypeId	Long	Yes	The non-sellable type unique identifier.
quantity	quantity	Yes	The quantity in this particular non-sellable type bucket.

Example Output

[

{

"itemId": "100637156",

"storeId": 5000,

"ranged": true,

"estimated": false,
"unitOfMeasure": "EA",
"caseSize": 100.00,
"quantityStockOnHand": 10.0000,
"quantityBackroom": 10.0000,
"quantityShopfloor": 0.0000,
"quantityDeliveryBay": 0.0000,
"quantityAvailable": 10.0000,
"quantityUnavailable": 0.0000,
"quantityNonSellable": 0.0000,
"quantityInTransit": 0.0000,
"quantityCustomerReserved": 0.0000,
"quantityTransferReserved": 0.0000,
"quantityVendorReturn": 0.0000
},
{
"itemId": "100637172",
"storeId": 5000,
"ranged": true,
"estimated": false,
"unitOfMeasure": "EA",
"caseSize": 100.00,
"quantityStockOnHand": 10.0000,
"quantityBackroom": -10.0000,
"quantityShopfloor": 0.0000,
"quantityDeliveryBay": 0.0000,
"quantityAvailable": -10.0000,
"quantityUnavailable": 20.0000,
"quantityNonSellable": 20.0000,
"quantityInTransit": 0.0000,
"quantityCustomerReserved": 0.0000,
"quantityTransferReserved": 0.0000,
"quantityVendorReturn": 0.0000,
"nonSellableIdos": [

{
"nonsellableTypeId": 1,
"quantity": 15.0000
},
{
"nonsellableTypeId": 2,
"quantity": 5.0000
}
]
}
}

REST Service: Item ISN

This rest service defines operations to manage Item ISN information.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env/siocs-int-services>/api/isns

APIs

API	Description
Create ISN	Create a new ISN
Update ISN	Updates an existing ISN
Delete ISN	Delete an existing ISN
Find ISNs	Search for ISNs based on a set of criteria
Read ISN Types	Read all Item ISN types

API: Create ISN

This API will create ISN information.

API Basics

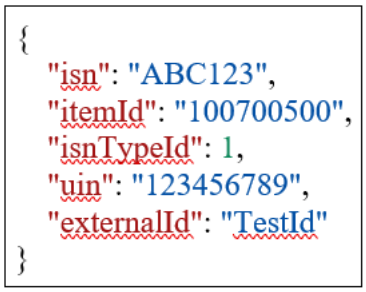
Endpoint URL	{base URL}
Method	POST
Successful Response	200 OK
Processing Type	Synchronous

Input	The ISN
Output	The ISN including ID
Max Response Limit	N/A

Input Data Definition

Attribute	Type	Req	Definition
isn	String(128)	X	A scan number used to scan the item
isnTypeId	Long(12)	X	The unique identifier of the item ISN type
itemId	String(25)	X	The unique item identifier (sku number)
uin	String(128)		A universal identification number
externalId	String(128)		An identifier from an external system

Example



Output Data Definition

Attribute	Type	Definition
isnId	Long(12)	The unique identifier of the ISN record
isn	String(128)	This is a scan number used to scan the item
externalId	String(128)	An identifier from an external system

API: Update ISN

This API allows the ISN information to be modified. An optional value left blank will update the ISN information to blank for that value.

API Basics

Endpoint URL	{base URL}/isnId
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Input	ISN Update Information

Output	N/A
Max Response Limit	N/A

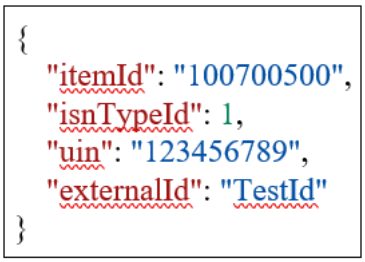
Path Data Definiton

Attribute	Type	Definition
isnId	Long(12)	The unique identifier of the item ISN.

Input Data Definition

Attribute	Type	Req	Definition
isnTypeId	Long(12)	X	The unique identifier of the item ISN type
itemId	String(25)	X	The unique item identifier (sku number)
uin	String(128)		A universal identification number
externalId	String(128)		An identifier from an external system

Example



API: Delete ISN

This API deletes an item ISN.

API Basics

Endpoint URL	{base URL}/{isnId}/delete
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Input	N/A
Output	N/A
Max Response Limit	N/A

Path Data Definition

Attribute	Type	Definition

isinId	Long(12)	The unique identifier of the item ISN.

API: Find ISNs

This API is used to lookup or find ISNs.

API Basics

Endpoint URL	{base URL}
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	N/A
Output	List of ISNs
Max Response Limit	10,000

Query Parameters

Attribute	Type	Definition
isn	String(128)	Retrieves records containing this ISN, which could be for multiple items.
ItemId	String(25)	Retrieves records associated to this unique item identifier (sku number).
uin	String(128)	Retrieves records associated to this universal identification number.
updateDateFrom	String	Retrieves records on or after this date.
updateDateTo	String	Retrieves records on or before this date.

Output Data Definition

Attribute	Type	Definition
itemIsnId	Long(12)	The unique identifier of the record
isn	String(128)	Retrieves records containing this ISN, which could be for multiple items.
ItemId	String(25)	Retrieves records associated to this unique item identifier (sku number).
uin	String(128)	Retrieves records associated to this universal identification number.
itemIsnTypeId	Long(12)	The unique identifier of the item ISN type
externalId	String(128)	An identifier of this ISN from an external system
createDate	Date	The date this ISN record was first created
createUser	String(128)	The user that created this ISN record
updateDate	Date	The last date this ISN record was updated
updateUser	String(128)	The user that last updated this ISN record.

API: Read ISN Types

This API is used to lookup all the ISN types available for an ISN.

API Basics

Endpoint URL	{base URL}/types
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	N/A
Output	List of ISN Types
Max Response Limit	N/A

Output Data Definition

Attribute	Type	Definition
isnTypeId	Long(12)	The unique ISN type identifier
labelKey	String(128)	A label for the ISN type (not translated)
restricted	Boolean	Y if this represents secure data, N otherwise.

REST Service: Item Price

This service allows for the search and retrieval of item pricing information stored within EICS.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer></cust_env>/siocs-int-services/api/prices

API Definitions

API Definitions

API	Description
findPrices	This API can be used to search for price summary information matching filter criteria.
FindPriceByIds	Find extended price information based on a list of potential unique price identifiers.

API: findPrices

This API can be used to search for price summary information matching filter criteria.

At least one input criteria is required or a bad request error will be returned.

API Basics

Endpoint URL	{base URL}
Method	GET
Success Response	200 OK
Processing Type	Synchronous
Input	Query Parameters
Output	List of Prices
Maximum Results Allowed	10,000

Input Data Definition

Attribute	Data Type	Definition
storeId	Long(10)	Only retrieve item price information for this store.
effectiveDateFrom	String	Only retrieve item price information on or after this date.
effectiveDateTo	String	Only retrieve item price information on or before this date.
itemId	String(25)	Only retrieve item price information for this item.

Output Data Definition

Attribute	Data Type	Definition
priceId	Long(12)	The unique identifier of the price.
itemId	String(25)	The unique identifier of the item.
storeId	Long(10)	The unique identifier of the store.
status	Integer	The status of the price.
priceType	Integer	The type of the price.
effectiveDate	Date	The effective date of the price.
endDate	Date	The end date of the price.
priceValue	BigDecimal(20,4)	The price amount.
priceCurrency	String(3)	The price currency.
unitOfMeasure	String(4)	The item unit of measure associated with the price.

API: findPriceByIds

Find extended price information based on a list of potential unique price identifiers.

It will return information only for price identifiers that are found. It will not return errors or fail to process if invalid identifiers occur. It is up to the accessing information to determined prices not found using this API.

API Basics

Endpoint URL	{base URL}/find
Method	POST
Success Response	200 OK
Processing Type	Synchronous
Input	ID List

Output	List of Prices
Maximum Input Allowed	5,000

Input Data Definition

Attribute	Type	Definition
priceIds	List<Long(12)>	A list of price identifiers.

Output Data Definition

Attribute	Type	Definition
priceId	Long(12)	The unique identifier of the price.
itemId	String(25)	The unique identifier of the item.
storeId	Long(10)	The unique identifier of the store.
Status	Integer	The status of the price.
priceType	Integer	The type of the price
effectiveDate	Date	The effective date of the price.
endDate	Date	The end date of the price.
priceValue	BigDecimal(20, 4)	The price amount.
priceCurrency	String(3)	The price currency.
unitOfMeasure	String(4)	The item unit of measure associated with the price.
externalPriceId	Long(12)	The unique identifier of the external price or price event.
clearanceId	Long(15)	The unique identifier of the clearance price change from the pricing engine.
promotionId	Long(10)	The unique identifier of the promotion.
regularPriceChangeId	Long(15)	The unique identifier of the regular price change from the pricing engine.
resetClearanceId	Long(15)	The identifier of the clearance reset.
storeRequested	Boolean	True indicates it is store requested, false indicates it is not store requested.
sellingUnitPriceChange	Boolean	True indicates the selling unit retail price has changed, false indicates it has not.
multiUnitPriceChange	Boolean	True indicates the multi-unit pricing has changed, false indicates it has not.
multiUnitRetail	BigDecimal(20, 4)	The multi-unit retail price.
multiUnitRetailCurrency	String(3)	The currency type of the multi-unit retail price in the multi-selling unit of measure.
multiUnits	BigDecimal(12, 4)	The number of multi-units.
multiUnitUom	String(4)	The unit of measure of the multi-unit retail price.
promotionName	String(160	The promotion name.
promotionCompDtlId	Long(15)	The unique identifier of the promotion component detail from the pricing engine.
promotionType	Integer	Promotion Component Type (See Index)
promotionDurationType	Integer	Promotion Duration Type (See Index)

promotionCompId	Long(10)	The unique identifier of the promotion component.
promotionCompName	String(160)	The promotion component name.
promotionDescription	String(640)	The promotion description.
updateDate	Date	The date that the update took place.

Example Input:

```
{
"priceIds": [
123,
 456,
 789,
 012
  ]
}
```

Additional Data Definitions

Price Type

ID	Status
1	Permanent
2	Promotional
3	Clearance
4	Clearance Reset

Price Status

ID	Status
1	New
2	Pending
3	Approved
4	Completed
5	Rejected
6	Ticket List
7	Extract Failed
8	Deleted
99	Default

Promotion Component Type

ID	Status
1	Complex Promotion
2	Simple Promotion
3	Threshold Promotion
4	Credit (Finance) Promotion
5	Transaction Promotion

Promotion Duration Type

ID	Status
1	All Day Promotion
2	Partial Day Promotion
3	Multiple Day Promotion

REST Service: Item UDA

This service integrates user defined attribute foundation data. Asynchronous item UDA integration is processed through staged messages and is controlled by the MPS Work Types.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/udas

API Definitions

API	Description
importUdas	Imports user defined attributes.
deleteUdas	Deletes user defined attributes.
importItemUdas	Imports an association between items and user defined attributes.
deleteItemUdas	Deletes the association between items and user defined attributes.
readItemUdas	Retrieves all the user defined attributes for a particular item.

API: Import Udas

Imports user defined attributes. It is managed by DcsUda work type. If the input exceeds 500 UDAs an input too large exception will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/import
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	UDA import List
Output	None
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
udas	List of details	Yes	A list of user defined attributes.

Detail Data Definition

Attribute	Data Type	Required	Description
udaId	Integer (5)	Yes	The user defined attribute identifier.
type	Integer	Yes	See Index: UdaType
description	String (120)	Yes	The description of the user defined attribute.
printTicket	Boolean		True indicates tickets are printed for this user defined attribute.
printLabel	Boolean		True indicates labels are printed for this user defined attribute.
lovId	String (25)		The unique identifier of a list of values UDA.
lovDescription	String (250)		The description of the list of values UDA.

API: Delete Udas

Deletes user defined attributes. It is managed by DcsUda work type. If the input exceeds 500 UDAs an input too large exception will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/delete
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	UDA delete list
Output	None
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
udaIds	List<Long>	Yes	A list of user defined attribute.

API: Import Item Udas

Imports associations between items and user defined attributes. This is controlled by the work type: DcsItem.

If the input exceeds 500 Item UDAs an input too large exception will be returned.

A "Forbidden" response will occur if application is integrated with MFCS.

API Basics

Endpoint URL	{base URL}/items/import
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	Item UDA list
Output	None
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
itemUdas	List of details	x	A list of associations between an item and user defined attributes.

Detail Data Definition

Attribute	Data Type	Required	Description
itemId	String	X	The item identifier.
udaId	Integer	X	The user defined attribute identifier.
udaDate	Date		Holds the value of the user defined attribute if it is a date.
udaText	String (250)		Holds the value of the user defined attribute if it is text.
udaLovId	String (25)		Holds the unique numeric identifier of the user defined attribute if it is a list of values selection.
print	Boolean		Y indicates printing is done for this item and user defined attribute (which is also controlled by the UDA).

API: Delete Item Udas

Deletes an association between item and user defined attributes. This is controlled by the work type: DcsItem.

If the input exceeds 500 Item UDAs an input too large exception will be returned.

A "Forbidden" response will occur if application is integrated with MFCS.

API Basics

Endpoint URL	{base URL}/items/delete
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	UDA item delete list
Output	None
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
itemUdas	List of details	Yes	A list of associations between item and user defined attribute identifiers.

Detail Data Definition

Attribute	Data Type	Required	Description
itemId	String (25)	Yes	The item identifier.
udaId	Integer (5)	Yes	The user defined attribute identifier.
udaDate	Date		Holds the value of the user defined attribute if it is a date.
udaText	String (250)		Holds the value of the user defined attribute if it is text.
udaLovId	String (25)		Holds the unique numeric identifier of the user defined attribute if it is a list of values selection.

API: Find Item Udas

It will retrieve UDAs for the inputted items.

API Basics

Endpoint URL	{base URL}/items/find

Method	POST
Successful Response	200 OK
Processing Type	Synchronous
Input	Item list
Output	UDA item list
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
itemIds	List<String>	Yes	A list of items to find UDAs for.

Output Data Definition

Attribute	Data Type	Description
itemId	String	The item identifier.
udaId	Integer	The user defined attribute identifier.
type	String	The user defined attribute type: (LV) List of Value, (FF) Free Form Text, DT (Date)
description	String	The description of the user defined attribute.
udaDate	Date	Holds the value of the user defined attribute if it is a date.
udaText	String	Holds the value of the user defined attribute if it is text.
udaLovId	Long	Holds the unique numeric identifier of the user defined attribute if it is a list of values selection.
udaLoveDescription	String	Holds the value description of the UDA List of Values selection.
printTicket	Boolean	True indicates tickets are printed for this user defined attribute.
printLabel	Boolean	True indicates labels are printed for this user defined attribute.

Additional Data Definitions

UDA Type

Value	Definition
1	Date
2	Free Form Text
3	List of Value

REST Service: Item UIN

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/uins

API Definitions

API	Description
createUin	Create a new unique identification number.
readUin	Reads information about a Universal Identification Number.
findUins	Find unique identification number summary information based on search criteria.
findUinLabels	This API is used to find all the UIN labels available for a uin items.
findUinHistory	This API is used to find UIN historical information based on search criteria.
generateUins	This API generates new Type 2 (Auto Generated Serial Numbers) Universal Identification Numbers without changing store inventory positions.

API: createUin

Create a new unique identification number. Note that the combination of store and item determines the administrative information about a UIN (such as UIN Type).

The newly created UIN will be in "Unconfirmed" status and its transaction type will be "UIN Web Service." To move it into inventory, use inventory adjustment or another transaction.

API Basics

Endpoint URL	{base URL}
Method	POST
Success Response	200 OK
Processing Type	Synchronous
Input	UIN information
Output	UIN confirmation information

Input Data Definition

Payload	Type	Req	Definition
storeId	Long	X	The identifier of the store.
itemId	String	X	The identifier of the item.

uin	String	X	The universal identification number.

Output Data Definition

Payload	Type	Definition
itemUinId	Long	The unique identifier to the record.
storeId	Long	The identifier of the store.
itemId	String	The identifier of the item.
uin	String	The universal identification number.
status	Integer	The current status of the UIN. Valid values are in index.

Example

```
{
  "storeId": 5000,,
   "itemId": "100700500",
   "uin": "1234"
}
```

API: readUin

Reads information about a Universal Identification Number.

API Basics

Endpoint URL	{base URL}/items/{itemId}/{uin}
Method	GET
Success Response	200 OK
Processing Type	Synchronous
Input	Path Parameters Item identifier and UIN
Output	UIN information

Output Data Definition

Payload	Type	Definition
itemUinId	Long	A unique identifier representing the record in the database.
itemId	String	The identifier of the item.
uin	String	The universal identification number.
type	Integer	The type of UIN. Valid values are: (1) Serial Number, (2) Auto Generated Serial Number
status	Integer	The current status of the UIN. See Index for valid values.
storeId	Long	The store identifier

transactionType	Integer	The business area that last contained the UIN,
transactionId	String	The transaction id of the transaction containing the UIN.
cartonId	String	The identifier of the carton containing the UIN.
nonsellableTypeId	Long	A non-sellable inventory bucket the UIN was within.
previousStatus	Integer	The previous status of the UIN. Valid values are in index.
previousStoreId	Long	The previous store identifier associated with the previous status.
previousTransactionType	Integer	The previous business area that contained the UIN for that previous status.
previousTransactionId	String	The transaction id of the transaction that previously contained the UIN for that previous status.
previousCartonId	String	The identifier of the carton that previously container the UIN for that previous status.
previousNonsellableTypeId	Long	A non-sellable inventory bucket the UIN was last within for that previous status.
damaged	Boolean	True if the UIN is damaged, N otherwise.
createDate	Date	The date the UIN was first inserted into the system.
updateDate	Date	The last date the UIN was updated.
createUser	String	The user that first inserted the UIN into the system.
updateUser	String	The user that last updated the UIN in the system.

API: findUins

Find unique identification number summary information based on search criteria.

API Basics

Endpoint URL	{base URL}
Method	GET
Success Response	200 OK
Processing Type	Synchronous
Input	Query Parameters
Output	List of UINs (see ReadUIN API for Data Output)
Maximum Results Allowed	10,000

Input Data Definition

Attribute	Type	Definition
storeId	Long	Include only UINs for this store identifier.
itemId	String	Include only UINS for this item
status	Integer	Include only UINs with this current status.
updateDateFrom	Date/String	Include only UINs updated on or after this date.
updateDateTo	Date/String	Include only UINs updated on or before this date.

API: findUinLabels

This API is used to find all the UIN labels available for a uin items.

API Basics

Endpoint URL	{base URL}/labels
Method	GET
Success Response	200 OK
Processing Type	Synchronous
Input	N/A
Output	List of labels

Output Data Definition

Attribute	Type	Definition
labelId	Long	The unique identifier of the record.
labelCode	String	A unique code that defines the label.
description	String	The description or label associated to the code (not translated).

API: findUinHistory

This API is used to find UIN historical information based on search criteria.

API Basics

Endpoint URL	{base URL}/histories
Method	GET
Success Response	200 OK
Processing Type	Synchronous
Input	Query parameters
Output	List of UIN history records
Maximum Results Allowed	10,000

Input Data Definition

Attribute	Type	Definition
itemId	String	Include only UIN history for this item.
uin	Integer	Include only UIN history for this UIN.
createDateFrom	Date/String	Include only UIN history created on or after this date.
createDateTo	Date/String	Include only UIN history created on or before this date.

Output Data Definition

Payload	Type	Definition
itemId	String	The identifier of the item.
uin	String	The universal identification number.
type	Integer	The type of UIN. Valid values are: (1) Serial Number, (2) Auto Generated Serial Number
status	Integer	The current status of the UIN. Valid values are in index.
storeId	Long	The store identifier
transactionType	Integer	The business area that last contained the UIN,
transactionId	String	The transaction id of the transaction containing the UIN.
cartonId	String	The identifier of the carton containing the UIN.
nonsellableTypeId	Integer	A non-sellable inventory bucket the UIN was within.
createDate	Date	The date the UIN was first inserted into the system.
updateDate	Date	The last date the UIN was updated.
createUser	String	The user that first inserted the UIN into the system.
updateUser	String	The user that last updated the UIN in the system.

API: generateUins

This API generates new Type 2 (Auto Generated Serial Numbers) Universal Identification Numbers without changing store inventory positions.

If the UIN administrative data for the item and store used do not indicate Type 2, an error will be returned.

The new UINs generated will have a status of “Unconfirmed”.

API Basics

Endpoint URL	{base URL}/generate
Method	POST
Success Response	200 OK
Processing Type	Synchronous
Input	UIN generation information
Output	N/A

Input Data Definition

Payload	Type	Req	Definition
itemId	String	X	The identifier of the item.
storeId	Long	X	The identifier of the store

quantity	Integer	X	The amount of universal identification numbers to generate.
transactionType	Integer	X	See Index: UIN Functional Area
transactionId	String		A transaction reference identifier.

Example

```
{
  "storeId": 5000,
  "itemId": "100663071",
  "uin": "1234",
 "quantity": 5,
   "transactionType": 13
}
```

Additional Data Definitions

UIN Type

ID	Description
1	Serial Number
2	Auto-Generated Serial Number

UIN Status

ID	Description
1	In Stock
2	Sold
3	Shipped To Warehouse
4	Shipped To Store
5	Reserved For Shipping
6	Shipped To Vendor
7	Removed From Inventory
8	Unavailable
9	Missing
10	In Receiving
11	Customer Order Reserved
12	Customer Order Fulfilled
13	Shipped To Finisher
99	Unconfirmed

UIN Functional Area

ID	Description

1	Warehouse Delivery Receipt
2	Direct Delivery Receipt
3	Create Transfer
4	Dispatch Transfer
5	Receive Transfer
6	Receipt Adjustment
7	Create Return
8	Dispatch Return
9	Inventory Adjustment
10	Stock Count
11	Stock Recount
12	Stock Count Authorized
13	Manual
14	POS Sale
15	POS Return
16	POS Sales Void
17	POS Return Void
18	UIN Web Service
19	Customer Order
20	Direct Delivery ASN Inbound
21	Transfer ASN Inbound
22	Transfer Shipment

REST Service: Manifest

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/manifests

API Definitions

API	Description
Close Manifest	Call this method to close all manifested shipments matching the input criteria.

API: Close Manifest

Call this method to close all manifested shipments for the carrier code and carrier services. A processing message is sent to the internal message processing system and the services

returns an “Accepted” response. The closing of the manifest will occur later when the message is processed.

API Basics

Endpoint URL	{base URL}/close
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	Criteria
Output	None
Max Response Limit	-

Input Data Definition

Attribute	Data Type	Required	Description
carrierCode	String (4)	Yes	A carrier code.
carrierServiceCode	String (6)	Yes	A carrier service code.
trackingNumber	List of Strings (120)	Yes	A list of tracking numbers associated to the contents of the manifest.
shipDate	Date	-	Indicates all items manifested prior to this date for the carrier have been shipped.

Example Input

```
{
    "carrierCode": "O",
    "carrierServiceCode": "O",
    "trackingIds": ["7861","45722"],
    "shipDate":"2022-04-19T23:59:59-05:00"
}
```

REST Service: POS Transaction

EICS integrates with POS systems and Sales Audit systems to ensure that the inventory positions are accurate. This is especially important where accurate up-to-date inventory positions are required to reduce customer disappointment when trying to locate items that appear in inventory or delays in filling customer orders. POS is the primary source of sales, returns, void, and some customer order transaction information to EICS. ReSA sends only modified or new POS transaction records to EICS. This service processes the information asynchronously so a short delay may occurs before inventory is updated. As part of the sales processing, EICS updates the inventory depending on the nature of the transaction. The following are the supported transaction types for the sales processing Sale, Return, and Post Void of these transactions. The audit system should not modify the post void transactions. A change to a void is not supported by EICS. Please refer to Sales Integration in the integration guide for more information. Duplicate transactions are prevented by scanning for unique

instances of transactions by id, date, and register id. However, it is the responsibility of the calling application to make sure that duplicate transactions are not sent. Even in the case of REST call that fails, any retry or attempt to resend the transaction should have a delayed time period to make sure multiple attempts to transmit or retransmit a transaction does not occur simultaneously.

Service Base URL

The Cloud Service base URL follows the format:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Import POS Transaction

Point-Of-Sale systems may integration transactions to EICS using this service, which imports and processes point-of-sale transactions through an asynchronous process. The service has a default limit of 1,000 total items, though they may be distrubted across any number of transactions. Only one store is allowed across all the transactions sent in a single request. The web service is optimized for speed at greater than 400 items and less than 500 items per service call. The further above or below this optimized point, processing speed will be reduced, and it may take longer for the sales to be recorded in inventory. Since this import is asynchronous, only the basic form of the input is validated prior to the data being captured and processed.

Method

```
POST
```

URL

```
/postransactions
```

Request

There are no request parameters.

The request body is application/json.

An array of transactions.

Example Value

```
{
  "transactions": [
    {
      "storeId": 1234,
      "transactionId": "444-555",
      "transactionTimestamp": "2024-09-11T12:10:53.145Z",
```

```
      "custOrderId": "44444",
      "customerOrderComment": "Customer attrived late.",
      "externalUser": "Employee A",
      "items": [
        {
          "itemId": "10000345",
          "quantity": 4,
          "unitOfMeasure": "EA",
          "uin": "14000567000",
          "epc": "urn:epc:tag:sgtin-96:1.012345.67890.10478932",
          "reasonCode": 1,
          "dropShip": true,
          "fulfillmentOrderId": "7000",
          "fulfillOrderLineNumber": 2,
          "reservationType": 1,
          "transactionCode": 1,
          "comments": "Item packaging is slightly damaged."
        }
      ]
    }
  ]
}
```


Schema — PosTransactionListIdo

This section describes the POSTransactionListIdo schema.

Table 4-27 PosTransactionListIdo — Object

Element Name	Required	Data Type/ Example	Description
transaction	Yes	object	transaction

Table 4-28 PosTransactionIdo — Object

Element Name	Required	Data Type/Example	Description
storeId	Yes	number($int10) example: 1234	The unique identifier of the store that is the source of the transaction.
transactionId	Yes	string($text128) example: 444-555	A unique identifier of this point-of-sale transaction. In order for the sales audit process to match and audit a POS transaction that was previously received, the transactionId attribute of the POS transaction must use the same data elements and format as the sales audit file. The sales audit file concatenates the THEAD file line id value, plus a dash separator, plus the THEAD transaction number value. For example, it will appear as 111-222. The transactionId attribute of the imported point-of-sale record must match that value and format.

Table 4-28 (Cont.) PosTransactionIdo — Object

Element Name	Required	Data Type/Example	Description
transactionTimestamp	Yes	string($date-time)	The date and time of the sale transaction.
custOrderId	NA	string($text128) example: 44444	An external customer order identifier. This attribute is required for customer order releated point-of-sale transactions.
customerOrderComment	NA	string($text512) example: Customer attrived late.	A comment associated with the customer order.
externalUser	NA	string($text128) example: Employee A	User information from the external point-of-sale system.
items	Yes	object	Items

Table 4-29 PosTransactionItemIdo — Object

Element Name	Required	Data Type/Example	Description
itemId	Yes	string($text25) example: 10000345	The transaction-level SKU number of the item.
quantity	Yes	number($dec12.4) example: 4	The quantity of the item transacted.
unitOfMeasure	Yes	string($text4) example: EA	The unit of measure of the quantity.
uin	NA	string($text128) example: 14000567000	A unique identifaction number. If not empty, the quantity will be modified to 1.
epc	NA	string($text256) example: urn:epc:tag:sgtin-96:1.012345.67890.10478932	The complete SGTIN-96 Electronic Product Code of the item.
reasonCode	NA	integer($int4) example:1	Reason code associated to the item transaction. This field is required if unavailable sub-buckets system configuration is active and you wish to move unavailable inventory.
dropShip	Yes	Boolean example:true	True if this item is drop ship, false if it is not. Drop ship sales will not impact stock positions.
fulfillmentOrderId	NA	string($text128) *example: 7000* If the transaction is associated to a customer order, this is the external fulfillment order identifier.	

Table 4-29 (Cont.) PosTransactionItemIdo — Object

Element Name	Required	Data Type/Example	Description
fulfillOrderLineNumber	NA	number($int15) example:2	If the transaction is for a customer order, this is the line number on the order that this item transactions aligns with.
reservationType	NA	integer($int4) example:1	If the transaction is a custoemr order, this is the type of reservation. Valid values are: 1 - Web Order 2 - Special Order 3 - Pickup or Delivery 4 - Layaway 5 - On Hold Enum:[1, 2, 3, 4, 5]
transactionCode	Yes	integer($int4) example: 1	A code that indicates the transaction event that took place on item. Valid values are: 1 - Sale 2 - Return 3 - Void Sale 4 - Void Return 5 - Order New 6 - Order Fulfill 7 - Order Cancel Enum: [1, 2, 3, 4, 5, 6, 7]
comments	NA	string($text512) example: Item packaging is slightly damaged.	Comments associated to this line item of the transaction.

Responses

This section describes the responses of the Import POS Transaction API.

Response Code: 200

Accepted

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

REST Service: Product Group

This service allows for the integration of product group with external systems.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/productgroups

APIs

API	Description
findProductGroups	Searches for product group summary headers based on input criteria.
readProductGroup	Reads the details about a specific product group.
createProductGroup	Creates a new product group including its components.
updateProductGroup	Modifies an existing product group including its components.
cancelProductGroup	Cancels an existing product group.

API: findProductGroup

This API is used to search for a product group summary using input criteria.

Table 4-30 API Basics

Endpoint URL	{base URL}
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	Query parameters
Output	Collection of product groups
Max Response Limit	5,000

Table 4-31 Query Parameters

Query	Type	Definition
storeId	Long(10)	Returns only product groups that match this store (which includes all store product groups).
type	Integer(3)	Returns only product groups that match this product group type. See Index for types.
description	String(100)	Returns only products groups that contain this text in its description.
itemId	String(25)	Returns only product groups that contain this individual sku number in its single items list.
departmentId	Long(12)	Returns only product groups that contain this hierarchy department identifier.
classId	Long(12)	Returns only product groups that contain this hierarchy class identifier.

Table 4-31 (Cont.) Query Parameters

subclassId	Long(12)	Returns only product groups that contain this hierarchy subclass identifier.
updateDateFrom	String	Returns only product groups updated on or after this date.
updateDateTo	String	Returns only product groups updated on or before this date.

Table 4-32 Output Data Definitions

Payload	Type	Definition
productGroupId	Long(12)	The unique product group identifier.
description	String(100)	A description of the product group.
storeId	Long(10)	The store identifier or blank if the product group is for all stores.
type	Integer(3)	Indicates the type of product group. See Index.
status	Integer(1)	Indicates the status of the product group. See Index.
updateDate	Date	The date the product group was last updated.

API: readProductGroup

This API is used to read a product group.

Table 4-33 API Basics

Endpoint URL	{base URL}/{productGroupId}
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Path Parameter	The identifier of the product group.
Output	Collection of product groups
Max Response Limit	5,000

Table 4-34 Output Data Definition

Payload	Type	Definition
productGroupId	Long(12)	The unique identifier of the product group.
description	String(100)	A description of the product group.
storeId	Long(10)	The unique identifier of a store associated to the product group. This will be blank/null if the product group is for all stores.
type	Integer(3)	Indicates the type of product group. See Index.
status	Integer(1)	Indicates the status of the product group. See Index.
unitOfMeasureMode	Integer(4)	Unit of measure type for pick list product groups. See Index.

Table 4-34 (Cont.) Output Data Definition

allItemGroup	Boolean	True indicates the product group is for all items. If set to true, then hierarchies and items will not be present.
updateDate	Date	The date the product group was last updated.
stockCountDetail	Object	Details about a stock count product group (used for all three stock count types). This will only be populated if the product group type is for a stock count.
replenishmentDetail	Object	Details about a replenishment product group. This will only be populated if the product group type is for replenishment.
storeOrderDetail	Object	Details about a store order product group. This will only be populated if the product group type is for store orders.
autoAdjustmentDetail	Object	Details about an auto inventory adjustment product group. This will only be populated if the product group type is for auto adjustments.
autoTicketPrintDetail	Object	Details about an auto ticket print product group. This will only be populated if the product group type is for auto ticket print.
hierarchies	List<Object>	A list of merchandise item hierarchies that belong to the group.
itemIds	List<String(25)>	A list of item SKU numbers associated to the product group.

Table 4-35 Stock Count Detail

Payload	Type	Definition
countingMethod	Integer	The method of counting a stock count: See Index (StockCountingMethod)
breakdownType	Integer	The method of breaking a stock count down into child counts: See Index (StockCountBreakdownType)
varianceCount	Integer(8)	The number of units in standard unit of measure considered discrepant on a stock count.
variancePercent	BigDecimal(12,4)	The percentage of units in standard unit of measure considered discrepant on a stock count.
varianceValue	BigDecimal(12,4)	The value of units considered discrepant on a stock count. This will only be populated for unit and amount stock count product group type.
performRecount	Boolean	True indicates the stock count should be recounted if discrepancies are found.
autoAuthorize	Boolean	True indicates the stock count should be automatically authorized after count.
activeItems	Boolean	True indicates active items should be included on the stock count.
inactiveItems	Boolean	True indicates inactive items should be included on the stock count.
discontinuedItems	Boolean	True indicates discontinued items should be included on the stock count.

Table 4-35 (Cont.) Stock Count Detail

deletedItems	Boolean	True indicates deleted items should be included on the stock count.
zeroStockOnHand	Boolean	True indicates items with 0 stock on hand should be included on the stock count.
positiveStockOnHand	Boolean	True indicates items with positive stock on hand should be included on the stock count.
negativeStockOnHand	Boolean	True indicates items with negative stock on hand should be included on the stock count.
problemLineNegativeAvailable	Boolean	True indicates to include items with negative available quantities. This will only be populated if the product group type is for a problem line stock count.
problemLinePickLessSuggested	Boolean	True indicates to include pick lists less than suggested amount. This will only be populated if the product group type is for a problem line stock count.
problemLineReplenishLessSuggested	Boolean	True indicates to include shelf replenishments that are less than the suggested amount. This will only be populated if the product group type is for a problem line stock count.
problemLineUinDiscrepancy	Boolean	True indicates UIN discrepancies should be included in the stock count. This will only be populated if the product group type is for a problem line stock count.

Table 4-36 Replenishment Detail

Payload	Type	Definition
autoReplenishment	Boolean	True indicates that the product group is eligible for automatic replenishment through a scheduled batch run.
differentiatorMode	Integer(3)	The display type of the diffentiator. See Index.

Table 4-37 Store Order Detail

Payload	Type	Definition
daysBeforeDelivery	Integer(3)	The date calculated from the creation date that the user wants the store order delivery by.
storeOrderAddItems	Boolean	True indicates items can be added to the store order after it has been generated by the system.
storeOrderItemsOnly	Boolean	Y indicates the store order can only include items that are marked as store order replenishment.
restrictSupplierId	Long(12)	Limits the creation of a store order from this product group to only this supplier.
restrictWarehouseId	Long(12)	Limits the creation of a store order from this product group to only this warehouse.
restrictHierarchyId	Long(12)	Limits the creation of a store order from this product group to only this merchandise hierarchy.
restrictAreaId	Long(12)	Limits the creation of a store order from this product group to only this store sequence area.

Table 4-38 Auto Adjustment Detail

Payload	Type	Definition
adjustmentQuantity	BigDecimal(20,4)	The quantity that should be automatically adjusted by this product group.
adjustmentPercent	BigDecimal(20,4)	The percentage of quantity that should be automatically adjusted by this product group.
adjustmentReasonCode	Long(12)	The unique identifier of a reason code associated to this product group.
updateToZero	Boolean	Update stock to zero when generating adjustment with this product group.

Table 4-39 Auto Ticket Print Detail

Payload	Type	Definition
refreshTicketQuantity	Boolean	True if the ticket quantity should be refreshed prior to printing.

Table 4-40 Item Hierarchy Detail

Payload	Type	Definition
departmentId	Long(12)	The department identifier
classId	Long(12)	The class identifier
subclassId	Long(12)	The subclass identifier

API: createProductGroup

This API is used to create a new product group that will be **in progress** status.

Table 4-41 API Basics

Endpoint URL	{base URL}
Method	POST
Successful Response	200 OK
Processing Type	Synchronous
Input	Product Group
Output	Product Group Status
Max Response Limit	5,000

Table 4-42 Input Data Definition

Payload	Type	Req	Definition
description	String(100)	X	A description of the product group.
type	Integer(3)	X	Indicates the type of product group. See Index.

Table 4-42 (Cont.) Input Data Definition

storeId	Long(10)	The unique identifier of a store associated to the product group. This will be blank/null if the product group is for all stores.
allItems	Boolean	True if the product group is for all items, false otherwise. If all items, any hierarchies and items included will be ignored.
unitOfMeasureMode	Integer	Unit of measure type for pick lists. See Index..
autoAdjustmentDetail	Object	Details about an auto inventory adjustment product group. This is only processed and is required if the type is auto inventory adjustment type.
autoTicketPrintDetail	Object	Details about an auto ticket print product group. This is only processed and is required if the type is auto ticket print.
replenishmentDetail	Object	Details about a replenishment product group. This is only processed and is required if the type is a shelf replenishment type..
storeOrderDetail	Object	Details about a store order product group. This is only processed and is required if the type is the store order type.
unitCountDetail	Object	Details about a unit stock count product group. This is only processed and is required if the type is a stock count type.
unitAmountCountDetail	Object	Details about a unit and amount stock count product group. This is only processed and is required if the type is a stock count type.
problemLineCountDetail	Object	Details about a problem line stock count product group. This is only processed and is required if the type is a stock count type.
hierarchies	List<Object>	A list of up to 5,000 unique merchandise item hierarchies that belong to the group (avoid duplicate or overlapping hierarchies).
itemIds	List<String(25)>	A list of up to 5,000 unique item SKU numbers on the product group.

Table 4-43 Unit Count Detail

Payload	Type	Req	Definition
countingMethod	Integer	X	The method of counting a stock count: See Index (StockCountingMethod)
breakdownType	Integer	X	The method of breaking a stock count down into child counts: See Index (StockCountBreakdownType). Must be "Location" for guided counts.
varianceCount	Integer(8)		The number of units in standard unit of measure considered discrepant on a stock count. Variance count and percent cannot both be empty.

Table 4-43 (Cont.) Unit Count Detail

variancePercent	BigDecimal(12,4)	The percentage of units in standard unit of measure considered discrepant on a stock count. Variance count and percent cannot both be empty.
performRecount	Boolean	True indicates the stock count should be recounted if discrepancies are found. This cannot be set to true if the counting method is "Third Party.
autoAuthorize	Boolean	True indicates the stock count should be automatically authorized after count.
activeItems	Boolean	True indicates active items should be included on the stock count. At least one item status choice is required as true.
inactiveItems	Boolean	True indicates inactive items should be included on the stock count. At least one item status choice is required as true.
discontinuedItems	Boolean	True indicates discontinued items should be included on the stock count. At least one item status choice is required as true.
deletedItems	Boolean	True indicates deleted items should be included on the stock count. At least one item status choice is required as true.
zeroStockOnHand	Boolean	True indicates items with 0 stock on hand should be included on the stock count. At least one stock choice is required as true.
positiveStockOnHand	Boolean	True indicates items with positive stock on hand should be included on the stock count. At least one stock choice is required as true.
negativeStockOnHand	Boolean	True indicates items with negative stock on hand should be included on the stock count. At least one stock choice is required as true.

Table 4-44 Unit and Amount Count Detail

Payload	Type	Req	Definition
countingMethod	Integer	X	The method of counting a stock count: See Index (StockCountingMethod)
breakdownType	Integer	X	The method of breaking a stock count down into child counts: See Index (StockCountBreakdownType). Must be "Location" for guided counts.
varianceCount	BigDecimal(12,4)		The number of units in standard unit of measure considered discrepant on a stock count. Count, percent, and value cannot all be empty.
variancePercent	BigDecimal(12,4)		The percentage of units in standard unit of measure considered discrepant on a stock count. Count, percent, and value cannot all be empty.

Table 4-44 (Cont.) Unit and Amount Count Detail

varianceValue	BigDecimal(12,4)	The value of units considered discrepant on a stock count. Count, percent, and value cannot all be empty.
performRecount	Boolean	True indicates the stock count should be recounted if discrepancies are found. This cannot be set to true if the counting method is "Third Party".
autoAuthorize	Boolean	True indicates the stock count should be automatically authorized after count.
zeroStockOnHand	Boolean	True indicates items with 0 stock on hand should be included on the stock count.

Table 4-45 Problem Line Count Detail

Payload	Type	Req	Definition
countingMethod	Integer	X	The method of counting a stock count: See Index (StockCountingMethod).
breakdownType	Integer	X	The method of breaking a stock count down into child counts: See Index (StockCountBreakdownType). Must be "Location" for guided counts.
autoReplenishment	Boolean		True indicates that the product group is eligible for automatic replenishment through a scheduled batch run.
differentiatorMode	Integer(3)		The display type of the differentiator. See Index.
varianceCount	BigDecimal(12,4)		The number of units in standard unit of measure considered discrepant on a stock count. Variance count and percent cannot both be empty.
variancePercent	BigDecimal(12,4)		The percentage of units in standard unit of measure considered discrepant on a stock count. Variance count and percent cannot both be empty
performRecount	Boolean		True indicates the stock count should be recounted if discrepancies are found. This cannot be set to true if the counting method is "Third Party."
autoAuthorize	Boolean		True indicates the stock count should be automatically authorized after count.
negativeStockOnHand	Boolean		True indicates items with negative stock on hand should be included on the stock count.
negativeAvailable	Boolean		True indicates to include items with negative available quantities.
pickLessSuggested	Boolean		True indicates to include pick lists less than suggested amount.
replenishLessSuggested	Boolean		True indicates to include shelf replenishments that are less than the suggested amount.

Table 4-45 (Cont.) Problem Line Count Detail

uinDiscrepancy	Boolean		True indicates UIN discrepancies should be included in the stock count. This will only be populated if the product group type is for a problem line stock count.

Table 4-46 Store Order Detail

Payload	Type	Req	Definition
daysBeforeDelivery	Integer(3)		The date calculated from the creation date that the user wants the store order delivery by.
storeOrderAddItems	Boolean		True indicates items can be added to the store order after it has been generated by the system.
storeOrderItemsOnly	Boolean		Y indicates can only include items that are marked as store order replenishment.
restrictSupplierId	Long(12)		Limits the creation of a store order from this product group to only this supplier.
restrictWarehouseId	Long(12)		Limits the creation of a store order from this product group to only this warehouse.
restrictHierarchyId	Long(12)		Limits the creation of a store order from this product group to only this merchandise hierarchy.
restrictAreaId	Long(12)		Limits the creation of a store order from this product group to only this store sequence area.

Table 4-47 Auto Adjustment Detail

Payload	Type	Req	Definition
adjustmentQuantity	BigDecimal(20, 4)		The quantity that should be automatically adjusted by this product group. Either quantity or percent is required.
adjustmentPercent	BigDecimal(20, 4)		The percentage of quantity that should be automatically adjusted by this product group. Either quantity or percent is required.
adjustmentReasonCode	Long(12)	X	The unique identifier of a reason code associated to this product group.
updateToZero	Boolean		Update stock to zero when generating adjustment with this product group.

Table 4-48 Auto Ticket Print Detail

Payload	Type	Req	Definition
refreshTicketQuantity	Boolean		True if the ticket quantity should be refreshed prior to printing.

Table 4-49 Item Hierarchy Detail

Payload	Type	Req	Definition
departmentId	Long(12)	X	The department identifier
classId	Long(12)		The class identifier
subclassId	Long(12)		The subclass identifier

Table 4-50 Output Data Definition

Attribute	Type	Definition
productGroupId	Long(12)	The product group identifier.
status	Integer(1)	Indicates the status of the product group: (0) Active, (1) Canceled

Figure 4-1 Example input unitCountDetail


```
{
   "description": "product group type
1",
   "type": 1,
   "storeId": 5000,
   "allItems":false,
   "unitOfMeasureMode":1,
   "unitCountDetail":{
      "countingMethod":4,
      "breakdownType":1,
      "varianceCount":1,
      "variancePercent":1,
      "performRecount":true,
      "autoAuthorize":true,
      "activeItems":true,
      "inactiveItems":true,
      "discontinuedItems":true,
      "deletedItems":true,
      "zeroStockOnHand":true,
      "positiveStockOnHand":true,
      "negativeStockOnHand":true
   },
   "hierarchies": [
      {
         "departmentId":2345,
         "classId":2,
         "subclassId":1
      },{
         "departmentId":4567,
         "classId":1000,
         "subclassId":5000
      }
   ],
   "itemIds": [
"100000001"
   ]
}
```

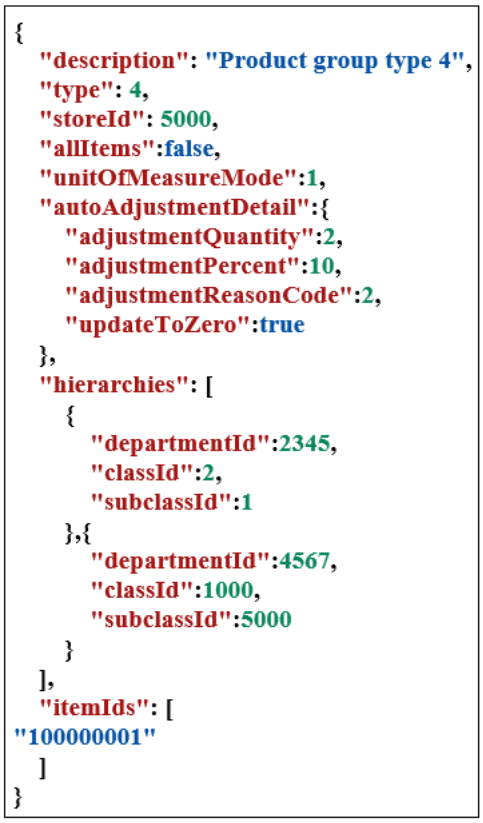
Figure 4-2 Example input unitAmountCountDetail:


```
{
   "description": "Product group type 2",
   "type": 2,
   "storeId": 5000,
   "allItems":false,
   "unitOfMeasureMode":1,
   "unitAmountCountDetail":{
      "countingMethod":4,
      "breakdownType":1,
      "varianceCount":1,
      "variancePercent":1,
      "variannceValue":1,
      "performRecount":false,
      "autoAuthorize":false,
      "zeroStockOnHand":false
   },
   "hierarchies": [
      {
         "departmentId":2345,
         "classId":2,
         "subclassId":1
      },{
         "departmentId":4567,
         "classId":1000,
         "subclassId":5000
      }
   ]
}
```

Figure 4-3 Example input problemLineCountDetail:

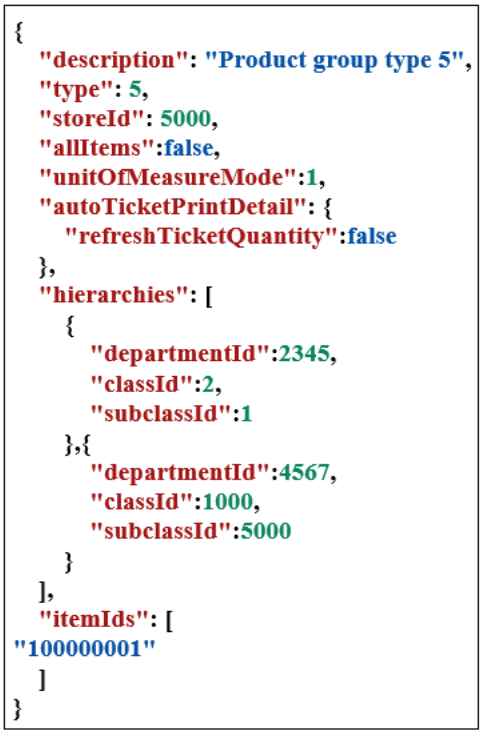

```
{
   "description": "Product group type 3",
   "type": 3,
   "storeId": 5000,
   "allItems":false,
   "unitOfMeasureMode":1,
   "problemLineCountDetail":{
      "countingMethod":4,
      "breakdownType":1,
      "varianceCount":1,
      "variancePercent":1,
      "performRecount":true,
      "autoAuthorize":true,
      "negativeStockOnHand":true,
      "negativeAvailable":true,
      "pickLessSuggested":true,
      "replenishLessSuggested":true,
      "uinDiscrepancy":true
   },
   "hierarchies": [
      {
         "departmentId":2345,
         "classId":2,
         "subclassId":1
      },{
         "departmentId":4567,
         "classId":1000,
         "subclassId":5000
      }
   ],
   "itemIds": [
"100000001"
   ]
}
```

Figure 4-4 Example input autoAdjustmentDetail:



```
{
  "description": "Product group type 4",
  "type": 4,
  "storeId": 5000,
  "allItems":false,
  "unitOfMeasureMode":1,
  "autoAdjustmentDetail":{
    "adjustmentQuantity":2,
    "adjustmentPercent":10,
    "adjustmentReasonCode":2,
    "updateToZero":true
  },
  "hierarchies": [
    {
      "departmentId":2345,
      "classId":2,
      "subclassId":1
    },{
      "departmentId":4567,
      "classId":1000,
      "subclassId":5000
    }
  ],
  "itemIds": [
"100000001"
  ]
}
```

Figure 4-5 Example input autoTicketPrintDetail:



```
{
  "description": "Product group type 5",
  "type": 5,
  "storeId": 5000,
  "allItems":false,
  "unitOfMeasureMode":1,
  "autoTicketPrintDetail": {
    "refreshTicketQuantity":false
  },
  "hierarchies": [
    {
      "departmentId":2345,
      "classId":2,
      "subclassId":1
    },{
      "departmentId":4567,
      "classId":1000,
      "subclassId":5000
    }
  ],
  "itemIds": [
"100000001"
  ]
}
```

Figure 4-6 Example input replenishmentDetail:


```
{
   "description": "Product group type 6",
   "type": 6,
   "storeId": 5000,
   "allItems":false,
   "unitOfMeasureMode":1,
   "replenishmentDetail": {
      "autoReplenishment":false,
      "differentiatorMode":1
   },
   "hierarchies": [
      {
         "departmentId":2345,
         "classId":2,
         "subclassId":1
      },{
         "departmentId":4567,
         "classId":1000,
         "subclassId":5000
      }
   ],
   "itemIds": [
"100000001"
   ]
}
```

Figure 4-7 Example input storeOrderDetail:

```
{
  "description": "Product group type 7",
  "type": 7,
  "storeId": 5000,
  "allItems":false,
  "unitOfMeasureMode":1,
  "storeOrderDetail":{
    "daysBeforeDelivery":4,
    "storeOrderAddItems":true,
    "storeOrderItemsOnly":true,
    "restrictSupplierId":9001,
    "restrictWarehouseId":7001,
    "restrictHierarchyId":173,
    "restrictAreaId":1
  },
  "hierarchies": [
    {
      "departmentId":2345,
      "classId":2,
      "subclassId":1
    },{
      "departmentId":4567,
      "classId":1000,
      "subclassId":5000
    }
  ],
  "itemIds": [
"100000001"
  ]
}
```

API: updateProductGroup

This API is used to modify a product group.

See API createProductGroup for the data definition of the product group type data objects.

API Basics

Table 4-51 API Basics

Endpoint URL	{base URL}/{productGroupId}
Method	POST
Successful Response	200 OK
Processing Type	Synchronous
Path Parameter	The identifier of the product group
Input	Product Group
Output	Product Group Status

Input Data Definition

Payload	Type	Req	Definition
storeId	Long(10)		The unique identifier of a store associated to the product group. This will be blank/null if the product group is for all stores. If this is altered for a unit and amount group already assigned to schedules, it may return a validate error that it can no longer be altered.
description	String(100)	X	A description of the product group.
allItems	Boolean		True if the product group is for all items, false otherwise. If all items, any hierarchies and items included will be ignored. Unit of measure type for pick lists. See Index.
unitOfMeasureMode	Integer		Unit of measure type for pick lists. See Index.
autoAdjustmentDetail	ProductGroupAdjustmentIdo		Details about an auto inventory adjustment product group. This is only processed and is required if the type is auto inventory adjustment type.
autoTicketPrintDetail	ProductGroupTicketPrintIdo		Details about an auto ticket print product group. This is only processed and is required if the type is auto ticket print.
replenishmentDetail	ProductGroupReplenishmentIdo		Details about a replenishment product group. This is only processed and is required if the type is a shelf replenishment type.
storeOrderDetail	ProductGroupStoreOrderIdo		Details about a store order product group. This is only processed and is required if the type is the store order type.
unitCountDetail	ProductGroupUnitCountIdo		Details about a unit stock count product group. This is only processed and is required if the type is a stock count type.
unitAmountCountDetail	ProductGroupUnitAmountCountIdo		Details about a unit and amount stock count product group. This is only processed and is required if the type is a stock count type.
problemLineCountDetail	ProductGroupProblemLineCountIdo		Details about a problem line stock count product group. This is only processed and is required if the type is a stock count type.
hierarchies	ProductGroupHierarchyIdo		A list of up to 5,000 unique merchandise item hierarchies that belong to the group (avoid duplicates or overlapping hierarchies).
itemIds	List<String(25)>		A list of up to 5,000 unique item SKU numbers on the product group.

Figure 4-8 Example Input unitCountDetail:


```
{
   "description": "unitCountDetail",
   "allItems":false,
   "unitOfMeasureMode":1,
   "unitCountDetail":{
      "countingMethod":2,
      "breakdownType":3,
      "varianceCount":100,
      "variancePercent":0,
      "performRecount":122,
      "autoAuthorize":123,
      "activeItems":123,
      "inactiveItems":123,
      "discontinuedItems":123,
      "deletedItems":123,
      "zeroStockOnHand":123,
      "positiveStockOnHand":123,
      "negativeStockOnHand":123
   },
   "hierarchies": [
      {
         "departmentId":1119,
         "classId":1,
         "subclassId":2
      }
   ],
   "itemIds": [
"100000147"
   ]
}
```


Figure 4-9 Example Input unitAmountCountDetail:


```
{
   "description": "unitAmountCountDetail",
   "allItems":false,
   "unitOfMeasureMode":1,
   "unitAmountCountDetail":{
      "countingMethod":4,
      "breakdownType":1,
      "varianceCount":1,
      "variancePercent":12,
      "varianceValue":12,
      "performRecount":false,
      "autoAuthorize":false,
      "zeroStockOnHand":false
   },
   "hierarchies": [
      {
         "departmentId":1119,
         "classId":1,
         "subclassId":2
      }
   ]
}
```

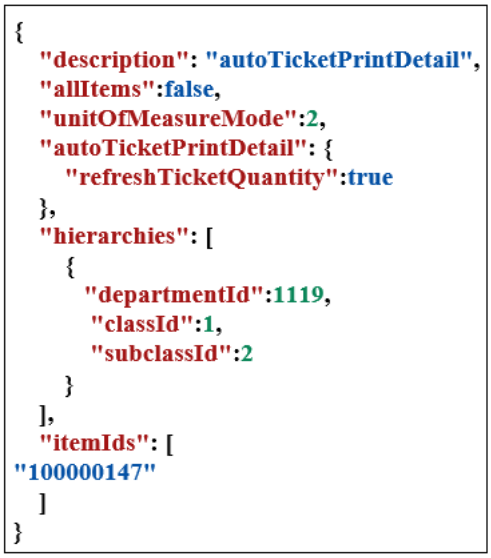
Figure 4-10 Example Input problemLineCountDetail:


```
{
   "description": "problemLineCountDetail",
   "allItems":false,
   "unitOfMeasureMode":2,
   "problemLineCountDetail":{
      "countingMethod":2,
      "breakdownType":2,
      "varianceCount":1,
      "variancePercent":1,
      "performRecount":true,
      "autoAuthorize":true,
      "negativeStockOnHand":true,
      "negativeAvailable":true,
      "pickLessSuggested":true,
      "replenishLessSuggested":true,
      "uinDiscrepancy":123
   },
   "hierarchies": [
      {
         "departmentId":1119,
         "classId":1,
         "subclassId":2
      }
   ],
   "itemIds": [
"100000147"
   ]
}
```


Figure 4-11 Example Input autoAdjustmentDetail:

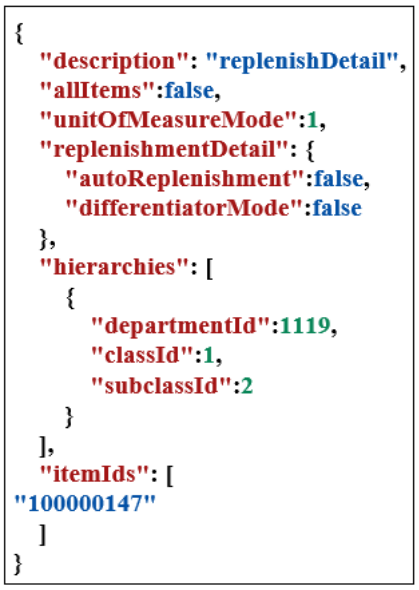

```
{
   "description": "autoAdjustmentDetail",
   "allItems":false,
   "unitOfMeasureMode":2,
   "autoAdjustmentDetail":{
      "adjustmentQuantity":2,
      "adjustmentPercent":2,
      "adjustmentReasonCode":3,
      "updateToZero":false
   },
   "hierarchies": [{
         "departmentId":1119,
         "classId":1,
         "subclassId":2
      }
   ],
   "itemIds": [
"100000147"
   ]
}
```

Figure 4-12 Example Input autoTicketPrintDetail:



```
{
   "description": "autoTicketPrintDetail",
   "allItems":false,
   "unitOfMeasureMode":2,
   "autoTicketPrintDetail": {
      "refreshTicketQuantity":true
   },
   "hierarchies": [
      {
        "departmentId":1119,
         "classId":1,
         "subclassId":2
      }
   ],
   "itemIds": [
"100000147"
   ]
}
```

Figure 4-13 Example Input replenishmentDetail:



```
{
   "description": "replenishDetail",
   "allItems":false,
   "unitOfMeasureMode":1,
   "replenishmentDetail": {
      "autoReplenishment":false,
      "differentiatorMode":false
   },
   "hierarchies": [
      {
         "departmentId":1119,
         "classId":1,
         "subclassId":2
      }
   ],
   "itemIds": [
"100000147"
   ]
}
```

Figure 4-14 Example Input storeOrderDetail:

```
{
  "description": "storeOrderDetail",
  "allItems":false,
  "unitOfMeasureMode":2,
  "storeOrderDetail":{
    "daysBeforeDelivery":5,
    "storeOrderAddItems":false,
    "storeOrderItemsOnly":false,
    "restrictSupplierId":9002,
    "restrictWarehouseId":7002,
    "restrictHierarchyId":false,
    "restrictAreaId":false
  },
  "hierarchies": [
    {
      "departmentId":"1119",
      "classId":"1",
      "subclassId":"2"
    }
  ],
  "itemIds": [
"100000147"
  ]
}
```

API: cancelProductGroup

Cancels the product group.

Table 4-52 API Basics

Endpoint URL	{base URL}/{productGroupId}/cancel
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Path Parameter	The identifier of the product group

Index

Table 4-53 Product Group Type

ID	Description
1	Stock Count: Unit
2	Stock Count: Unit and Amount
3	Stock Count: Problem Line
4	Auto Inventory Adjustment
5	Auto Ticket Print

Table 4-53 (Cont.) Product Group Type

6	Shelf Replenishment
7	Store Order

Table 4-54 Product Group Status

ID	Description
1	Active
2	Canceled

Table 4-55 Unit of Measure Mode

ID	Description
1	Standard
2	Cases
3	Preferred

Table 4-56 Shelf Replenishment Differentiator Mode

ID	Description
1	Differentiator 1
2	Differentiator 2
3	Differentiator 3
4	Differentiator 4

Table 4-57 Stock Counting Method

ID	Description
1	Guided
2	Unguided
3	Third Party
4	Auto

Table 4-58 Stock Count Breakdown Type

ID	Description
1	Department
2	Class
3	Subclass
4	Location
5	None

REST Service: Security

This service provides an end point for the management of security information within SIOCS.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api

Scope To Be Used

Security services are protected by the security scope, so to obtain a token use this scope - rgbu:siocs:security-<ENV>.

API Definitions

Table 4-59 Security API Definitions

API	Description
Import Users	Imports a collection of user security information changes and processes them synchronously. This allows up to 2,000 users.
Delete Users	Deletes security information for the specified users within SIOCS.

API: Import Users

Imports a collection of user security information changes and processes them synchronously. This allows up to 2,000 users.

Table 4-60 API Basics

Endpoint URL	/security/import/users
Method	POST
Successful Response	202 Accepted
Processing Type	synchronous
Input	Query parameters
Output	N/A
Max Response	2000

Table 4-61 Input Data Definition

Parameter	Format	Required	Definition
users	array	No	A list of security changes to import. See below:
Security Changes to Import			

Table 4-61 (Cont.) Input Data Definition

userName	string(text128)	Yes	The user name of the user.
addedStores	array[Integer](int10)	No	The stores to be added to the user.
removedStores	array[Integer](int10	No	The stores to be removed from the user.
addedRoles	array	No	The roles to be assigned to the user: roleName — The name of the role, string(text128), required storeId — The identifier of the store for a specific store assignment, or no value for assignment applying to all allowed stores., BigDecimal(int10), optional startDate — The date the role assignment should start to be allowed., date-time, optional endDate — The date the role assignment should stop being allowed., date-time, optional
removedRoles	array	No	The role assignments to be removed from the user: roleName — The name of the role, string(text128), required storeId — The identifier of the store for a specific store assignment, or no value for assignment applying to all allowed stores., BigDecimal(int10), optional

Example Input ImportUsers

```
{
  "users": [
    {
      "userName": "abc",
      "addedStores":[1000, 2000],
      "removedStores":[1001, 2001],
      "addedRoles": [
        {
          "roleName": "role_a",
          "storeId": 3000,
          "endDate": "2032-11-19T23:59:59-05:00"
        },
        {
          "roleName": "role_c",
          "startDate": "2022-11-19T23:59:59-05:00"
        },
        {
          "roleName": "role_e",
        }
      ],
      "removedRoles": [
        {
          "roleName": "role_c",
          "storeId": 3001
        },
        {
```

```
          "roleName": "role_d"
        }
      ]
    }
  ]
}
```

Table 4-62 Responses

Code	Description
202	Accepted

400	Bad Request
	Example:
	
	[
	{
	"errors": [
	{
	"code": 1,
	"description": "AN_ERROR_TOOK_PLACE",
	"dataElement": "item",
	"dataValue": "1234",
	"referenceElement": "store",
	"referenceValue": "123"
	}
	]
	}
	]

API: Delete Users

Deletes security information for the specified users within SIOCS.

Table 4-63 API Basics

Endpoint URL	/security/users/delete
Method	POST
Successful Response	202 Accepted
Processing Type	
Input	Query parameters
Output	N/A
Max Response	

Table 4-64 Query Parameter Definitions

Property	Format	Required	Definition

Table 4-64 (Cont.) Query Parameter Definitions

userNames	string(text128)	Yes	A list of user names to delete information for.
			Example:
			
			{
			"userNames": [
			"user123",
			"user456"
			]
			}

Table 4-65 Responses

Code	Description
202	Accepted

400	Bad Request
	Example:
	
	[
	{
	"errors": [
	{
	"code": 1,
	"description": "AN_ERROR_TOOK_PLACE",
	"dataElement": "item",
	"dataValue": "1234",
	"referenceElement": "store",
	"referenceValue": "123"
	}
	]
	}
	]

REST Service: Reason Code

This service allows and external system to retrieve available reason codes. Reason codes are attached to inventory adjustments or shipments.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/ reasoncodes

API Definitions

API	Description
Find Adjustment Reason Codes	Finds reason codes available for inventory adjustments.
Find Shipment Reason Codes	Finds reason codes available for shipments.

API: Find Adjustment Reason Codes

This API is used to find reason codes available for inventory adjustments.

API Basics

Endpoint URL	{base URL} /adjustments
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	None
Output	List of inventory adjustment reasons
Max Response Limit	N/A

Output Data Definition

Attribute	Data Type	Description
reasonId	Long	The unique identifier of the inventory adjustment reason code.
reasonCode	Integer	Unique reason code associated to external systems.
description	String	A description of the inventory reason code.
dispositionCode	Integer	The inventory disposition associated to the code.
dispositionDescription	String	A description of the inventory disposition associated to the code (not translated).
fromNonSellableType	Long	From unavailable sub-bucket (indicates the sub-bucket of disposition of stock movement)
fromNonSellableTypeDescription	String	The description of the from unavailable sub-bucket (not translated).
toNonSellableType	Long	To unavailable sub-bucket (indicates the sub-bucket of disposition of stock movement)
toNonSellableTypeDescription	String	The description of the to unavailable sub-bucket (not translated).

systemRequired	Boolean		True indicates the reason code is required for the system to function. A system required reason code cannot be deactivated.
displayable	Boolean		True indicates the reason code can be used by a transactional inventory adjustment created by an entity other than EICS internal service.
publish	Boolean	-	True indicating inventory movements with this reason code should be published to external systems

Example Input

[

{

"reasonId": 1,

"reasonCode": 1,

"description": “invAdjReason.1",

"dispositionCode": 4,

"dispositionDescription": "inventoryDisposition.ATS-DIST",

"systemRequired": true,

"displayable": false,

"publish": true

},

{

"reasonId": 2,

"reasonCode": 81,

"description": "invAdjReason.81",

"dispositionCode": 4,

"dispositionDescription": "inventoryDisposition.ATS-DIST",

"systemRequired": false,

"displayable": true,

"publish": true

}

]

API: Find Shipment Reason Codes

This API is used to find the reason codes available for shipments.

API Basics

Endpoint URL	{base URL} /shipments
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	None
Output	List of reasons codes
Max Response Limit	N/A

Output Data Definition

Attribute	Data Type	Description
reasonId	Long	The unique identifier of the inventory adjustment reason code.
reasonCode	String	Unique reason code associated to external systems.
description	String	A description of the inventory reason code (not translated).
type	Integer	The Shipment Reason Code Type: See the Shipment Reason Code Type.
useAvailable	Boolean	True if it should use available inventory, false otherwise.
nonSellableTypeId	Long	An identifier of associated unavailable sub-bucket (indicates the sub-bucket of disposition of stock movement)

Example Input

[

{

"reasonId": 1,

"reasonCode": "F",

"description": "shipmentReason.4.F",

"type": 4,

"useAvailable": true

},

{

“reasonId": 2,

"reasonCode": "O",

"description": "shipmentReason.4.O",

"type": 4,

"useAvailable": true

},

{

"reasonId": 3,

"reasonCode": "U",

"description": "shipmentReason.4.U",

"type": 4,

"useAvailable": false,

"nonSellableTypeId": 1

}

]

Additional Data Definitions

Shipment Reason Code Type

Value	Definition
1	Store
2	Supplier
3	Warehouse
4	Finisher
5	Customer

REST Service: Shipping

This service integrates various shipping support information with an external application. This is primarily various lookups of shipping data such as carriers and package sizes to use within shipping transactions.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/shipping

APIs

Table 4-66 APIs

API	Description
findCarriers	Finds all the carriers available for shipping.
findCarrierServices	Finds all the carrier services available for shipping.

Table 4-66 (Cont.) APIs

findCartonSizes	Finds the available sizes of cartons for shipping.
findWeightUoms	Finds all the various units of measurement of the carton measurements.
findMotives	Finds all the motives available for a shipping type.

API: findCarriers

This API is used to find all the carriers available for shipping.

Table 4-67 API Basics

Endpoint URL	/carriers
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Output	Collection of carriers

Table 4-68 Output Data Definition

Attribute	Type	Definition
carrierId	Long(10)	The unique identifier of the carrier.
code	String(4)	A unique character code for the carrier.
description	String(128)	A description or name of the carrier.
manifestType	Integer(1)	The carrier delivery manifest type (see Additional Data Definitions)

API: findCarrierServices

This API is used to find all the carrier services available for shipping.

Table 4-69 API Basics

Endpoint URL	/carrierservices
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Output	Collection of carriers

Table 4-70 Output Data Definition

Attribute	Type	Definition
carrierServiceId	Long(10)	The unique identifier of the carrier service.
code	String(6)	A unique character code for the carrier service.

Table 4-70 (Cont.) Output Data Definition

description	String(128)	A description or name of the carrier service.
averageDeliveryDays	Integer(4)	The average number of days it takes to deliver using this service.
carrierId	Long(10)	The unique identifier of the carrier this service is used with.
defaultService	Boolean	True is this is the default service type for the carrier, false otherwise.
weightRequired	Boolean	True is weight is required for this carrier service, false otherwise.
cartonSizeRequired	Boolean	True if dimensions/size is required for this carrier service, false otherwise.

API: findCartonSizes

This API is used to find all the carton services available for shipping at the particular store.

Table 4-71 API Basics

Endpoint URL	/cartonsizes/{storeId}
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Path Parameter	The store identifier of the store to retrieve carton sizes for.
Output	Collection of carton sizes

Table 4-72 Output Data Definition

Attribute	Type	Definition
cartonSizeId	Long(12)	A unique identifier of this particular carton size definition.
storeId	Long(10)	The store identifier the carton size is used at.
description	String(120)	A description of the carton size.
height	BigDecimal(12,4)	The height of the carton in units of measure.
width	BigDecimal(12,4)	The width of the carton in units of measure.
length	BigDecimal(12,4)	The length of the carton in units of measure.
unitOfMeasure	String(4)	The unit of measure of the height, width, and length.

API: findWeightUoms

This API is used to find all the weight unit of measures available for shipping.

Table 4-73 API Basics

Endpoint URL	/weightuoms
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Output	Collection of shipping weight units of measure

Attribute	Type	Definition
uom	String(4)	The unit of measure
description	String(120)	The unit of measure description

API: findMotives

This API is used to find all the motives available for a shipping type. See index for available shipment types.

Table 4-74 API Basics

Endpoint URL	/motives/(shipmentType}
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Path Parameter	The shipment type to retrieve motives for (see Additional Data Definitions)
Output	Collection of carton sizes

Table 4-75 Output Data Definition

Attribute	Type	Definition
id	Long(18)	The unique identifier of the shipping motive
code	String(6)	The external code of the shipping motive
description	String(120)	A description of the motive
sequence	Long	The sequence in which the motive should appear in a list

Index

ID	Description
1	Parcel
2	Home Fleet
3	Other

ID	Description
1	Fulfillment Order
2	Store Transfer
3	Vendor Return

REST Service: Stock Count

Stock Counts allow the user to count the inventory in the store, determine discrepancy of items, and authorize new inventory positions triggering adjustments to bring the inventory into alignment. There are four main types of stock counts: ad hoc, unit, problem line, and unit-amount. Ad Hoc stock counts are not schedule, but rather performed at random times when a user decides to correct inventory. Unit stock counts must be secheduled. They can be scheduled and executed the same day. A problem line stock count features items that have inventory positions issues, such as having negative inventory. A problem line is also scheduled and follow the same overall workflows as unit counts. Unit and amount counts must be scheduled for a single specific date. These stock counts must be scheduled at least one day ahead of time. When the count is scheduled, it is sent to the merchandising system so that it can also create a corresponding stock count. The service defines operations to manage stock count information by integration with an external system.

Service Base URL

The Cloud service base URL follows the format:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Find Stock Counts

This section describes the Find Stock Counts API. This API finds up to 1,000 stock counts matching the input criteria.

Method

```
GET
```

URL

```
/stockcounts
```

Request Parameters

Table 4-76 Find Stock Counts — Request Parameters

Parameter	Required	Data Type	Description
storeId	NA	integer($int10) (query)	Include only stock counts for this store.
scheduleDate	NA	string($date-time) (query)	Include only stock counts that are scheduled to be executed on this date.
phase	NA	integer($int4) (query)	Include only stock counts in this phase. Valid values are: 1 - Count 2 - Recount 3 - Authorize 4 - Future Available values : 1, 2, 3, 4
status	NA	integer($int4) (query)	Include only stock counts in this status. Valid values are: 1 - New 2 - Count Scheduled 3 - Count In Progress 4 - Count Complete 5 - Recount Scheduled 6 - Recount In Progress 7 - Recount Complete 8 - Approval Scheduled 9 - Approval In Progress 10 - Approval Processing 11 - Approval Authorized 12 - Approval Complete 13 - Canceled Available values : 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
departmentId	NA	number($int12) (query)	Include only stock counts associated to this department.
classId	NA	number($int12) (query)	Include only stock counts associated to this class. A department is required if this attribute is used.
subclassId	NA	number($int12) (query)	Include only stock counts associated to this subclass. A class is required if this attribute is used.

Responses

This section describes the responses of the Find Stock Counts API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "stockCountId": 11111,
    "storeId": 5000,
    "description": "Weekly Department Count",
    "productGroupId": 966400,
    "productGroupDescription": "Clothing Department",
    "productGroupScheduleId": 966400,
    "type": 1,
    "status": 1,
    "phase": 1,
    "scheduleDate": "2025-01-16T13:19:10.243Z",
    "startDateTime": "2025-01-16T13:19:10.243Z",
    "updateDateTime": "2025-01-16T13:19:10.243Z",
    "totalItemCount": 2000,
    "totalLeftToCount": 950
  }
]
```


Schema — StockCountHeaderIdo

Table 4-77 StockCountHeaderIdo— Object

Element Name	Required	Data Type/ Example	Description
stockCountId	NA	number($int12) example: 11111	The unique identifier of the stock count.
storeId	NA	number($int10) example: 5000	The identifier of the store.
description	NA	string($text255) example: Weekly Department Count	A description of the stock count.
productGroupId	NA	number($int12) example: 966400	The identifier of the product group
productGroupDescription	NA	string($text100) example: Clothing Department	The description of the product group.
productGroupScheduleId	NA	number($int12) example: 966400	The identifier of the product group schedule.

Table 4-77 (Cont.) StockCountHeaderIdo— Object

Element Name	Required	Data Type/ Example	Description
type	NA	integer($int4) example: 1	The type of the stock count. Valid values are: 1 - Unit 2 - Unit and Amount 3 - Problem Line 4 - Adhoc Enum: [1, 2, 3, 4]
status	NA	integer($int4) example: 1	The current status of the stock count. Valid values are: 1 - New 2 - Count Scheduled 3 - Count In Progress 4 - Count Complete 5 - Recount Scheduled 6 - Recount In Progress 7 - Recount Complete 8 - Approval Scheduled 9 - Approval In Progress 10 - Approval Processing 11 - Approval Authorized 12 - Approval Complete 13 - Canceled Enum: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13]
phase	NA	integer($int4) example: 1	The current phase of the stock count. Valid values are: 1 - Count 2 - Recount 3 - Authorize 4 - Future Enum: [1, 2, 3, 4
scheduleDate	NA	string($date-time)	The date the stock count is scheduled to be executed on.
startDateTime	NA	string($date-time)	The time stamp when the stock count was started.
updateDateTime	NA	string($date-time)	The time stamp when the stock count was last updated.
totalItemCount	NA	number($int12) example: 2000	The total number of items on the stock count.
totalLeftToCount	NA	number($int12) example: 950	The total number of items left to count.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Read Stock Count

This section describes the Read Stock Count API. This API reads information about a stock count. It includes the information for the stock count header as well as the header information for each stock count child. It does not include the item detail. To retrieve detailed information, the stock count child must be read individually.

Method

```
GET
```

URL

```
/stockcounts/{stockCountId}
```

Request Parameters

Table 4-78 Read Stock Count — Request Parameters

Parameter	Required	Data Type	Description
stockCountId	Yes	number($int12) (path)	The stock count identifier.

Responses

This section describes the responses of the Read Stock Count API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value

```
[
  {
    "stockCountId": 11111,
    "storeId": 5000,
    "description": "Weekly Department Count",
    "productGroupId": 966400,
```

```
    "productGroupDescription": "Clothing Department",
    "productGroupScheduleId": 966400,
    "type": 1,
    "status": 1,
    "phase": 1,
    "scheduleDate": "2025-01-16T13:48:59.866Z",
    "startDateTime": "2025-01-16T13:48:59.866Z",
    "updateDateTime": "2025-01-16T13:48:59.866Z",
    "exportUser": "smith123",
    "totalItemCount": 2000,
    "totalLeftToCount": 950,
    "stockCountTimeframe": 1,
    "varianceCount": 5,
    "variancePercent": 2.5,
    "varianceValue": 2.5,
    "countingMethod": 1,
    "breakdownType": 1,
    "recountRequired": true,
    "autoAuthorize": false,
    "includeAllItems": true,
    "includeActiveItems": false,
    "includeDiscontinuedItems": true,
    "includeDeletedItems": true,
    "includeSohZero": false,
    "includeSohPositive": true,
    "includeSohNegative": false,
    "problemLinePickLessSuggested": true,
    "problemLineReplenishLessSuggested": true,
    "problemLineReplenishNegativeAvailable": false,
    "problemLineReplenishDiscrepantUin": true,
    "adhocItemLock": false,
    "childCounts": [
      {
        "childCountId": 1223465,
        "locationId": "738429",
        "locationArea": 45,
        "description": "Frozen Foods",
        "breakdownDescription": "123 - Pies",
        "phase": 1,
        "status": 1,
        "countUser": "smith123",
        "recountUser": "smith123",
        "authorizeUser": "jones123",
        "totalItemCount": 2000,
        "totalLeftToCount": 950,
        "countSnapshotDate": "2025-01-16T13:48:59.866Z",
        "recountSnapshotDate": "2025-01-16T13:48:59.866Z",
        "authorizedDate": "2025-01-16T13:48:59.866Z"
      }
    ]
  }
]
```


Schema — StockCountIdo

Table 4-79 StockCountIdo— Object

Element Name	Required	Data Type/ Example	Description
stockCountId	NA	number($int12) example: 11111	The unique identifier of the stock count.
storeId	NA	number($int10) example: 5000	The identifier of the store.
description	NA	string($text255) example: Weekly Department Count	A description of the stock count.
productGroupId	NA	number($int12) example: 966400	The identifier of the product group.
productGroupDescription	NA	string($text100) example: Clothing Department	The description of the product group.
productGroupScheduleId	NA	number($int12) example: 966400	The identifier of the product group schedule.
type	NA	integer($int4) example: 1	The type of the stock count. Valid values are: 1 - Unit 2 - Unit and Amount 3 - Problem Line 4 - Adhoc Enum: [1, 2, 3, 4]
status	NA	integer($int4) example: 1	1 - New 2 - Count Scheduled 3 - Count In Progress 4 - Count Complete 5 - Recount Scheduled 6 - Recount In Progress 7 - Recount Complete 8 - Approval Scheduled 9 - Approval In Progress 10 - Approval Processing 11 - Approval Authorized 12 - Approval Complete 13 - Canceled Enum: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13]
phase	NA	integer($int4) example: 1	1 - Count 2 - Recount 3 - Authorize 4 - Future Enum: [1, 2, 3, 4]

Table 4-79 (Cont.) StockCountIdo— Object

Element Name	Required	Data Type/ Example	Description
scheduleDate	NA	string($date-time)	The date the stock count is scheduled to be executed on.
startDateTime	NA	string($date-time)	The time stamp when the stock count was started.
updateDateTime	NA	string($date-time)	The time stamp when the stock count was last updated.
exportUser	NA	string($text128) example: smith12	The user that exported the stock count.
totalItemCount	NA	number($int12) example: 2000	The total number of items on the stock count.
totalLeftToCount	NA	number($int12) example: 950	The total number of items left to count.
stockCountTimeframe	NA	integer($int1) example: 1	1 - Before Store Open 2 - After Store Closed 3 - None Enum: [1, 2, 3]
varianceCount	NA	number($int12) example: 5	The amount in standard unit of measure that the count can vary before being considered discrepant.
variancePercent	NA	number($decimal(12,4)) example: 2.5	The percent in standard unit of measure that the count can vary before being considered discrepant.
varianceValue	NA	number($decimal(12,4)) example: 2.5	The value variance allowed before the count is considered discrepant.
countingMethod	NA	integer($int2) example: 1	1 - Guided 2 - Unguided 3 - Third Party 4 - Auto Enum: [1, 2, 3, 4]
breakdownType	NA	integer($int2) example: 1	1 - Department 2 - Class 3 - Subclass 4 - Location 5 - None Enum: [1, 2, 3, 4, 5]
recountRequired	NA	boolean example: true	True indicates stock count should be recounted.
autoAuthorize	NA	boolean example: false	True indicates stock count should automatically authorize after count.
includeAllItems	NA	boolean example: true	True indicates stock count should include all items.

Table 4-79 (Cont.) StockCountIdo— Object

Element Name	Required	Data Type/ Example	Description
includeActiveItems	NA	boolean example: false	True indicates stock count should include active items.
includeDiscontinuedItems	NA	boolean example: true	True indicates stock count should include inactive items.
includeDeletedItems	NA	boolean example: true	True indicates stock count should include deleted items.
includeSohZero	NA	boolean example: false	True indicates stock count should include zero stock on hand items.
includeSohPositive	NA	boolean example: true	True indicates stock count should include positive stock on hand items.
includeSohNegative	NA	boolean example: false	True indicates stock count should include negative stock on hand items.
problemLinePickLessSuggested	NA	boolean example: true	True indicates stock count should include pick lists less than suggested amounts.
problemLineReplenishLessSuggested	NA	boolean example: true	True indicates stock count should include shelf replenishments that are less than the suggested amount.
problemLineReplenishNegativeAvailable	NA	boolean example: false	True indicates stock count should include items with negative available quantities.
problemLineReplenishDiscrepantUin	NA	boolean example: true	True indicates stock count should include UIN discrepancies.
adhocItemLock	NA	boolean example: false	True indicates an ad-hoc count is locked and new items can no longer be added.
childCounts	NA	object	A list of child stock counts that organize the items for counting.

Table 4-80 StockCounChildHeadertIdo— Object

Element Name	Required	Data Type/ Example	Description
childCountId	NA	number($int12) example: 1223465	The unique identifier of the stock count child.
locationId	NA	string($text128) example: 738429	The unique identifier of the sequence location being counted.
locationArea	NA	integer($int9) example: 45	An area number associated with the location.

Table 4-80 (Cont.) StockCounChildHeadertIdo— Object

Element Name	Required	Data Type/ Example	Description
description	NA	string($text1000) example: Frozen Foods	The description of the stock count location.
breakdownDescription	NA	string($text30) example: 123 – Pies	The description of a breakdown sub-location within the stock count location.
phase	NA	integer($int4) example: 1	1 - Count 2 - Recount 3 - Authorize 4 - Future Enum: [1, 2, 3, 4]
status	NA	integer($int4) example: 1	1 - New 2 - Count Scheduled 3 - Count In Progress 4 - Count Complete 5 - Recount Scheduled 6 - Recount In Progress 7 - Recount Complete 8 - Approval Scheduled 9 - Approval In Progress 10 - Approval Processing 11 - Approval Authorized 12 - Approval Complete 13 - Canceled Enum: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13]
countUser	NA	string($text128) example: smith123	The user that performed the count in this location.
recountUser	NA	string($text128) example: smith123	The user that performed the recount in this location.
authorizeUser	NA	string($text128) example: jones123	The user that performed the authorization in this location.
totalItemCount	NA	number($int12) example: 2000	The total number of items in the location.
totalLeftToCount	NA	number($int12) example: 950	The items remaining to be counted in the location.
countSnapshotDate	NA	string($date-time)	The time stamp when this child had its count snapshot taken.
recountSnapshotDate	NA	string($date-time)	The time stamp when this child had its recount snapshot taken.
authorizedDate	NA	string($date-time)	The time stamp when this child was authorized.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Snapshot Stock Count

Snapshots a stock count capturing the current stock on hand quantity as a snapshot quantity for each item on the count. The process of doing a snapshot first determines whether or not the stock count needs a snapshot and only snapshots a stock count or stock count childs that need a snapshot. However, if the stock count or stock count child does not need a snapshot, the service is still considered successful as the snapshot exists.

Method

```
POST
```

URL

```
/stockcounts/{stockCountId}/snapshot
```

Request Parameters

Table 4-81 Snapshot Stock Count — Request Parameters

Parameter	Required	Data Type	Description
stockCountId	Yes	number($int12) (path)	The stock count identifier.

Responses

This section describes the responses of the Snapshot Stock Count API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Cancel Stock Count

This section describes the Cancel Stock Count API. This API cancels a stock count if it has not begun approval processing. If a unit and amount stock count is canceled, it will notify merchandising of the cancellation.

Method

```
POST
```

URL

```
/stockcounts/{stockCountId}/cancel
```

Request Parameters

Table 4-82 Cancel Stock Count — Request Parameters

Parameter	Required	Data Type	Description
stockCountId	Yes	number($int12) (path)	The stock count identifier.

Responses

This section describes the responses of the Cancel Stock Count API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Read Stock Count Child

This section describes the Read Stock Count Child API. This API reads information about a stock count child, including all its items.

Method

```
GET
```

URL

```
/stockcounts/childs/{stockCountChildId}
```

Request Parameters

Table 4-83 Read Stock Count Child — Request Parameters

Parameter	Required	Data Type	Description
stockCountChildId	Yes	number($int12) (path)	The stock count child identifier.

Responses

This section describes the responses of the Read Stock Count Child API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "childCountId": 1223465,
    "locationId": "738429",
    "locationArea": 45,
    "description": "Frozen Foods",
    "breakdownDescription": "123 - Pies",
    "phase": 1,
    "status": 1,
    "countUser": "smith123",
    "recountUser": "smith123",
    "authorizeUser": "jones123",
    "totalItemCount": 2000,
    "totalLeftToCount": 950,
    "countSnapshotDate": "2025-01-16T14:34:40.120Z",
    "recountSnapshotDate": "2025-01-16T14:34:40.120Z",
    "authorizedDate": "2025-01-16T14:34:40.120Z",
    "lineItems": [
```

```
      {
        "lineId": 1223465,
        "itemId": "20045673",
        "departmentId": 2000,
        "classId": 3000,
        "subclassId": 4000,
        "primaryLocation": true,
        "multiLocated": false,
        "discrepant": true,
        "breakableComponent": false,
        "countSnapshot": 100,
        "recountSnapshot": 110,
        "quantityCounted": 99,
        "quantityRecounted": 101,
        "quantityAuthorized": 101,
        "quantityCountedTotal": 99,
        "quantityRecountedTotal": 99,
        "countedDateTime": "2025-01-16T14:34:40.120Z",
        "recountedDateTime": "2025-01-16T14:34:40.120Z",
        "authorizedDateTime": "2025-01-16T14:34:40.120Z",
        "snapshotDateTime": "2025-01-16T14:34:40.120Z",
        "priceType": 1,
        "priceCurrency": "USD",
        "priceValue": 12.99,
        "uins": [
          {
            "uin": "200456734823",
            "uinId": 1223465,
            "snapshotStatus": 1
          }
        ],
        "epcs": [
          {
            "epc": "2004435813456734700",
            "scanDateTime": "2025-01-16T14:34:40.120Z"
          }
        ]
      }
    ]
  }
]
```


Schema — StockCountChildIdo

Table 4-84 StockCountChildIdo— Object

Element Name	Required	Data Type/ Example	Description
childCountId	NA	number($int12) example: 1223465	The unique identifier of the stock count child.
locationId	NA	string($text128) example: 738429	The unique identifier of the sequence location being counted.

Table 4-84 (Cont.) StockCountChildIdo— Object

Element Name	Required	Data Type/ Example	Description
locationArea	NA	integer($int9) example: 45	An area number associated with the location.
description	NA	string($text1000) example: Frozen Foods	The description of the stock count location.
breakdownDescription	NA	string($text30) example: 123 – Pies	The description of a breakdown sub-location within the stock count location.
phase	NA	integer($int4) example: 1	1 - Count 2 - Recount 3 - Authorize 4 - Future Enum: [1, 2, 3, 4]
status	NA	integer($int4) example: 1	1 - New 2 - Count Scheduled 3 - Count In Progress 4 - Count Complete 5 - Recount Scheduled 6 - Recount In Progress 7 - Recount Complete 8 - Approval Scheduled 9 - Approval In Progress 10 - Approval Processing 11 - Approval Authorized 12 - Approval Complete 13 - Canceled Enum: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13]
countUser	NA	string($text128) example: smith123	The user that performed the count in this location.
recountUser	NA	string($text128) example: smith123	The user that performed the recount in this location.
authorizeUser	NA	string($text128) example: jones123	The user that performed the authorization in this location.
totalItemCount	NA	number($int12) example: 2000	The total number of items in the location.
totalLeftToCount	NA	number($int12) example: 950	The items remaining to be counted in the location.
countSnapshotDate	NA	string($date-time)	The time stamp when this child had its count snapshot taken.
recountSnapshotDate	NA	string($date-time)	The time stamp when this child had its recount snapshot taken.

Table 4-84 (Cont.) StockCountChildIdo— Object

Element Name	Required	Data Type/ Example	Description
authorizedDate	NA	string($date-time)	The time stamp when this child was authorized.
lineItems	NA	object	The items counted within this location.

Table 4-85 StockCountLineItemIdo — Object

Element Name	Required	Data Type/ Example	Description
lineId	NA	number($int12) example: 1223465	The unique identifier of the line item record.
itemId	NA	string($text128) example: 20045673	The unique identifier of the item.
departmentId	NA	number($int12) example: 2000	The unique identifier of the department.
classId	NA	number($int12) example: 3000	The unique identifier of the class.
subclassId	NA	number($int12) example: 4000	The unique identifier of the subclass.
primaryLocation	NA	boolean example: true	True indicates this is the primary stock count child for the item.
multiLocated	NA	boolean example: false	True indicates this item is located within multiple stock count child records.
discrepant	NA	boolean example: true	True indicates the item count is discrepant.
breakableComponent	NA	boolean example: false	True indicates this is a component of a breakable (notional) pack.
countSnapshot	NA	number($decimal(12,4)) example: 100	The stock on hand at the time the count snapshot was executed.
recountSnapshot	NA	number($decimal(12,4)) example: 110	The stock on hand at the time the recount snapshot was executed.
quantityCounted	NA	number($decimal(12,4)) example: 99	The amount in standard unit of measure counted during the initial stock counting phase.
quantityRecounted	NA	number($decimal(12,4)) example: 101	The amount in standard unit of measure counted during the recount of stock.
quantityAuthorized	NA	number($decimal(12,4)) example: 101	The amount in standard unit of measure to be approved during authorization.

Table 4-85 (Cont.) StockCountLineItemIdo — Object

Element Name	Required	Data Type/ Example	Description
quantityCountedTotal	NA	number($decimal(12,4)) example: 99	The amount in standard unit of measure counted during the initial stock counting phase for this item across all children in which it appears.
quantityRecountedTotal	NA	number($decimal(12,4)) example: 99	The amount in standard unit of measure counted during the recount for this item across all children in which it appears.
countedDateTime	NA	string($date-time)	The time stamp when counting began for the item.
recountedDateTime	NA	string($date-time)	The time stamp when recounting began for the item.
authorizedDateTime	NA	string($date-time)	The time stamp when the item was authorized.
snapshotDateTime	NA	string($date-time)	The time stamp when the snapshot was last taken for this item.
priceType	NA	integer($int3) example: 1	1 - Permanent 2 - Promotional 3 - Clearance Enum: [1, 2, 3]
priceCurrency	NA	string($text3) example: USD	The price currency at the time of the snapshot.
priceValue	NA	number($decimal(20,4)) example: 12.99	The price amount at the time of the snapshot.
uins	NA	object	The UINs associated to this item on the count.
epcs	NA	object	The EPCs associated to this item on the count.

Table 4-86 StockCountLineItemUinIdo — Object

Element Name	Required	Data Type/ Example	Description
uin	NA	string($text128) example: 200456734823	The unique identifier number.
uinId	NA	number($int12) example: 1223465	The record identifier of the UIN.

Table 4-86 (Cont.) StockCountLineItemUinIdo — Object

Element Name	Required	Data Type/ Example	Description
snapshotStatus	NA	number($int2) example: 1	1 - In Stock 2 - Sold 3 - Shipped To Warehouse 4 - Shipped To Store 5 - Reserved For Shipping 6 - Shipped To Vendor 7 - Remove From Inventory 8 - Unavailable 9 - Missing 10 - In Receiving 11 - Customer Reserved 12 - Customer Fulfilled 13 - Shipped To Finisher 99 - Unconfirmed Enum: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 99]

Table 4-87 StockCountLineItemEpcIdo — Object

Element Name	Required	Data Type/ Example	Description
epc	NA	string($text256) example: 2004435813456734700	The Electronic Product Code
scanDateTime	NA	string($date-time)	Snapshot of the last time the EPC was scanned.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Update Stock Count Child

This section describes the Update Stock Count Child API. This API updates a child count's quantities based on the current phase of counting. Counted quantity is updated in count phase, recounted quantity for recount phase, and authorization quantity for authorzation phase. A maximum of 10,000 line items is allowed per update.

Method

```
POST
```

URL

```
/stockcounts/childs/{stockCountChildId}
```

Request Parameters

Table 4-88 Update Stock Count Child — Request Parameters

Parameter	Required	Data Type	Description
stockCountChildId	Yes	number($int12) (path)	The stock count child identifier.

The request body is application/json.

Details of the stock count child to update.

Example Value

```
{
  "lineItems": [
    {
      "lineId": 456333,
      "quantity": 12.4,
      "timestamp": "2025-01-16T15:10:31.345Z",
      "uins": [
        111222333,
        444555666
      ]
    }
  ]
}
```

Schema — StockCountChildUpdateIdo

Table 4-89 StockCountChildUpdateIdo— Object

Element Name	Required	Data Type/ Example	Description
lineItems	Yes	object	Information about the items that were counted.

Table 4-90 StockCountChildUpdateItemIdo— Object

Element Name	Required	Data Type/ Example	Description
lineId	Yes	number($int 12) example: 456333	The unique identifier of the line item record being updated.
quantity	Yes	number($decimal(12,4)) example: 12.4	The quantity to assign to the line item based on the current phase of the stock count. If UINs are enabled for the store and this is a UIN item, the quantity value will be overwritten by the sum of the UINs on the line item.
timestamp	NA	string($date-time)	The timestamp when the quantity was counted, recounted, or authorized. If the item does not yet have a timestamp, this value will be assigned to the item. If left blank, current timestamp of processing will be used instead.
uins	Yes	string($text128)] example: List [111222333, 444555666]	The UINs to attach to this line item.

Responses

This section describes the responses of the Update Stock Count Child API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Complete Stock Count Child

This section describes the Complete Stock Count Child API. This API completes the count or recount of a stock count child moving it to the next phase of stock count processing if possible. Many factors may cause a child count to be pending until further counting is completed in other child counts. If the child has not yet been counted, it can still be completed and will follow the business rules and configurations for uncounted items.

Method

`POST`

URL

```
/stockcounts/childs/{stockCountChildId}/complete
```

Request Parameters

Table 4-91 Complete Stock Count Child — Request Parameters

Parameter	Required	Data Type	Description
stockCountChildId	Yes	number($int12) (path)	The stock count child identifier.

Responses

This section describes the responses of the Complete Stock Count Child API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

REST Service: Store

This service integrates the store foundation data with an external application. Store integration is controlled by the MPS Work Type: DcsStore.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/stores

API Definitions

API	Description
Import Stores	Imports a collection of stores.
Delete Store	Deactivate a single store.
Read Store	Read store information based on an identifier (or link)

API	Description
Find Stores	Lookup store information based on a collection of store identifiers.
Find Associated Stores	Lookup store associated to the specified input store.
Find Auto Receive Stores	Lookup stores that are allowed to auto receive from the specified input store.
Find Transfer Zone Stores	Lookup stores that are in the same transfer zone as the specified input store.
Find Adjustment Reason Codes	Finds reason codes available for inventory adjustments.
Find Shipment Reason Codes	Finds reason codes available for shipments.

API: Import Stores

Imports a collection of stores. This allows 1,000 stores per input call. All imported stores will be inventory-holding regular stores.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/import
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	List of Store to Import
Output	None
Max Response Limit	1000

Input Data Definition

Attribute	Data Type	Required	Description
stores	List of stores to import	Yes	A collection of up to 1000 stores to import.

Stores Data Definition

Attribute	Data Type	Required	Description
storeId	Long(10)	Yes	The store identifier
storeName	String(150)	Yes	The name of the store.
languageCode	String(3)	-	The language code of the store.
countryCode	String(3)	-	The country code of the store.
currencyCode	String(3)	-	The currency code of the store.
timezone	String(80)	-	The timezone of the store.
transferZoneId	String(128)	Yes	The transfer zone identifier of the store.

organizationUnitId	String(15)	-	The organization unit identifier of the store.
managedStore	Boolean	-	True indicates that EICS manages the inventory, false indicates it does not.
customerOrdering	Boolean	-	True indicates this store can take customer orders, false indicates it does not.

Example Output

{
"stores": [
{
"storeId": 5002,
"storeName": "Leamington Spa",
"languageCode": "EN",
"countryCode": "US",
"currencyCode": "USD",
"timezone": "America/Los_Angeles",
"transferZoneId": "1000",
"organizationUnitId": "1111",
"managedStore": true,
"allowsCustomerOrders": false
},
{
"storeId": 5003,
"storeName": "Leamington Spa",
"languageCode": "EN",
"countryCode": "US",
"currencyCode": "USD",
"timezone": "America/Los_Angeles",
"transferZoneId": "1000",
"organizationUnitId": "1111",
"managedStore": true,
"allowsCustomerOrders": false
}
]

}

API: Delete Store

Delete a store. Prior to placing the request to delete into the MPS queue, it validates that the store exists and that the store contains no items ranged to it.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/{storeId}/delete
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	None
Output	None
Max Response Limit	N/A

Path Parameter Definitions

Attribute	Definition
storeId	The internal identifier of the store.

API: Read Store

Retrieve information about a store based on a single unique store identifier or link.

API Basics

Endpoint URL	{base URL}/{storeId}
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	None
Output	Store
Max Response Limit	N/A

Path Parameter Definitions

Attribute	Definition
storeId	The internal identifier of the store.

Output Data Definition

Attribute	Data Type	Description

storeId	Long	The store identifier
storeName	String	The name of the store.
languageCode	String	The language code of the store
countryCode	String	The country code of the store.
currencyCode	String	The currency code of the store
timezone	String	The timezone of the store
transferZoneId	String	The transfer zone identifier of the store
organizationUnitId	String	The organization unit identifier of the store.
managedStore	boolean	True indicates that EICS manages the inventory, false indicates it does not.
customerOrdering	boolean	True indicates this store can take customer orders, false indicates it does not.

Example Output


```
{
   "links": [
      {
         "href": "/stores/5000",
         "rel": "self"
      },
      {
         "href": "/stores/5000/delete",
         "rel": "delete"
      }
   ],
   "storeId": 5000,
   "storeName": "Solihull",
   "languageCode": "EN",
   "countryCode": "US",
   "currencyCode": "USD",
   "timezone": "America/Chicago",
   "transferZoneId": "1000",
   "organizationUnitId": "1111",
   "managedStore": true,
   "allowsCustomerOrders": false
}
```

API: Find Stores

Find stores based on a list of potential unique store identifiers. It allows a maximum of 1500 store identifiers.

API Basics

Endpoint URL	{base URL}/find
Method	POST
Successful Response	200 OK
Processing Type	Synchronous
Input	List of stores ids
Output	List of stores
Max Response Limit	1500

Input Data Definition

Attribute	Data Type	Required	Description
stores	List of stores Ids	Yes	A collection of up to 1500 stores to read.

Example Input

```
{
"storeIds": [
5000,
5001
]
}
```

Output Data Definition

Attribute	Data Type	Description
Stores	List of Stores	A collection containing the store information

Stores Data Definition

Attribute	Data Type	Required	Description
storeId	Long	Yes	The store identifier
storeName	String		The name of the store.
languageCode	String		The language code of the store
countryCode	String		The country code of the store.
currencyCode	String		The currency code of the store
timezone	String		The timezone of the store

transferZoneId	String	The transfer zone identifier of the store
organizationUnitId	String	The organization unit identifier of the store.
managedStore	boolean	True indicates that EICS manages the inventory, false indicates it does not.
customerOrdering	boolean	True indicates this store can take customer orders, false indicates it does not.

Example Output


```
[
   {
      "links": [
         {
            "href": "/stores/5000",
            "rel": "self"
         },
         {
            "href": "/stores/5000/delete",
            "rel": "delete"
         }
      ],
      "storeId": 5000,
      "storeName": "Solihull",
      "languageCode": "EN",
      "countryCode": "US",
      "currencyCode": "USD",
      "timezone": "America/Chicago",
      "transferZoneId": "1000",
      "organizationUnitId": "1111",
      "managedStore": true,
      "allowsCustomerOrders": false
   },
   {
      "links": [
         {
```

```
            "href": "/stores/5001",
            "rel": "self"
        },
        {
            "href": "/stores/5001/delete",
            "rel": "delete"
        }
    ],
    "storeId": 5001,
    "storeName": "Nottingham",
    "languageCode": "EN",
    "countryCode": "US",
    "currencyCode": "USD",
    "timezone": "America/New_York",
    "transferZoneId": "1000",
    "organizationUnitId": "1111",
    "managedStore": true,
    "allowsCustomerOrders": false
  }
]
```


API: Find Associated Stores

Find potential associated stores (buddy stores) to the specified input store.

API Basics

Endpoint URL	{base URL}/{storeId}/associated
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	None
Output	List of stores
Max Response Limit	N/A

Path Parameter Definitions

Attribute	Definition
storeId	The internal identifier of the store.

Output Data Definition

Attribute	Data Type	Required	Description
Stores	List of Stores Ids	Yes	A collection containing the store Ids

Stores Data Definition

Attribute	Data Type	Required	Description
storeId	Long	Yes	The internal identifier of the store.

Example Output

[
{
"links": [
{
"href": "/stores/5001",
"rel": "self"
},
{
"href": "/stores/5001/delete",
"rel": "delete"
}
],
"storeId": 5001
},
{
"links": [
{
"href": "/stores/5002",
"rel": "self"
},
{
"href": "/stores/5002/delete",
"rel": "delete"
}
],

"storeId": 5002

}

]

API: Find Auto Receive Stores

Find stores that are allowed to auto receive from the specified input store.

API Basics

Endpoint URL	{base URL}/{storeId}/autoreceive
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	None
Output	List of stores
Max Response Limit	N/A

Path Parameter Definitions

Attribute	Definition
storeId	The internal identifier of the store.

Example Output

[

{

"links": [

{

"href": "/stores/5001",

"rel": "self"

},

{

"href": "/stores/5001/delete",

"rel": "delete"

}

],

"storeId": 5001

},

{

"links": [

{
"href": "/stores/5002",
"rel": "self"
},
{
"href": "/stores/5002/delete",
"rel": "delete"
}
],
"storeId": 5002
}
]

API: Find Transfer Zone Stores

Find stores that are available within the transfer zone of the input store.

API Basics

Endpoint URL	{base URL}/{storeId}/transferzone
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	None
Output	List of stores
Max Response Limit	N/A

Path Parameter Definitions

Attribute	Definition
storeId	The internal identifier of the store.

Output Data Definition

Attribute	Data Type	Required	Description
Stores	List of Stores Ids	Yes	A collection containing the store Ids

Stores Data Definition

Attribute	Data Type	Required	Description
storeId	Long	Yes	The internal identifier of the store.

Example Output

[
{
"links": [
{
"href": "/stores/5001",
"rel": "self"
},
{
"href": "/stores/5001/delete",
"rel": "delete"
}
],
"storeId": 5001
},
{
"links": [
{
"href": "/stores/5002",
"rel": "self"
},
{
"href": "/stores/5002/delete",
"rel": "delete"
}
],
"storeId": 5002
}
]

REST Service: Store Item

This service integrates the store item foundation data with an external application. Store integration is controlled by the MPS Work Type: DcsItemLocation.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/storeitems

API Definitions

API	Description
Import Store Items	Imports items at a store location.
Remove Store Items	Deactivate items at a store location.
Import Replenishment Items	Imports replenishment item information.
Remove Replenishment Items	Deactivate replenishment item information.

API: Import Store Items

Imports store items into the system.

If more than 10,000 items are included in a single call, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/import
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	List of store Items to Import
Output	None
Max Response Limit	10,000

Input Data Definition

Attribute	Data Type	Required	Description
items	List of stores items to import	Yes	A collection of up to 10,000 stores items to import.

Stores Items Data Definition

Attribute	Data Type	Required	Description
itemId	String(25)	Yes	The unique item identifier (sku number).
shortDescription	String(255)	-	A short description of the item at this store.
longDescirption	String(400)	-	A long description of the item at this store.

status	String	Yes	See Index (Item Status)
primarySupplierId	Long(10)	-	The unique identifier of the primary supplier of the item to this store location.
storeControlPricing	Boolean	-	True indicates the item price can be controlled by the store.
rfid	Boolean	-	True indicates the item is RFID tagged.
defaultCurrencyCode	String(3)	-	The default currency of the item's price at this store.
purchaseType	Long	-	See Index (Purchase Type)
uinType	Integer	-	See Index (UIN Type)
uinCaptureTime	Integer	-	See Index (UIN Capture Time)
uinLabelCode	Long	-	The UIN label unique identifier.
uinExternalCreateAllowed	Boolean	-	True if an external system can create a UIN, false otherwise.

Example Input

{

"items": [

{

"itemId": "100637121",

"defaultCurrencyCode": "USB",

"longDescription": "TestDescriptionAA",

"primarySupplierId": 1,

"purchaseType": 1,

"rfid": true,

"shortDescription": "TestShortAA",

"status": 1,

"storeControlPricing": false,

"uinCaptureTime": 1,

"uinExternalCreateAllowed": true,

"uinLabelCode": "SN",

"uinType": 1

}

]

}

Additional Data Definitions

Item Status

Value	Definition
1	Active
2	Discontinued
3	Inactive
4	Auto Stockable

Purchase Type

Value	Definition
1	Normal Merchandise
2	Consignment Stock
3	Concession Items

UIN Capture Time

Value	Definition
1	Sale
2	Store Receiving

UIN Type

Value	Definition
1	Serial Number
2	Auto-Generated Serial Number

API: Remove Store Items

This will mark items as no longer usable. When all data is cleared out of transactions that reference this data, later batch jobs will eventually delete the material.

If more than 1000 items are included in a single call, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/{storeId}/remove
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	None
Output	None
Max Input Limit	1000

Path Parameter Definitions

Attribute	Definition
storeId	The internal identifier of the store.

Input Data Definition

Attribute	Data Type	Required	Description
items	List of items to remove	Yes	A collection of up to 1000 items to remove.

Example Input

{

"itemIds": [

"100637121",

"100637113"

]

}

API: Import Replenishment Items

Imports item replenishment information for an item at a store location.

If more than 1000 items are included in a single call, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/{storeId}/replenish/import
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	None
Output	List of Items Replenishment to import
Max Input Limit	1000

Path Parameter Definitions

Attribute	Definition
storeId	The internal identifier of the store.

Input Data Definition

Attribute	Data Type	Required	Description
items	List of Item Replenishment Import	Yes	The item replenishment information to import.

Item Replenishment Import Data Definition

Attribute	Data Type	Required	Description
itemId	String (25)	Yes	The unique item identifier (sku number).
replenishmentMethod	String(6)		A code representing the replenishment method. (SO indicates Store Order).
rejectStoreOrder	Boolean		True indicates store orders must be on or after the next delivery date or should be rejected.
multipleDeliveryPerDayAllowed	Boolean		True indicates the item allows multiple deliveries per day at the location.
nextDeliveryDate	Date		The next delivery date of the time based on its replenishment type.

Example Input

{

"items": [

{

"itemId": "100637121",

"replenishmentMethod": "AB",

"rejectStoreOrder": false,

"multipleDeliveryPerDayAllowed": false,

"nextDeliveryDate": "2022-11-19T23:59:59-05:00"

}

]

}

API: Remove Replenishment Items

Clears the replenishment item information from within the store item setting the replenishment properties to empty, null, or default flag settings.

If more than 1000 items are included in a single call, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/replenish/remove
Method	POST
Successful Response	200 OK
Processing Type	Asynchronous
Input	List of item ids
Output	None
Max Input Limit	1000

Input Data Definition

Attribute	Data Type	Required	Description
Items	List of item Ids	Yes	A collection of up to 1000 items to read.

Example Input

{

"itemIds": [

"100637121",

"100637113"

]

REST Service: Store Order

Store orders allow a store to request items to be ordered to the store. The items being requested may come from a supplier or warehouse. Store orders allows a user to capture items and their quantities to be ordered as well as restrictions for the store order. The inventory will be sourced to the store based on the corporate replenishment setup. This can be either a delivery from a warehouse or a drop ship from the supplier. The actual sourcing, delivery timings, and final quantities remain a function of the external replenishment system.

Service Base URL

The Cloud service base URL follows the format:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Find Store Order

This section describes the Find Store Order API. This API finds up to a maximum of 5,000 store orders for the input criteria.

Method

```
GET
```

URL

```
/storeorders
```

Request Parameters

Table 4-92 Find Store Order — Request Parameters

storeId	NA	integer($int10) (query)	Include only store orders with this store identifier.
externalReference	NA	string($text128) (query)	Include only store orders with this external reference number.
externalTransferId	NA	string($text128) (query)	Include only store orders with this external transfer identifier.
externalPurchaseOrderId	NA	string($text128) (query)	Include only store orders with this external purchase order identifier.
status	NA	integer($int4) (query)	1 - New 2 - In Progress 3 - Approved 4 - Canceled 5 - Submitted Available values : 1, 2, 3, 4, 5
itemId	NA	string($text25) (query)	Include only store orders containing this item.
updateDateFrom	NA	string($date-time) (query)	Include only store orders with an update date on or after this date.
updateDateTo	NA	string($date-time) (query)	Include only store orders with an update date on or before this date.

Responses

This section describes the responses of the Find Store Order API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "storeOrderId": 11111,
    "storeId": 1234,
    "externalTransferId": "7000",
    "externalPurchaseOrderId": "8000",
    "externalReference": "9000",
    "description": "Need more inventory",
    "status": 1,
    "requestedDeliveryDate": "2025-01-21T14:44:31.735Z",
    "updateDate": "2025-01-21T14:44:31.735Z"
  }
]
```


Schema — StoreOrderHeaderIdo

Table 4-93 StoreOrderHeaderIdo— Object

Element Name	Required	Data Type/ Example	Description
storeOrderId	NA	integer($int12) example: 11111	The unique identifier of the store order.
storeId	NA	number($int10) example: 1234	The store identifier of the store order.
externalTransferId	NA	string($text128) example: 7000	An external transfer identifier that this store order is associated to.
externalPurchaseOrderId	NA	string($text128) example: 8000	An external purchase order identifier that this store order is associated to.
externalReference	NA	string($text128) example: 9000	A reference to this store order in an external system.
description	NA	string($text2000) example: Need more inventory	A description of the store order or cause of the store order.
status	NA	integer($int4) example: 1	1 - New 2 - In Progress 3 - Approved 4 - Canceled 5 - Submitted Enum: [1, 2, 3, 4, 5]
requestedDeliveryDate	NA	string($date-time)	The date the store request the delivery arrive by.

Table 4-93 (Cont.) StoreOrderHeaderIdo— Object

Element Name	Required	Data Type/ Example	Description
updateDate	NA	string($date-time)	The date the store order was lasted updated within the system.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Create Store Order

This operation will cause the system to generate a new inventory request to an external system which will then generate a new transfer or purchase order to fulfill the inventory request.

Method

```
POST
```

URL

```
/storeorders
```

Request Parameters

There are no request parameters.

The request body is application/json.

Details about the store order to request.

Example Value

```
{
  "storeId": 1234,
  "description": "Need more inventory",
  "requestedDeliveryDate": "2025-01-21T15:26:24.751Z",
  "contextTypeId": 1234,
  "restrictToSupplierId": 1111,
  "restrictToWarehouseId": 2222,
  "restrictToAreaId": 4444,
  "restrictToDepartmentId": 1000,
```

```
  "restrictToClassId": 1000,
  "restrictToSubclassId": 1000,
  "storeOrderOnly": false,
  "lineItems": [
    {
      "itemId": "55001234",
      "quantity": 2,
      "caseSize": 5,
      "deliverySlotId": 55555
    }
  ]
}
```

Schema — StoreOrderCreateIdo

Table 4-94 StoreOrderCreateIdo — Object

Element Name	Required	Data Type/ Example	Description
storeId	Yes	number($int10) example: 1234	The store identifier of the store order.
description	NA	string($text2000) example: Need more inventory	A description of the store order or cause of the store order.
requestedDeliveryDate	NA	string($date-time)	The date the store request the delivery arrive by.
contextTypeId	NA	integer($int18) example: 1234	A context identifier associated to the store order.
restrictToSupplierId	NA	integer($int12) example: 1111	Only allow items on the store order that are associated to this supplier.
restrictToWarehouseId	NA	integer($int12) example: 2222	Only allow items on the store order that are associated to this warehouse.
restrictToAreaId	NA	integer($int12) example: 4444	Only allow items on the store order that are associated to this store sequence area.
restrictToDepartmentId	NA	integer($int15) example: 1000	Only allow items that are within this department.
restrictToClassId	NA	integer($int15) example: 1000	Only allow items that are within this class. If included, department must also be included.
restrictToSubclassId	NA	integer($int15) example: 1000	Only allow items that are within this subclass. If included, class must also be included.
storeOrderOnly	NA	boolean example: false	If true, only store order replenishment items can be added to the order.
lineItems	Yes	object	The items to request inventory for.

Table 4-95 StoreOrderCreateItemIdo — Object

Element Name	Required	Data Type/ Example	Description
itemId	Yes	string($text25) example: 55001234	The SKU level item identifier.
quantity	Yes	number($decimal(20,4)) example: 2	The quantity of the item to be requested from an external system.
caseSize	NA	number($decimal(10,2)) example: 5	The case size of this line item.
deliverySlotId	NA	integer($int15) example: 55555	The unique identifier of the delivery time.

Responses

This section describes the responses of the Create Store Order API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value

```
[
  {
    "storeOrderId": 11111,
    "storeId": 1234,
    "status": 1
  }
]
```

Schema — StoreOrderStatusIdo

Table 4-96 StoreOrderStatusIdo — Object

Element Name	Required	Data Type/Example	Description
storeOrderId	NA	integer($int12) example: 11111	The unique identifier of the store order.
storeId	NA	number($int10) example: 1234	The store identifier of the store order.

Table 4-96 (Cont.) StoreOrderStatusIdo — Object

Element Name	Required	Data Type/Example	Description
status	NA	integer($int4) example: 1	1 - New 2 - In Progress 3 - Approved 4 - Canceled 5 - Submitted Enum: [1, 2, 3, 4, 5]

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Read Store Order

This section describes the Read Store Order API. This API retrieves all the details about a store order.

Method

```
GET
```

URL

```
/storeorders/{storeOrderId}
```

Request Parameters

Table 4-97 Read Store Order — Request Parameters

Parameter	Required	Data Type	Description
storeOrderId	Yes	number($int12) (path)	The unique identifier of the store order..

Responses

This section describes the responses of the Read Store Order API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "storeOrderId": 11111,
    "storeId": 1234,
    "externalTransferId": "7000",
    "externalPurchaseOrderId": "8000",
    "externalReference": "9000",
    "parentReference": 1111,
    "description": "Need more inventory",
    "status": 1,
    "origin": 1,
    "requestedDeliveryDate": "2025-01-21T15:43:39.415Z",
    "autoApproveDate": "2025-01-21T15:43:39.415Z",
    "addItemsAllowed": true,
    "replenishmentItemsOnly": false,
    "contextTypeId": 1234,
    "deliverySlotId": 4565,
    "productGroupId": 5678,
    "productGroupDescription": "Bi-Weekly Restock",
    "restrictToSupplierId": 1111,
    "restrictToWarehouseId": 2222,
    "restrictToHierarchyId": 3333,
    "restrictToAreaId": 4444,
    "externalCreateDate": "2025-01-21T15:43:39.415Z",
    "createDate": "2025-01-21T15:43:39.415Z",
    "createUser": "userAbc",
    "updateDate": "2025-01-21T15:43:39.415Z",
    "approvedDate": "2025-01-21T15:43:39.415Z",
    "approvedUser": "userAbc",
    "lineItems": [
      {
        "lineId": 1234,
        "itemId": "55001234",
        "approvedQuantity": 2,
        "suggestedQuantity": 2,
        "caseSize": 5,
        "unitCostCurrency": "USD",
        "unitCostAmount": 5.5,
        "deliverySlotId": 55555
      }
    ]
  }
]
```


Schema — StoreOrderIdo

Table 4-98 StoreOrderIdo— Object

Element Name	Required	Data Type/ Example	Description
storeOrderId	NA	integer($int12) example: 11111	The unique identifier of the store order.
storeId	NA	number($int10) example: 1234	The store identifier of the store order.
externalTransferId	NA	string($text128) example: 7000	An external transfer identifier that this store order is associated to.
externalPurchaseOrderId	NA	string($text128) example: 8000	An external purchase order identifier that this store order is associated to.
externalReference	NA	string($text128) example: 9000	A reference to this store order in an external system.
parentReference	NA	integer($int12) example: 1111	Reference to a parent transfer or order.
description	NA	string($text2000) example: Need more inventory	A description of the store order or cause of the store order.
status	NA	integer($int4) example: 1	1 - New 2 - In Progress 3 - Approved 4 - Canceled 5 - Submitted Enum: [1, 2, 3, 4, 5]
origin	NA	integer($int4) example: 1	1 - External 2 - Manual 3 - System Enum: [1, 2, 3]
requestedDeliveryDate	NA	string($date-time)	The date the store requested the delivery arrive by.
autoApproveDate	NA	string($date-time)	The date the record was automatically approved in the system.
addItemsAllowed	NA	boolean example: true	True indicates new items can be added to the store order.

Table 4-98 (Cont.) StoreOrderIdo— Object

Element Name	Required	Data Type/ Example	Description
replenishmentItemsOnly	NA	boolean example: false	True indicates only store order replenishment items can be added to the store order.
contextTypeId	NA	integer($int18) example: 1234	A context identifier associated to the store order.
deliverySlotId	NA	integer($int15) example: 4565	The unqiue identifer of a delivery time.
productGroupId	NA	integer($int12) example: 5678	The unique identifier of a product group associated to the order.
productGroupDescription	NA	string($text250) example: Bi-Weekly Restock	The description of the product group associated to the order.
restrictToSupplierId	NA	integer($int12) example: 1111	Only allow items on the store order that are associated to this supplier.
restrictToWarehouseId	NA	integer($int12) example: 2222	Only allow items on the store order that are associated to this warehouse.
restrictToHierarchyId	NA	integer($int12) example: 3333	Only allow items on the store order that belong to this merchandise hierarchy.
restrictToAreaId	NA	integer($int12) example: 4444	Only allow items on teh store order that are associated to this store sequence area.
externalCreateDate	NA	string($date-time)	The date the store order was created in an external system.
createDate	NA	string($date-time)	The date the store order was created in the system.
createUser	NA	string($text128) example: userAbc	The user that created the store order in the system.
updateDate	NA	string($date-time)	The date the store order was lasted updated in the system.
approvedDate	NA	string($date-time)	The date the store order was approved in the system.

Table 4-98 (Cont.) StoreOrderIdo— Object

Element Name	Required	Data Type/ Example	Description
approvedUser	NA	string($text128) example: userAbc	The user that approved the store order in the system.
lineItems	NA	object	A list of items on the store order.

Table 4-99 StoreOrderItemIdo— Object

Element Name	Required	Data Type/ Example	Description
lineId	NA	number($int12) example: 1234	The unique system identifier of the line item.
itemId	NA	string($text25) example: 55001234	The SKU level item identifier.
approvedQuantity	NA	number($decimal(20,4)) example: 2	The quantity of the item approved to order.
suggestedQuantity	NA	number($decimal(20,4)) example: 2	The quantity of the item ordered from an external system.
caseSize	NA	number($decimal(10,2)) example: 5	The case size of this line item.
unitCostCurrency	NA	string($text3) example: USD	The currency of the unit cost.
unitCostAmount	NA	number($decimal(12,4)) example: 5.5	The value of the unit cost.
deliverySlotId	NA	integer($int15) example: 55555	The unique identifier of the delivery time.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Update Store Order

This section describes the Update Store Order API. This operation update the information on a store order before store order approval.

Method

```
POST
```

URL

```
/storeorders/{storeOrderId}
```

Request Parameters

Table 4-100 Update Store Order — Request Parameters

Parameter	Required	Data Type	Description
storeOrderId	yes	integer($int12) (path)	The unique identifier of the store order.

The request body is application/json.

Details to update on the store order.

Example Value

```
{
  "description": "Need more inventory",
  "requestedDeliveryDate": "2025-01-22T11:09:54.923Z",
  "contextTypeId": 1234,
  "lineItems": [
    {
      "itemId": "55001234",
      "quantity": 2,
      "caseSize": 5,
      "deliverySlotId": 55555
    }
  ]
}
```

Schema — StoreOrderUpdateIdo

Table 4-101 StoreOrderUpdateIdo— Object

Element Name	Required	Data Type/ Example	Description
description	NA	string($text2000) example: Need more inventory	A description of the store order or cause of the store order.
requestedDeliveryDate	NA	string($date-time)	The date the store request the delivery arrive by.
contextTypeId	NA	integer($int18) example: 1234	A context identifier associated to the store order.
lineItems	NA	object	A list of line items to update on the store order.

Table 4-102 StoreOrderUpdateItemIdo— Object

Element Name	Required	Data Type/ Example	Description
itemId	Yes	string($text25) example: 55001234	The SKU level item identifier.
quantity	Yes	number($decimal(20,4)) example: 2	If the store order originated internally, then this modifies the quantity to be requested from the external system. If the store order originated in an external system, then this defines the approved amount of the original order.
caseSize	NA	number($decimal(10,2)) example: 5	The case size of this line item.
deliverySlotId	NA	integer($int15) example: 55555	The unique identifier of the delivery time.

Responses

This section describes the responses of the Update Store Order API.

Response Code: 204

No Content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Approve Store Order

This section describes the Approve Store Order API. This operations will approve a store order. It may be either a new request for inventory or the approval of an already existing transfer or purchase order. Either way, the store is approved and a notification sent to external systems, either a request to create a new transfer/purchase order or notification of an approval of an existing transfer/purchase order.

Method

```
POST
```

URL

```
/storeorders/{storeOrderId}/approve
```

Request Parameters

Table 4-103 Approve Store Order — Request Parameters

Parameter	Required	Data Type	Description
storeOrderId	yes	integer($int12) (path)	The unique identifier of the store order.

Responses

This section describes the responses of the Approve Store Order API.

Response Code: 204

No Content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Cancel Store Order

This section describes the Cancel Store Order API. This operation will cancel the store order.

Method

POST

URL

/storeorders/{storeOrderId}/cancel

Request Parameters

Table 4-104 Cancel Store Order — Request Parameters

Parameter	Required	Data Type	Description
storeOrderId	yes	integer($int12) (path)	The unique identifier of the store order.

Responses

This section describes the responses of the Cancel Store Order API.

Response Code: 204

No Content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Import Store Order

This operation will import store orders from an external system. These store orders are already transfers or purchase orders that are being planned and require store approval before proceeding.

Method

POST

URL

```
/storeorders
```

Request Parameters

There are no request parameters.

The request body is application/json.

Details about the store order.

Example Value

```
{
  "orderNumber": "7000",
  "storeId": 1234,
  "locationType": 1,
  "locationId": 4500,
  "parentReference": 1111,
  "requestedDeliveryDate": "2025-01-22T11:41:05.395Z",
  "contextTypeId": 1234,
  "deliverySlotId": 4565,
  "currencyCode": "USD",
  "comments": "Automated department replenishment",
  "lineItems": [
    {
      "itemId": "55001234",
      "quantity": 2,
      "caseSize": 5,
      "unitCostAmount": 5.5
    }
  ]
}
```

Schema — StoreOrderImportIdo

Table 4-105 StoreOrderImportIdo — Object

Element Name	Required	Data Type/ Example	Description
orderNumber	Yes	string($text128) example: 7000	The original transfer or purchase order identifier of the store order from an external system.
storeId	Yes	number($int10) example: 1234	The store identifier of the store order.

Table 4-105 (Cont.) StoreOrderImportIdo — Object

Element Name	Required	Data Type/ Example	Description
locationType	Yes	integer($int4) example: 1	1 - Supplier 2 - Warehouse Enum: [1, 2]
locationId	Yes	integer($int18) example: 4500	The identifier the location shipping the goods.
parentReferen ce	NA	integer($int12) example: 1111	Reference to a parent transfer or order.
requestedDeli veryDate	NA	string($date-time)	The date the store requests the delivery arrive by.
contextTypeId	NA	integer($int18) example: 1234	A context identifier associated to the store order.
deliverySlotId	NA	integer($int15) example: 4565	The unqiue identifer of a delivery time.
currencyCode	NA	integer($int15) example: USD	The currency code of cost values on the order.
comments	NA	string($text20 00) example: Automated department replenishment	Comments associated to the store order.
lineItems	Yes	object	The items to import on the store order.

Table 4-106 StoreOrderImportItemIdo — Object

Element Name	Required	Data Type/ Example	Description
itemId	NA	string($text25) example: 55001234	The SKU level item identifier.
quantity	NA	number($deci mal20,4) example: 2	The quantity of the suggested item order generated from an external system.
caseSize	NA	number($deci mal10,2) example: 5	The case size of this line item.
unitCostAmou nt	NA	number($deci mal(12,4)) example: 5.5	The value of the unit cost in the currency of the order.

Responses

This section describes the responses of the Import Store Order API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value

```
[
  {
    "storeOrderId": 11111,
    "storeId": 1234,
    "status": 1
  }
]
```

Schema — StoreOrderStatusIdo

Table 4-107 StoreOrderStatusIdo — Object

Element Name	Required	Data Type/Example	Description
storeOrderId	NA	integer($int12) example: 11111	The unique identifier of the store order.
storeId	NA	number($int10) example: 1234	The store identifier of the store order.
status	NA	integer($int4) example: 1	1 - New 2 - In Progress 3 - Approved 4 - Canceled 5 - Submitted Enum: [1, 2, 3, 4, 5]

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Find Order Timeslots

This section describes the Find Order Timeslots. This API retrieves all the store order delivery timeslots.

Method

```
GET
```

URL

```
/storeorders/timeslots
```

Request Parameters

There are no request parameters.

Responses

This section describes the responses of the Find Order Timeslots API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
  {
    "id": 1,
    "code": "Morn",
    "description": "Morning",
    "sequence": 1,
    "publish": true
  }
]
```


Schema — StoreOrderTimeslotIdo

Table 4-108 StoreOrderTimeslotIdo — Object

Element Name	Required	Data Type/Example	Description
id	NA	number($int15) example: 1	The unique identifier of the delivery slot.
code	NA	string($text15) example: Morn	The external code of the delivery time slot.
description	NA	string($text240) example: Morning	The description of the time slot.

Table 4-108 (Cont.) StoreOrderTimeslotIdo — Object

Element Name	Required	Data Type/Example	Description
sequence	NA	number($int8) example: 1	The order the time slot should appear in a list.
publish	NA	boolean example: true	True if the delivery time slot should be published, false otherwise.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Find Order Context Types

This section describes the Find Order Context Types. This API retrieves all the context type available for a store order

Method

```
GET
```

URL

```
/storeorders/contexts
```

Request Parameters

There are no request parameters.

Responses

This section describes the responses of the Find Order Context Types API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value

```
[
  {
    "id": 11111,
    "code": "CS",
    "description": "Consumables",
    "sequence": 1
  }
]
```

Schema — StoreOrderContextTypeIdo

Table 4-109 StoreOrderContextTypeIdo — Object

Element Name	Required	Data Type/Example	Description
id	NA	number($int18) example: 11111	The identifier of the context type.
code	NA	string($text6) example: CS	The identification code of the context type.
description	NA	string($text1) example: Consumables	The description of the context type.
sequence	NA	number($int3) example: 1	This number indicates the order the context type should appear in a list.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Find Order Areas

This section describes the Find Order Areas. This API retrieves all the order areas available for a store order.

Method

```
GET
```

URL

```
/storeorders/areas/{storeId}
```

Request Parameters

Table 4-110 Find Order Areas— Request Parameters

Parameter	Required	Data Type	Description
storeId	yes	integer($int10) (path)	The store to retrieve completed product areas for.

Responses

This section describes the responses of the Find Order Areas API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value

```
[
  {
    "areaId": 13413513443,
    "itemBasketId": 34134134,
    "description": "11111"
  }
]
```

Schema — StoreOrderAreaIdo

Table 4-111 StoreOrderAreaIdo — Object

Element Name	Required	Data Type/Example	Description
areaId	NA	integer($int12) example: 13413513443	The unique identifier of the product area.
itemBasketId	NA	integer($int12) example: 34134134	The unique identifier of an item basket associated to the area.
description	NA	string($text255) example: 11111	The description of the store order product area.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

REST Service: Store Sequencing

This service defines operations to manage Store Sequence information.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/sequences

APIs

API	Description
Find Sequence Areas	Finds sequence area header based on search criteria.
Read Sequence Area	Reads the details of a sequence area.
Create Sequence Area	Create a sequence area along with all its details.
Update Sequence Area	Replace the entire sequence area including all its details (a complete sequence area must be sent).
Delete Sequence Area	Delete a sequenced area and all its details.
Create Sequence Item	Create a single sequence item in a sequence area.
Update Sequence Item	Updates a single sequence item from a sequence area.
Delete Sequence Item	Removes a single sequence item from a sequence area.

API: Find Sequence Areas

This API is used to search for sequence area headers. No items or detailed information is returned by this API. At least one criteria is required in order to search.

API Basics

Table 4-112 API Basics

Endpoint URL	{base URL}
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	Query Parameters
Output	Collection of Sequence Areas
Max Response Limit	15,000

Query Parameters

Table 4-113 Query Parameters

Attribute	Type	Definition
storeId	Long(12)	Include only records for this store.
areaType	Integer(9)	Area Type (see Index).
departmentId	Long(12)	The unique identifier of a department associated to the area.
classId	Long(12)	The unique identifier of a class within the department associated to the area.
itemId	String(25)	Include only records with this item on them.

Output Data Definition

Table 4-114 Output Data Definition

Attribute	Type	Definition
sequenceAreaId	Long(10)	The unique identifier of the sequence area.
storeId	Long(10)	The unique identifier of the store.
description	String(255)	A description of this store sequence.
areaType	Integer(9)	Area Type (see Index).
departmentId	Long(12)	The unique identifier of a department associated to the area.
classId	Long(12)	The unique identifier of a class within the department associated to the area.
sequenceOrder	Long(20	The order of this store sequence compared to other store sequences at the store.
unsequenced	Boolean	True indicates that this is a default sequence area that contains all the items that have not been sequenced within a different area.

API: Read Sequence Area

This API is used to read an entire sequence area including its details.

API Basics

Table 4-115 API Basics

Endpoint URL	{base URL}/{sequenceAreaId}
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	N/A
Output	Sequence Area
Max Response Limit	N/A

Path Parameter Definition

Table 4-116 Path Parameter Definition

Attribute	Type	Definition
sequenceAreaId	Long(10)	The unique identifier of the sequence area.

Output Data Definition

Table 4-117 Output Data Definition

Attribute	Type	Definition
sequenceAreaId	Long(10)	The unique identifier of the sequence area.
storeId	Long(10)	The unique identifier of the store.
description	String(255)	A description of this store sequence.
areaType	Integer(9)	Area Type (see Index).
departmentId	Long(12)	The unique identifier of a department associated to the area.
classId	Long(12)	The unique identifier of a class within the department associated to the area.
sequenceOrder	Long(20	The order of this store sequence compared to other store sequences at the store.
unsequenced	Boolean	True indicates that this is a default sequence area that contains all the items that have not been sequenced within a different area.
Items	Collection	Contains all the items in the area (see Store Sequence Item)

Store Sequence Item

Table 4-118 Store Sequence Item

Payload	Type	Definition
sequenceItemId	Long(12)	The unique area item identifier.
itemId	String(25)	The unique identifier of the item
sequenceOrder	Long(20)	The order of the item within its sequence.
capacity	BigDecimal(11,2)	The amount of the item that can be contained in the area for that item at the unit of measure.
width	Long(12)	The number of items that can fit across the width of the shelf.
uomMode	Integer(2)	The mode of display of the unit of measure of the item.
primaryLocation	Boolean	Y indicates this is the primary sequence for the item.
ticketQuantity	BigDecimal(11,2)	The quantity of tickets that need to be printed for the item inventory area.
ticketFormatId	Long(10)	The unique identifier of the ticket format used to print the tickets.

API: Create Sequence Area

API Basics

Endpoint URL	{base URL}
Method	POST
Successful Response	200 OK
Processing Type	Synchronous
Input	Sequence Area Create Info
Output	Sequence Area Reference Info
Max Response Limit	1,000 items in the area

Input Data Definition

Attribute	Type	Req	Definition
storeId	Long(10)	X	The unique identifier of the store.
description	String(255)		A description of this store sequence.
areaType	Integer(9)	X	Area Type (see Index).
departmentId	Long(12)		The unique identifier of a department associated to the area.
classId	Long(12)		The unique identifier of a class within the department associated to the area.
sequenceOrder	Long(20)	X	The order of this store sequence compared to other store sequences at the store. The sequence order must be unique for the set of areas within the store.
items	Collections	X	All the items that belong to this sequence area (see Sequence Area Item Create)

Store Sequence Area Item Create

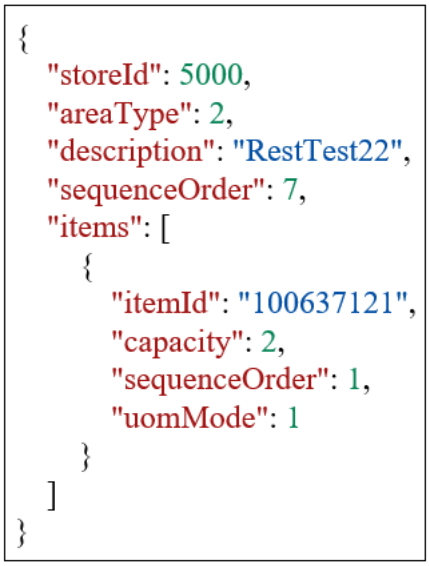
Payload	Type	Req	Definition
itemId	String(25)	X	The unique identifier of the item
sequenceOrder	Long(20)	X	The order of the item within its sequence.
capacity	BigDecimal(11,2)	X	The amount of the item that can be contained in the area for that item at the unit of measure.
width	Long(12)		The number of items that can fit across the width of the shelf.
uomMode	Integer(2)	X	The mode of display of the unit of measure of the item.
primaryLocation	Boolean		Y indicates this is the primary sequence for the item.
ticketQuantity	BigDecimal(11,2)		The quantity of tickets that need to be printed for the item inventory area.

ticketFormatId	Long(10)	The unique identifier of the ticket format used to print the tickets.

Output Data Definition

Attribute	Type	Definition
sequenceAreaId	Long(12)	The newly created adjustment identifier.
storeId	Long(10)	The store identifier.

Example



```
{
  "storeId": 5000,
  "areaType": 2,
  "description": "RestTest22",
  "sequenceOrder": 7,
  "items": [
    {
      "itemId": "100637121",
      "capacity": 2,
      "sequenceOrder": 1,
      "uomMode": 1
    }
  ]
}
```

API: Update Sequence Area

This API is used to update a sequence area within a store.

This API will **replace** the entire sequence area with the new data passed to the API. Only the area identifier and store identifier will be preserved from previous data.

API Basics

Table 4-119 API Basics

Endpoint URL	{base URL}
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Input	Sequence Area Update Info
Output	N/A
Max Response Limit	1,000 items in the area

Path Parameter Definition

Table 4-120 Path Parameter Definition

Attribute	Type	Definition
sequenceItemId	Long(12)	The unique area item identifier

Input Data Definition

Table 4-121 Input Data Definition

Attribute	Type	Req	Definition
description	String(255)		A description of this store sequence.
areaType	Integer(9)	X	Area Type (see Index).
departmentId	Long(12)		The unique identifier of a department associated to the area.
classId	Long(12)		The unique identifier of a class within the department associated to the area.
sequenceOrder	Long(20)	X	The order of this store sequence compared to other store sequences at the store. The sequence order must be unique for the set of areas within the store.
items	Collections	X	All the items that belong to this sequence area (see Sequence Area Item Update)

Store Sequence Area Item Update

Table 4-122 Store Sequence Area Item Update

Payload	Type	Req	Definition
itemId	String(25)	X	The unique identifier of the item
sequenceOrder	Long(20)	X	The order of the item within its sequence.
capacity	BigDecimal(11,2)	X	The amount of the item that can be contained in the area for that item at the unit of measure.
width	Long(12)		The number of items that can fit across the width of the shelf.
uomMode	Integer(2)	X	The mode of display of the unit of measure of the item.
primaryLocation	Boolean		Y indicates this is the primary sequence for the item.
ticketQuantity	BigDecimal(11,2)		The quantity of tickets that need to be printed for the item inventory area.
ticketFormatId	Long(10)		The unique identifier of the ticket format used to print the tickets.

Example

```
{
  "areaType": 2,
  "description": "RestTest22",
  "sequenceOrder": 7,
  "items": [
    {
      "itemId": "100637121",
      "capacity": 2,
      "sequenceOrder": 1,
      "uomMode": 1
    }
  ]
}
```


API: Delete Sequence Area

This API is used to delete a sequence area and all its items. This will not delete a sequence area currently being used by a sequenced stock count.

API Basics

Table 4-123 API Basics

Endpoint URL	{base URL}
Method	DELETE
Successful Response	204 No Content
Processing Type	Synchronous
Input	N/A
Output	N/A
Max Response Limit	N/A

API: Create Sequence Item

This API is used to create a new sequence item within a sequence area.

API Basics

Table 4-124 API Basics

Endpoint URL	{base URL}/{sequenceAreaId}/items
Method	POST
Successful Response	200 No Content
Processing Type	Synchronous
Input	Store Sequence Item Create

Table 4-124 (Cont.) API Basics

Output	Store Sequence Item
Max Response Limit	N/A

Input Data Definition

Table 4-125 Input Data Definition

Payload	Type	Req	Definition
itemId	String(25)	X	The unique identifier of the item
sequenceOrder	Long(20)	X	The order of the item within its sequence.
capacity	BigDecimal(11,2)	X	The amount of the item that can be contained in the area for that item at the unit of measure.
width	Long(12)		The number of items that can fit across the width of the shelf.
uomMode	Integer(2)	X	The mode of display of the unit of measure of the item. (see Index)
primaryLocation	Boolean		Y indicates this is the primary sequence for the item.
ticketQuantity	BigDecimal(11,2)		The quantity of tickets that need to be printed for the item inventory area.
ticketFormatId	Long(10)		The unique identifier of the ticket format used to print the tickets.

Example

```
{
  "itemId": "100637113",
  "capacity": 2,
  "sequenceOrder": 1,
  "uomMode": 1
}
```

API: Update Sequence Item

This API is used to update a sequence item within a sequence area.

API Basics

Table 4-126 API Basics

Endpoint URL	{base URL}/{sequenceAreaId}/items/{itemId}
Method	POST

Table 4-126 (Cont.) API Basics

Successful Response	204 No Content
Processing Type	Synchronous
Input	N/A
Output	N/A
Max Response Limit	N/A

Path Parameter Definition

Table 4-127 Path Parameter Definition

Attribute	Type	Definition
sequencerAreaId	Long(12)	The unique sequence area identifier.
itemId	String(25)	The item to be deleted from the sequence.

Input Data Definition

Table 4-128 Input Data Definition

Payload	Type	Req	Definition
sequenceOrder	Long(20)	X	The order of the item within its sequence.
capacity	BigDecimal(11,2)	X	The amount of the item that can be contained in the area for that item at the unit of measure.
width	Long(12)		The number of items that can fit across the width of the shelf.
uomMode	Integer(2)	X	The mode of display of the unit of measure of the item.
primaryLocation	Boolean		Y indicates this is the primary sequence for the item.
ticketQuantity	BigDecimal(11,2)		The quantity of tickets that need to be printed for the item inventory area.
ticketFormatId	Long(10)		The unique identifier of the ticket format used to print the tickets.

Example

```
{
  "capacity": 8,
  "sequenceOrder": 2,
  "uomMode": 1
}
```

API: Delete Sequence Item

This API is used to delete a sequence item from an area.

API Basics

Table 4-129 API Basics

Endpoint URL	{base URL}/{sequenceAreaId}/items/{itemId}
Method	DELETE
Successful Response	204 No Content
Processing Type	Synchronous
Input	N/A
Output	N/A
Max Response Limit	N/A

Path Parameter Definition

Table 4-130 Path Parameter Definition

Attribute	Type	Definition
sequencerAreaId	Long(12)	The unique sequence area identifier.
itemId	String(25)	The item to be deleted from the sequence.

Additional Data Definitions

Sequence Area Type

Table 4-131 Sequence Area Type

ID	Status
1	Shopfloor
2	Backroom
3	None

Sequence UOM Mode

Table 4-132 Sequence UOM Mode

ID	Status
1	Units
2	Cases

REST Service: Supplier

This service integrates supplier and supplier item foundation data.

Asynchronous supplier integration is processed through staged messages and is controlled by the MPS Work Type: DcsSupplier.

Asynchronous supplier item integration is processed through staged messages and is controlled by the MPS Work Type: DcsSupplierItem.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/suppliers

API Definitions

API	Description
Import Suppliers	Imports supplier.
Delete Supplier	Deletes a supplier.
Import Items	Imports items for a supplier.
Delete Items	Deletes items from a supplier.
Import Item UOMs	Imports units of measure for a supplier item.
Delete Item UOMs	Deletes units of measure from a supplier item.
Import Item Countries	Imports countries for a supplier item.
Delete Item Countries	Deletes countries from a supplier item.
Import Item Dimensions	Imports items dimensions for a supplier item country.
Delete Item Dimensions	Deletes dimensions from a supplier item country.
Import Item Manufacturers	Imports manufacturers for a supplier item country.
Delete Item Manufacturers	Deletes manufacturers from a supplier item country.

API: Import Suppliers

Imports a list of suppliers.

If the import contains more than 500 suppliers, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/import
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous

Input	List of suppliers to Import
Output	None
Max Response Limit	500

Input Data Definition

Attribute	Data Type	Required	Description
suppliers	List of details	Yes	A collection of up to 500 suppliers to import.

Detail Data Definition

Attribute	Data Type	Required	Description
supplierId	Long (10)	Yes	The supplier identifier.
name	String (240)	-	The supplier's name.
status	Integer	Yes	The supplier’s status: See Supplier Status
dunsNumber	String (9)	-	The nine-digit number assigned and maintained by Dun and Bradstreet.
taxId	String (18)	-	The tax identification number of the supplier.
parentId	Long (128)	-	The parent supplier's identifier.
countryCode	String (3)	-	The 2-3 character ISO code of the country.
languageCode	String (3)	-	The 2-3 character ISO code of the language.
currencyCode	String (3)	-	The 2-3 character ISO code of the currency.
returnAllowed	Boolean	-	True is return is allowed to the supplier, N otherwise.
authorizationRequired	Boolean	-	True indicates an authorization number is required when merchandise is return to this supplier.
orderCreateAllowed	Boolean	-	True indicates at a purchase order can be created for the supplier when processing deliveries from that supplier.
vendorCheck	Boolean	-	True indicates that orders from this supplier requires vendor control.
vendorCheckPercent	BigDecimal	-	Indicates the percentage of items per receipt that will be marked for vendor checking.
quantityLevel	Integer	Yes	The Quantity Level: See Quantity Level
deliveryDiscrepancy	Integer	Yes	The delivery discrepancy: See Supplier Delivery Discrepancy Type
organizationUnitIds	List<Long>	Yes	A complete list of organization unit identifiers for the supplier.

Example Input

```
{
"suppliers": [
```

{
"supplierId": 5000,
"status": 1,
"quantityLevel": 1,
"deliveryDiscrepancy": 1,
"organizationUnitIds": [1]
},
{
"supplierId": 5001,
"status": 1,
"returnAllowed": false,
"quantityLevel": 1,
"deliveryDiscrepancy": 1,
"organizationUnitIds": [1]
}
]
}

Additional Data Definitions

Supplier Delivery Discrepancy Type

Value	Definition
1	Allow Any Discrepancy
2	Allow Overage But Not Short Receipts
3	Discrepancy Not Allowed

Supplier Status

Value	Definition
1	Active
2	Inactive

Quantity Level

Value	Definition
1	Eaches
2	Cases

API: Delete Supplier

Deletes a supplier.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/{supplierId}/delete
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	None
Output	None
Max Response Limit	1000

Path Parameter Definitions

Attribute	Definition
supplierId	The internal identifier of the supplier.

API: Import Items

Imports supplier items. Later during asynchronous processing, it validates that both the supplier and item exist before inserting new records.

If the import contains more than 500 supplier items, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/items
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	List of Supplier Items to import
Output	None
Max Response Limit	500

Path Parameter Definitions

Attribute	Definition
supplierId	The internal identifier of the supplier.

Input Data Definition

Attribute	Data Type	Required	Description

items	List of details	Yes	The supplier item information to import.

Detail Data Definition

Attribute	Data Type	Required	Description
supplierId	Long (10)	Yes	The supplier identifier.
itemId	String (25)	Yes	The item identifier.
vendorProductNumber	String (256)	-	Vendor product number.
primary	Boolean	-	True indicates this supplier is the primary supplier for the item at all locations.

Example Input

{
"items": [
{
"supplierId": 5000,
"itemId": "163715121",
"vendorProductNumber": "abc"
},
{
"supplierId": 5001,
"itemId": "163715121",
"vendorProductNumber": "def"
}
]
}

API: Delete Items

Deletes supplier items.

If the delete contains more than 500 supplier items, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/items/delete
Method	POST
Successful Response	202 Accepted

Processing Type	Asynchronous
Input	List of supplier items
Output	None
Max Response Limit	500

Input Data Definition

Attribute	Data Type	Required	Description
items	List of details	Yes	The supplier item information to delete.

Detail Data Definition

Attribute	Data Type	Required	Description
supplierId	Long (10)	Yes	The supplier identifier.
itemId	String (15)	Yes	The item identifier.

Example Input

{

"items":

[

{

"supplierId":"9002",

"itemId": "100637130"

},

{

"supplierId":"9002",

"itemId": "100637148"

}

]

}

API: Import Item UOMs

Imports supplier item unit of measure information.

If the import contains more than 500 supplier item units of measure, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/uoms
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	List of supplier items UOMs to import
Output	None
Max Response Limit	500

Input Data Definition

Attribute	Data Type	Required	Description
uoms	List of details	Yes	The UOMs to import.

Detail Data Definition

Attribute	Data Type	Required	Description
supplierId	Long (10)	Yes	The supplier identifier.
itemId	String (25)	Yes	The item identifier.
unitOfMeasure	String (4)	Yes	The unit of measure.
Value	BigDecimal	Yes	Equivalent item/supplier shipping carton value in unit of measure

Example Input

{

"uoms": [

{

"supplierId": 5000,

"itemId": "163715121",

"unitOfMeasure": "KG",

"value": "1.0"

},

{

"supplierId": 5001,

"itemId": "163715121",

"unitOfMeasure": "KG",

"value": "1.0"

}

]

}

API: Delete Item UOMs

Deletes supplier item unit of measure information.

If the delete contains more than 500 supplier item units of measure, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/uoms/delete
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	List of supplier items UOMs to delete
Output	None
Max Response Limit	500

Input Data Definition

Attribute	Data Type	Required	Description
uoms	List of details	Yes	The UOMs to delete.

Detail Data Definition

Attribute	Data Type	Required	Description
supplierId	Long (10)	Yes	The supplier identifier.
itemId	String (25)	Yes	The item identifier.
unitOfMeasure	String (4)	Yes	The unit of measure.

Example Input

{

"uoms":

[

{

"supplierId":"9002",

"itemId": "100637130",

"unitOfMeasure":"EA"

},

{

"supplierId":"9002",

"itemId": "100637148",

"unitOfMeasure":"EA"

}

]

API: Import Item Countries

Imports supplier item country information. If the imported supplier item country is for the primary supplier of the item, the item's case size will be updated on the item master to reflect the imported case size.

If the import contains more than 500 supplier item countries, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/countries
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	List of supplier items country to import
Output	None
Max Response Limit	500

Input Data Definition

Attribute	Data Type	Required	Description
countries	List of details	Yes	The countries to import.

Detail Data Definition

Attribute	Data Type	Required	Description
supplierId	Long (10)	Yes	The supplier identifier.
itemId	String (25)	Yes	The item identifier.
countryCode	String (3)	Yes	The ISO country code of the supplier that produces the item.
caseSize	BigDecimal	Yes	Number of items with a case from the supplier.
unitCostCurrency	String (3)	-	The unit cost currency for that item and supplier in that country.
unitCostValue	BigDecimal	-	The unit cost of the item and supplier in that country.

Example Input

{

```
  "countries": [
    {
      "supplierId": 5100,
      "itemId": "163715121",
      "countryCode": "US",
      "caseSize":7
    },
    {
      "supplierId": 5200,
      "itemId": "163715121",
      "countryCode": "US",
      "caseSize":8
    }
  ]
}
```


API: Delete Item Countries

Deletes supplier item country information.

If the delete contains more than 500 supplier item countries, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/countries/delete
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	List of supplier items country to remove
Output	None
Max Response Limit	500

Input Data Definition

Attribute	Data Type	Required	Description
countries	List of details	Yes	The countries to remove.

Detail Data Definition

Attribute	Data Type	Required	Description
supplierId	Long (10)	Yes	The supplier identifier.
itemId	String (25)	Yes	The item identifier.
countryCode	String (3)	Yes	The ISO country code of the supplier that produces the item.

Example Input

{

"countries":

[

{

"supplierId":"9002",

"itemId": "100637130",

"countryCode":"US"

}

]

}

API: Import Item Dimensions

Imports supplier item country dimension information.

If the import contains more than 500 supplier item dimensions, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/dimensions
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	List of supplier items dimensions to import
Output	None
Max Response Limit	500

Input Data Definition

Attribute	Data Type	Required	Description
dimensions	List of details	Yes	The dimensions to import.

Detail Data Definition

Attribute	Data Type	Required	Description
supplierId	Long (10)	Yes	The supplier identifier.
itemId	String (25)	Yes	The item identifier.
countryCode	String (3)	Yes	The ISO country code of the supplier that produces the item.
dimensionName	String (6)	Yes	Dimension name
presentationMethod	String (6)	-	Describes the packaging method
Length	BigDecimal	-	The length in dimension unit of measure.
Width	BigDecimal	-	The width in dimension unit of measure.
Height	BigDecimal	-	The height in dimension unit of measure.
dimensionUom	String (4)	-	The unit of measure of the dimensions.
Weight	BigDecimal	-	The weight of the object in weight unit of measure.
netWeight	BigDecimal	-	The net weight of the goods without packaging in weight unit of measure.
weightUom	String (4)	-	The weight unit of measure.
liquidVolume	BigDecimal	-	The liquid value or capacity of the object.
liquidVolumeUom	String (4)	-	The liquid volume unit of measure.
statisticalCube	BigDecimal	-	A statistical value of the object's dimensions used for shipment loading purposes.

Example Input

{

"dimensions": [

{

"supplierId": 5100,

"itemId": "163715121",

"countryCode": "US",

"dimensionName": "Hello"

},

{

"supplierId": 7100,

"itemId": "163715121",

"countryCode": "US",

"dimensionName": "Bye"

}

]

}

API: Delete Item Dimensions

Deletes supplier item country dimension information.

If the delete contains more than 500 supplier items, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/dimensions/delete
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	List of supplier items dimensions to remove
Output	None
Max Response Limit	500

Input Data Definition

Attribute	Data Type	Required	Description
Dimensions	List of details	Yes	The dimensions to remove.

Supplier Items Dimensions Data Definition

Attribute	Data Type	Required	Description
supplierId	Long (10)	Yes	The supplier identifier.
itemId	String (25)	Yes	The item identifier.
countryCode	String (3)	Yes	The ISO country code of the supplier that produces the item
dimensionName	String (6)	Yes	Dimension name

Example Input

{

"dimensions":

[

{

"supplierId":"9002",

"itemId": "100637130",

"countryCode":"US",

"dimensionName":"Dimen1"

},

{

"supplierId":"9002",

"itemId": "100637148",

"countryCode":"US",

"dimensionName":"Dimen2"

}

]

}

API: Import Item Manufacturers

Import supplier item country manufacturer information.

If the import contains more than 500 supplier item manufacturers, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/manufacturers
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	List of supplier items manufacturer to import
Output	None
Max Response Limit	500

Input Data Definition

Attribute	Data Type	Required	Description
manufacturers	List of details	Yes	The manufacturers to import.

Detail Data Definition

Attribute	Data Type	Required	Description
supplierId	Long (10)	Yes	The supplier identifier.
itemId	String (25)	Yes	The item identifier.
countryCode	String (3)	Yes	The ISO country code of the supplier that produces the item.
primary	Boolean	-	True indicates it is primary country of manufacture.

Example Input

{
"manufacturers": [
{
"supplierId": 5100,
"itemId": "163715121",
"countryCode": "US",
"primary": true
},
{
"supplierId": 7100,
"itemId": "163715121",
"countryCode": "US",
"primary": true
}
]
}

API: Delete Item Manufacturers

Deletes supplier item country manufacturer information.

If the delete contains more than 500 supplier item manufacturers, an input too large error will be returned.

A "Forbidden" response will occur if application is integrated with MFCS or RMS.

API Basics

Endpoint URL	{base URL}/manufacturers/delete
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	List of supplier items manufacturers to remove
Output	None
Max Response Limit	500

Input Data Definition

Attribute	Data Type	Required	Description

manufacturers	List of details	Yes	The manufacturers to remove.

Detail Data Definition

Attribute	Data Type	Required	Description
supplierId	Long (10)	Yes	The supplier identifier.
itemId	String (25)	Yes	The item identifier.
countryCode	String (3)	Yes	The ISO country code of the supplier that produces the item.

Example Input

{
"manufacturers":
[
{
"supplierId":"9002",
"itemId": "100637130",
"countryCode":"US"
},
{
"supplierId":"9002",
"itemId": "100637148",
"countryCode":"US"
}
]
}

REST Service: Ticket

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/tickets

API Definitions

API	Description
readTicket	This API reads a current actively ticket by its identifier.
findTickets	API is used to find summarized ticket headers for a set of criteria.
readArchivedTicket	This API reads a previously printed and archived ticket by its identifier.
findArchivedTickets	API is used to find archived ticket summaries.
createTickets	Creates new tickets within the system.
updateTickets	Updates current tickets within the system.
printTickets	Prints the requested tickets.
findTicketFormats	Reads all the available ticket formats.
findTicketPrinters	Finds the printers available to print tickets.

API: readTicket

This API reads a current actively ticket by its identifier.

API Basics

Endpoint URL	{base URL}/{ticketId}
Method	GET
Success Response	200 OK
Processing Type	Synchronous
Input	The ticket identifier
Output	The ticket

Output Data Definition

Column	Type	Definition
ticketId	Long(12)	The unique ticket identifier.
itemId	String(25)	The item identifier.
storeId	Long(10)	The store identifier.
originType	Integer(2)	The origin type (See Index)
ticketFormatId	Long(12)	The identifier of the ticket format used for printing.
ticketFormatDescription	String(100)	The description of the ticket format associated to the ticket.
ticketFormatType	Integer(4)	The type of the ticket format associated to the ticket.
ticketFormatReference	String(255)	The format reference used to print the ticket.
ticketFormatZplId	Long(12)	The ZPL format file identifier.
ticketCount	Integer(3)	The number of instances of this ticket to print.
ticketSequence	Integer(3)	The sequence number of a ticket within a ticket grouping.
printQuantity	BigDecimal(12,4)	The quantity to be printed on the ticket.
printDate	Date	The date the ticket should be printed.

groupId	Long(12)	An internal EICS grouping identifier that groups the tickets.
groupIdExternal	String(128)	An external system grouping identifier that groups the tickets.
autoPrint	Boolean	True if the ticket should automatically print, false if the ticket requires manual printing.
autoRefeshQuantity	Boolean	True indicates the ticket count gets refreshed with SOH at the time of printing, false it prints as is.
countryOfManufacture	String(3)	A two letter country code denoting the country of manufacture for the item.
shortDescription	String(255)	The short description of the item.
longDescription	String(400)	The long description of the item.
shortDescriptionLanguage	String(255)	The short description of the item in the language of the store.
longDescriptionLanguage	String(400)	The long description of the item in the language of the store.
differentiatorType1	String(10)	The description of the differentiator type for differentiator 1.
differentiatorType2	String(10)	The description of the differentiator type for differentiator 2.
differentiatorType3	String(10)	The description of the differentiator type for differentiator 3.
differentiatorType4	String(10)	The description of the differentiator type for differentiator 4.
differentiatorDescription1	String(255)	The description of differentiator 1 of the item.
differentiatorDescription2	String(255)	The description of differentiator 2 of the item.
differentiatorDescription3	String(255)	The description of differentiator 3 of the item.
differentiatorDescription4	String(255)	The description of differentiator 4 of the item.
departmentId	Long(12)	The department identifier of the item.
departmentName	String(360)	The department name of the item.
classId	Long(12)	The class identifier of the item.
className	String(360)	The class name of the item.
subclassId	Long(12)	The subclass identifier of the item.
subclassName	String(360)	The subclass name of the item.
primaryUpc	String(25)	The primary Unique Product Code for the item.
priceCurrency	String(3)	The currency code of the ticket price.
priceAmount	BigDecimal(12,4)	The amount of the ticket price.
priceType	Integer(3)	The type of the ticket price. (See Index)
priceUom	String(4)	The unit of measure of the ticket price.
priceActiveDate	Date	The date the ticket price became active.
priceExpireDate	Date	The date the ticket price expires.
mutliUnitPriceCurrency	String(3)	The currency code of the ticket's multi-unit price.
multiUnitPriceAmount	BigDecimal(12,4)	The amount of the ticket's multi-unit price.
multiUnitPriceUom	String(4)	The unit of measure of the ticket's multi-unit price.

multiUnitQuantity	BigDecimal(12,4)	The multi-unit quantity associated to the price.
overridePriceCurrency	String(3)	The override price currency code.
overridePriceAmount	BigDecimal(20,4)	The override price amount.
previousPriceCurrency	String(3)	The currency code of the previous price.
previousPriceAmount	BigDecimal(12,4)	The amount of the previous price.
previousPriceType	Integer(3)	The price type of the previous price.
lowestMonthlyPriceCurrency	String(3)	The currency code of the lowest monthly price.
lowestMonthlyPriceAmount	BigDecimal(12,4)	The amount of the lowest monthly price.
lowestMonthlyPriceType	Integer(3)	The price type of the lowest monthly price.
printedDate	Date	The date that the ticket was printed.
printedUser	String(128)	The user that printed the ticket.
createDate	Date	The date the ticket was created.
createUser	String(128)	The user that created the ticket.
updateDate	Date	The date the ticket was last updated.
updateUser	String(128)	The user that last updated the ticket.
udas	Collection	A group of associated user defined attributes.

UDA

Column	Type	Definition
name	String	The name of the user defined attribute.
value	String	The value of the user defined attributes.

API: findTickets

API is used to find summarized ticket headers for a set of criteria.

If maximum results are exceeded, additional or more limiting input criteria will be required.

API Basics

Endpoint URL	{base URL}
Method	GET
Success Response	200 OK
Processing Type	Synchronous
Input	Query Parameters
Output	List of Ticket Headers
Maximum Results Allowed	5,000

Input Data Definition

Attribute	Type	Definition
itemId	String(25)	Include only records with this item identifier.
storeId	Long(10)	Include only records with this store identifier.
ticketFormatId	Long(12)	Include only records with this ticket format identifier.
groupId	Long(12)	Include only records with this EICS group identifier.
groupIdExternal	String(128)	Include only records with this external system group identifier.
printDateFrom	String	Include only records on or after this scheduled print date and time.
printDateTo	String	Include only records on or before this scheduled print date and time.
updateDateFrom	String	Include only records on or after this scheduled print date and time.
updateDateTo	String	Include only records on or before this scheduled print date and time.

Output Data Definition

Column	Type	Definition
ticketId	Long(12)	The unique ticket identifier.
itemId	String(25)	The item identifier.
storeId	Long(10)	The store identifier.
originType	Integer(2)	The origin type (See Index)
ticketFormatId	Long(12)	The identifier of the ticket format used for printing.
ticketSequence	Integer(3)	The sequence number of a ticket within a ticket grouping.
groupId	Long(12)	An internal EICS grouping identifier that groups the tickets.
groupIdExternal	String(128)	An external system grouping identifier that groups the tickets.
autoPrint	Boolean	True if the ticket should automatically print, false if the ticket requires manual printing.
printDate	Date	The date the ticket should be printed.
printQuantity	BigDecimal(12, 4)	The quantity to be printed on the ticket.
updateDate	Date	The date the ticket was last updated.

API: readArchivedTicket

This API reads a previously printed and archived ticket by its identifier.

API Basics

Endpoint URL	{base URL}/archives/{ticketId}
Method	GET

Success Response	200 OK
Processing Type	Synchronous
Input	The ticket identifier
Output	The ticket details

Output Data Definition

See readTicket() for the output data definition of this API.

API: findArchivedTickets

API is used to find archived ticket summaries.

If the number of tickets found exceeds the limit, additional or more limiting input criteria will be required.

API Basics

Endpoint URL	{base URL}/archives
Method	GET
Success Response	200 OK
Processing Type	Synchronous
Input	Query Parameters
Output	List of Ticket Headers
Maximum Results Allowed	5,000

Input Data Definition

Attribute	Type	Definition
itemId	String(25)	Include only records with this item identifier.
storeId	Long(10)	Include only records with this store identifier.
ticketFormatId	Long(12)	Include only records with this ticket format identifier.
groupId	Long(12)	Include only records with this EICS group identifier.
groupIdExternal	String(128)	Include only records with this external system group identifier.
printedDateFrom	String	Include only records that were printed on or after this date and time.
printedDateTo	String	Include only records that were printed on or before this date and time.

Output Data Definition

Column	Type	Definition
ticketId	Long(12)	The unique ticket identifier.
itemId	String(25)	The item identifier.
storeId	Long(10)	The store identifier.

originType	Integer(2)	The origin type (See Index)
ticketFormatId	Long(12)	The identifier of the ticket format used for printing.
ticketSequence	Integer(3)	The sequence number of a ticket within a ticket grouping.
groupId	Long(12)	An internal EICS grouping identifier that groups the tickets.
groupIdExternal	String(128)	An external system grouping identifier that groups the tickets.
printedDate	Date	The date the ticket was printed.
printQuantity	BigDecimal(12,4)	The quantity printed on the ticket.
priceCurrency	String(3)	The currency of the price of the ticket.
priceAmount	BigDecimal(12,4)	The amount of the price of the ticket.

API: createTickets

Creates new tickets within the system.

API Basics

Endpoint URL	{base URL}
Method	POST
Success Response	200 OK
Processing Type	Synchronous
Input	Ticket group
Output	List of ticket identifying information
Maximum Input Allowed	2,000 tickets within the group

Input Data Definition

Payload	Type	Req	Definition
storeId	Long(10)	X	The store identifier.
groupIdExternal	String(128)		An external system grouping identifier that groups the tickets.
printDate	Date	X	The date the ticket should be printed.
autoPrint	Boolean		True if the ticket should automatically print, false if the ticket requires manual printing. Defaults to false.
autoRefeshQuantity	Boolean		True indicates the ticket count gets refreshed with SOH at the time of printing, false it prints as is. Defaults to false.
tickets	Collection	X	The tickets to create.

Ticket

Payload	Type	Req	Definition
itemId	String(25)	X	The item identifier.

originType	Integer(2)	X	The origin type (See Index)
ticketFormatId	Long(12)	X	The identifier of the ticket format used for printing.
ticketCount	Integer(3)	X	The number of instances of this ticket to print.
ticketSequence	Integer(3)	X	The sequence number of a ticket within a ticket grouping.
printQuantity	BigDecimal(12, 4)	X	The quantity to be printed on the ticket.
overridePriceCurrency	String(3)		The override price currency code. Required if an amount is entered.
overridePriceAmount	BigDecimal(20, 4)		The override price amount.
countryOfManufacture	String(3)		A two letter country code denoting the country of manufacture for the item.

Output Data Definition

Payload	Type	Definition
ticketId	Long(12)	The unique ticket identifier.
storeId	Long(10)	The store identifier.
ticketFormatId	Long(12)	The identifier of the ticket format used for printing.

Example Input

```
{
   "storeId": 5000,
   "groupIdExternal": "123456",
   "printDate": "2023-01-10T23:59:59-05:00",
   "autoPrint": false,
   "autoRefreshQuantity": false,
   "tickets": [
      {
         "itemId": "100637121",
         "originType": 1,
         "ticketFormatId": 1,
         "ticketCount": 2,
         "ticketSequence": 3
      },
      {
         "itemId": "100637113",
```

```
            "originType": 2,
            "ticketFormatId": 2,
            "ticketCount": 4,
            "ticketSequence": 5
        }
    ]
}
```


API: Update Tickets

Updates current tickets within the system.

If a field that is not required contains an empty or null value, the ticket will be updated to that empty or null value.

API Basics

Endpoint URL	{base URL}/update
Method	POST
Success Response	204 No Content
Processing Type	Synchronous
Processing Type	Synchronous
Input	Tickets
Output	N/A
Maximum Input Allowed	2,000 tickets

Input Data Definition

Payload	Type	Req	Definition
ticketId	Long(12)	X	The unique ticket identifier.
originType	Integer(2)	X	The origin type (See Index)
ticketCount	Integer(3)	X	The number of instances of this ticket to print.
ticketSequence	Integer(3)	X	The sequence number of a ticket within a ticket grouping.
printQuantity	BigDecimal(12,4)	X	The quantity to be printed on the ticket.
printDate	Date	X	The date the ticket should be printed.
autoPrint	Boolean		True if the ticket should automatically print, false if the ticket requires manual printing.
autoRefeshQuantity	Boolean		True indicates the ticket count gets refreshed with SOH at the time of printing, false it prints as is.
overridePriceCurrency	String(3)		The override price currency code. Required if an amount is entered.

overridePriceAmount	BigDecimal(20,4)	The override price amount.
countryOfManufacture	String(3)	A two letter country code denoting the country of manufacture for the item.

Example Input


```
{
   "tickets": [
      {
         "ticketId": 8,
         "originType": 2,
         "printDate": "2023-01-10T23:59:59-05:00",
         "ticketCount": 22,
         "ticketSequence": 33
      },
      {
         "ticketId": 9,
         "originType": 1,
         "printDate": "2023-01-10T23:59:59-05:00",
         "ticketCount": 44,
         "ticketSequence": 55
      }
   ]
}
```


API: printTickets

Prints the requested tickets. This can print both current tickets and previously printed tickets.

It is assumed that the calling system will have verified or retrieved the ticket ids prior. The ticket ids and archived ticket ids will not be validated.

This service operation will simply print any tickets that are found that match identifiers passed in and ignore any identifiers for which tickets are not found.

Depending on printing configuration with the system, the printing may occur synchronous and real-time or the tickets may be staged and sent asynchronously to another system after a short delay.

API Basics

Endpoint URL	{base URL}/print

Method	POST
Success Response	204 No Content
Processing Type	Synchronous/Asynchronous
Input	Ticket identifiers
Output	N/A
Maximum Input Allowed	100 total ticket ids

Input Data Definition

Payload	Type	Req	Definition
printerId	Long	X	The identifier of the printer to print the tickets on.
refreshQuantity	Boolean		If true, the quantities of all the tickets will be refreshed prior to printing. If false, they will not.
ticketIds	List<Long>		A list of ticket identifiers of the tickets to print. If this is null or empty, then archived ticket ids must contain a value. Not validated.
archivedTicketIds	List<Long>		A list of archived ticket identifiers of tickets to print. If this is null or empty, then ticket ids must contain a value. Not validated.

API: findTicketFormats

Reads all the available ticket formats.

API Basics

Endpoint URL	{base URL}/formats
Method	GET
Success Response	200 OK
Processing Type	Synchronous
Input	Query parameters
Output	List of ticket formats

Input Data Definition

Column	Type	Definition
storeId	Long(10)	Include only ticket formats available at this store.

Output Data Definition

Column	Type	Definition
formatId	Long(12)	The unique format identifier.
storeId	Long(10)	The store identifier.

description	String(100)	A description of the ticket (possibly from ticket format).
type	Integer(4)	The type of ticket format. (See Index)
zplTemplateId	Long(12)	The unique identifier to the ZPL template to be used for printing.
formatReference	String(255)	A reference to the format content to use for this format.
defaultFormat	Boolean	True if this is the default form for the type, False otherwise.
defaultPrinterId	Long(6)	Teh default printer identifier for the format.
createDate	Date	The date the format was created.
createUser	String(128)	The user that created the format.
updateDate	Date	The date the format was last updated.
updateUser	String(128)	The user that last updated the format.

API: findTicketPrinters

Finds the printers available to print tickets.

API Basics

Endpoint URL	{base URL}/printers
Method	GET
Success Response	200 OK
Processing Type	Synchronous
Input	Query parameters
Output	List of printers

Query Params

Column	Type	Definition
storeId	Long(10)	Include only ticket printers available at this store.

Output Data Definition

Column	Type	Definition
printerId	Long(6)	The unique identifier of the printer.
storeId	Long(10)	The identifier of the store the printer is assigned to.
printerType	Integer(3)	The print type of the printer (see Index).
printerDescription	String(200)	A description of the printer.
printerUri	String(300)	The URI address of the printer.
printerName	String(128)	The logical name of the printer.
defaultManifest	Boolean	True if the printer is the default printer at the store for manifest printing.
defaultPreshipment	Boolean	True if the printer is the default printer at the store for preshipment printing.

Additional Data Definitions

Ticket Format Type

ID	Description
1	Item Basket
2	Shelf Label

Price Type

ID	Description
1	Permanent
2	Promotional
3	Clearance
4	Clearance Reset

Printer Type

ID	Description
1	Item Ticket
2	Shelf Label
3	Postscript

Ticket Origin Type

ID	Description
1	External
2	Price Change
3	Foundation
4	Manual
5	Promotional Price Change
6	Clearance Price Change
7	Permanent Price Change
8	Reset Price Change

REST Service: Transfer

Transfers define the movement of goods between internal entities or trading partners. Requests from corporate or other stores for shipping inventory out can be auto-approved without human interaction and it is possible to transfer unavailable inventory between entities with a store as a starting or ending point of the transaction. A transfer defines the logical movement of goods and are often created at corporate offices. They define the intent of what needs to be shipped. Some validations and features to consider include transfer zone restrictions may be enforced, shipping network restrictions may be enforced, auto receiving may be active, and non-inventory items may be transfered. A transfer request is a transfer that is initiated by the receiving location and is awaiting approval from the sending location. Once approved, it can be shipped. A transfer can be initiatied by the sending location without any

request or input from the receiving location. Once appproved, it can be shipped. This service defines operations to manage transfer information by integration with an external system.

Server Base URL

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Find Transfer

This section describes the Find Transfer API. The Find Transfer API finds up to 10,000 summary header records of both transfers and transfer requests that match the search criteria.

Method

```
GET
```

URL

```
/transfers
```

Request

Table 4-133 Find Transfer — Request Parameters

Name	Required	Data Type/Example	Description
externalTransferId	NA	string($text128) (query)	Include only transfers with this external transfer identifier.
sourceLocationId	NA	integer($int10) (query)	Include only transfers with this source location identifier.
sourceLocationType	NA	integer($int4) (query)	Include only transfers with this source location type. Valid values are: 1 - Store 2 - Warehouse 3 - Finisher Available values : 1, 2, 3
destinationLocationId	NA	integer($int10) (query)	Include only transfers with this destination location identifier.
destinationLocationType	NA	integer($int4) (query)	Include only transfers with this desintation location type. Valid values are: 1 - Store 2 - Warehouse 3 - Finisher Available values : 1, 2, 3

Table 4-133 (Cont.) Find Transfer — Request Parameters

Name	Required	Data Type/Example	Description
status	NA	integer($int4) (query)	Include only shipments with this delivery status. Valid values are: 1 - New Request 2 - Requeste 3 - Request In Progress 4 - Rejected Request 5 - Canceled Request 6 - Transfer In Progress 7 - Approved 8 - In Shipping 9 - Completed Transfer 10 - Canceled Transfer 99 - Active Available values : 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 99
itemId	NA	string($text25) (query)	Include only transfers that contain this item.
updateDateFrom	NA	string($date-time) (query)	Include only transfers with an update date on or after this date.
updateDateTo	NA	string($date-time) (query)	Include only transfers with an update date on or before this date.

Responses

This section describes the responses of the Find Transfer API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "transferid": 11111,
    "externalTransferId": "AX57684",
    "sourceLocationType": 1,
    "sourcelocationId": 4000,
    "desintationLocationType": 1,
    "destinationLocationId": 5000,
    "status": 1,
    "originType": 1,
    "notAfterDate": "2024-09-19T09:10:14.140Z",
    "createDate": "2024-09-19T09:10:14.140Z",
    "updateDate": "2024-09-19T09:10:14.140Z",
```

```
    "requestDate": "2024-09-19T09:10:14.140Z",
    "approvalDate": "2024-09-19T09:10:14.140Z"
  }
]
```


Schema — TransferSummaryIdo

Table 4-134 TransferSummaryIdo —Object

Element Name	Required	Data Type/ Example	Description
transferid	NA	integer($int15) example: 11111	The unique identifier of the transfer.
externalTransferId	NA	string($text128) example: AX57684	An identifier supplied from an external system.
sourceLocationType	NA	integer($int4) example: 1	The type of the source location of the transfer. Valid values are: 1 - Store 2 - Warehouse 3 - Finisher Enum: [1, 2, 3]
sourcelocationId	NA	integer($int10) example: 4000	The identifier of the source location of the transfer.
desintationLocationType	NA	integer($int4) example: 1	The type of the destination location of the transfer. Valid values are: 1 - Store 2 - Warehouse 3 - Finisher Enum: [1, 2, 3]
destinationLocationId	NA	integer($int10) example: 5000	The identifier of the destination location of the transfer.
status	NA	integer($int4) example: 1	The current status of the transfer. Valid values are: 1 - New Request 2 - Requeste 3 - Request In Progress 4 - Rejected Request 5 - Canceled Request 6 - Transfer In Progress 7 - Approved 8 - In Shipping 9 - Completed Transfer 10 - Canceled Transfer Enum: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

Table 4-134 (Cont.) TransferSummaryIdo —Object

Element Name	Required	Data Type/ Example	Description
originType	NA	integer($int4) example: 1	The origin type of the transfer. Valid values are: 1 - External 2 - Internal 3 - Adhoc Enum: [1, 2, 3]
notAfterDate	NA	string($date-time)	A date after which the transfer should not be shipped.
createDate	NA	string($date-time)	The date the transfer was created.
updateDate	NA	string($date-time)	The date the transfer was last updated.
requestDate	NA	string($date-time)	The date the transfer was requested.
approvalDate	NA	string($date-time)	The date the transfer was approved.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Create Transfer

The Create Transfer API creates a new transfer from a source store that does not need involvement or approval from a receiving location. The transfer will be created as in progress and must be approved before shipping can begin.

Method

```
POST
```

URL

```
/transfers
```

Request

There are no request parameters.

The request body is appliaction/json.

Details about the transfer to create.

Example Value

```
{
  "sourceStoreId": 5000,
  "destinationLocationType": 1,
  "destinationLocationId": 5000,
  "notAfterDate": "2025-01-10T12:45:31.430Z",
  "authorizationCode": "1111",
  "contextTypeId": 400000,
  "contextValue": "Repair Needed",
  "useUnavailableInventory": false,
  "allowPartialDelivery": true,
  "lineItems": [
    {
      "itemId": "10045600",
      "quantity": 100,
      "caseSize": 3
    }
  ],
  "notes": [
    "Transfer needs to be rushed.",
    "Items are in the back room."
  ]
}
```

Schema — TransferCreateIdo

Table 4-135 TransferCreateIdo —Object

Element Name	Required	Data Type/ Example	Description
sourceStoreId	Yes	integer($int10) example: 5000	The identifier of the store that will be shipping the goods.
destinationLocationType	Yes	integer($int4) example: 1	The type of the destination location of the transfer. Valid values are: 1 - Store 2 - Warehouse 3 - Finisher Enum: [1, 2, 3]
destinationLocationId	Yes	integer($int10) example: 5000	The identifier of the destination location of the transfer.
notAfterDate	NA	string($date-time)	A date after which the transfer should not be shipped.
authorizationCode	NA	string($text12) example: 1111	An authorization code assigned to the transfer.
contextTypeId	NA	number($int18) example: 400000	Unique identifier of a context associated to the transfer.

Table 4-135 (Cont.) TransferCreateIdo —Object

Element Name	Required	Data Type/ Example	Description
contextValue	NA	string($text25) example: Repair Needed	A value or some information related to the context associated to the transfer.
useUnavailableInventory	NA	boolean example: false	True if the transfer is for unavailable inventory, false otherwise.
allowPartialDelivery	NA	boolean example: true	True indicates that a partial delivery is allowed for the transfer, false indicates it is not.
lineItems	Yes	object	A collection of up to 5,000 items to be added to the transfer.
notes	NA	string($text2000) example: List ["Transfer needs to be rushed.", "Items are in the back room."]	A collection of notes that will be added to the transfer notes.

Table 4-136 TransferCreateLineItemIdo —Object

Element Name	Required	Data Type/ Example	Description
itemId	Yes	string($text25) example: 10045600	The unique identifier of the SKU item.
quantity	Yes	number($decimal(20,4)) example: 100	The quantity that is requested.
caseSize	NA	number($decimal(10,2)) example: 3	The case size of this record.

Responses

This section describes the responses of the Create Transfer API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value

```
[
  {
    "transferId": 11111,
```

```
    "externalTransferId": "AX57684",
    "sourceLocationType": 1,
    "sourceLocationId": 4000,
    "destinationLocationType": 1,
    "destinationLocationId": 5000,
    "status": 1,
    "originType": 1,
    "notAfterDate": "2025-01-08T12:56:00.798Z",
    "createDate": "2025-01-08T12:56:00.798Z",
    "updateDate": "2025-01-08T12:56:00.798Z",
    "requestDate": "2025-01-08T12:56:00.798Z",
    "approvalDate": "2025-01-08T12:56:00.798Z"
  }
]
```


Schema — TransferSummaryIdo

Table 4-137 TransferSummaryIdo —Object

Element Name	Required	Data Type/ Example	Description
transferid	NA	integer($int15) example: 11111	The unique identifier of the transfer.
externalTransferId	NA	string($text128) example: AX57684	An identifier supplied from an external system.
sourceLocationType	NA	integer($int4) example: 1	The type of the source location of the transfer. Valid values are: 1 - Store 2 - Warehouse 3 - Finisher Enum: [1, 2, 3]
sourcelocationId	NA	integer($int10) example: 4000	The identifier of the source location of the transfer.
desintationLocationType	NA	integer($int4) example: 1	The type of the destination location of the transfer. Valid values are: 1 - Store 2 - Warehouse 3 - Finisher Enum: [1, 2, 3]
destinationLocationId	NA	integer($int10) example: 5000	The identifier of the destination location of the transfer.

Table 4-137 (Cont.) TransferSummaryIdo —Object

Element Name	Required	Data Type/ Example	Description
status	NA	integer($int4) example: 1	The current status of the transfer. Valid values are: 1 - New Request 2 - Requeste 3 - Request In Progress 4 - Rejected Request 5 - Canceled Request 6 - Transfer In Progress 7 - Approved 8 - In Shipping 9 - Completed Transfer 10 - Canceled Transfer Enum: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
originType	NA	integer($int4) example: 1	The origin type of the transfer. Valid values are: 1 - External 2 - Internal 3 - Adhoc Enum: [1, 2, 3]
notAfterDate	NA	string($date-time)	A date after which the transfer should not be shipped.
createDate	NA	string($date-time)	The date the transfer was created.
updateDate	NA	string($date-time)	The date the transfer was last updated.
requestDate	NA	string($date-time)	The date the transfer was requested.
approvalDate	NA	string($date-time)	The date the transfer was approved.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Read Transfer

The Read Transfer API retrieves all the details about a transfer or transfer request.

Method

```
GET
```

URL

```
/transfers/{transferId}
```

Request

Table 4-138 Read Transfer — Request Parameter

Name	Required	Data Type/ Example	Description
transferId	Yes	number($int12) (path)	The unique identifier of the transfer.

Responses

This section describes the responses of the Read Transfer API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "transferId": 11111,
    "externalTransferId": "AX57684",
    "distroNumber": "440213",
    "sourceLocationType": 1,
    "sourceLocationId": 4000,
    "destinationLocationType": 1,
    "destinationLocationId": 5000,
    "status": 1,
    "originType": 1,
    "contextTypeId": 400000,
    "contextTypeCode": "CNTXA",
    "contextValue": "Repair Needed",
    "customerOrderNumber": "67008700",
    "fulfillmentOrderNumber": "67008711",
    "allowPartialDelivery": true,
    "useAvailable": true,
```

```
    "authorizationCode": "1111",
    "notAfterDate": "2025-01-08T13:34:27.151Z",
    "createDate": "2025-01-08T13:34:27.151Z",
    "createUser": "smith123",
    "updateDate": "2025-01-08T13:34:27.151Z",
    "updateUser": "smith123",
    "requestDate": "2025-01-08T13:34:27.151Z",
    "requestUser": "smith123",
    "approvalDate": "2025-01-08T13:34:27.151Z",
    "approvedUser": "smith123",
    "importId": "smith123",
    "lineItems": [
      {
        "lineId": 2222222,
        "itemId": "10045600",
        "caseSize": 3,
        "quantityRequested": 100,
        "quantityApproved": 90,
        "quantityShipping": 50,
        "quantityShipped": 40,
        "quantityReceived": 20,
        "quantityDamaged": 20,
        "preferredUom": "EA"
      }
    ]
  }
]
```


Schema — TransferIdo

Table 4-139 TransferIdo — Object

Element Name	Required	Data Type/ Example	Description
transferid	NA	integer($int15) example: 11111	The unique identifier of the transfer.
externalTransferId	NA	string($text128) example: AX57684	An identifier supplied from an external system.
distroNumber	NA	string($text128) example: 440213	A distribution number(used for integration with other systems). It is another type of external identifier.
sourceLocationType	NA	integer($int4) example: 1	The type of the source location of the transfer. Valid values are: 1 - Store 2 - Warehouse 3 - Finisher Enum: [1, 2, 3]
sourcelocationId	NA	integer($int10) example: 4000	The identifier of the source location of the transfer.

Table 4-139 (Cont.) TransferIdo — Object

Element Name	Required	Data Type/ Example	Description
desintationLocationType	NA	integer($int4) example: 1	The type of the destination location of the transfer. Valid values are: 1 - Store 2 - Warehouse 3 - Finisher Enum: [1, 2, 3]
destinationLocationId	NA	integer($int10) example: 5000	The identifier of the destination location of the transfer.
status	NA	integer($int4) example: 1	The current status of the transfer. Valid values are: 1 - New Request 2 - Requeste 3 - Request In Progress 4 - Rejected Request 5 - Canceled Request 6 - Transfer In Progress 7 - Approved 8 - In Shipping 9 - Completed Transfer 10 - Canceled Transfer Enum: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
originType	NA	integer($int4) example: 1	The origin type of the transfer. Valid values are: 1 - External 2 - Internal 3 - Adhoc Enum: [1, 2, 3]
contextTypeId	NA	number($int18) example: 400000	Unique identifier of a context associated to the transfer.
contextTypeCode	NA	integer($int4) example: CNTXA	An external code of a context associated to the transfer.
contextValue	NA	string($text25) example: Repair Needed	A value or some information related to the context associated to the transfer.
customerOrderNumber	NA	string($text128) example: 67008700	External system identifier of a customer order.
fulfillmentOrderNumber	NA	string($text128) example: 67008711	External system identifier of a fulfillment order.
allowPartialDelivery	NA	boolean example: true	True indicates that parial delivery is allowed for the transfer, false indicates it is not.
useAvailable	NA	boolean example: true	True indicates the transfer must use available stock, false indicates it uses unavailable stock.

Table 4-139 (Cont.) TransferIdo — Object

Element Name	Required	Data Type/ Example	Description
authorizationCode	NA	string($text12) example: 1111	An authorization code assigned to the transfer.
notAfterDate	NA	string($date-time)	A date after which the transfer should not be shipped.
createDate	NA	string($date-time)	The date the transfer was created.
createUser	NA	string($text128) example: smith123	The user that created this transfer.
updateDate	NA	string($date-time)	The date the transfer was last updated.
updateUser	NA	string($text128) example: smith123	The user that last updated this transfer.
requestDate	NA	string($date-time)	The date the transfer was requested.
requestUser	NA	string($text128) example: smith123	The user that requested this transfer.
approvalDate	NA	string($date-time)	The date the transfer was approved.
approvedUser	NA	string($text128) example: smith123	The user that approved this transfer.
importId	NA	string($text128) example: smith123	An identifier from an original data seed import.
lineItems		object	Line items

Table 4-140 TransferLineItemIdo — Object

Element Name	Required	Data Type/ Example	Description
lineId	NA	integer($int15) example: 2222222	The unique identifier of the line record.
itemId	NA	string($text25) example: 10045600	The unique identifier of the SKU item.
caseSize	NA	number($decimal(10,2)) example: 3	The case size of this record.
quantityRequested	NA	number($decimal(20,4)) example: 100	The quantity that was requested.
quantityApproved	NA	number($decimal(20,4)) example: 90	The quantity that was approved.
quantityShipping	NA	number($decimal(20,4)) example: 50	The quantity that is currently in shipping.

Table 4-140 (Cont.) TransferLineItemIdo — Object

Element Name	Required	Data Type/ Example	Description
quantityShipped	NA	number($decimal(20,4)) example: 40	The quantity that has shipped.
quantityReceived	NA	number($decimal(20,4)) example: 20	The quantity that was received into stock.
quantityDamaged	NA	number($decimal(20,4)) example: 20	The quantity that was received as damaged.
preferredUom	NA	string($text4) example: EA	The preferred unit of measure of this line item.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Update Transfer

The Update Transfer API updates a transfer request that has been requested or updates a newly created transfer that is prior to being approved. It allows the approved quantities to be updated until the transfer becomes approved.

Method

```
POST
```

URL

```
/transfers/{transferId}
```

Request

Table 4-141 Update Transfer — Request Parameter

Name	Required	Data Type/ Example	Description
transferId	Yes	number($int12) (path)	The unique identifier of the transfer.

The request body is appliaction/json.

Details about the transfer to update.

Example Value


```
{
  "contextTypeId": 400000,
  "contextValue": "Repair Needed",
  "allowPartialDelivery": true,
  "notAfterDate": "2025-01-10T12:58:44.635Z",
  "lineItems": [
    {
      "itemId": "10045600",
      "quantity": 100,
      "caseSize": 3
    }
  ],
  "notes": [
    "Transfer needs to be rushed.",
    "Items are in the back room."
  ]
}
```


Schema — TransferRequestUpdateIdo

Table 4-142 TransferRequestUpdateIdo— Object

Element Name	Required	Data Type/ Example	Description
sourceStoreId	Yes	integer($int10) example: 4000	The identifier of the source location of the transfer.
destinationStoreId	Yes	integer($int10) example: 5000	The identifier of the destination location of the transfer.
contextTypeId	NA	number($int18) example: 400000	Unique identifier of a context associated to the transfer.
contextValue	NA	string($text25) example: Repair Needed	A value or some information related to the context associated to the transfer.
allowPartialDelivery	NA	boolean example: true	True indicates that a partial delivery is allowed for the transfer, false indicates it is not.
notAfterDate	NA	string($date-time)	A date after which the transfer should not be shipped.
lineItems	Yes	object	Up to 5,000 Items to update on the transfer.

Table 4-143 TransferRequestUpdatweLineItemIdo— Object

notes	NA	string($text2000)] example: List ["Transfer needs to be rushed.", "Items are in the back room."]	A collection of notes that will be added to the transfer notes.

Responses

This section describes the responses of the Update Transfer API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "transferId": 11111,
    "externalTransferId": "AX57684",
    "distroNumber": "440213",
    "sourceLocationType": 1,
    "sourceLocationId": 4000,
    "destinationLocationType": 1,
    "destinationLocationId": 5000,
    "status": 1,
    "originType": 1,
    "contextTypeId": 400000,
    "contextTypeCode": "CNTXA",
    "contextValue": "Repair Needed",
    "customerOrderNumber": "67008700",
    "fulfillmentOrderNumber": "67008711",
    "allowPartialDelivery": true,
    "useAvailable": true,
    "authorizationCode": "1111",
    "notAfterDate": "2025-01-08T13:54:30.666Z",
    "createDate": "2025-01-08T13:54:30.666Z",
    "createUser": "smith123",
    "updateDate": "2025-01-08T13:54:30.666Z",
    "updateUser": "smith123",
    "requestDate": "2025-01-08T13:54:30.666Z",
    "requestUser": "smith123",
    "approvalDate": "2025-01-08T13:54:30.666Z",
    "approvedUser": "smith123",
    "importId": "smith123",
    "lineItems": [
      {
        "lineId": 2222222,
```

```
        "itemId": "10045600",
        "caseSize": 3,
        "quantityRequested": 100,
        "quantityApproved": 90,
        "quantityShipping": 50,
        "quantityShipped": 40,
        "quantityReceived": 20,
        "quantityDamaged": 20,
        "preferredUom": "EA"
      }
    ]
  }
]
```


Schema — TransferIdo

Table 4-144 TransferIdo — Object

Element Name	Required	Data Type/ Example	Description
transferid	NA	integer($int15) example: 11111	The unique identifier of the transfer.
externalTransferId	NA	string($text128) example: AX57684	An identifier supplied from an external system.
distroNumber	NA	string($text128) example: 440213	A distribution number(used for integration with other systems). It is another type of external identifier.
sourceLocationType	NA	integer($int4) example: 1	The type of the source location of the transfer. Valid values are: 1 - Store 2 - Warehouse 3 - Finisher Enum: [1, 2, 3]
sourcelocationId	NA	integer($int10) example: 4000	The identifier of the source location of the transfer.
desintationLocationType	NA	integer($int4) example: 1	The type of the destination location of the transfer. Valid values are: 1 - Store 2 - Warehouse 3 - Finisher Enum: [1, 2, 3]
destinationLocationId	NA	integer($int10) example: 5000	The identifier of the destination location of the transfer.

Table 4-144 (Cont.) TransferIdo — Object

Element Name	Required	Data Type/ Example	Description
status	NA	integer($int4) example: 1	The current status of the transfer. Valid values are: 1 - New Request 2 - Requeste 3 - Request In Progress 4 - Rejected Request 5 - Canceled Request 6 - Transfer In Progress 7 - Approved 8 - In Shipping 9 - Completed Transfer 10 - Canceled Transfer Enum: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
originType	NA	integer($int4) example: 1	The origin type of the transfer. Valid values are: 1 - External 2 - Internal 3 - Adhoc Enum: [1, 2, 3]
contextTypeId	NA	number($int18) example: 400000	Unique identifier of a context associated to the transfer.
contextTypeCode	NA	integer($int4) example: CNTXA	An external code of a context associated to the transfer.
contextValue	NA	string($text25) example: Repair Needed	A value or some information related to the context associated to the transfer.
customerOrderNumber	NA	string($text128) example: 67008700	External system identifier of a customer order.
fulfillmentOrderNumber	NA	string($text128) example: 67008711	External system identifier of a fulfillment order.
allowPartialDelivery	NA	boolean example: true	True indicates that parial delivery is allowed for the transfer, false indicates it is not.
useAvailable	NA	boolean example: true	True indicates the transfer must use available stock, false indicates it uses unavailable stock.
authorizationCode	NA	string($text12) example: 1111	An authorization code assigned to the transfer.
notAfterDate	NA	string($date-time)	A date after which the transfer should not be shipped.
createDate	NA	string($date-time)	The date the transfer was created.
createUser	NA	string($text128) example: smith123	The user that created this transfer.
updateDate	NA	string($date-time)	The date the transfer was last updated.

Table 4-144 (Cont.) TransferIdo — Object

Element Name	Required	Data Type/ Example	Description
updateUser	NA	string($text128) example: smith123	The user that last updated this transfer.
requestDate	NA	string($date-time)	The date the transfer was requested.
requestUser	NA	string($text128) example: smith123	The user that requested this transfer.
approvalDate	NA	string($date-time)	The date the transfer was approved.
approvedUser	NA	string($text128) example: smith123	The user that approved this transfer.
importId	NA	string($text128) example: smith123	An identifier from an original data seed import.
lineItems		object	Line items

Table 4-145 TransferLineItemIdo — Object

Element Name	Required	Data Type/ Example	Description
lineId	NA	integer($int15) example: 2222222	The unique identifier of the line record.
itemId	NA	string($text25) example: 10045600	The unique identifier of the SKU item.
caseSize	NA	number($decimal(10,2)) example: 3	The case size of this record.
quantityRequested	NA	number($decimal(20,4)) example: 100	The quantity that was requested.
quantityApproved	NA	number($decimal(20,4)) example: 90	The quantity that was approved.
quantityShipping	NA	number($decimal(20,4)) example: 50	The quantity that is currently in shipping.
quantityShipped	NA	number($decimal(20,4)) example: 40	The quantity that has shipped.
quantityReceived	NA	number($decimal(20,4)) example: 20	The quantity that was received into stock.
quantityDamaged	NA	number($decimal(20,4)) example: 20	The quantity that was received as damaged.

Table 4-145 (Cont.) TransferLineItemIdo — Object

Element Name	Required	Data Type/ Example	Description
preferredUom	NA	string($text4) example: EA	The preferred unit of measure of this line item.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Create Request

The Create Request API creates a new store-to-store transfer request. The transfer must be released in order to be available to the sending store to later approve or reject. EICS will be the originator of this transfer request, not the external system. To import transfers from an external system, see Import Transfer.

Method

```
POST
```

URL

```
/transfers/requests
```

Request

There are no request parameters.

The request body is application/json.

Example Value

```
{
  "sourceStoreId": 4000,
  "destinationStoreId": 5000,
  "contextTypeId": 400000,
  "contextValue": "Repair Needed",
  "allowPartialDelivery": true,
  "notAfterDate": "2025-01-08T14:01:57.301Z",
  "lineItems": [
    {
```

```
      "itemId": "10045600",
      "quantity": 100,
      "caseSize": 3
    }
  ],
  "notes": [
    "Transfer needs to be rushed.",
    "Items are in the back room."
  ]
}
```

Schema — TransferRequestCreateIdo

Table 4-146 TransferRequestCreateIdo— Object

Element Name	Required	Data Type/ Example	Description
sourceStoreId	Yes	integer($int10) example: 4000	The identifier of the source location of the transfer.
destinationStoreId	Yes	integer($int10) example: 5000	The identifier of the destination location of the transfer.
contextTypeId	NA	number($int18) example: 400000	Unique identifier of a context associated to the transfer.
contextValue	NA	string($text25) example: Repair Needed	A value or some information related to the context associated to the transfer.
allowPartialDelivery	NA	boolean example: true	True indicates that a partial delivery is allowed for the transfer, false indicates it is not.
notAfterDate	NA	string($date-time)	A date after which the transfer should not be shipped.
lineItems	Yes	object	A collection of up to 5,000 items that will be added to the transfer.
notes	NA	string($text2000)] example: List ["Transfer needs to be rushed.", "Items are in the back room."]	A collection of notes that will be added to the transfer notes.

Table 4-147 TransferRequestCreateLineItemIdo— Object

Element Name	Required	Data Type/ Example	Description
itemId	Yes	string($text25) example: 10045600q	The unique identifier of the SKU item.
quantity	Yes	number($decimal(20,4)) example: 100	The quantity that is requested.

Table 4-147 (Cont.) TransferRequestCreateLineItemIdo— Object

Element Name	Required	Data Type/ Example	Description
caseSize	NA	number($decimal(10,2)) example: 3	The case size of this record.

Responses

This section describes the responses of the Create Request API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value

```
[
  {
    "transferId": 11111,
    "externalTransferId": "AX57684",
    "status": 1
  }
]
```

Schema — TransferStatusIdo

Table 4-148 TransferStatusIdo — Object

Element Name	Required	Data Type/Example	Description
transferId	NA	integer($int15) example: 11111	The unique identifier of the transfer.
externalTransferId	NA	string($text128) example: AX57684	An identifier supplied from an external system.

Table 4-148 (Cont.) TransferStatusIdo — Object

Element Name	Required	Data Type/Example	Description
status	NA	integer($int4) example: 1	The current status of the transfer. Valid values are: 1 - New Request 2 - Requeste 3 - Request In Progress 4 - Rejected Request 5 - Canceled Request 6 - Transfer In Progress 7 - Approved 8 - In Shipping 9 - Completed Transfer 10 - Canceled Transfer Enum: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Update Request

The Update Request API updates requested quantities on a store-to-store request while it is still in new status, prior to being released to the shipping store.

Method

```
POST
```

URL

```
/transfers/requests/{transferId}
```

Request

Table 4-149 Update Transfer — Request Parameter

Name	Required	Data Type/ Example	Description
transferId	Yes	number($int12) (path)	The unique identifier of the transfer.

The request body is appliaction/json.

Details about the transfer to update.

Example Value

```
{
  "sourceStoreId": 4000,
  "destinationStoreId": 5000,
  "contextTypeId": 400000,
  "contextValue": "Repair Needed",
  "allowPartialDelivery": true,
  "notAfterDate": "2025-01-08T14:41:38.414Z",
  "lineItems": [
    {
      "itemId": "10045600",
      "quantity": 100,
      "caseSize": 3
    }
  ],
  "notes": [
    "Transfer needs to be rushed.",
    "Items are in the back room."
  ]
}
```

Schema — TransferRequestUpdateIdo

Table 4-150 TransferRequestUpdateIdo— Object

Element Name	Required	Data Type/ Example	Description
sourceStoreId	Yes	integer($int10) example: 4000	The identifier of the source location of the transfer.
destinationStoreId	Yes	integer($int10) example: 5000	The identifier of the destination location of the transfer.
contextTypeId	NA	number($int18) example: 400000	Unique identifier of a context associated to the transfer.
contextValue	NA	string($text25) example: Repair Needed	A value or some information related to the context associated to the transfer.
allowPartialDelivery	NA	boolean example: true	True indicates that a partial delivery is allowed for the transfer, false indicates it is not.

Table 4-150 (Cont.) TransferRequestUpdateIdo— Object

Element Name	Required	Data Type/ Example	Description
notAfterDate	NA	string($date-time)	A date after which the transfer should not be shipped.
lineItems	Yes	object	Up to 5,000 Items to update on the transfer.

Table 4-151 TransferRequestUpdatweLineItemIdo— Object

notes	NA	string($text2000)] example: List ["Transfer needs to be rushed.", "Items are in the back room."]	A collection of notes that will be added to the transfer notes.

Responses

This section describes the responses of the Create Request API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Cancel Request

The Cancel Request API cancels a new request before it is released to the sending store for approval. This is done when the receiving location decides the transfer is not needed prior to finishing their request. The status must be new request in order to cancel.

Method

```
POST
```

URL

```
/transfers/requests/{transferId}/cancel
```

Request

Table 4-152 Cancel Request — Request Parameter

Name	Required	Data Type/ Example	Description
transferId	Yes	number($int15) (path)	The unique identifier of the transfer.

Responses

This section describes the responses of the Cancel Request API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Release Request

The Release Request API finalizes the request of the transfer at the receiving location and begins the approval process at the sending location.

Method

```
POST
```

URL

```
/transfers/requests/{transferId}/cancel
```

Request

Table 4-153 Release Request — Request Parameter

Name	Required	Data Type/ Example	Description
transferId	Yes	number($int15) (path)	The unique identifier of the transfer.

Responses

This section describes the responses of the Release Request API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Approve Request

The Approve Request API approves a transfer request created by a receiving store and released to the sending store. The transfer request must be in requested or request in progress status in order to approve.

Method

`POST`

URL

`/transfers/requests/{transferId}/approve`

Request

Table 4-154 Approve Request — Request Parameter

Name	Required	Data Type/ Example	Description
transferId	Yes	number($int15) (path)	The unique identifier of the transfer.

Responses

This section describes the responses of the Approve Request API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Reject Request

The Reject Request API rejects a transfer request from a receiving store closing out the transfer. This is done when the shipping store decides it will not fulfill it. The status must be requested or request in progress in order for it to be rejected.

Method

```
POST
```

URL

```
/transfers/requests/{transferId}/reject
```

Request

Table 4-155 Reject Request — Request Parameter

Name	Required	Data Type/ Example	Description
transferId	Yes	number($int15) (path)	The unique identifier of the transfer.

Responses

This section describes the responses of the Reject Request API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Approve Transfer

The Approve Transfer API approves a transfer created by the sending store moving it to the shipping stage. The status of the transfer must be transfer in progress in order to approve it.

Method

`POST`

URL

`/transfers/{transferId}/approve`

Request

Table 4-156 Approve Transfer — Request Parameter

Name	Required	Data Type/ Example	Description
transferId	Yes	number($int15) (path)	The unique identifier of the transfer.

Responses

This section describes the responses of the Approve Transfer API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Cancel Transfer

The Cancel Transfer API cancels a transfer created by a sending store that has yet to be approved. The status must be transfer in progress in order to cancel the transfer.

Method

```
POST
```

URL

```
/transfers/{transferId}/cancel
```

Request

Table 4-157 Cancel Transfer — Request Parameter

Name	Required	Data Type/ Example	Description
transferId	Yes	number($int15) (path)	The unique identifier of the transfer.

Responses

This section describes the responses of the Cancel Transfer API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Close Transfer

The Close Transfer API closes a transfer that has been approved. It can close a request that currently is in requested or request in progress status, but only if the shipping location is a store. It can close a transfer that is in shipping status so long as it does not have shipping quantities (this can happen if a previous partial shipment has already shipped.).

Method

```
POST
```

URL

```
/transfers/{transferId}/close
```

Request

Table 4-158 Close Transfer — Request Parameter

Name	Required	Data Type/ Example	Description
transferId	Yes	number($int15) (path)	The unique identifier of the transfer.

Responses

This section describes the responses of the Close Transfer API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Find Transfer Contexts

The Find Transfer Contexts API reads all the available contexts for a transfer.

Method

```
GET
```

URL

```
/transfers/contexts
```

Request

There are no request parameters.

Responses

This section describes the responses of the Find Transfer Contexts API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value

```
[
  {
    "contextId": 1234,
    "code": "CNTXIA",
    "description": "Repair",
    "sequence": 2
  }
]
```

Schema — TransferContextIdo

Table 4-159 TransferContextIdo — Object

Element Name	Required	Data Type/Example	Description
contextId	NA	number($int18) example: 1234	The unqiue identifier of the context record.
code	NA	string($text6) example: CNTXIA	A short code associated to the context.
description	NA	string($text120) example: Repair	A description of the context.
sequence	NA	integer($int6) example: 2	The order it should be sequenced in.

Import Transfer

The Import Transfer API imports a transfer (stock order) that is managed by an external system. This is an asynchronous process where minimal validation is performed on input and the message is staged in MPS for later processing. The message is managed by the MPS work queue (DcsTransfer). If Oracle Merchandising is enabled in the system, this service operation is not allowed.

Method

```
POST
```

URL

```
/transfers/import
```

Request

There are no request parameters.

The request body is application/json.

Example Value

```
{
  "externalTransferId": "AX57684",
  "sourceLocationType": 1,
  "sourceLocationId": 4000,
  "destinationLocationType": 1,
  "destinationLocationId": 5000,
  "contextTypeId": 400000,
  "contextValue": "Repair Needed",
  "deliveryDate": "2025-01-10T12:19:54.491Z",
  "notAfterDate": "2025-01-10T12:19:54.491Z",
  "customerOrderNumber": "67008700",
  "fulfillmentOrderNumber": "67008711",
  "allowPartialDelivery": true,
  "useUnavailableInventory": true,
  "lineItems": [
    {
      "itemId": "10045600",
      "quantity": 100,
      "preferredUom": "EA"
    }
  ]
}
```

Schema — TransferImportIdo

Table 4-160 TransfeImportIdo — Object

Element Name	Required	Data Type/ Example	Description
externalTransferId	Yes	string($text128) example: AX57684	An identifier supplied from an external system.
sourceLocationType	Yes	integer($int4) example: 1	The type of the source location of the transfer. Valid values are: 1 - Store 2 - Warehouse 3 - Finisher Enum: [1, 2, 3]
sourceLocationId	Yes	integer($int10) example: 4000	The identifier of the source location of the transfer.
destinationLocationType	Yes	integer($int4) example: 1	The type of the destination location of the transfer. Valid values are 1 - Store 2 - Warehouse 3 - Finisher Enum: [1, 2, 3]
destinationLocationId	Yes	integer($int10) example: 5000	The identifier of the destination location of the transfer.
contextTypeId	NA	number($int18) example: 400000	Unique identifier of a context associated to the transfer.
contextValue	NA	string($text25) example: Repair Needed	A value or some information related to the context associated to the transfer.
deliveryDate	NA	string($date-time) .	The date in which the transfer delivery should take place
notAfterDate	NA	string($date-time) .	A date after which the transfer should not be shipped
customerOrderNumber	NA	string($text128) example: 67008700	External system identifier of a customer order.
fulfillmentOrderNumber	NA	string($text128) example: 67008711	External system identifier of a fulfillment order.
allowPartialDelivery	NA	boolean example: true	True indicates that a partial delivery is allowed for the transfer, false indicates it is not.
useUnavailableInventory	NA	boolean example: true	True if the transfer is for unavailable inventory, false otherwise.
lineItems	Yes	object	A collecton of up to 5,000 line items on the transfer.

Table 4-161 TransferImportLineItemIdo — Object

Element Name	Required	Data Type/ Example	Description
itemId	Yes	string($text25) example: 10045600	The unique identifier of the SKU item.
quantity	Yes	number($decimal(20,4)) example: 100	The quantity that was requested.
preferredUom	NA	string($text4) example: EA	The preferred unit of measure of this line item.

Responses

This section describes the responses of the Import Transfer API.

Response Code: 202

Accepted

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Delete Transfer Import

The Delete Transfer Import API deletes a transfer request or trasnfer (stock order) if it has not yet become active.

Method

```
DELETE
```

URL

```
/transfers/import/{externalTransferId}
```

Request

Table 4-162 Delete Transfer Import — Request Parameter

Name	Required	Data Type/ Example	Description
externalTransferId	Yes	number($int15) (path)	The unique identifier of the transfer from the external system.

Responses

This section describes the responses of the Delete Transfer Import API.

Response Code: 202

Accepted

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

REST Service: Transfer Delivery

A transfer delivery is the physical accounting of receiving goods from a store, warehouse, or external finisher. Deliveries consists of containers that hold items. Containers may be received blind, without knowing the expected quantities. The containers can also be for unavailable inventory. Transfer deliveries allow for receving by Advance Shipment Notice (ASN), container, item level, or the entire delivery. Damages may be recorded during the receiving. This service defines operations to manage transfer delivery information by integration with an external system.

Server Base URL

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Find Delivery

This section describes the Find Delivery API. This API finds up to 10,000 delivery headers for the input criteria.

Method

```
GET
```

URL

```
/tsfdeliveries
```

Request

Table 4-163 Find Delivery — Request Parameters

Name	Required	Data Type/Example	Description
storeId	NA	number($int10) (query)	Include only deliveries from this store.
asn	NA	string($text128) (query)	Include only deliveries with this ASN.
status	NA	integer($int4) (query)	Include only deliveries with this status. Valid values are 1 - New 2 - In Progress 3 - Received Available values : 1, 2, 3
updateDateFrom	NA	string($date-time) (query)	Include only deliveries with an update date on or after this date.
updateDateTo	NA	string($date-time) (query)	Include only deliveries with an update date on or before this date.

Responses

This section describes the responses of the Find Delivery API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "deliveryId": 11111,
    "storeId": 5000,
    "sourceType": 1,
    "sourceId": 5101,
    "asn": "789012",
    "status": 1,
    "receiptNumber": "799003",
    "carrierName": "Speedy, Inc.",
    "expectedDate": "2025-01-10T13:35:33.734Z",
```

```
    "receivedDate": "2025-01-10T13:35:33.734Z",
    "createDate": "2025-01-10T13:35:33.734Z",
    "updateDate": "2025-01-10T13:35:33.734Z"
  }
]
```


Schema — TransferDeliveryHeaderIdo

Table 4-164 TransferDeliveryHeaderIdo —Object

Element Name	Required	Data Type/Example	Description
deliveryId	NA	number($int15) example: 11111	The unique identifier of the transfer delivery.
storeId	NA	number($int10) example: 5000	The identifier of the store receiving the inventory.
sourceType		integer($int4) example: 1	The type of location that is shipping the goods. Valid values are: 1 - Store 2 - Warehouse 3 - Finisher Enum: Array [3]
sourceId	NA	number($int10) example: 5101	The identifier of the location shipping the goods.
asn	NA	string($text128) example: 789012	The advanced shipping notification number.
status	NA	integer($int4) example: 1	The current status of the delivery. Valid values are: 1 - New 2 - In Progress 3 - Received Enum: [1, 2, 3]
receiptNumber	NA	string($text128) example: 799003	The receipt number of the delivery.
carrierName	NA	string($text128) example: Speedy, Inc.	The name of the carrier of the delivery.
expectedDate	NA	string($date-time)	The date the delivery is epxected to be received.
receivedDate	NA	string($date-time)	The date the delivery was received.
createDate	NA	string($date-time)	The date the delivery was created.
updateDate	NA	string($date-time)	The date the delivery was last updated.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Create Delivery

Creates a new transfer delivery as if SIOCS was the originator of the delivery. For integration of ASN deliveries originating from an external system, please see import delivery operation.

Method

```
POST
```

URL

```
/tsfdeliveries
```

Request

There are no request parameters.

The request body is appliaction/json.

The delivery details of the new delivery.

Example Value

```
{
  "storeId": 5000,
  "sourceType": 1,
  "sourceId": 5101,
  "asn": "789012",
  "billOfLadingId": "BOL884455",
  "carrierType": 1,
  "carrierName": "Speedy, Inc.",
  "carrierCode": "SPI",
  "sourceAddress": "Solid Supplies",
  "licensePlate": "ABX100",
  "freightId": "666234522",
  "expectedDate": "2025-01-10T14:25:34.133Z",
  "cartons": [
    {
      "externalCartonId": "GH124000",
      "referenceId": "3461353",
      "damagedReason": "Vehicle Accident",
      "serialCode": 3333600,
      "trackingNumber": "346139384726043",
      "damagedRemaining": true,
      "receiveAtShopFloor": false,
      "qualityControl": true,
```

```
      "lineItems": [
        {
          "itemId": "11111",
          "documentId": 222222,
          "documentType": 1,
          "documentDate": "2025-01-10T14:25:34.133Z",
          "customerOrderNumber": "1444923",
          "fulfillmentOrderNumber": "11123412",
          "useAvailable": true,
          "caseSize": 1,
          "quantityExpected": 20,
          "quantityReceived": 20,
          "quantityDamaged": 20,
          "uins": [
            {
              "uin": "11123412",
              "shipped": true,
              "received": true,
              "damaged": true
            }
          ]
        }
      ]
    }
  ]
}
```


Schema — TransferDeliveryCreateIdo

Table 4-165 TransferDeliveryCreateIdo —Object

Element Name	Required	Data Type/ Example	Description
storeId	Yes	number($int10) example: 5000	The identifier of the store receiving the inventory.
sourceType	Yes	integer($int4) example: 1	The type of location that is shipping the goods. Valid values are
1 - Store			
2 - Warehouse			
3 - Finisher			
Enum: [1, 2, 3]			
sourceId	Yes	number($int10) example: 5101	The identifier of the location shipping the goods.
asn	Yes	string($text128) example: 789012	The advanced shipping notification number.
billOfLadingId	NA	string($text128) example: BOL884455	A bill of lading identifier from an external system.

Table 4-165 (Cont.) TransferDeliveryCreateIdo —Object

Element Name	Required	Data Type/ Example	Description
carrierType	NA	integer($int4) example: 1	The carrier type of the carrier. Valid values are: 1 - Corporate 2 - Third Party Enum: [1, 2]
carrierName	NA	string($text128) example: Speedy, Inc.	The name of the carrier of the delivery.
carrierCode	NA	string($text4) example: SPI	A unique code that identifies the carrier.
sourceAddress	NA	string($text1000) example: Solid Supplies	The address of the source location that shipped the inventory.
licensePlate	NA	string($text128) example: ABX100	A license plate number of the delivery vehicle.
freightId	NA	string($text128) example: 666234522	A freight identifier associated to the delivery.
expectedDate	NA	string($date-time) The date the delivery is epxected to be received.	
cartons	Yes	object	A collection of up to 500 cartons on the delivery.

Table 4-166 TransferDeliveryCreateCartonIdo —Object

Element Name	Required	Data Type/ Example	Description
externalCartonId	NA	string($text128) example: GH124000	A carton identifier from an external system.
referenceId	NA	string($text128) example: 3461353	A reference identifier (another way to identify the carton).
damagedReason	NA	string($text128) example: Vehicle Accident	A reason for the container damage.
serialCode	NA	number($int15) example: 3333600	A serial code associated to the container.
trackingNumber	NA	string($text128) example: 346139384726043	A tracking number associated to the container.

Table 4-166 (Cont.) TransferDeliveryCreateCartonIdo —Object

Element Name	Required	Data Type/ Example	Description
damagedRemaining	NA	boolean example: true	True indicates all remaining unreceived quantities should be marked as damaged on the final receipt.
receiveAtShopFloor	NA	boolean example: false	True indicates the container is to be received on the shopfloor, false indicates it should not.
qualityControl	NA	boolean example: true	True indicates the container requires quality control, false indicates it does not.
lineItems	Yes	object	A collection of up to 2,000 items on the container.

Table 4-167 TransferDeliveryCreateLineItemIdo —Object

Element Name	Required	Data Type/ Example	Description
itemId	Yes	string($text25) example: 11111	The unique identifier of the item.
documentId	Yes	number($int15) example: 222222	The unique identifier of the transfer or allocation document.
documentType	Yes	integer($int4) example: 1	The type of the document. Valid values are: 1 - Transfer 2 - Allocation Enum: [1, 2]
documentDate	Yes	string($date-time)	The date the document was created.
customerOrderNumber	NA	string($text128) example: 1444923	The customer order identifier if a customer order is associated to the item.
fulfillmentOrderNumber	NA	string($text128) example: 11123412	The fulfillment order identifier if a customer order is associated to the item.
useAvailable	NA	boolean example: true	True indicates to use available inventory, false indicuates to use unavailable inventory.
caseSize	NA	number($decimal(10,2)) example: 1	The case size of the item for this record.
quantityExpected	NA	number($decimal(20,4)) example: 20	The quantity expected to be received.
quantityReceived	NA	number($decimal(20,4)) example: 20	The quantity received as good.
quantityDamaged	NA	number($decimal(20,4)) example: 20	The quantity received as damaged.

Table 4-167 (Cont.) TransferDeliveryCreateLineItemIdo —Object

Element Name	Required	Data Type/ Example	Description
uins	NA	object	A collection of UINs on the line item.

Table 4-168 TransferDeliveryUinIdo —Object

Element Name	Required	Data Type/ Example	Description
uin	Yes	string($text128) example: 11123412	The unique identification number.
shipped	NA	boolean example: true	True, if the UIN is shipped, false otherwise.
received	NA	boolean example: true	True, if the UIN is received, false otherwise.
damaged	NA	boolean example: true	True if the UIN is received as damaged, false otherwise.

Responses

This section describes the responses of the Create Delivery API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value

```
[
  {
    "deliveryId": 11111,
    "status": 1
  }
]
```

Schema — TransferDeliveryStatusIdo

Table 4-169 TransferDeliveryStatusIdo —Object

Element Name	Required	Data Type/ Example	Description
deliveryId	NA	number($int15) example: 11111	The unique identifier of the transfer delivery.

Table 4-169 (Cont.) TransferDeliveryStatusIdo —Object

Element Name	Required	Data Type/ Example	Description
status	NA	integer($int4) example: 1	The current status of the delivery. Valid values are: 1 - New 2 - In Progress 3 - Received Enum: [1, 2, 3]

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Read Delivery

The Read Delivery API retrieves all the details about an transfer delivery.

Method

```
GET
```

URL

```
/tsfdeliveries/{deliveryId}
```

Request

Table 4-170 Read Delivery — Request Parameter

Name	Required	Data Type/ Example	Description
deliveryId	Yes	number($int12) (path)	The unique identifier of the transfer delivery.

Responses

This section describes the responses of the Read Delivery API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "deliveryId": 11111,
    "storeId": 5000,
    "sourceType": 1,
    "sourceId": 5101,
    "status": 1,
    "asn": "789012",
    "receiptNumber": "799003",
    "carrierName": "Speedy, Inc.",
    "carrierType": 1,
    "carrierCode": "SPI",
    "sourceAddress": "Solid Supplies",
    "licensePlate": "ABX100",
    "freightId": "666234522",
    "fiscalDocumentRequestId": 100234,
    "fiscalDocumentReferenceId": 63452277,
    "fiscalDocumentNumber": "84478274",
    "billOfLadingId": "BOL884455",
    "expectedDate": "2025-01-10T14:36:21.974Z",
    "receivedDate": "2025-01-10T14:36:21.974Z",
    "receivedUser": "smith123",
    "createDate": "2025-01-10T14:36:21.974Z",
    "createUser": "smith123",
    "updateDate": "2025-01-10T14:36:21.974Z",
    "updateUser": "smith123",
    "importId": "3461353",
    "cartons": [
      {
        "cartonId": 11111,
        "externalCartonId": "GH124000",
        "referenceId": "3461353",
        "misdirectedId": 3461353,
        "discrepant": true,
        "receiveAtShopFloor": false,
        "externalCreate": true,
        "adjusted": false,
        "qualityControl": true,
        "copied": true,
        "damagedRemaining": true,
        "damagedReason": "Vehicle Accident",
        "serialCode": 3333600,
        "trackingNumber": "346139384726043",
        "status": 1,
        "customerOrderRelated": 1,
        "createUser": "smith123",
```

```
      "updateDate": "2025-01-10T14:36:21.974Z",
      "updateUser": "smith123",
      "receivedDate": "2025-01-10T14:36:21.974Z",
      "receivedUser": "smith123",
      "lineItems": [
        {
          "lineId": 11111,
          "itemId": "11111",
          "documentId": 222222,
          "documentType": 1,
          "documentDate": "2025-01-10T14:36:21.974Z",
          "customerOrderNumber": "1444923",
          "fulfillmentOrderNumber": "11123412",
          "useAvailable": true,
          "caseSize": 1,
          "quantityExpected": 20,
          "quantityReceived": 20,
          "quantityDamaged": 20,
          "quantityPreviousReceived": 20,
          "quantityPreviousDamaged": 20,
          "uins": [
            {
              "uin": "11123412",
              "itemUinId": 8475,
              "shipped": true,
              "received": true,
              "damaged": true
            }
          ]
        }
      ]
    }
  ]
}
```


Schema — TransferDeliveryIdo

Table 4-171 TransferDeliveryIdo — Object

Element Name	Required	Data Type/ Example	Description
deliveryId	NA	number($int15) example: 11111	The unique identifier of the transfer delivery.
storeId	NA	number($int10) example: 5000	The identifier of the store receiving the inventory.
sourceType	NA	integer($int4) example: 1	The type of location that is shipping the goods. Valid values are 1 - Store 2 - Warehouse 3 - Finisher Enum: [1, 2, 3]

Table 4-171 (Cont.) TransferDeliveryIdo — Object

Element Name	Required	Data Type/ Example	Description
sourceId	NA	number($int10) example: 5101	The identifier of the location shipping the goods.
status	NA	integer($int4) example: 1	The current status of the delivery. Valid values are 1 - New 2 - In Progress 3 - Received Enum: [1, 2, 3]
asn	NA	string($text128) example: 789012	The advanced shipping notification number.
receiptNumber	NA	string($text128) example: 799003	The receipt number of the delivery.
carrierName	NA	string($text128) example: Speedy, Inc.	The name of the carrier of the delivery.
carrierType	NA	integer($int4) example: 1	The carrier type of the carrier. Valid values are 1 - Corporate 2 - Third Party Enum: [1, 2, 3]
carrierCode	NA	string($text4) example: SPI	A unique code that identifies the carrier.
sourceAddress	NA	string($text1000) example: Solid Supplies	The address of the source location that shipped the inventory.
licensePlate	NA	string($text128) example: ABX100	A license plate number of the delivery vehicle.
freightId	NA	string($text128) example: 666234522	A freight identifier associated to the shipment.
fiscalDocument RequestId	NA	number($int20) example: 100234	The identifier of the request for a fiscal document.
fiscalDocument ReferenceId	NA	number($int20) example: 63452277	The unique identifier of the fiscal document record.
fiscalDocument Number	NA	string($text255) example: 84478274	The fiscal document number.
billOfLadingId	NA	string($text128) example: BOL884455	An external bill of lading identifier.
expectedDate	NA	string($date-time)	The date the delivery is expected to be received.
receivedDate	NA	string($date-time)	The date the delivery was received.
receivedUser	NA	string($text128) example: smith123	The user that received the delivery.

Table 4-171 (Cont.) TransferDeliveryIdo — Object

Element Name	Required	Data Type/ Example	Description
createDate	NA	string($date-time)	The date the delivery was created.
createUser	NA	string($text128) example: smith123	The user that created the delivery.
updateDate	NA	string($date-time)	The date the delivery was last updated.
updateUser	NA	string($text128) example: smith123	The user that last updated the delivery.
importId	NA	string($text128) example: 3461353	An original import identifier if the data was imported through data-seeding.
cartons	NA	object	A collection of cartons on the delivery.

Table 4-172 TransferDeliveryCartonIdo — Object

Element Name	Required	Data Type/ Example	Description
cartonId	NA	number($int15) example: 11111	The unique identifier of the transfer delivery carton.
externalCartonId	NA	string($text128) example: GH124000	A carton identifier from an external system.
referenceId	NA	string($text128) example: 3461353	A reference identifier (another way to identify the carton)
misdirectedId	NA	number($int15) example: 3461353	A misdirected container identifier (if this is copy of a another container).
discrepant	NA	boolean example: true	True indicates the container is discrepant, false indicates it is not.
receiveAtShopFloor	NA	boolean example: false	True indicates the container is to be received on the shopfloor, false indicates it should not.
externalCreate	NA	boolean example: true	True indicates the container was externally created, false indicates it was created internally.
adjusted	NA	boolean example: false	True indicates the container has been adjusted, false indicates it has not.
qualityControl	NA	boolean example: true	True indicates the container requires quality control, false indicates it does not.
copied	NA	boolean example: true	True indicates the container has been copied as a misdirected container, false means it has not.
damagedRemaining	NA	boolean example: true	True indicates all remaining unreceived quantities should be marked as damaged on the final receipt.
damagedReason	NA	string($text128) example: Vehicle Accident	A reason for the container damage.

Table 4-172 (Cont.) TransferDeliveryCartonIdo — Object

Element Name	Required	Data Type/ Example	Description
serialCode	NA	number($int15) example: 3333600	A serial code associated to the container.
trackingNumber	NA	string($text128) example: 346139384726043	A tracking number associated to the container.
status	NA	integer($int4) example: 1	The status of the container. Value values are 1 - New 2 - In Progress 3 - Damaged 4 - Received 5 - Missing Enum: [1, 2, 3, 4, 5]
customerOrderRelated	NA	nteger($int4) example: 1	Indicates if the carton is related to a customer order. Valid values are 1 - Yes 2 - Mix 3 - No Enum: [1, 2, 3]
createUser	NA	string($text128) example: smith123	The user that created the container.
updateDate	NA	string($date-time)	The date the container was last updated.
updateUser	NA	string($text128) example: smith123	The user that last updated the container.
receivedDate	NA	string($date-time)	The date the container was received.
receivedUser	NA	string($text128) example: smith123	The user that created the container.
lineItems	NA	object	A collection of items in the container.

Table 4-173 TransferDeliveryLindeItemIdo — Object

Element Name	Required	Data Type/ Example	Description
lineId	NA	number($int15) example: 11111	The unique identifier of the line item record.
itemId	NA	string($text25) example: 11111	The unique identifier of the item.
documentId	NA	number($int15) example: 222222	The unique identifier of the transfer or allocation document.

Table 4-173 (Cont.) TransferDeliveryLindeItemIdo — Object

Element Name	Required	Data Type/ Example	Description
documentType	NA	integer($int4) example: 1	The type of the document. Value values are 1 - Transfer 2 - Allocation Enum: [1, 2]
documentDate	NA	string($date-time)	The date the document was created.
customerOrderNumber	NA	string($text128) example: 1444923	A customer order identifier if a customer order is associated to the delivery.
fulfillmentOrderNumber	NA	string($text128) example: 11123412	The fulfillment order identifier if a customer order is associated to the delivery.
useAvailable	NA	boolean example: true	True indicates to use available inventory, false indicates to use unavailable inventory.
caseSize	NA	number($decimal(10,2)) example: 1	The case size of the item for this record.
quantityExpected	NA	number($decimal(20,4)) example: 20	The quantity expected to be received.
quantityReceived	NA	number($decimal(20,4)) example: 20	The quantity received as good.
quantityDamaged	NA	number($decimal(20,4)) example: 20	The quantity received as damaged.
quantityPreviousReceived	NA	number($decimal(20,4)) example: 20	The quantity last received as good.
quantityPreviousDamaged	NA	number($decimal(20,4)) example: 20	The quantity last received as damaged.
uins	NA	object	A collections of UINs on the line item.

Table 4-174 TransferDeliveryLindeItemUinIdo — Object

Element Name	Required	Data Type/ Example	Description
uin	NA	string($text128) example: 11123412	The unique identification number.
itemUinId	NA	number($int14) example: 8475	The unique identifier of the item UIN record.
shipped	NA	boolean example: true	True if the UIN is shipped, false otherwise.
received	NA	boolean example: true	True if the UIN is received, false otherwise.
damaged	NA	boolean example: true	True if the UIN is received as damaged, false otherwise.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Update Delivery

The Update Delivery API update the header portion of a delivery.

Method

```
POST
```

URL

```
/tsfdeliveries/{deliveryId}
```

Request

Table 4-175 Update Delivery — Request Parameter

Name	Required	Data Type/ Example	Description
deliveryId	Yes	number($int12) (path)	The unique identifier of the transfer delivery.

The request body is appliaction/json.

Delivery header details to update.

Example Value

```
{
  "billOfLadingId": "BOL884455",
  "carrierType": 1,
  "carrierName": "Speedy, Inc.",
  "carrierCode": "SPI",
  "sourceAddress": "Solid Supplies",
  "licensePlate": "ABX100",
  "freightId": "666234522",
  "expectedDate": "2025-01-10T15:43:51.438Z"
}
```

Schema — TransferDeliveryUpdateIdo

Table 4-176 TransferDeliveryUpdateIdo— Object

Element Name	Required	Data Type/ Example	Description
billOfLadingId	NA	string($text128) example: BOL884455	A bill of lading identifier from an external system.
carrierType	NA	integer($int4) example: 1	The carrier type of the carrier. Valid values are 1 - Corporate 2 - Third Party Enum: [1, 2]
carrierName	NA	string($text128) example: Speedy, Inc.	The name of the carrier of the delivery.
carrierCode	NA	string($text4) example: SPI	A unique code that identifies the carrier.
sourceAddress	NA	string($text1000) example: Solid Supplies	The address of the source location that shipped the inventory.
licensePlate	NA	string($text128) example: ABX100	A license plate number of the delivery vehicle.
freightId	NA	string($text128) example: 666234522	A freight identifier associated to the delivery.
expectedDate	NA	string($date-time)	The date the delivery is expected to be received.

Responses

This section describes the responses of the Update Delivery API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Receive Delivery

The Receive Delivery API receives the transfer delivery. The quantities will be updated to the expected quantity value (if no quantity has been recorded previously, including recording 0 previously) and the delivery will be set to in progress stats. To finalize the delivery, use the confirm operation.

Method

```
POST
```

URL

```
/tsfdeliveries/{deliveryId}/receive
```

Request

Table 4-177 Receive Delivery — Request Parameter

Name	Required	Data Type/ Example	Description
deliveryId	Yes	number($int12) (path)	The unique identifier of the transfer delivery.

Responses

This section describes the responses of the Receive Delivery API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Confirm Delivery

The Confirm Delivery API confirms the delivery finalizing the movement of inventory and closing the delivery.

Method

POST

URL

/tsfdeliveries/{deliveryId}/confirm

Request

Table 4-178 Confirm Delivery — Request Parameter

Name	Required	Data Type/ Example	Description
deliveryId	Yes	number($int12) (path)	The unique identifier of the transfer delivery.

Responses

This section describes the responses of the Confirm Delivery API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Open Delivery

The Open Delivery API opens the delivery for additional receiving but leaves all the cartons in their current state.

Method

POST

URL

```
/tsfdeliveries/{deliveryId}/open
```

Request

Table 4-179 Open Delivery — Request Parameter

Name	Required	Data Type/ Example	Description
deliveryId	Yes	number($int12) (path)	The unique identifier of the transfer delivery.

Responses

This section describes the responses of the Open Delivery API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Create Carton

The Create Carton Delivery API adds a new container to a new or in progress shipment.

Method

```
POST
```

URL

```
/tsfdeliveries/{deliveryId}/cartons
```

Request

Table 4-180 Create Carton — Request Parameter

Name	Required	Data Type/ Example	Description
deliveryId	Yes	number($int12) (path)	The unique identifier of the delivery.

The request body is application/json.

Details about the carton to add to the shipment.

Example Value


```
{
  "externalCartonId": "GH124000",
  "referenceId": "3461353",
  "damagedReason": "Vehicle Accident",
  "serialCode": 3333600,
  "trackingNumber": "346139384726043",
  "damagedRemaining": true,
  "receiveAtShopFloor": false,
  "qualityControl": true,
  "lineItems": [
    {
      "itemId": "11111",
      "documentId": 222222,
      "documentType": 1,
      "documentDate": "2025-01-13T12:33:47.167Z",
      "customerOrderNumber": "1444923",
      "fulfillmentOrderNumber": "11123412",
      "useAvailable": true,
      "caseSize": 1,
      "quantityExpected": 20,
      "quantityReceived": 20,
      "quantityDamaged": 20,
      "uins": [
        {
          "uin": "11123412",
          "shipped": true,
          "received": true,
          "damaged": true
        }
      ]
    }
  ]
}
```


Schema — TransferDeliveryCreateCartonIdo

Table 4-181 TransferDeliveryCreateCartonIdo— Object

Element Name	Required	Data Type/ Example	Description
externalCartonId	NA	string($text128) example: GH124000	A carton identifier from an external system.
referenceId	NA	string($text128) example: 3461353	A reference identifier (another way to identify the carton).
damagedReason	NA	string($text128) example: Vehicle Accident	A reason for the container damage.
serialCode	NA	number($int15) example: 3333600	A serial code associated to the container.
trackingNumber	NA	string($text128) example: 346139384726043	A tracking number associated to the container.
damagedRemaining	NA	boolean example: true	True indicates all remaining unreceived quantities should be marked as damaged on the final receipt.
receiveAtShopFloor	NA	boolean example: false	True indicates the container is to be received on the shopfloor, false indicates it should not.
qualityControl	NA	boolean example: true	True indicates the container requires quality control, false indicates it does not.
lineItems	Yes	object	A collection of up to 2,000 items on the container.

Table 4-182 TransferDeliveryCreateLineItemIdo —Object

Element Name	Required	Data Type/ Example	Description
itemId	Yes	string($text25) example: 11111	The unique identifier of the item.
documentId	Yes	number($int15) example: 222222	The unique identifier of the transfer or allocation document.
documentType	Yes	integer($int4) example: 1	The type of the document. Valid values are: 1 - Transfer 2 - Allocation Enum: [1, 2]
documentDate	Yes	string($date-time)	The date the document was created.
customerOrderNumber	NA	string($text128) example: 1444923	The customer order identifier if a customer order is associated to the item.
fulfillmentOrderNumber	NA	string($text128) example: 11123412	The fulfillment order identifier if a customer order is associated to the item.
useAvailable	NA	boolean example: true	True indicates to use available inventory, false indicuates to use unavailable inventory.

Table 4-182 (Cont.) TransferDeliveryCreateLineItemIdo —Object

Element Name	Required	Data Type/ Example	Description
caseSize	NA	number($decimal(10,2)) example: 1	The case size of the item for this record.
quantityExpected	NA	number($decimal(20,4)) example: 20	The quantity expected to be received.
quantityReceived	NA	number($decimal(20,4)) example: 20	The quantity received as good.
quantityDamaged	NA	number($decimal(20,4)) example: 20	The quantity received as damaged.
uins	NA	object	A collection of UINs on the line item.

Table 4-183 TransferDeliveryUinIdo —Object

Element Name	Required	Data Type/ Example	Description
uin	Yes	string($text128) example: 11123412	The unique identification number.
shipped	NA	boolean example: true	True, if the UIN is shipped, false otherwise.
received	NA	boolean example: true	True, if the UIN is received, false otherwise.
damaged	NA	boolean example: true	True if the UIN is received as damaged, false otherwise.

Responses

This section describes the responses of the Create Carton API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value

```
[
  {
    "deliveryId": 11111,
    "cartonId": 24680,
    "externalCartonId": "GH124000",
```

```
    "status": 1
  }
]
```

Schema — TransferDeliveryCartonStatusIdo

Table 4-184 TransferDeliveryICartonStatusdo — Object

Element Name	Required	Data Type/ Example	Description
deliveryId	NA	number($int15) example: 11111	The unique identifier of the transfer delivery.
cartonId	NA	number($int15) example: 24680	The unique identifier of the transfer delivery carton.
externalCartonId	NA	string($text128) example: GH124000	A carton identifier from an external system.
status	NA	integer($int4) example: 1	The status of the container. Valid values are 1 - New 2 - In Progress 3 - Damaged 4 - Received 5 - Missing Enum: [1, 2, 3, 4, 5]

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Update Carton

The Update Carton API Updates a previously existing carton that is in a new or in progress state, on a delivery that is also new or in progress.

Method

```
POST
```

URL

```
/tsfdeliveries/cartons/{cartonId}
```

Request

Table 4-185 Update Carton — Request Parameter

Name	Required	Data Type/ Example	Description
cartonId	Yes	number($int12) (path)	The unique identifier of the delivery carton.

The request body is appliaction/json.

Details about the carton update.

Example Value

```
{
  "externalCartonId": "GH124000",
  "referenceId": "3461353",
  "receiveAtShopFloor": false,
  "qualityControl": true,
  "damagedRemaining": true,
  "damagedReason": "Vehicle Accident",
  "serialCode": 3333600,
  "trackingNumber": "346139384726043",
  "lineItems": [
    {
      "itemId": "11111",
      "documentId": 222222,
      "documentType": 1,
      "documentDate": "2025-01-13T13:33:02.273Z",
      "caseSize": 1,
      "quantityReceived": 20,
      "quantityDamaged": 20,
      "uins": [
        {
          "uin": "11123412",
          "shipped": true,
          "received": true,
          "damaged": true
        }
      ]
    }
  ]
}
```

Schema — TransferDeliveryCartonUpdateIdo

Table 4-186 TransferDeliveryCartonUpdateIdo — Object

Element Name	Required	Data Type/ Example	Description
externalCartonId	NA	string($text128) example: GH124000	A carton identifier from an external system.
referenceId	NA	string($text128) example: 3461353	A reference identifier (another way to identify the carton).
receiveAtShopFloor	NA	boolean example: false	True indicates the container is to be received on the shopfloor, false indicates it should not.
qualityControl	NA	boolean example: true	True indicates the container requires quality control, false indicates it does not.
damagedRemaining	NA	boolean example: true	True indicates all remaining unreceived quantities should be marked as damaged on the final receipt.
damagedReason	NA	string($text128) example: Vehicle Accident	A reason for the container damage.
serialCode	NA	number($int15) example: 3333600	A serial code associated to the container.
trackingNumber	NA	string($text128) example: 346139384726043	A tracking number associated to the container.
lineItems	NA	object	A collection of up to 2,000 items in the container.

Table 4-187 TransferDeliveryCartonUpdateItemIdo — Object

Element Name	Required	Data Type/ Example	Description
itemId	Yes	string($text25) example: 11111	The unique identifier of the item.
documentId	Yes	number($int15) example: 222222	The unique identifier of the transfer or allocation document.
documentType	Yes	integer($int4) example: 1	The type of the document. Valid values are 1 - Transfer 2 - Allocation Enum: [1, 2]
documentDate*	Yes	string($date-time)	The date the document was created.
caseSize	NA	number($decimal(10,2)) example: 1	The case size of the item for this record.
quantityReceived	NA	number($decimal(20,4)) example: 20	The quantity received as good.
quantityDamaged	NA	number($decimal(20,4)) example: 20	The quantity received as damaged.
uins	NA	object	A collection of UINs on the line item.

Table 4-188 TransferDeliveryUinIdo — Object

Element Name	Required	Data Type/ Example	Description
uin	Yes	string($text128) example: 11123412	The unique identification number.
shipped	NA	boolean example: true	True, if the UIN is shipped, false otherwise.
received	NA	boolean example: true	True, if the UIN is received, false otherwise.
damaged	NA	boolean example: true	True if the UIN is received as damaged, false otherwise.

Responses

This section describes the responses of the Update Carton API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Receive Carton

The Receive Carton API receives the container. The quantities will be updated to the expected quantity value (if no quantity has been previously entered, including 0) and the container will be moved to in progress. Use the confirm operation to finalize the carton.

Method

```
POST
```

URL

```
/tsfdeliveries/cartons/{cartonId}/receive
```

Request

Table 4-189 Receive Carton — Request Parameter

Name	Required	Data Type/ Example	Description
cartonId	Yes	number($int12) (path)	The unique identifier of the transfer delivery carton.

Responses

This section describes the responses of the Update Carton API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Confirm Carton

The Confirm Carton API confirms the container finalizing its status as received or damaged.

Method

```
POST
```

URL

```
/tsfdeliveries/cartons/{cartonId}/confirm
```

Request

Table 4-190 Confirm Carton — Request Parameter

Name	Required	Data Type/ Example	Description
cartonId	Yes	number($int12) (path)	The unique identifier of the transfer delivery carton.

Responses

This section describes the responses of the Confirm Carton API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Cancel Carton

The Cancel Carton API cancels the container indicating it will not be received as part of the delivery.

Method

`POST`

URL

`/tsfdeliveries/cartons/{cartonId}/cancel`

Request

Table 4-191 Cancel Carton — Request Parameter

Name	Required	Data Type/ Example	Description
cartonId	Yes	number($int12) (path)	The unique identifier of the transfer delivery carton.

Responses

This section describes the responses of the Cancel Carton API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Open Carton

The Open Carton API re-opens a confirmed container, placing it back into in progress state in order to adjust and confirm again.

Method

`POST`

URL

`/tsfdeliveries/cartons/{cartonId}/open`

Request

Table 4-192 Open Carton — Request Parameter

Name	Required	Data Type/ Example	Description
cartonId	Yes	number($int12) (path)	The unique identifier of the transfer delivery carton.

Responses

This section describes the responses of the Open Carton API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Import ASN Delivery

The Import ASN Delivery API imports a transfer delivery (ASN) managed by an external system that is notifying SIOCS of an ASN creation or modification that took place. This request is staged and processed asynchronously, and is controlled by the MPS message type DcsAsn.

Method

```
POST
```

URL

```
/tsfdeliveries/imports
```

Request

There are no request parameters.

The request body is appliaction/json.

Details about the delivery to import.

Example Value

```
{
  "asn": "789012",
  "storeId": 5000,
  "sourceType": 1,
  "sourceId": 5101,
  "carrierType": 1,
  "carrierName": "Speedy, Inc.",
  "carrierCode": "SPI",
  "sourceAddress": "Solid Supplies",
  "licensePlate": "ABX100",
  "freightId": "666234522",
  "fiscalDocumentNumber": "84478274",
  "billOfLadingId": "BOL884455",
  "expectedDate": "2025-01-13T14:21:38.692Z",
  "cartons": [
    {
      "externalCartonId": "GH124000",
      "referenceId": "3461353",
      "serialCode": 3333600,
      "trackingNumber": "346139384726043",
      "qualityControl": true,
      "lineItems": [
        {
          "itemId": "11111",
          "documentId": 222222,
```

```
            "documentType": 1,
            "documentDate": "2025-01-13T14:21:38.692Z",
            "useAvailable": true,
            "caseSize": 1,
            "quantity": 20
          }
        ]
      }
    ]
}
```


Schema — TransferDeliveryImportIdo

Table 4-193 TransferDeliveryImportIdo— Object

Element Name	Required	Data Type/ Example	Description
asn	Yes	string($text128) example: 789012	The advanced shipping notification number.
storeId	Yes	number($int10) example: 5000	The identifier of the store receiving the inventory.
sourceType	Yes	integer($int4) example: 1	The type of location that is shipping the goods. Valid values are 1 - Store 2 - Warehouse 3 - Finisher Enum: [1, 2, 3]
sourceId	Yes	number($int10) example: 5101	The identifier of the location shipping the goods.
carrierType	NA	integer($int4) example: 1	The carrier type of the carrier. Valid values are 1 - Corporate 2 - Third Party Enum: [1, 2]
carrierName	NA	string($text128) example: Speedy, Inc.	The name of the carrier of the delivery.
carrierCode	NA	string($text4) example: SPI	A unique code that identifies the carrier.
sourceAddress	NA	string($text1000) example: Solid Supplies	The address of the source location that shipped the inventory.
licensePlate	NA	string($text128) example: ABX100	A license plate number of the delivery vehicle.
freightId	NA	string($text128) example: 666234522	A freight identifier associated to the delivery.
fiscalDocumentNumber	NA	string($text255) example: 84478274	The fiscal document number of an associated fiscal document.

Table 4-193 (Cont.) TransferDeliveryImportIdo— Object

Element Name	Required	Data Type/ Example	Description
billOfLadingId	NA	string($text128) example: BOL884455	An external bill of lading identifier.
expectedDate	NA	string($date-time) The date the delivery is expected to be received.	
cartons	Yes	object	A collection of up to 500 cartons on the delivery.

Table 4-194 TransferDeliveryImporCartontIdo— Object

Element Name	Required	Data Type/ Example	Description
externalCartonId	Yes	string($text128) example: GH124000	A carton identifier from an external system.
referenceId	NA	string($text128) example: 3461353	A reference identifier (another way to identify the carton).
serialCode	NA	number($int15) example: 3333600	A serial code associated to the container.
trackingNumber	NA	string($text128) example: 346139384726043	A tracking number associated to the container.
qualityControl	NA	Boolean example: true	True indicates the container requires quality control, false indicates it does not.
lineItems	Yes	object	A collection of up to 2,000 items on the container.

Table 4-195 TransferDeliveryImportItemtIdo— Object

Element Name	Required	Data Type/ Example	Description
itemId	Yes	string($text25) example: 11111	The unique identifier of the item.
documentId	Yes	number($int15) example: 222222	The unique identifier of the transfer or allocation document.
documentType	Yes	integer($int4) example: 1	The type of the document. Valid values are 1 - Transfer 2 - Allocation Enum: [1, 2]
documentDate	Yes	string($date-time)	The date the document was created.
useAvailable	NA	boolean example: true	True indicates to use available inventory, false indicuates to use unavailable inventory.

Table 4-195 (Cont.) TransferDeliveryImportItemtIdo— Object

Element Name	Required	Data Type/ Example	Description
caseSize	NA	number($decimal(10,2)) example: 1	The case size of the item for this record.
Quantity	Yes	number($decimal(20,4)) example: 20	The quantity expected to be received.

Responses

This section describes the responses of the Import ASN Delivery API.

Response Code: 202

Accepted

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Import ASN Delete Delivery

A transfer delivery in new status can be deleted from the system. A transfer delivery that has progressed past the point cannot. This request is staged and processed asynchronously, and is controlled by the MPS message type DcsAsn.

Method

`POST`

URL

`/tsfdeliveries/imports/delete`

Request

There are no request parameters.

The request body is appliaction/json.

Details about the delivery to delete.

Example Value

```
{
  "asn": "789012",
  "storeId": 5000
}
```

Schema — TransferDeliveryDeleteImportIdo

Table 4-196 TransferDeliveryDeleteImportIdo— Object

Element Name	Required	Data Type/ Example	Description
asn	Yes	string($text128) example: 789012	The advanced shipping notification number.
storeId	Yes	number($int10) example: 5000	The identifier of the store receiving the inventory.

Responses

This section describes the responses of the Import ASN Delete Delivery API.

Response Code: 202

Accepted

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

REST Service: Transfer Shipment

This service allows the creation, modification, and cancellation of transfer shipments from an external application.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/tsfshipments

API Definitions

API	Definition
readShipment	Reads the transfer shipment. This does not include containers or items.
findShipments	Finds transfer shipment header information based on a set of criteria.
submitShipment	Submits the transfer shipment.
cancelSubmitShipment	Cancels the submission of a transfer shipment.
dispatchShipment	Dispatches a transfer shipment.
cancelShipment	Cancels a transfer shipment.
confirmCarton	Confirms a container for shipment.
cancelCarton	Cancels a container, removing it from the shipment.
openCarton	Opens a confirmed container so that it can be modified again.
createShipment	Creates a shipment.
updateShipment	Updates shipment header information.
createCarton	Adds a carton to the shipment.
updateCarton	Updates a carton on the shipment.

API: Read Shipment

Read a transfer shipment.

Table 4-197 API Basics

Endpoint URL	/{shipmentId}
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	None
Output	Transfer Shipment

Table 4-198 Path Parameter Definitions

Parameter	Definition
shipmentId	The internal identifier of the transfer shipment header.

Table 4-199 Output Data Definition

Column	Type	Definition
shipmentId	Long(15)	The unique internal identifier of the transfer shipment.
storeId	Long(10)	The unique store identifier that is the source of the shipment.
destinationType	Integer(2)	The location type of the destination. See Additional Data Definitions-Destination Type.
destinationId	Long(10)	The unique identifier of the destination.
asn	String(128)	The advance shipment notification number.

Table 4-199 (Cont.) Output Data Definition

status	Integer(2)	The current status of the shipment. See Additional Data Definitions: Status
authorizationCode	String(12)	An authorization code associated to the shipment.
billOfLadingId	Long(12)	The unique identifier of the bill of lading.
adhocDocumentId	Long(15)	An adhoc transfer document identifier associated to the shipment.
billOfLadingId	Long(15)	The bill of lading number.
alternateAddress	String(2000)	An alternate destination address.
carrierRole	Integer(2)	The type of carrier for the shipment. See Additional Data Definitions
carrierId	Long(10)	A unique identifier of a carrier for the shipment.
carrierServiceId	Long(10)	A unique identifier of a carrier service for the shipment.
alternateCarrierName	String(240)	The name of a third-party shipping company.
alternateCarrierAddress	String(2000)	The address of a third-party shipping company.
motive	String(120)	A motive for the shipment.
taxId	String(18)	The tax identifier of the supplier it is being shipped to.
trackingNumber	String(128)	A tracking number associated to the shipment.
dimensionId	Long(12)	The identifier of a dimension associated to the shipment.
weight	BigDecimal(12, 4)	The weight of the shipment.
weightUom	String(4)	The unit of measure of the weight of the shipment.
requestedPickupDate	Date	The requested pickup date.
fiscalDocumentRequestId	Long(20)	The identifier of the request for a fiscal document.
fiscalDocumentReferenceId	Long(20)	The unique identifier of the fiscal document.
fiscalDocumentNumber	String(255)	The fiscal document number.
fiscalDocumentStatus	Integer(4)	The status of the fiscal document.
fiscalDocumentRejectReason	String(255)	A reason the fiscal document was rejected.
fiscalDocumentUrl	String(255)	A URL to the fiscal document.
createUser	String(128)	The user that created the shipment record.
createDate	Date	The date the shipment record was created.
updateUser	String(128)	The user that last updated the shipment.
updateDate	Date	The last date the shipment was updated.
submitUser	String(128)	The user that submitted the shipment record.
submitDate	Date	The date the shipment was submitted within EICS.
dispatchUser	String(128)	The user that dispatched the shipment.
dispatchDate	Date	The date the shipment was dispatched within EICS.
cartons	Collection	A collection of cartons on the shipment.

Table 4-200 Output Data Definition (Cartons)

Column	Type	Definition
cartonId	Long(10)	The unique identifier of the record.
externalCartonId	String(128)	A container identifier from an external system.
status	Integer(4)	The current status of the container.
dimensionId	Long(10)	The shipment container dimension identifier.
weight	BigDecimal(12,4)	The weight of the container.
weightUom	String(4)	The unit of measure of the weight of the container.
trackingNumber	String(128)	A tracking number for the container.
useAvailableInventory	Boolean	True indicates use only available inventory, False indicates use non-available inventory.
restrictionLevel	Integer(4)	A hierarchy restriction level for items in the container.
customerOrderRelated	Integer(4)	The customer order related value (see Additional Data Definitions).
createUser	String(128)	The user that created the container in EICS.
createDate	Date	The date the container was created in EICS.
updateUser	String(128)	The user that last updated the container in EICS.
updateDate	date	The date the container was last updated in EICS.
approvalUser	String(128)	The user that approved the container in EICS.
approvalDate	Date	The date the container was approved in EICS.
lineItems	Collection	The line items in the container.

Table 4-201 Output Data Definition (Line Item)

Column	Type	Definition
lineId	Long(15)	The unique identifier of the record.
itemId	String(25)	The unique identifier of the item.
caseSize	BigDecimal(10,2)	The case size of this line item.
quantity	BigDecimal(20,4)	The quantity being shipped.
transferId	Long(12)	The unique identifier of the associated transfer.
externalTransferId	Long(15)	The external system identifier of the associated transfer.
customerOrderNumber	String(128)	The customer order number if line item is for a customer order.
fulfillmentOrderNumber	String(128)	The fulfillment order number if line item is for a customer order.
preferredUom	String(4)	The preferred unit of measure for the shipment quantity.
shipmentReasonId	Long(15)	A unique identifier of a shipment reason associated to this item.
uins	List<String>	A list of UINs that are shipped. The number of UINs must match the quantity attribute.

Example

Figure 4-15 Example

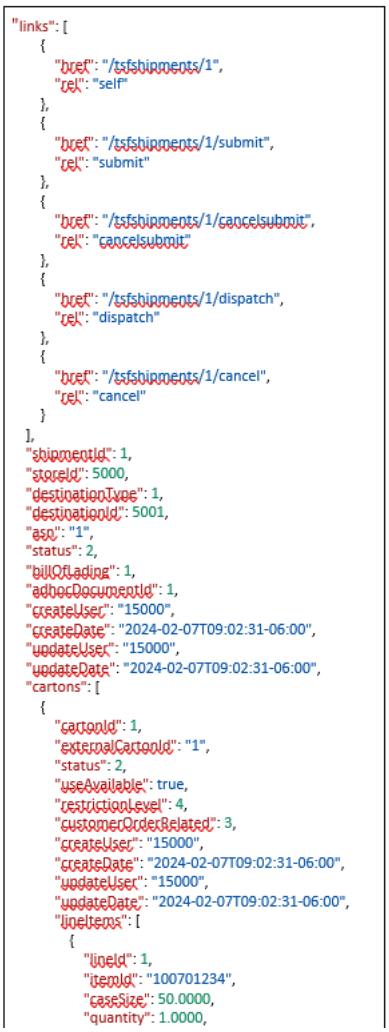


Figure 4-16 Example, continued

```
        "transferId": 1
      },
      {
        "lineId": 7,
        "itemId": "100801236",
        "caseSize": 50.0000,
        "quantity": 1.0000,
        "transferId": 1
      }
    ]
  },
  {
    "cartonId": 2,
    "externalCartonId": "2",
    "status": 2,
    "trackingNumber": "1111",
    "useAvailable": true,
    "restrictionLevel": 4,
    "customerOrderRelated": 3,
    "createUser": "15000",
    "createDate": "2024-02-07T09:02:31-06:00",
    "updateUser": "15000",
    "updateDate": "2024-02-07T09:02:31-06:00",
    "lineItems": [
      {
        "lineId": 8,
        "itemId": "101386248",
        "caseSize": 50.0000,
        "quantity": 1.0000,
        "transferId": 1
      },
      {
        "lineId": 15,
        "itemId": "100681077",
        "caseSize": 100.0000,
        "quantity": 1.0000,
        "transferId": 1
      }
    ]
  }
 ]
}
```


API: Find Transfer Shipment

Search for shipments based on a set of criteria.

If more than 10,000 shipments are found a "Results Too Large" response is returned and search criteria will need to be more restrictive.

Table 4-202 API Basics

Endpoint URL	
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	Query Parameters
Output	List of Transfer Shipments Headers

Table 4-203 Query Parameter Definitions

Attribute	Type	Definition
storeId	Long(10)	Include only transfer shipments from this store.

Table 4-203 (Cont.) Query Parameter Definitions

destinationType	Integer(2)	Include only transfer shipments to this destination type.
destinationId	Long(10)	Include only transfer shipments to this destination identifier.
asn	String(128)	Include only transfer shipments with this ASN.
status	Integer(2)	Include only transfer shipments in this status.
updateDateFrom	String	Include only transfer shipments last updated on or after this date.
updateDateTo	String	Include only transfer shipments last updated on or before this date.

Table 4-204 Output Data Definition

Column	Type	Definition
shipmentId	Long(15)	The unique internal identifier of the transfer shipment.
storeId	Long(10)	The unique store identifier that is the source of the shipment.
destinationType	Integer(2)	The location type of the destination. See Additional Data Definitions: Destination Type.
destinationId	Long(10)	The unique identifier of the destination location.
asn	String(128)	The advance shipment notification number.
status	Integer(4)	The current status of the shipment. See Additional Data Definitions: Status
createDate	Date	The date the shipment record was created.
updateDate	Date	The last date the shipment was updated.
submitDate	Date	The date the shipment was submitted within EICS.
dispatchDate	Date	The date the shipment was dispatched within EICS.

API: Submit Shipment

Submits the transfer shipment moving it to a noneditable state while it is waiting to be dispatched.

Table 4-205 API Basics

Endpoint URL	/{shipmentId}/submit
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Input	None
Output	None

Table 4-206 Path Parameter Definitions

Parameter	Definition
shipmentId	The internal identifier of the transfer shipment header.

API: Cancel Submit Shipment

Cancels the submissions of the transfer shipment return it to an in progress and editable state.

Table 4-207 API Basics

Endpoint URL	/{shipmentId}/cancelsubmit
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Input	None
Output	None

Table 4-208 Path Parameter Definitions

Parameter	Definition
shipmentId	The internal identifier of the transfer shipment header.

API: Dispatch Shipment

Dispatches the transfer shipment updating all the inventory positions and closing the shipment.

Table 4-209 API Basics

Endpoint URL	/{shipmentId}/dispatch
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Input	None
Output	None

Table 4-210 Path Parameter Definitions

Parameter	Definition
shipmentId	The internal identifier of the transfer shipment header.

API: Cancel Shipment

Cancels the transfer shipment reversing any reserved inventory currently picked.

Table 4-211 API Basics

Endpoint URL	/{shipmentId}/cancel
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Input	None
Output	None

Table 4-212 Path Parameter Definitions

Parameter	Definition
shipmentId	The internal identifier of the transfer shipment header.

API: Confirm Carton

Confirms a transfer shipment container, completing the container and making it non-editable and awaiting dispatch.

Table 4-213 API Basics

Endpoint URL	cartons/{cartonId}/confirm
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Input	None
Output	None

Table 4-214 Path Parameter Definitions

Parameter	Definition
cartonId	The internal identifier of the transfer shipment carton.

API: Cancel Carton

Cancels a transfer shipment container.

Table 4-215 API Basics

Endpoint URL	cartons/{cartonId}/cancel
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Input	None

Table 4-215 (Cont.) API Basics

Output	None

Table 4-216 Path Parameter Definitions

Parameter	Definition
cartonId	The internal identifier of the transfer shipment carton.

API: Open Carton

Opens a transfer shipment container.

Table 4-217 API Basics

Endpoint URL	cartons/{cartonId}/open
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Input	None
Output	None

Table 4-218 Path Parameter Definitions

Parameter	Definition
cartonId	The internal identifier of the transfer shipment carton.

API: createShipment

This API is used to create a new transfer shipment whose status is "In Progress."

> **Note:**
> Container item/reason combination cannot be duplicated within the container.

Table 4-219 API Basics

Endpoint URL	{base URL}
Method	POST
Successful Response	200 OK
Processing Type	Synchronous
Input	Transfer Shipment
Output	Transfer Shipment Status

Table 4-219 (Cont.) API Basics

Maximum Input Limit	1,000 overall line items on shipment

Table 4-220 Input Data Definition

Attribute	Type	Req	Definition
storeId	Long(10	X	The identifier of the store shipping the goods.
destinationType	Integer(2)	X	The location type of the destination (see Index).
destinationId	Long(10)	X	The location identifier of the destination
asn	String(15)		The advance shipping number from an external system.
authorizationCode	String(12)		A vendor authorization code. It may be required for some suppliers.
displayCartons	Boolean		True if cartons should be displayed, otherwise false.
addressType	Integer		The type of return address. See Index.
carrierRole	Integer(2)	X	The type of carrier for the shipment. See Index
carrierId	Long(10)		A unique identifier of a carrier for the shipment.
carrierServiceId	Long(10)		A unique identifier of a carrier service for the shipment.
alternateAddress	String(2000)		An alternate destination address.
alternateCarrierName	String(240)		The name of a third-party shipping company.
alternateCarrierAddress	String(2000)		The address of a third-party shipping company.
motiveId	Long(18)		The unique identifier of a bill of lading motive.
taxId	taxId		The tax identifier of the supplier it is being shipped to.
trackingNumber	String(128)		A tracking number associated to the shipment.
dimensionId	Long(12)		The identifier of a dimension associated to the shipment.
weight	BigDecimal(12,4)		The weight of the shipment.
weightUom	String(4)		The unit of measure of the weight of the shipment.
requestedPickupDate	Date		The requested pickup date.
cartons	Collection	X	A group of cartons to create along with the shipment.
notes	Collections of Strings		A collection of up to 100 notes.

Table 4-221 Shipment Carton Data Definition

Payload	Type	Req	Definition
externalCartonId	String(128)		A container identifier from an external system.

Table 4-221 (Cont.) Shipment Carton Data Definition

trackingNumber	String(128)		The tracking number of the container.
restrictionLevel	Integer(4)		A hierarchy restriction level for items in the container.
cartonSizeId	Long(10)		The shipment container dimension identifier.
weight	Long(12,4)		The weight of the container.
weightUom	String(4)		The unit of measure of the weight of the container.
useAvailableInventory	Boolean		True indicates available inventory will be used, false indicates unavailable inventory should be used.
lineItems	Collection	X	A collection of line items to create along with the carton.

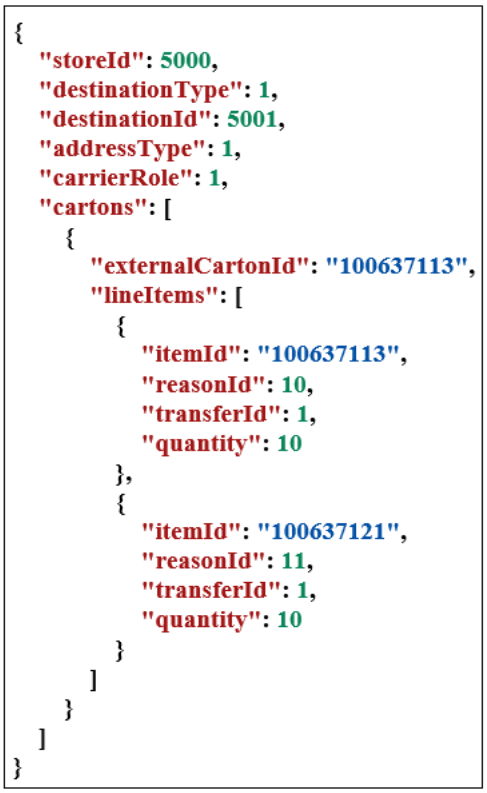
Table 4-222 Shipment Lien Item Data Definition

Payload	Type	Req	Definition
itemId	String(25)	X	The unique identifier of the SKU item.
transferId	Long(12)	X	The unique identifier of a transfer this item is being shipped for.
reasonId	Long(15)		The unique identifier of the shipment reason associated to this line item. It is not allowed for available inventory and required for unavailable inventory.
quantity	BigDecimal(12,4)	X	The quantity to ship.
caseSize	BigDecimal(10,2)		The case size of the item for this particular shipment.
uins	Collecton<String>		A collection of UINs to ship. This number of UINs must match the quantity.

Table 4-223 Output Data Definition

Attribute	Type	Definition
shipmentId	Long(15)	The unique identifier of the shipment.
storeId	Long(10)	The store identifier of the store shipping the goods.
asn	String(15)	The Advancing Shipping Number.
status	Integer(2)	The shipment status. See Index.

Figure 4-17 Example Code



```
{
  "storeId": 5000,
  "destinationType": 1,
  "destinationId": 5001,
  "addressType": 1,
  "carrierRole": 1,
  "cartons": [
    {
      "externalCartonId": "100637113",
      "lineItems": [
        {
          "itemId": "100637113",
          "reasonId": 10,
          "transferId": 1,
          "quantity": 10
        },
        {
          "itemId": "100637121",
          "reasonId": 11,
          "transferId": 1,
          "quantity": 10
        }
      ]
    }
  ]
}
```

API: updateShipment

This API is used to update to the header portion of a shipment as well as its bill of lading information.

The shipment header cannot be updated while containers/cartons are currently confirmed for shipping.

Table 4-224 API Basics

Endpoint URL	{base URL}/{shipmentId}
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Path Parameter	The identifier of the transfer shipment
Input	Transfer Shipment

Table 4-225 Input Data Definition

Column	Type	Definition
authorizationCode	String(12)	An authorization code associated to the shipment.
displayCartons	Boolean	True if cartons should be displayed, otherwise false.

Table 4-225 (Cont.) Input Data Definition

addressType	Integer(2)	The type of return address. See Index.
carrierRole	Integer(2)	The type of carrier for the shipment. See Index.
carrierId	Long(10)	A unique identifier of a carrier for the shipment.
carrierServiceId	Long(10)	A unique identifier of a carrier service for the shipment.
alternateAddress	String(2000)	An alternate destination address.
alternateCarrierName	String(240)	The name of a third-party shipping company.
alternateCarrierAddress	String(2000)	The address of a third-party shipping company
motiveId	Long(18)	The unique identifier of a bill of lading motive.
taxId	String(18)	The tax identifier of the supplier it is being shipped to.
trackingNumber	String(128)	A tracking number associated to the shipment.
dimensionId	Long(12)	The identifier of a dimension associated to the shipment.
weight	BigDecimal(12, 4)	The weight of the shipment.
weightUom	String(4)	The unit of measure of the weight of the shipment.
requestedPickupDate	Date	The requested pickup date.
notes	Collection(String)	A collection of up to 100 notes to add to the notes associated to the shipment.

Figure 4-18 Code Example

```
{
  "carrierRole": 2,
  "authorizationCode": "6543",
  "trackingNumber": "A67B",
  "addressType": 2
}
```

API: createCarton

This API is used to add a new carton/container to a "New" or "In Progress" shipment.

Container item/reason combination cannot be duplicated within the container.

Table 4-226 API Basics

Endpoint URL	{base URL}/{shipmentId}/cartons
Method	POST
Successful Response	200 OK
Processing Type	Synchronous
Path Parameter	The identifier of the transfer shipment
Input	Transfer Shipment Carton

Table 4-226 (Cont.) API Basics

Output	Transfer Shipment Carton Status
Maximum Input Limit	1,000 overall line items on carton

Table 4-227 Input Data Definition

Column	Type	Req	Definition
externalCartonId	String(128)		A carton identifier or barcode label from an external system.
cartonSizeId	Long(10)		The shipment container dimension identifier.
weight	BigDecimal(12,4)		The weight of the container.
weightUom	String(4)		The unit of measure of the weight of the container.
trackingNumber	String(128)		A tracking number for the container.
useAvailableInventory	Boolean		True indicates use only available inventory, False indicates use non-available inventory.
restrictionLevel	Integer(4)		A hierarchy restriction level for items in the container.
lineItems	Collection	X	The line items in the container.

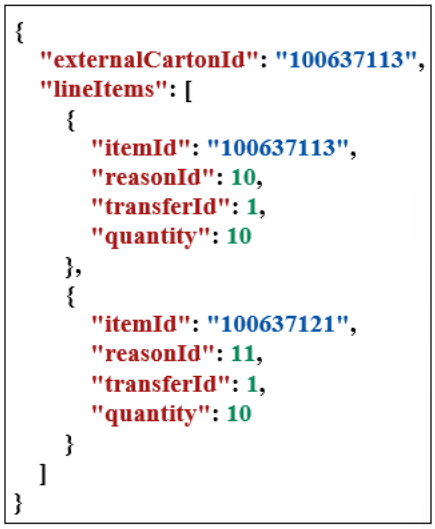
Table 4-228 Shipment Line Item Data Definition

Column	Type	Req	Definition
itemId	String(25)	X	The unique identifier of the item.
caseSize	BigDecimal(10,2)		The case size of this line item.
quantity	BigDecimal(20,4)	X	The quantity to be shipped.
transferId	Long(12)	X	The unique identifier of the associated transfer.
reasonId	Long(15)		A unique identifier of a shipment reason associated to this item. It is not allowed for available inventory and required for unavailable inventory.
uins	List<String>		A list of UINs to be shipped. This must match the quantity.

Table 4-229 Output Data Definition

Attribute	Type	Definition
shipmentId	Long(15)	The unique identifier of the shipment.
cartonId	Long(15)	The unique identifier of the new carton.
externalId	String(128)	The external identifier or barcode label of the container.
status	Integer(2)	The carton status. See Index.

Figure 4-19 Code Example



```
{
  "externalCartonId": "100637113",
  "lineItems": [
    {
      "itemId": "100637113",
      "reasonId": 10,
      "transferId": 1,
      "quantity": 10
    },
    {
      "itemId": "100637121",
      "reasonId": 11,
      "transferId": 1,
      "quantity": 10
    }
  ]
}
```

API: updateCarton

This API is used to update an existing carton that is in "New" or "In Progress" shipment.

Table 4-230 API Basics

Endpoint URL	{base URL}/cartons/{cartonId}
Method	POST
Successful Response	200 OK
Processing Type	Synchronous
Path Parameter	The identifier of the carton
Input	Transfer Shipment Carton
Output	Transfer Shipment Carton Status
Maximum Input Limit	1,000 overall line items on carton

Table 4-231 Input Data Definition

Payload	Type	Req	Definition
externalCartonId	String(128)		A container identifier from an external system.
trackingNumber	String(128)		The tracking number of the container.
restrictionLevel	Integer(4)		A hierarchy restriction level for items in the container.
cartonSizeId	Long(10)		The shipment container dimension identifier.
weight	Long(12,4)		The weight of the container.
weightUom	String(4)		The unit of measure of the weight of the container.

Table 4-231 (Cont.) Input Data Definition

lineItems	Collection		A collection of up to 1,000 line items to update or add within the carton. See TransferShipmentUpdateCartontemIdo.

Payload	Type	Req	Definition
itemId	String(25)	X	The unique identifier of the SKU item.
transferId	Long(12)	X	The unique identifier of the associated transfer.
reasonId	Long(15)		The unique identifier of the shipment reason associated to this line item. It is not allowed for available inventory and required for unavailable inventory.
quantity	BigDecimal(12,4)	X	The quantity shipped. Reducing this to 0 will remove the line item from the shipment.
caseSize	BigDecimal(10,2)		The case size of the item for this particular shipment.
uins	Collection<String>		The UINs associated to the item quantities. The number of UINS must match the quantity shipped.

Figure 4-20 Code Example

```
{
  "externalCartonId": "100637113",
  "lineItems": [
    {
      "itemId": "100637113",
      "reasonId": 10,
      "transferId": 1,
      "quantity": 10
    },
    {
      "itemId": "100637121",
      "reasonId": 11,
      "transferId": 1,
      "quantity": 10
    }
  ]
}
```

Index

Table 4-232 Destination Type

Value	Description
1	Store

Table 4-232 (Cont.) Destination Type

2	Warehouse
3	Finisher

Table 4-233 Status

Value	Description
1	New
2	In Progress
3	Submitted
4	Shipped
5	Canceled

Table 4-234 Customer Order Related

Value	Description
1	Yes
2	Mixed
3	No

REST Service: Translations

This page captures the service APIs related to retrieving translations. It allows the translation of such things as labels and item descriptions.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/translations

API Definitions

API	Description
Find Locales	Finds all locales that can be used to translation a series of text keys.
Find Translations	Finds the translations for a series of text keys, translating into text for the locale if it is available.
Find Item Descriptions	Finds the translations for item descriptions, translating it to the text of the locale if it is available.

API: Find Locales

Finds all locales available for use in translation.

API Basics

Endpoint URL	{base URL}/locales
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	Criteria
Output	List of locales
Max Response Limit	N/A

Output Data Definition

Attribute	Data Type	Description
localeId	Long	The SIOCS internal unique identifier of the record.
language	String	A code representing a language (ISO 639 alpha-2 or alpha-3 language code).
country	String	A code representing a country of the language (ISO 3166 alpha-2 country code or UN M.49 numeric-3 area code.)
variant	String	A code representing a variant of the country of the language (an arbitrary value indication the variant).
description	String	A description of the locale.

Example Output

[

{

"localeId": 1,

"language": "en",

"description": "English"

},

{

"localeId": 2,

"language": "de",

"description": "German"

},

{

"localeId": 3,

"language": "fr",

"description": "French"

}

]

API: Find Translations

Searches for translations for text keys and a given locale.

API Basics

Endpoint URL	{base URL}/find
Method	POST
Successful Response	200 OK
Processing Type	Synchronous
Input	Criteria
Output	A map of translation key and its translation
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
localeId	Long(12)	Yes	Unique identifier of the Locale to translate keys for (see find Locales).
keys	List<String(600)>	Yes	A list of text keys to attempt to translate.

Example Input

{

"localeId": 1,

"keys": [

"invAdjReason.1",

"invAdjReason.2"

]

}

Output Data Definition

Attribute	Data Type	Description
values	Map<String, String>	A map where the key is the translation key and the value is the translation value.

Example Output

{

"invAdjReason.2": "Shrinkage",

"invAdjReason.1": "Wastage"

}

API: Find Items Descriptions

Finds the translations for item descriptions, translating it to the text of the locale if it is available.

API Basics

Endpoint URL	{base URL}/items
Method	POST
Successful Response	200 OK
Processing Type	Synchronous
Input	Criteria
Output	A list of translation items
Max Response Limit	N/A

Input Data Definition

Attribute	Data Type	Required	Description
LocaleId	Long (12)	Yes	Unique identifier of the Locale to translate descriptions for (see findLocales).
itemIds	List<String(25)>	Yes	A list of items to get descriptions for within the locale.

Example Input

{

"localeId": 1,

"itemIds": [

"100637121",

"100637113"

]

}

Output Data Definition

Attribute	Data Type	Required	Description
itemId	String		The item identifier.
shortDescription	String		The short description in the locale's text if available.
longDescription	String		The long description in the locale's text if available.

Example Output

[
{
"itemId": "100637121",
"shortDescription": "translation value for 100637121",
"longDescription": "translation value for 100637121"
},
{
"itemId": "100637113",
"shortDescription": "translation value for 100637113",
"longDescription": "translation value for 100637113"
}
]

REST Service: Vendor Delivery

This service allows the import and handling of direct store deliveries from vendors/suppliers.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/dsds

API Definitions

API	Description
readDelivery	Read the full details of a vendor delivery.
findDeliveries	Find vendor delivery headers based on input search criteria.
receiveDelivery	Receives the expected quantities of a vendor delivery so that it is ready to be confirmed.
confirmDelivery	Confirm the receipt of a vendor delivery updating inventory positions with the receipt information.
rejectDelivery	Rejects the vendor delivery and do not allow it to be received.
cancelDelivery	Cancel a vendor delivery.
submitCarton	Moves the status of the carton to submitted and prevents further updates. The carton must still be confirmed. No inventory positions are updated via this operation.
cancelSubmitCarton	Opens a submitted carton for further updates, moving the status back to in-progress.
confirmCarton	Confirms the receipt a vendor delivery carton.

cancelCarton	Cancels a vendor delivery carton.
openCarton	Re-opens a completed carton after receipt allowing it to be received a second time (possibly adjusting quantities).

API: Read Delivery

Retrieves a vendor delivery.

Table 4-235 API Basics

Endpoint URL	/{deliveryId}
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	None
Output	Transfer Shipment

Table 4-236 Path Parameter Definitions

Parameter	Definition
deliveryId	The internal identifier of the vendor delivery header.

Table 4-237 Output Data Definition

Column	Type	Definition
deliveryId	Long(12)	The unique identifier of the delivery record.
storeId	Long(10)	The unique identifier of the store receiving the inventory.
supplierId	Long(10)	The unique identifier of the supplier shipping the inventory.
status	Integer(4)	The current status of the delivery. See Vendor Delivery Status.
originType	Integer(2)	The origin type of the delivery. See Vendor Delivery Origin Type.
purchaseOrderId	Long(12)	The purchase order that the delivery is associated to.
receiptNumber	Long	The global receipt number of the delivery used to identifier the receipt across applications through integration.
asn	String(128)	The advanced shipping notification of the delivery.
invoiceNumber	String(128)	A unique identifier of an invoice associated to this delivery.
invoiceCurrency	String	A currency code of the invoice cost.
invoiceAmount	BigDecimal	The value of the invoice cost.

Table 4-237 (Cont.) Output Data Definition

customerOrderId	String(128)	A customer order identifier (from an external system) associated to the delivery.
fulfillmentOrderId	String(128)	A fulfillment order identifier (from an external system) associated to the delivery.
billOfLadingId	String(128)	An external identifier of a bill of lading record.
carrierName	String(128)	The name of the carrier.
carrierType	Integer(2)	The type of the carrier. See Carrier Type.
carrierCode	String(4)	Unique code that identifies the carrier.
countryCode	String(3)	A country code.
sourceAddress	String(1000)	The address of the source shipping location sending the delivery to the store.
licensePlate	String(128)	The license plate of the delivery vehicle.
freightId	String(128)	A freight identifier associated to the delivery.
fiscalDocumentRequestId	Long(20)	The identifier of the request for a fiscal document.
fiscalDocumentReferenceId	Long(20)	The unique identifier of the fiscal document.
fiscalDocumentNumber	String(255)	The fiscal document number.
createDate	Date	The date the delivery record was created.
updateDate	Date	The date the delivery record was last updated.
expectedDate	Date	The expected date of the delivery.
invoiceDate	Date	The date of the delivery invoice.
receivedDate	Date	The date the delivery was received.
createUser	String(128)	The user that created the delivery .record.
updateUser	String(128)	The user who last updated the delivery record.
receivedUser	String(128)	The user who received the delivery record.
cartons	Collection	A list of cartons.

Table 4-238 Open Data Definition (Carton)

Column	Type	Definition
cartonId	Long(12)	The unique identifier of the carton record.
externalCartonId	String(128)	An external identifier of the carton.
referenceId	String(128)	A reference identifier to the carton.
status	Integer(4)	The current status of the carton (See Additional Data Definitions Vendor Delivery Carton Status)
damagedReason	String(128)	A reason for the carton damage that took place.
serialCode	Long(18)	A serial code for the carton.
trackingNumber	String(128)	The tracking number of the carton.

Table 4-238 (Cont.) Open Data Definition (Carton)

damageRemaining	Boolean	indicates all remaining quantities should be damaged on final receipt.
uinRequired	Boolean	True if a UIN item exists within the carton, otherwise false.
receiveAtShopFloor	Boolean	True if receive the inventory at shop floor, otherwise false.
qualityControl	Boolean	True indicates that the carton requires detailed receiving.
externalCreate	Boolean	True indicates the carton was externally created, false indicates it was created by EICS.
adjusted	Boolean	True indicates the carton is adjusted, otherwise false.
customerOrderRelated	Integer(4)	Customer Order Related Type (See Additional Data Definitions)
createUser	String(128)	The user who created the carton.
updateUser	String(128)	The user who last updated the carton.
receivedUser	String(128)	The user who received the carton.
createDate	Date	The date the carton was created.
updateDate	Date	The date the carton was last updated.
receivedDate	Date	The date the carton was received.
lineItems	Collection	The line items associated with the container.

Table 4-239 Output Data Definition (Line Item)

Column	Type	Definition
lineId	Long(12)	The unique identifier of the line item record.
itemId	String(25)	The unique identifier of the item.
caseSize	BigDecimal(10,2)	A number of units in the case that this item was shipped with.
quantityExpected	BigDecimal(20,4)	The total number of units expected on the delivery.
quantityReceived	BigDecimal(20,4)	The total number of units received on the delivery.
quantityDamaged	BigDecimal(20,4)	The total number of units received as damaged on the delivery.
quantityReceivedOverage	BigDecimal(20,4)	Amount of received inventory over expected quantities.
quantityDamagedOvarage	BigDecimal(20,4)	Amount of received damage inventory over expected quantities.
quantityPreviouslyReceived	BigDecimal(20,4)	Units previously received (captured at time container is re-opened after receipt)
quantityPreviouslyDamaged	BigDecimal(20,4)	Units previously received as damaged (captured at time container is re-opened after receipt)
unitCostCurrency	String(3)	The unit cost currency of this item delivery.

Table 4-239 (Cont.) Output Data Definition (Line Item)

unitCostAmount	BigDecimal(12,4)	The unit cost value of this item delivery.
unitCostOverrideCurrency	String(3)	The override unit cost currency of this item delivery.
unitCostOverrideAmount	BigDecimal(12,4)	The override unit cost value of this item delivery.
purchaseOrderId	Long (12)	The internal unique identifier of the purchase order of this particular item delivery.
purchaseOrderNumber	String(128)	The external purchase order number of this particular item delivery.
customerOrderNumber	String(128)	The unique external customer order identifier of this particular item delivery.
fulfillmentOrderNumber	String(128)	The unique external fulfillment order identifier of this particular item delivery.
vendorProductNumber	String(256)	The vendor product number of the item.
uins	Collection<String>	A list of UINs associated to the line item.

API: Find Vendor Delivery

API is used to find transaction headers for vendor deliveries.

If more than 10,000 deliveries are found, a "results too large" error will be returned. Limit the results with further search criteria.

Table 4-240 API Basics

Endpoint URL	
Method	GET
Successful Response	200 OK
Processing Type	Synchronous
Input	Query Parameters
Output	List of Vendor Shipments

Table 4-241 Query Parameter Definitions

Attribute	Type	Definition
storeId	Long(10)	Include only records where the delivery is to this store.
asn	String(128)	Include only records for this advanced shipping notification.
originType	Integer(2)	Include only records for this origin type. (See Additional Data Definitions: Vendor Delivery Origin Type).
status	Integer(4)	Include only records where the delivery is in this status. (See Additional Data Definitions: Vendor Delivery Criteria Status)

Table 4-241 (Cont.) Query Parameter Definitions

customerOrderNumber	String(128)	Include only records for this customer order number.
fulfillmentOrderNumber	String(128)	Include only records for this fulfilment order number.
invoiceNumber	String(128)	Include only records for this invoice number.
supplierId	Long(10)	Include only records for this supplier identifier.
purchaseOrderNumber	String(12)	Include only records where a line item is associated to this external purchase order number.
updateDateFrom	String	Include only records with a last update date on or after this date.
updateDateto	String	Include only records with a first update date on or before this date.

Table 4-242 Output Data Definition

Column	Type	Definition
deliveryId	Long(12)	The unique identifier of the delivery record.
storeId	Long(10)	The unique identifier of the store receiving the inventory.
supplierId	Long(10)	The unique identifier of the supplier shipping the inventory.
status	Integer(4)	The current status of the delivery. See Vendor Delivery Status.
originType	Integer(2)	The origin type of the delivery. See Vendor Delivery Origin Type.
purchaseOrderId	Long(12)	The purchase order that the delivery is associated to.
receiptNumber	Long	The global receipt number of the delivery used to identifier the receipt across applications through integration.
asn	String(128)	The advanced shipping notification of the delivery.
invoiceId	String(128)	A unique identifier of an invoice associated to this delivery.
customerOrderId	String(128)	A customer order identifier associated to the delivery.
fulfillmentOrderId	String(128)	A fulfillment order identifier (from an external system) associated to the delivery.
createDate	Date	The date the delivery record was created.
updateDate	Date	The date the delivery record was last updated.
expectedDate	Date	The expected date of the delivery.
invoiceDate	Date	The date of the delivery invoice.
receivedDate	Date	The date the delivery was received.

API: Receive Delivery

Updates the received quantities to quantities that were expected so that it is ready to be confirmed. It puts the delivery in the "In Progress" status.

Table 4-243 API Basics

Endpoint URL	/{deliveryId}/receive
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Input	None
Output	None

Table 4-244 Path Parameter Definitions

Parameter	Definition
deliveryId	The internal identifier of the vendor delivery header.

API: Confirm Delivery

Confirms the delivery and receives the goods into inventory.

Table 4-245 API Basics

Endpoint URL	/{deliveryId}/confirm
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Input	None
Output	None

Table 4-246 Path Parameter Definitions

Parameter	Definition
deliveryId	The internal identifier of the vendor delivery header.

API: Reject Delivery

Rejects the delivery without receiving goods, placing it in rejected status.

Table 4-247 API Basics

Endpoint URL	/{deliveryId}/reject
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous

Table 4-247 (Cont.) API Basics

Input	None
Output	None

Table 4-248 Path Parameter Definitions

Parameter	Definition
deliveryId	The internal identifier of the vendor delivery header.

API: Cancel Delivery

Cancels the delivery without receiving the goods and places it in canceled status.

Table 4-249 API Basics

Endpoint URL	/{deliveryId}/cancel
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Input	None
Output	None

Table 4-250 Path Parameter Definitions

Parameter	Definition
deliveryId	The internal identifier of the vendor delivery header.

API: Submit Carton

Moves the status of the carton to submitted and prevents further updates. The carton may still be confirmed. No inventory positions are updated via this operation.

Table 4-251 API Basics

Endpoint URL	cartons/{cartonId}/submit
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Input	None
Output	None

Table 4-252 Path Parameter Definitions

Parameter	Definition

Table 4-252 (Cont.) Path Parameter Definitions

cartonId	The internal identifier of the vendor delivery carton.

API: Cancel Submit Carton

Opens a submitted carton for further updates, moving the status to in-progress.

Table 4-253 API Basics

Endpoint URL	cartons/{cartonId}/cancelsubmit
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Input	None
Output	None

Table 4-254 Path Parameter Definitions

Parameter	Definition
cartonId	The internal identifier of the vendor delivery carton.

API: Confirm Carton

Confirms the final receipt of a vendor delivery carton.

Table 4-255 API Basics

Endpoint URL	cartons/{cartonId}/confirm
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Input	None
Output	None

Table 4-256 Path Parameter Definitions

Parameter	Definition
cartonId	The internal identifier of the vendor delivery carton.

API: Cancel Carton

Cancels a vendor delivery carton.

Table 4-257 API Basics

Endpoint URL	cartons/{cartonId}/cancel
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Input	None
Output	None

Table 4-258 Path Parameter Definitions

Parameter	Definition
cartonId	The internal identifier of the vendor delivery carton.

API: Open Carton

Re-open a completed carton after receipt allowing it to be received again.

Table 4-259 API Basics

Endpoint URL	cartons/{cartonId}/open
Method	POST
Successful Response	204 No Content
Processing Type	Synchronous
Input	None
Output	None

Table 4-260 Path Parameter Definitions

Parameter	Definition
cartonId	The internal identifier of the vendor delivery carton.

Additional Data Definitions

Table 4-261 Vendor Delivery Carton Status

Value	Status
1	New
2	In Progress
3	Submitted
4	Received
5	Damaged
6	Missing

Table 4-261 (Cont.) Vendor Delivery Carton Status

7	Canceled

Table 4-262 Customer Order Related Type

Value	Status
1	Yes
2	Mix
3	No

Table 4-263 Vendor Delivery Status

Value	Status
1	New
2	In Progress
3	Received
4	Canceled
5	Rejected

Table 4-264 Vendor Delivery Criteria Status

Value	Status
1	New
2	In Progress
3	Received
4	Canceled
5	Rejected
99	Active

Table 4-265 Vendor Delivery Origin Type

Value	Status
1	Advanced Shipping Notification
2	Purchase Order
3	Dex-Nex
4	Manual/On the Fly

Table 4-266 Vendor Delivery Create Origin Type

Value	Status
2	Purchase Order
3	Dex-Nex
4	Manual/On the Fly

Table 4-267 Carrier Type

Value	Status
1	Corporate
2	Third Party

REST Service: Vendor Return

A return request is a return to vendor that comes into the store from an external system. A return request is a made for items to be returned to the supplier from the store. The items and quantities requested to be returned and reasons (for RTV) will be listed. Updating the return allows the approved quantity to be assigned. Once the request has been approved, the items are shipped to the supplier. This service allows for the integration of return requests with an external system.

Service Base URL

The Cloud service base URL follows the format:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Find Return

This section describes the Find Return API. This API Finds up to 10,000 return headers for the input criteria.

Method

```
GET
```

URL

```
/vendorreturns
```

Request Parameters

Table 4-268 Find Return — Request Parameters

Parameter	Required	Data Type	Description
storeId	NA	number($int10) (query)	Include only returns from this store.

Table 4-268 (Cont.) Find Return — Request Parameters

Parameter	Required	Data Type	Description
supplierId	NA	number($int10) (query)	Include only returns to this supplier.
externalReturnId	NA	string($text128) (query)	Include only returns for this vendor return external identifier.
status	NA	integer($int4) (query)	Include only returns with this status. Valid values are: 1 - Requested 2 - Request In Progress 3 - RTV In Progress 4 - Approved 5 - In Shipping 6 - Completed 7 - Rejected 8 - Canceled Request 9 - Canceled RTV 99 - Active Available values : 1, 2, 3, 4, 5, 6, 7, 8, 9, 99
itemId	NA	string($text25) (query)	Include only returns that contain this item.
shipmentReasonId	NA	number($int15) (query)	Include only returns that contain this shipment reason.
updateDateFrom	NA	string($date-time) (query)	Include only returns with an update date on or after this date.
updateDateTo	NA	string($date-time) (query)	Include only returns with an update date on or before this date.

Responses

This section describes the responses of the Find Return API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "returnId": 11111,
    "storeId": 5000,
    "supplierId": 5101,
    "externalReturnId": "90000",
    "status": 1,
    "notAfterDate": "2025-01-17T16:44:28.715Z",
```

```
    "approvedDate": "2025-01-17T16:44:28.715Z",
    "closedDate": "2025-01-17T16:44:28.715Z",
    "createDate": "2025-01-17T16:44:28.715Z",
    "updateDate": "2025-01-17T16:44:28.715Z"
  }
]
```


Schema — VendorReturnHeaderIdo

Table 4-269 VendorReturnHeaderIdo— Object

Element Name	Required	Data Type/ Example	Description
returnId	NA	number($int12) example: 11111	The unique identifier of the vendor return.
storeId	NA	number($int10) example: 5000	The identifier of the store returning the inventory.
supplierId	NA	number($int10) example: 5101	The identifier of the supplier the goods are being shipped to.
externalReturnId	NA	string($text128) example: 90000	A unique identifier of the vendor return from an external system.
status	NA	integer($int4) example: 1	1 - Requested 2 - Request In Progress 3 - RTV In Progress 4 - Approved 5 - In Shipping 6 - Completed 7 - Rejected 8 - Canceled Request 9 - Canceled RTV Enum: [1, 2, 3, 4, 5, 6, 7, 8, 9]
notAfterDate	NA	string($date-time)	A date after which the return should not be shipped.
approvedDate	NA	string($date-time)	The date the return was approved.
closedDate	NA	string($date-time)	The date the return was closed.
createDate	NA	string($date-time)	The date the return was created in SIOCS.
updateDate	NA	string($date-time)	The date the return was last updated in SIOCS.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Create Return

This section describes the Create Return API. This service creates a new vendor return document.

Method

```
POST
```

URL

```
/vendorreturns
```

Request Parameters

The are no request parameters.

The request body is application/json.

Example Value

```
{
  "storeId": 5000,
  "supplierId": 5101,
  "notAfterDate": "2025-01-20T14:04:51.208Z",
  "authorizationCode": "JID112",
  "addressLine1": "460 Summer Street",
  "addressLine2": "Apartment 2",
  "addressLine3": "c/o John Smith",
  "aAddressCity": "Coolsville",
  "addressState": "NY",
  "addressCountry": "US",
  "addressPostalCode": "55555-1111",
  "lineItems": [
    {
      "itemId": "10045600",
      "reasonId": "82236",
      "quantity": 100,
      "caseSize": 1
    }
  ]
}
```

Schema — VendorReturnCreateIdo

Table 4-270 VendorReturnCreateIdo— Object

Element Name	Required	Data Type/ Example	Description
storeId	Yes	number($int 10) example: 5000	The identifier of the store returning the inventory. This value is ignored if the return already exists.
supplierId	Yes	number($int 10) example: 5101	The identifier of the supplier the goods are being shipped to. This value is ignored if the return already exists.
notAfterDate	NA	string($date-time)	A date after which the return should not be shipped. If not included, this value will be defaulted through system configuration.
authorization Code	NA	string($text1 2) example: JID112	An authorization number that may be required for the return.
addressLine1	NA	string($text2 40) example: 460 Summer Street	The first line of the destination address.
addressLine2	NA	string($text2 40) example: Apartment 2	The second line of the destination address.
addressLine3	NA	string($text2 40) example: c/o John Smith	The third line of the destination address.
aAddressCity	NA	string($text1 20) example: Coolsville	The city of the destination address.
addressState	Na	string($text3) example: NY	The state of the destination address.
addressCount ry	NA	string($text3) example: US	The country code of the destination address.
addressPostal Code	NA	string($text3 0) example: 55555-1111	The postal code of the destination address.
lineItems*	Yes	object	The items to be returned.

Table 4-271 VendorReturnCreateLineItemIdo— Object

Element Name	Required	Data Type/ Example	Description
itemId	Yes	string($text2 5) example: 10045600	The unique identifier of the SKU item.
reasonId	NA	string($text6) example: 82236	The unique identifier of a return reason code for this item return.

Table 4-271 (Cont.) VendorReturnCreateLineItemIdo— Object

Element Name	Required	Data Type/ Example	Description
quantity	Yes	number($decimal(20,4)) example: 100	The quantity to return.
caseSize		number($decimal(20,4)) example: 1	The case size of this item return.

Responses

This section describes the responses of the Create Return API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value

```
[
  {
    "returnId": 11111,
    "storeId": 5000,
    "supplierId": 5101,
    "status": 1
  }
]
```

Schema — VendorReturnStatusIdo

Table 4-272 VendorReturnStatusIdo— Object

Element Name	Required	Data Type/ Example	Description
returnId	NA	number($int12) example: 11111	The unique identifier of the vendor return.
storeId	NA	number($int10) example: 5000	The identifier of the store returning the inventory.
supplierId	Na	number($int10) example: 5101	The identifier of the supplier the goods are being shipped to.

Table 4-272 (Cont.) VendorReturnStatusIdo— Object

Element Name	Required	Data Type/ Example	Description
status	NA	integer($int4) example: 1	1 - Requested 2 - Request In Progress 3 - RTV In Progress 4 - Approved 5 - In Shipping 6 - Completed 7 - Rejected 8 - Canceled Request 9 - Canceled RTV Enum: [1, 2, 3, 4, 5, 6, 7, 8, 9]

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Read Return

This section describes the Read Return API. This service retrieves all the details about a vendor return.

Method

```
GET
```

URL

```
/vendorreturns/{returnId}
```

Request Parameters

Table 4-273 Read Return — Request Parameters

Parameter	Required	Data Type	Description
returnId	Yes	number($int12) (path)	The unique identifier of the vendor return.

Responses

This section describes the responses of the Read Return API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "returnId": 11111,
    "storeId": 5000,
    "supplierId": 5101,
    "externalReturnId": "90000",
    "externalLocked": true,
    "originType": 1,
    "status": 1,
    "notAfterDate": "2025-01-17T16:59:15.721Z",
    "authorizationCode": "JID112",
    "addressLine1": "460 Summer Street",
    "addressLine2": "Apartment 2",
    "addressLine3": "c/o John Smith",
    "aAddressCity": "Coolsville",
    "addressState": "NY",
    "addressCountry": "US",
    "addressPostalCode": "55555-1111",
    "approvedUser": "smith123",
    "approvedDate": "2025-01-17T16:59:15.721Z",
    "closedUser": "smith123",
    "closedDate": "2025-01-17T16:59:15.721Z",
    "createUser": "smith123",
    "createDate": "2025-01-17T16:59:15.721Z",
    "updateUser": "smith123",
    "updateDate": "2025-01-17T16:59:15.721Z",
    "lineItems": [
      {
        "lineId": 2222222,
        "externalLineId": 456,
        "itemId": "10045600",
        "shipmentReasonId": 82236,
        "caseSize": 3,
        "quantityRequested": 100,
        "quantityApproved": 100,
        "quantityShipping": 100,
        "quantityShipped": 100
      }
    ]
```

```
    }
]
```

Schema — VendorReturnIdo

Table 4-274 VendorReturnIdo— Object

Element Name	Required	Data Type/ Example	Description
returnId	NA	number($int 12) example: 11111	The unique identifier of the vendor return.
storeId	NA	number($int 10) example: 5000	The identifier of the store returning the inventory.
supplierId	NA	number($int 10) example: 5101	The identifier of the supplier the goods are being shipped to.
externalReturnId	NA	string($text128) example: 90000	A unique identifer of the vendor return from an external system.
externalLocked	NA	boolean example: true	True if the system no longer accepts changes to the vendor return from an external source.
originType	NA	integer($int4) example: 1	The origin type of the return. Valid values are: 1 - External 2 - Internal <br/ 3 - Shipment Enum: [1, 2, 3]
status	NA	integer($int4) example: 1	1 - Requested 2 - Request In Progress 3 - RTV In Progress 4 - Approved 5 - In Shipping 6 - Completed 7 - Rejected 8 - Canceled Request 9 - Canceled RTV Enum: [1, 2, 3, 4, 5, 6, 7, 8, 9]
notAfterDate	NA	string($date-time)	A date after which the return should not be shipped.
authorizationCode	NA	string($text12) example: JID112	An authorization number that may be required for the return.
addressLine1	NA	string($text240) example: 460 Summer Street	The first line of the destination address.
addressLine2	NA	string($text240) example: Apartment 2	The second line of the destination address.

Table 4-274 (Cont.) VendorReturnIdo— Object

Element Name	Required	Data Type/ Example	Description
addressLine3	NA	string($text240) example: c/o John Smith	The third line of the destination address.
aAddressCity	NA	string($text120) example: Coolsville	The city of the destination address.
addressState	NA	string($text3) example: NY	The state of the destination address.
addressCountry	NA	string($text3) example: US	The country code of the destination address.
addressPostalCode	NA	string($text30) example: 55555-1111	The postal code of the destination address.
approvedUser	NA	string($text128) example: smith123	The user that approved the return.
approvedDate	NA	string($date-time)	The date the return was approved.
closedUser	NA	string($text128) example: smith123	The user that closed the return.
closedDate	NA	string($date-time)	The date the return was closed.
createUser	NA	string($text128) example: smith123	The user that created the return.
createDate	NA	string($date-time)	The date the return was created.
updateUser	NA	string($text128) example: smith123	The user that last updated the return.
updateDate	NA	string($date-time)	The date the return was last updated.
lineItems	NA	object	A collection of items to be returned.

Table 4-275 VendorReturnLineItemIdo— Object

Element Name	Required	Data Type/ Example	Description
lineId	NA	integer($int15) example: 2222222	The unique identifier of the line record.
externalLineId	NA	integer($int15) example: 456	An external identifier to this particular line item on the return.

Table 4-275 (Cont.) VendorReturnLineItemIdo— Object

Element Name	Required	Data Type/ Example	Description
itemId	NA	string($text25) example: 10045600	The unique identifier of the SKU item.
shipmentReasonId	NA	integer($int15) example: 82236	The unique identifier of the shipment reason.
caseSize	NA	number($decimal(10,2)) example: 3	The case size of this record.
quantityRequested	NA	number($decimal(20,4)) example: 100	The quantity requested to return.
quantityApproved	NA	number($decimal(20,4)) example: 100	The quantity approved to return.
quantityShipping	NA	number($decimal(20,4)) example: 100	The quantity prepared to ship on the return.
quantityShipped	NA	number($decimal(20,4)) example: 100	The quantity that has shipped on the return.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Update Return

This section describes the Update Return API. This service updates vendor return approved quantities prior to approving the vendor return.

Method

```
POST
```

URL

```
/vendorreturns/{returnId}
```

Request Parameters

Table 4-276 Update Return — Request Parameters

Parameter	Required	Data Type	Description
returnId	Yes	number($int12) (path)	The unique identifier of the vendor return.

The request body is application/json.

Vendor return details to update.

Example Value

```
{
  "authorizationCode": "JID112",
  "lineItems": [
    {
      "itemId": "10045600",
      "shipmentReasonId": 82236,
      "quantity": 100
    }
  ]
}
```

Schema — VendorReturnUpdateIdo

Table 4-277 VendorReturnUpdateIdo— Object

Element Name	Required	Data Type/ Example	Description
authorizationCode	NA	string($text12) example: JID112	An authorization number that may be required for the return.
lineItems	NA	object	A list of up to 1,000 items with approved quantities to be included on the return. The collection can remain empty if only updating the authorization code.

Table 4-278 VendorReturnUpdateLineItemIdo— Object

Element Name	Required	Data Type/ Example	Description
itemId	Yes	string($text25) example: 10045600	The unique identifier of the SKU item.

Table 4-278 (Cont.) VendorReturnUpdateLineItemIdo— Object

Element Name	Required	Data Type/ Example	Description
shipmentReasonId	Yes	integer($int15) example: 82236	The unique identier of the shipment reason. If the shipment reason is unavailable, the quantity must not exceed the item's unavailable stock. Unavailable sub-buckets are not considered in vendor return and are only used when creating the vendor shipment.
quantity	Yes	number($decimal(20,4)) example: 100	The quantity approved to return.

Responses

This section describes the responses of the Update Return API.

Response Code: 204

No content.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Approve Return

This section describes the Approve Return API. This service approves a vendor return for shipment. Use the Update Return operation to assign and persist desired quantities before approval.

Method

```
POST
```

URL

```
/vendorreturns/{returnId}/approve
```

Request Parameters

Table 4-279 Approve Return — Request Parameters

Parameter	Required	Data Type	Description
returnId	Yes	number($int12) (path)	The unique identifier of the vendor return.

Responses

This section describes the responses of the Approve Return API.

Response Code: 204

No content.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Close Return

This section describes the Close Return API. This service closes out the vendor return.

Method

```
POST
```

URL

```
/vendorreturns/{returnId}/close
```

Request Parameters

Table 4-280 Close Return — Request Parameters

Parameter	Required	Data Type	Description
returnId	Yes	number($int12) (path)	The unique identifier of the vendor return.

Responses

This section describes the responses of the Close Return API.

Response Code: 204

No content.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Import Return

This section describes the Import Return API. This service imports a vendor return request managed by an external system. Processing assumes that any notification to other systems about the creation of this information will be managed by the external system. The imported return is processed asynchronous through our MPS sub-system and is controlled by the DcsRtv work type. If more than 1,000 items are included in the return, a "input too large" error will be returned. This operation will return a forbidden error code if the system is integrated with Oracle merchandising.

Method

```
POST
```

URL

```
/vendorreturns/imports
```

Request Parameters

There are no request parameters.

Vendor return details to import.

Example Value

```
{
  "externalReturnId": "90000",
  "storeId": 5000,
  "supplierId": 5101,
  "notAfterDate": "2025-01-20T15:17:16.265Z",
  "authorizationCode": "JID112",
  "addressLine1": "460 Summer Street",
  "addressLine2": "Apartment 2",
  "addressLine3": "c/o John Smith",
```

```
  "aAddressCity": "Coolsville",
  "addressState": "NY",
  "addressCountry": "US",
  "addressPostalCode": "55555-1111",
  "comment": "Originally overshipped goods.",
  "createDate": "2025-01-20T15:17:16.265Z",
  "lineItems": [
    {
      "itemId": "10045600",
      "reasonCode": "82236",
      "quantity": 100,
      "sequence": 1
    }
  ]
}
```


Schema — VendorReturnImportIdo

Table 4-281 VendorReturnImportIdo— Object

Element Name	Required	Data Type/ Example	Description
externalReturnId	Yes	string($text128) example: 90000	A unique identifer of the vendor return from an external system. This identifier is used to determine if the import will be created or updated.
storeId	Yes	number($int10) example: 5000	The identifier of the store returning the inventory. This value is ignored if the return already exists.
supplierId	Yes	number($int10) example: 5101	The identifier of the supplier the goods are being shipped to. This value is ignored if the return already exists.
notAfterDate	NA	string($date-time)	A date after which the return should not be shipped. If not included, this value will be defaulted through system configuration.
authorizationCode	NA	string($text12) example: JID112	An authorization number that may be required for the return.
addressLine1	NA	string($text240) example: 460 Summer Street	The first line of the destination address.
addressLine2	NA	string($text240) example: Apartment 2	The second line of the destination address.
addressLine3	NA	string($text240) example: c/o John Smith	The third line of the destination address.
aAddressCity	NA	string($text120) example: Coolsville	The city of the destination address.
addressState	NA	string($text3) example: NY	The state of the destination address.

Table 4-281 (Cont.) VendorReturnImportIdo— Object

Element Name	Required	Data Type/ Example	Description
addressCountry	NA	string($text3) example: US	The country code of the destination address.
addressPostalCode	NA	string($text30) example: 55555-1111	The postal code of the destination address.
comment	NA	string($text2000) example: Originally overshipped goods.	A comment to associate to the vendor return request.
createDate	Yes	string($date-time)	The date the return was created.
lineItems	Yes	object	The items to be returned.

Table 4-282 VendorReturnImportLineItemIdo— Object

Element Name	Required	Data Type/ Example	Description
itemId	Yes	string($text25) example: 10045600	The unique identifier of the SKU item.
reasonCode	Yes	string($text6) example: 82236	A reason code associate to the item return.
quantity	Yes	number($decimal(20,4)) example: 100	The quantity requested to return.
sequence	NA	number($int15) example: 1	An external sequence number for the item on the return.

Responses

This section describes the responses of the Import Return API.

Response Code: 204

No content.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Import Return Delete

This section describes the Import Return Delete API. This service will place a delete notification in the system (in the MPS work queue with DcsRtv work type) for asynchronous processing. When processed, it will cancel the vendor return if it qualifies for cancellation (it is not already in progress). This operation will return a forbidden error code if the system is integrated with Oracle merchandising.

Method

```
DELETE
```

URL

```
/vendorreturns/imports/{externalReturnId}
```

Request Parameters

Table 4-283 Import Return Delete — Request Parameters

Parameter	Required	Data Type	Description
externalReturnId	Yes	string($text128) (path)	The unique identifier of the vendor return from the external system.

Responses

This section describes the responses of the Import Return Delete API.

Response Code: 202

Accepted.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

REST Service: Vendor Shipment

Vendor shipment is the process of shipping inventory out of the store back to a supplier for redistribution or disposal. If the store plans to return items to the vendor, it can be done by creating a vendor shipment (RTV shipment). The items, quantities to be returned, and reasons

for the return, can be added to the shipment. When the shipment is dispatched, the goods are removed from inventory.

To create a shipment, a supplier must be identified for this return. The supplier must allow for returns and must be a DSD supplier, and if the system is configured to use multiple sets of books, then the supplier is limited to the same operating unit as that of the store.

Items along with reasons can be added to the return. For Return to Vendors, the system allows a mix of available and unavailable inventory status items on the return; therefore, all reasons for the Return to Vendor type will be listed. All items on the return must be sourced by the supplier designated on the RTV. Authorization Number, which is required for certain suppliers, would need to be entered before dispatching.

The service defines operations to manage vendor shipment information by integration with an external system.

Service Base URL

The Cloud service base URL follows the format:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Find Shipments — GET

This section describes the Find Shipments API. This API finds up to 10,000 shipments headers for the input criteria.

Method

```
GET
```

URL

```
/rtvshipments
```

Request

This section describes the request parameters.

Table 4-284 Find Shipments— Request Parameters

Parameter	Required	Data Type	Description
storeId	NA	number ($int10) (query)	Include only records where the shipment is from this store.
supplierId	NA	number ($int10) (query)	Include only shipments where the shipment is to this supplier.
vendorReturnId	NA	number ($int15) (query)	Include only shipments for this vendor return (by internal identifier).

Table 4-284 (Cont.) Find Shipments— Request Parameters

Parameter	Required	Data Type	Description
vendorReturnExternalId	NA	string ($text128) (query)	Include only shipments for this vendor return (by external identifier).
status	NA	integer ($int4) (query)	Include only shipments with this delivery status. Valid values are 1 – New 2 - In Progress 3 – Submitted 4 – Shipped 5 – Canceled 99 – Active *Available values:* 1, 2, 3, 4, 5, 99
itemId	NA	string ($text128) (query)	Include only shipments that contain this item.
updateDateFrom	NA	string ($date-time) (query)	Include only shipments with an update date on or after this date.
updateDateTo	NA	string ($date-time) (query)	Include only shipments with an update date on or before this date.

Responses

This section describes the responses of the Find Shipments API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "shipmentId": 11111,
    "storeId": 5000,
    "supplierId": 5101,
    "vendorReturnId": 789012,
    "vendorReturnExternalId": "90000",
    "status": 1,
    "notAfterDate": "2024-08-30T07:40:22.421Z",
    "submitDate": "2024-08-30T07:40:22.421Z",
    "dispatchDate": "2024-08-30T07:40:22.422Z",
    "updateDate": "2024-08-30T07:40:22.422Z"
  }
]
```

Schema — VendorShipmentHeaderIdo

This section describes the VendorShipmentHeaderIdo schema.

Table 4-285 VendorShipmentHeaderIdo — Object

Element Name	Required	Data Type	Description
shipmentId	NA	number($int12) example: 11111	The unique identifier of the vendor shipment.
storeId	NA	number($int10) example: 5000	The identifier of the store shipping the inventory.
supplierId	NA	number($int10) example: 5101	The identifier of the supplier the goods are being shipped to.
vendorReturnId	NA	number($int15) example: 789012	The unique identifier of the vendor return this shipment is for.
vendorReturnExternalId	NA	string($text128) example: 90000	A unique identifer of the vendor return from an external system.
status	NA	integer($int4) example: 1	The current status of the vendor shipment. Valid values are: 1 – New 2 - In Progress 3 – Submitted 4 – Shipped 5 – Canceled Enum: [1, 2, 3, 4, 5]
notAfterDate	NA	string($date-time)	A date after which the shipment should not be shipped.
submitDate	NA	string($date-time)	The date the shipment was submitted.
dispatchDate	NA	string($date-time)	The date the shipment was dispatched.
updateDate	NA	string($date-time)	The date the delivery was last updated.

Response Code: 400

Bad Request

The media type is application/json.

Create Shipment — POST

This section describes the Create Shipment API. It creates a new vendor shipment whose status is in progress. When creating the vendor shipment, it only allows up to 1,000 items in the overall shipment.

Method

```
POST
```

URL

```
/rtvshipments
```

Request

There are no request parameters.

The request body is application/json.

The shipment details of the new shipment.

Example Value


```
{
  "storeId": 5000,
  "supplierId": 5101,
  "supplierCountryCode": "USA",
  "vendorReturnId": 789012,
  "authorizationCode": "H112",
  "notAfterDate": "2024-08-30T07:55:27.191Z",
  "contextId": 90000,
  "contextValue": "Spring Return",
  "addressType": 1,
  "carrierRole": 1,
  "carrierId": 123,
  "carrierServiceId": 456,
  "alternateAddress": "Another Street, Different City, NY, 44444",
  "alternateCarrierName": "Speedy Delivery",
  "alternateCarrierAddress": "Carrier Street, Carrier City, NY, 44444",
  "motiveId": 123,
  "taxId": "11-33500",
  "trackingNumber": "44000567002",
  "dimensionId": 100,
  "weight": 12.8,
  "weightUom": "KG",
  "requestedPickupDate": "2024-08-30T07:55:27.191Z",
  "cartons": [
    {
      "externalCartonId": "4500300",
      "trackingNumber": "876300456",
      "restrictionLevel": 1,
      "cartonSizeId": 1000,
      "weight": 4.5,
      "weightUom": "LBS",
      "lineItems": [
        {
          "itemId": "10045600",
          "reasonId": 2222222,
          "caseSize": 3,
          "quantity": 100,
          "uins": [
```

```
            111345000,
            222220000
          ]
        }
      ]
    }
  ],
  "notes": [
    "The first note",
    "The second note"
  ]
}
```


Schema — VendorShipmentCreateIdo

This section describes the VendorShipmentCreateIdo schema.

Table 4-286 VendorShipmentCreateIdo — Object

Element Name	Required	Data Type/ Example	Description
storeId	Yes	number($int10) example: 5000	The identifier of the store shipping the inventory.
supplierId	Yes	number($int10) example: 5101	The identifier of the supplier the goods are being shipped to.
supplierCountryCode	NA	string($text3) example: USA	The country code of the supplier for this shipment. All items must be available with this country code. If left blank, a country code will be selected from the available supplier items giving preference to a country code that matches the store.
vendorReturnId	NA	number($int15) example: 789012	The unique identifier of the vendor return this shipment is for.
authorizationCode	NA	string($text12) example: H112	A vendor authorization code
notAfterDate	NA	string($date-time)	A date after which the shipment should not be shipped.
contextId	NA	number($int18) example: 90000	A unique identifer of a context for the shipment (see shipping service).
contextValue	NA	string($text25) example: Spring Return	An additional value associated to the context for the shipment.
addressType	NA	integer($int4) example: 1	The hierarchy restriction level for items in the container. Valid values are: 1 - Department 2 - Class 3 - Subclass 4 - None Enum: [1, 2, 3, 4

Table 4-286 (Cont.) VendorShipmentCreateIdo — Object

Element Name	Required	Data Type/ Example	Description
carrierRole	Yes	integer($int2) example: 1	The type of carrier for the shipment. Valid values are: 1 - Sender 2 - Receiver 3 - Third Party Enum: [1, 2, 3]
carrierId	NA	integer($int10) example: 123	A unique identifier of a carrier for the shipment.
carrierServiceId	NA	integer($int10) example: 456	A unique identifier of a carrier service for the shipment.
alternateAddress	NA	string($text2000) example: Another Street, Different City, NY, 44444	An alternate destination address.
alternateCarrierName	NA	string($text240) example: Speedy Delivery	The name of a third-party shipping company.
alternateCarrierAddress	NA	string($text240) example: Carrier Street, Carrier City, NY, 44444	The address of a third-party shipping company.
motiveId	NA	number($int18) example: 123	The identifier ofa motive for the bill of lading.
taxId	NA	string($text18) example: 11-33500	The tax identifier of the supplier it is being shipped to.
trackingNumber	NA	string($text128) example: 44000567002	A tracking number associated to the shipment.
dimensionId	NA	integer($int12) example: 100	The identifier of a dimension object associated to the shipment.
weight	NA	number($decimal(12,4)) example: 12.8	The weight of the shipment.
weightUom	NA	string($text4) example: KG	The unit of measure of the weight of the shipment.
requestedPickupDate	NA	string($date-time)	The requested pickup date.
cartons	Yes	object	cartons
notes	NA	string ($text2000) example: List ["The first note", "The second note"]	A collection of up to 100 notes to be created.

Table 4-287 VendorShipmentCreateCartonIdo — Object

Element Name	Required	Data Type/Example	Description
externalCartonId	NA	string($text128) example: 4500300	A container identifier from an external system.
trackingNumber	NA	string($text128) example: 876300456	The tracking number of the container.
restrictionLevel	NA	integer($int4)	example: 1 The hierarchy restriction level for items in the container. Valid values are: 1 - Department 2 - Class 3 - Subclass 4 - None Enum: [1, 2, 3, 4]
cartonSizeId	NA	integer($int10) example: 1000	The unique identifier of the container dimension object.
weight	NA	number($decimal(12,4)) example: 4.5	The weight of the container.
weightUom	NA	string($text4) example: LBS	The unit of measure of the weight of the container.
lineItems	Yes	object	line items

Table 4-288 VendorShipmentCreateLineItemIdo — Object

Element Name	Required	Data Type/Example	Description
itemId	Yes	string($text25) example: 10045600	The unique identifier of the SKU item.
reasonId	Yes	integer($int15) example: 2222222	The unique identier of the shipment reason.
caseSize	NA	number($decimal(10,2)) example: 3	The case size of this record.
quantity	Yes	number($decimal(20,4)) example: 100	The quantity that was shipped.
uins	NA	string($text128)] example: List [111345000, 222220000]	The UINs that were shipped. They total number must match the quantity shipped.

Responses

This section describes the responses of the Create Shipment API.

Response Code: 200

Successful response.

The media type is application/json.

Example Value

```
[
  {
    "shipmentId": <shipmentId>,
    "returnId": <returnId>,
    "status": 1
  }
]
```

Schema — VendorShipmentStatusIdo

This section describes the VendorShipmentStatusIdo schema.

Table 4-289 VenderoShipmentStatusIdo

Element Name	Required	Data Type/ Example	Description
shipmentId	NA	number($int15) example: 11111	The unique identifier of the vendor shipment.
returnId	NA	number($int15) example: 5000	The identifier of the associated vendor return.
status	NA	integer($int4) example: 1	The current status of the vendor shipment. Valid values: 1 - New 2 - In Progress 3 - Submitted 4 - Shipped 5 - Canceled Enum: [1, 2, 3, 4, 5]

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Read Shipment — GET

This section describes the Read Shipment API. This API retrieves all the details about an vendor shipment.

Method

```
GET
```

URL

```
/rtvshipments/{shipmentId}
```

Request

This section describes the request parameters.

Table 4-290 Read Shipment — Request Parameters

Parameters	Required	Data Type	Description
shipmentId	Yes	number($int12) (path)	The unique identifier of the vendor shipment.

Responses

This section describes the responses of the Read Shipment API.

Response Code: 200

Successful response

This media type is application/json.

Example Value


```
[
  {
    "shipmentId": <shipmentId>,
    "storeId": 5000,
    "supplierId": 5101,
    "vendorReturnId": 789012,
    "vendorReturnExternalId": "90000",
    "status": 1,
    "notAfterDate": "2024-08-28T09:29:33.327Z",
    "authorizationCode": "H112",
    "contextId": 90000,
    "contextValue": "Spring Return",
    "destinationAddress1": "460 Summer Street",
    "destinationAddress2": "Apartment 2",
    "destinationAddress3": "c/o John Smith",
    "destinationAddressCity": "Coolsville",
    "destinationAddressState": "NY",
    "destinationAddressCountry": "US",
    "destinationAddressPostalCode": "55555-1111",
    "billOfLadingId": 55601,
    "alternateAddress": "Another Street, Different City, NY, 44444",
    "carrierRole": 1,
    "carrierId": 123,
```

```
"carrierServiceId": 456,
"alternateCarrierName": "Speedy Delivery",
"alternateCarrierAddress": "Carrier Street, Carrier City, NY, 44444",
"motive": "Overstock",
"taxId": "11-33500",
"trackingNumber": "44000567002",
"dimensionId": 100,
"weight": 12.8,
"weightUom": "KG",
"requestedPickupDate": "2024-08-28T09:29:33.327Z",
"fiscalDocumentRequestId": 22233344455566,
"fiscalDocumentReferenceId": 77788899100,
"fiscalDocumentNumber": "128745",
"fiscalDocumentStatus": 1,
"fiscalDocumentRejectReason": "Missing Requirements",
"fiscalDocumentUrl": "http://fiscaldoc/doc123",
"createUser": "smith123",
"createDate": "2024-08-28T09:29:33.327Z",
"submitUser": "smith123",
"submitDate": "2024-08-28T09:29:33.327Z",
"dispatchUser": "smith123",
"dispatchDate": "2024-08-28T09:29:33.327Z",
"updateUser": "smith123",
"updateDate": "2024-08-28T09:29:33.327Z",
"cartons": [
  {
    "cartonId": 100200300,
    "externalCartonId": "4500300",
    "status": 1,
    "cartonDimensionId": 1000,
    "weight": 4.5,
    "weightUom": "LBS",
    "trackingNumber": "876300456",
    "restrictionLevel": 1,
    "createDate": "2024-08-28T09:29:33.328Z",
    "createUser": "smith123",
    "updateDate": "2024-08-28T09:29:33.328Z",
    "updateUser": "smith123",
    "approvalDate": "2024-08-28T09:29:33.328Z",
    "approvalUser": "smith123",
    "lineItems": [
      {
        "lineId": 2222222,
        "itemId": "10045600",
        "shipmentReasonId": 2222222,
        "caseSize": 3,
        "quantity": 100,
        "uins": [
          111345000,
          222220000
        ]
      }
    ]
  }
]
```

```
    }
]
```

Schema — VendorShipmentIdo

This section describes the VendorShipmentIdo schema.

Table 4-291 VendorShipmentIdo — Object

Element Name	Required	Data Type/Example	Description
shipmentId	NA	number($int12) example: 11111	The unique identifier of the vendor shipment.
storeId	NA	number($int10) example: 5000	The identifier of the store shipping the inventory.
supplierId	NA	number($int10) example: 5101	The identifier of the supplier the goods are being shipped to.
vendorReturnId	NA	number($int15) example: 789012	The unique identifier of the vendor return this shipment is for.
vendorReturnExternalId	NA	string($text128) example: 90000	A unique identifer of the vendor return from an external system.
status	NA	integer($int4) example: 1	The current status of the vendor shipment. Valid values are 1 - New 2 - In Progress 3 - Submitted 4 - Shipped 5 - Canceled Enum: [1, 2, 3, 4, 5]
notAfterDate	NA	string($date-time)	A date after which the shipment should not be shipped.
authorizationCode	NA	string($text12) example: H112	A vendor authorization code
contextId	NA	number($int18) example: 90000	A unique identifer of a context for the shipment (see shipping service).
contextValue	NA	string($text25) example: Spring Return	An additional value associated to the context for the shipment.
destinationAddress1	NA	string($text240) example: 460 Summer Street	The first line of the destination address.
destinationAddress2	NA	string($text240) example: Apartment 2	The second line of the destination address.
destinationAddress3	NA	string($text240) example: c/o John Smith	The third line of the destination address.
destinationAddressCity	NA	string($text120) example: Coolsville	The city of the destination address.
destinationAddressState	NA	string($text3) example: NY	The state of the destination address.

Table 4-291 (Cont.) VendorShipmentIdo — Object

Element Name	Required	Data Type/Example	Description
destinationAddressCountry	NA	string($text3) example: US	The country code of the destination address.
destinationAddressPostalCode	NA	string($text30) example: 55555-1111	The postal code of the destination address.
billOfLadingId	NA	number($int15) example: 55601	A bill of lading identifier.
alternateAddress	NA	string($text2000) example: Another Street, Different City, NY, 44444	An alternate destination address.
carrierRole	NA	integer($int2) example: 1	The type of carrier for the shipment. Valid values are 1 - Sender 2 - Receiver 3 - Third Party Enum: [1, 2, 3]
carrierId	NA	integer($int10) example: 123	A unique identifier of a carrier for the shipment.
carrierServiceId	NA	integer($int10) example: 456	A unique identifier of a carrier service for the shipment.
alternateCarrierName	NA	string($text240) example: Speedy Delivery	The name of a third-party shipping company.
alternateCarrierAddress	NA	string($text240) example: Carrier Street, Carrier City, NY, 44444	The address of a third-party shipping company.
motive	NA	string($text120) example: Overstock	A motive for the shipment.
taxId	NA	string($text18) example: 11-33500	The tax identifier of the supplier it is being shipped to.
trackingNumber	NA	string($text128) example: 44000567002	A tracking number associated to the shipment.
dimensionId	NA	integer($int12) example: 100	The identifier of a dimension object associated to the shipment.
weight	NA	number($decimal(12,4)) example: 12.8	The weight of the shipment.
weightUom	NA	string($text4) example: KG	The unit of measure of the weight of the shipment.
requestedPickupDate	NA	string($date-time)	The requested pickup date.
fiscalDocumentRequestId	NA	number($int20) example: 22233344455566	The identifier of the request for a fiscal document.
fiscalDocumentReferenceId	NA	number($int20) example: 77788899100	The unique identifier of the fiscal document

Table 4-291 (Cont.) VendorShipmentIdo — Object

Element Name	Required	Data Type/Example	Description
fiscalDocumentNumber	NA	string($text255) example: 128745	The fiscal document number.
fiscalDocumentStatus	NA	integer($int4) example: 1	The status of the fiscal document. Valid values are 1 - Approved 2 - Submitted 3 - Rejected 4 - Canceled Enum: [1, 2, 3, 4]
fiscalDocumentRejectReason	NA	string($text255) example: Missing Requirements	A reason the fiscal document was rejected.
fiscalDocumentUrl	NA	string($text255) example:	A URL to the fiscal document.
createUser	NA	string($text128) example: smith123	The user that created the shipment.
createDate	NA	string($date-time)	The date the shipment was created.
submitUser	NA	string($text128) example: smith123	The user that submitted the shipment.
submitDate	NA	string($date-time)	The date the shipment was submitted.
dispatchUser	NA	string($text128) example: smith123	The user that dispatched the shipment.
dispatchDate	NA	string($date-time)	The date the shipment was dispatched.
updateUser	NA	string($text128) example: smith123	The user that last updated the shipment.
updateDate	NA	string($date-time)	The date the delivery was last updated.
cartons	NA	object	cartons

Table 4-292 VendorShipmentCartonIdo — Object

Element Name	Required	Data Type/Example	Description
cartonId	NA	integer($int15) example: 100200300	The unique identifier of the carton record.
externalCartonId	NA	string($text128) example: 4500300	A container identifier from an external system.
status	NA	integer($int4) example: 1	The current status of the carton. Valid values are 1 - New 2 - In Progress 3 - Completed 4 - Shipped 5 - Canceled Enum: [1, 2, 3, 4, 5]

Table 4-292 (Cont.) VendorShipmentCartonIdo — Object

Element Name	Required	Data Type/Example	Description
cartonDimensionId	NA	integer($int10) example: 1000	The unique identifier of the container dimension object.
weight	NA	number($decimal(12,4)) example: 4.5	The weight of the container.
weightUom	NA	string($text4) example: LBS	The unit of measure of the weight of the container.
trackingNumber	NA	string($text128) example: 876300456	The tracking number of the container.
restrictionLevel	NA	integer($int4) example: 1	The hierarchy restriction level for items in the container. Valid values are1 - Department 2 - Class 3 - Subclass 4 - None Enum: [1, 2, 3, 4]
createDate	NA	string($date-time)	The date the carton was created.
createUser	NA	string($text128) example: smith123	The user that created the carton.
updateDate	NA	string($date-time)	The date the carton was last updated.
updateUser	NA	string($text128) example: smith123	The user that last updated the carton.
approvalDate	NA	string($date-time)	The date the carton was approved.
approvalUser	NA	string($text128) example: smith123	The user that approved the carton.
lineItems	NA	object	line items

Table 4-293 VendorShipmentLineItemIdo — Object

Element Name	Required	Data Type/Example	Description
lineId	NA	integer($int15) example: 2222222	The unique identier of the line record.
itemId	NA	string($text25) example: 10045600	The unique identifier of the SKU item.
shipmentReasonId	NA	integer($int15) example: 2222222	The unique identier of the shipment reason.
caseSize	NA	number($decimal(10,2)) example: 3	The case size of this record.
quantity	NA	number($decimal(20,4)) example: 100	The quantity that was shipped.
uins	Na	string($text128) example: List [111345000, 222220000]	The UINs that were shipped. They total number must match the quantity shipped.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Update Shipment — POST

This section describes the Update Shipment API. This API updates the header portion of a shipment as well as its bill of lading information. See carton related operations for creating or updating cartons on the shipment.

Method

```
POST
```

URL

```
/rtvshipments/{shipmentId}
```

Request

This section describes the request parameters.

Table 4-294 Update Shipment — Request Parameters

Parameters	Required	Data Type	Description
shipmentId	Yes	number($int12) (path)	The unique identifier of the vendor shipment.

The request body is application/json.

Shipment header details to update

Example Value

```
{
  "notAfterDate": "2024-08-28T12:54:48.823Z",
  "authorizationCode": "H112",
  "contextId": 90000,
  "contextValue": "Spring Return",
  "addressType": 1,
  "carrierRole": 1,
  "carrierId": 123,
  "carrierServiceId": 456,
  "alternateAddress": "Another Street, Different City, NY, 44444",
  "alternateCarrierName": "Speedy Delivery",
  "alternateCarrierAddress": "Carrier Street, Carrier City, NY, 44444",
  "motiveId": 123,
```

```
  "taxId": "11-33500",
  "trackingNumber": "44000567002",
  "dimensionId": 100,
  "weight": 20.4,
  "weightUom": "KG",
  "requestedPickupDate": "2024-08-28T12:54:48.823Z",
  "notes": [
    "The first note",
    "The second note"
  ]
}
```


Schema — VendorShipmentUpdateIdo

This section describes the VendorShipmentUpdateIdo schema.

Table 4-295 VendorShipmentUpdateIdo — Object

Element Name	Required	Data Type/ Example	Description
notAfterDate	NA	string($date-time)	A date after which the shipment should not be shipped.
authorizationCode	NA	string($text12) example: H112	A vendor authorization code
contextId	NA	number($int18) example: 90000	A unique identifer of a context for the shipment (see shipping service).
contextValue	NA	string($text25) example: Spring Return	An additional value associated to the context for the shipment.
addressType	NA	integer($int4) example: 1	The hierarchy restriction level for items in the container. Valid values are 1 - Department 2 - Class 3 - Subclass 4 - None Enum: [1, 2, 3, 4]
carrierRole	Yes	integer($int2) example: 1	The type of carrier for the shipment. Valid values are 1 - Sender 2 - Receiver 3 - Third Party Enum: [1, 2, 3]
carrierId	NA	integer($int10) example: 123	A unique identifier of a carrier for the shipment.
carrierServiceId	NA	integer($int10) example: 456	A unique identifier of a carrier service for the shipment.
alternateAddress	NA	string($text2000) example: Another Street, Different City, NY, 44444	An alternate destination address.

Table 4-295 (Cont.) VendorShipmentUpdateIdo — Object

Element Name	Required	Data Type/ Example	Description
alternateCarrierName	NA	string($text240) example: Speedy Delivery	The name of a third-party shipping company.
alternateCarrierAddress	NA	string($text240) example: Carrier Street, Carrier City, NY, 44444	The address of a third-party shipping company.
motiveId	NA	number($int18) example: 123	The unique identifier of a mtoive for the bill of lading.
taxId	NA	string($text18) example: 11-33500	The tax identifier of the supplier it is being shipped to.
trackingNumber	NA	string($text128) example: 44000567002	A tracking number associated to the shipment.
dimensionId	NA	integer($int12) example: 100	The idnetifier of a dimension object associated to the shipment.
weight	NA	number($decimal(12,4)) example: 20.4	The weight of the shipment.
weightUom	NA	string($text4) example: KG	The unit of measure of the weight of the shipment.
requestedPickupDate	NA	string($date-time)	The requested pickup date.
notes	NA	string($text2000) example: List ["The first note", "The second note"]	A collection of up to 100 notes to be added to the list of notes.

Responses

This section describes the responses of the Update Shipment API.

Response Code: 204

No Content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Submit Shipment — POST

This section describes the Submit Shipment API. This API submits a vendor shipment placing it into submitted status awaiting review and eventual dispatch. Fiscal document data capture can occur as part of this process.

Method

```
POST
```

URL

```
/rtvshipments/{shipmentId}/submit
```

Request

This section describes the request paramters.

Table 4-296 Submit Shipment — Request Parameters

Parameters	Required	Data Type	Description
shipmentId	Yes	number($int12) (path)	The unique identifier of the vendor shipment.

The request body is application/json.

Fiscal document information to include as part of the submission.

Example Value

```
{
  "vehicleNumber": "ABC-222",
  "vehicleStateOrCountry": "New York",
  "driverName": "John Smith",
  "driverLicenseNumber": "HBAC-123456"
}
```

Schema — VendorShipmentFiscalSubmitIdo

This section describes the VendorShipmentFiscalSubmitIdo schema.

Table 4-297 VendorShipmentFiscalSubmitIdo — Object

Element Name	Required	Data Type/ Example	Description
vehicleNumber	NA	string($text25) example: ABC-222	The vehicle license plate or identifying number.
vehicleStateOrCountry	NA	string($text25) example: New York	The vehicle's state or country.
driverName	NA	string($text30) example: John Smith	The name of the driver.
driverLicenseNumber	NA	string($text30) example: HBAC-123456	The driver's liscence number.

Responses

This section describes the responses of the Submit Shipment API.

Response Code: 204

No Content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Cancel Submit Shipment — POST

This section describes the Cancel Submit Shipment API. Cancels the submission of a shipment moving it back to in progress state.

Method

```
POST
```

URL

```
/rtvshipments/{shipmentId}/cancelSubmit
```

Request

This section describes the request parameters.

Table 4-298 Cancel Submit Shipment — Request Parameters

Parameters	Required	Data Type	Description
shipmentId	Yes	number($int12) (path)	The unique identifier of the vendor shipment.

Responses

This section describes the responses of the Cancel Submit Shipment API.

Response Code: 204

No Content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Dispatch Shipment — POST

This section describes the Dispatch Shipment API. This API dispatches the shipment to the destination, closing the shipment, and updating inventory.

Method

```
POST
```

URL

```
/rtvshipments/{shipmentId}/dispatch
```

Request

This section describes the request parameters.

Table 4-299 Dispatch Shipment — Request Parameters

Parameters	Required	Data Type	Description
shipmentId	Yes	number($int12) (path)	The unique identifier of the vendor shipment.

Responses

This section describes the responses of the Dispatch Shipment API.

Response Code: 204

No Content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Cancel Shipment — POST

This section describes the Cancel Shipment API. This API cancels the shipment. This will close the associated vendor return.

Method

```
POST
```

URL

```
/rtvshipments/{shipmentId}/cancel
```

Request

This section describes the request parameters.

Table 4-300 Cancel Shipment — Request Parameters

Parameters	Required	Data Type	Description
shipmentId	Yes	number($int12) (path)	The unique identifier of the vendor shipment.

Responses

This section describes the responses of the Cancel Shipment API.

Response Code: 204

No Content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Create Carton — POST

This section describes the Create Carton API. This API adds a new container to a new or in progress shipment.

Method

```
POST
```

URL

```
/rtvshipments/{shipmentId}/cartons
```

Request

This section describes the request parameters.

Table 4-301 Create Carton — Request Parameters

Parameters	Required	Data Type	Description
shipmentId	Yes	number($int12) (path)	The unique identifier of the shipment.

The request body is applicaton/json.

Details for the carton to create.

Example Value


```
{
  "externalCartonId": "4500300",
  "trackingNumber": "876300456",
  "restrictionLevel": 1,
  "cartonSizeId": 1000,
  "weight": 4.5,
  "weightUom": "LBS",
  "lineItems": [
    {
      "itemId": "10045600",
      "reasonId": 2222222,
      "caseSize": 3,
      "quantity": 100,
      "uins": [
        111345000,
        222220000
      ]
    }
  ]
}
```


Schema — VendorShipmentCartonCreateIdo

This section describes the VendorShipmentCartonCreateIdo schema.

Table 4-302 VendorShipmentCartonCreateIdo — Object

Element Name	Required	Data Type/ Example	Description
externalCartonId	NA	string($text128) example: 4500300	A container identifier from an external system.
trackingNumber	NA	string($text128) example: 876300456	The tracking number of the container.
restrictionLevel	NA	integer($int4) example: 1	The hierarchy restriction level for items in the container. Valid values are 1 - Department 2 - Class 3 - Subclass 4 - None Enum: [1, 2, 3, 4]
cartonSizeId	NA	integer($int10) example: 1000	The unique identifier of the container dimension object.
weight	NA	number($decimal(12,4)) example: 4.5	The weight of the container.

Table 4-302 (Cont.) VendorShipmentCartonCreateIdo — Object

Element Name	Required	Data Type/ Example	Description
weightUom	NA	string($text4) example: LBS	The unit of measure of the weight of the container.
lineItems	Yes	object	line items

Table 4-303 VendorShipmentCartonCreateLineItemIdo — Object

Element Name	Required	Data Type/ Example	Description
itemId	Yes	string($text25) example: 10045600	The unique identifier of the SKU item.
reasonId	Yes	integer($int15) example: 2222222	The unique identifier of the shipment reason.
caseSize	NA	number($decimal(10,2)) example: 3	The case size of this record.
quantity	Yes	number($decimal(20,4)) example: 100	The quantity that was shipped.
uins	NA	string($text128 example: List [111345000, 222220000]	The UINs that were shipped. The total number must match the quantity shipped.

Responses

This section describes the responses of the Create Carton API.

Reason Code: 200

Successful response

The media type is application/json.

Example Value

```
[
  {
    "shipmentId": 11111,
    "cartonId": 5000,
    "status": 1
  }
]
```

Schema — VendorShipmentCartonStatusIdo

This section describes the VendorShipmentCartonStatusIdo schema.

Table 4-304 VendorShipmentCartonStatusIdo — Object

Element Name	Required	Data Type/ Example	Description
shipmentId	NA	number($int15) example: 11111	The unique identifier of the vendor shipment.
cartonId	NA	number($int15) example: 5000	The identifier of the new carton.
status	NA	integer($int4) example: 1	The current status of the vendor shipment. Valid values are 1 - New 2 - In Progress 3 - Completed 4 - Shipped 5 - Canceled Enum: [1, 2, 3, 4, 5]

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Update Carton — POST

This section describes the Update Carton API. Updates a previously existing carton that is in a new or in progress state, on a shipment that is also new or in progress.

Method

```
POST
```

URL

```
/rtvshipments/cartons/{cartonId}
```

Request

This section describes the request parameters.

Table 4-305 Update Create — Request Parameters

Parameters	Required	Data Type/ Example	Description
cartonId	Yes	number($int12) (path)	The unique identifier of the shipment carton.

The request body is application/json.

Details for the carton to update.

Example Value

```
{
  "externalCartonId": "4500300",
  "trackingNumber": "876300456",
  "restrictionLevel": 1,
  "cartonSizeId": 1000,
  "weight": 4.5,
  "weightUom": "LBS",
  "lineItems": [
    {
      "itemId": "10045600",
      "reasonId": 2222222,
      "caseSize": 3,
      "quantity": 100,
      "uins": [
        111345000,
        222220000
      ]
    }
  ]
}
```

Schema — VendorShipmentCartonUpdateIdo

This section describes the VendorShipmentCartonUpdateIdo schema.

Table 4-306 VendorShipmentCartonUpdateIdo — Object

Element Name	Required	Data Type/Example	Description
externalCartonId	NA	string($text128) example: 4500300	A container identifier from an external system.
trackingNumber	NA	string($text128) example: 876300456	The tracking number of the container.

Table 4-306 (Cont.) VendorShipmentCartonUpdateIdo — Object

Element Name	Required	Data Type/Example	Description
restrictionLevel	NA	integer($int4) example: 1	The hierarchy restriction level for items in the container. Valid values are 1 - Department 2 - Class 3 - Subclass 4 - None Enum: [1, 2, 3, 4]
cartonSizeId	NA	integer($int10) example: 1000	The unique identifier of the container dimension object.
weight	NA	number($decimal(12,4)) example: 4.5	The weight of the container.
weightUom	NA	string($text4) example: LBS	The unit of measure of the weight of the container.
lineItems	Yes	object	Line items

Table 4-307 VendorShipmentCreateLineItemIdo — Object

Element Name	Required	Data Type/Example	Description
itemId	Yes	string($text25) example: 10045600	The unique identifier of the SKU item.
reasonId	Yes	integer($int15) example: 2222222	The unique identier of the shipment reason.
caseSize	NA	number($decimal(10,2)) example: 3	The case size of this record.
quantity*	Yes	number($decimal(20,4)) example: 100	The quantity that was shipped.
uins	NA	string($text128) example: List [111345000, 222220000]	The UINs that were shipped. They total number must match the quantity shipped.

Responses

This section describes the responses of the Update Carton API.

Response Code: 204

No Content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Confirm Carton — POST

This section describes the Confirm Carton API. This API confirms a carton indicating the carton is ready for dispatch. This sets the carton so it can no longer be modified.

Method

`POST`

URL

`/rtvshipments/cartons/{cartonId}/confirm`

Request

This section describes the request parameters.

Table 4-308 Confirm Carton — Request Parameters

Parameters	Required	Data Type/ Example	Description
cartonId	Yes	number($int12) (path)	The unique identifier of the shipment carton.

Responses

This section describes the responses of the Confirm Carton API.

Response Code: 204

No Content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Cancel Carton — POST

This section describes the Cancel Carton API. This API cancels a carton effectively removing its contents from the shipment.

Method

```
POST
```

URL

```
/rtvshipments/cartons/{cartonId}/cancel
```

Request

This section describes the request parameters.

Table 4-309 Cancel Carton — Request Parameters

Parameters	Required	Data Type/ Example	Description
cartonId	Yes	number($int12) (path)	The unique identifier of the shipment carton.

Responses

This section describes the responses of the Cancel Carton API.

Response Code: 204

No Content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Open Carton — POST

This section describes the Open Carton API. This API opens a previously confirmed carton so that it can be modified again.

Method

```
POST
```

URL

```
/rtvshipments/cartons/{cartonId}/open
```

Request

This section describes the request parameters.

Table 4-310 Open Carton — Request Parameters

Parameters	Required	Data Type/ Example	Description
cartonId	Yes	number($int12) (path)	The unique identifier of the shipment carton.

Responses

This section describes the responses of the Open Carton API.

Response Code: 204

No Content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

REST Service: Warehouse

This service integrates warehouse and warehouse item foundation data as well as warehouse item inventory adjustments.

Asynchronous warehouse integration is processed through staged messages and is controlled by the MPS Work Type: DcsWarehouse.

Service Base URL

The Cloud service base URL follows the format:

https://<external_load_balancer>/<cust_env>/siocs-int-services/api/warehouses

API Definitions

API	Description
Import Warehouses	Imports a collection of warehouses into the system.
Delete Warehouse	Deletes a warehouse from the system.
Import Items	Imports a collection of warehouse items.
Delete Items	Deletes warehouse items from the system.
Import Adjustments	Imports a collection of warehouse items adjustments that took place.
Import Inventory	Imports a collection of warehouse item inventory to update the inventory positions.

API: Import Warehouses

This will import warehouses through foundation warehouse processing.

If more than 500 warehouses are sent in a single call, an input too large error will be returned.

API Basics

Endpoint URL	{base URL}/import
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	List of warehouses to import
Output	None
Max Response Limit	500

Input Data Definition

Attribute	Data Type	Required	Description
warehouses	List of details	Yes	A list of warehouses to import.

Detail Data Definition

Attribute	Data Type	Required	Size	Description
warehouseId	Long (10)	Yes		The warehouse identifier.
name	String (150)	Yes	150	The name of the warehouse.
organizationUnit	String (15)		15	The organization the warehouse belongs to.
countryCode	String (3)		3	The ISO country code of the warehouse.
currencyCode	String (40)		3	The ISO currency code of the warehouse.

Example Output

```
{
```

"warehouses": [
{
"warehouseId": 64,
"name": "DownTownWarehouse-1",
"organizationUnit": "70001",
"countryCode": "IN",
"currencyCode": "INR"
},
{
"warehouseId": 65,
"name": "CitynWarehouse-1",
"organizationUnit": "70001",
"countryCode": "IN",
"currencyCode": "INR"
}
]
}
]

API: Delete Warehouse

Deletes a warehouse. The warehouse will not be deleted if any items remain ranged to the warehouse.

API Basics

Endpoint URL	{base URL}{warehouseId}/delete
Method	POST
Successful Response	202 Accepted
Processing Type	Synchronous
Input	None
Output	None
Max Response Limit	N/A

Path Parameter Definitions

Attribute	Definition
warehouseId	The internal identifier of the warehouse.

API: Import Items

Imports a collection of warehouse items.

If more than 5000 items are sent in a single call, an input too large error will be returned.

API Basics

Endpoint URL	{base URL}/{warehouseId}/items/import
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous (High Volume)
Input	A list of warehouse items to import
Output	None
Max Response Limit	5000

Path Parameter Definitions

Attribute	Definition
warehouseId	The internal identifier of the warehouse.

Input Data Definition

Attribute	Data Type	Required	Description
items	List of details	Yes	A list of warehouse items to import.

Detail Import Data Definition

Attribute	Data Type	Required	Description
itemId	String (25)	Yes	The item identifier.
standardUom	String (4)	Yes	The standard unit of measure of the item.
status	Integer	Yes	The status (See Index: Warehouse Item Import Status)
clearInventory	Boolean	Yes	True indicates that the inventory positions should all be set to zero.

Example Input

{

"items": [

{

"itemId": "100000147",

"standardUom": "EA",

"status": 1,

"clearInventory": true

},

{

"itemId": "100000148",

"standardUom": "KG",

"status": 2,

"clearInventory": false

}

]

}

Additional Data Definitions

Warehouse Import Item Status

Value	Definition
1	ACTIVE
2	DISCONTINUED
3	INACTIVE

API: Delete Items

Marks warehouse items for later deletion.

If more than 5000 items are sent in a single call, an input too large error will be returned.

API Basics

Endpoint URL	{base URL}{warehouseId}/delete
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous
Input	List of item ids to delete
Output	None
Max Response Limit	5000

Path Parameter Definitions

Attribute	Definition
warehouseId	The internal identifier of the warehouse.

Input Data Definition

Attribute	Data Type	Required	Description
items	List<String(25)>	Yes	A collection of up to 5000 items to remove.

Example Input

{

"itemIds": ["100000301", "100000147"]

}

API: Import Adjustments

API: Import Adjustments

A list of warehouse adjustments is processed, inventory is updated for the warehouse items, and then the adjustments are discarded.

They are not persisted anywhere and this process does not produce a transaction history record.

If more than 5000 items are sent in a single call, an input too large error will be returned.

API Basics

Endpoint URL	{base URL} {warehouseId}/adjustments/import
Method	POST
Successful Response	202 Accepted
Processing Type	Asynchronous (High Volume)
Input	A list of warehouse adjustments to import
Output	None
Max Response Limit	5000

Path Parameter Definitions

Attribute	Definition
warehouseId	The internal identifier of the warehouse.

Input Data Definition

Attribute	Data Type	Required	Description
adjustments	List of details	Yes	A list of adjustments that occurred for that warehouse.

Detail Import Data Definition

Attribute	Data Type	Required	Description
itemId	String (25)	Yes	The unique item identifier.
quantity	BigDecimal	Yes	The quantity to be adjusted.
reasonCode	Integer	Yes	The unique reason code of an inventory adjustment reason code.

Example Input

```
{
"adjustments": [
{
"itemId": "100000147",
"quantity": 100,
"reasonCode": 182
},
{
"itemId": "100000024",
"quantity": 50,
"reasonCode": 183
}
]
}
```

API: Import Inventory

This operation updates the inventory positions of a warehouse.

API Basics

Endpoint URL	{base URL}/{warehouseId}/inventory/import
Method	POST
Successful Response	200 Accepted
Processing Type	Asynchronous
Input	List of items with their inventory
Max Input	10,000 items
Output	N/A
Max Response Limit	N/A

Input Data Definition

Attribute	Type	Definition
Items	List of Warehouse Inventory	A list of items to overwrite inventory for at the warehouse.

Warehouse Inventory Ido

Attribute	Type	Definition
itemId	String(25)	The unique item identifier.
quantityTotal	BigDecimal(12,4)	The total quantity of the item in inventory.
quantityReserved	BigDecimal(12,4)	he quantity reserved for outgoing shipping.
quantityUnavailable	BigDecimal(12,4)	The quantity unavailable for usage.
quantityInTransit	BigDecimal(12,4)	The quantity in transit to the warehouse.

Example Input

{

"items

{

"itemId": "100000147",

"quantityTotal”: 100,

"quantityReserved”: 8

},

{

"itemId": "100000024",

"quantityTotal”: 50,

"quantityInTransit”: 183

}

]

}

REST Service: Item Basket

tem Basket is a way of creating a list of items that can be utilized for other things such as line busting, gift registries, and so on. Item Basket allows a user to capture items and their quantities. An item basket that has only items on it is considered static, meaning that the

number of items does not change. An item basket that has only hierarchies or hierarchies and items is considered dynamic, meaning that the items on the basket can change based upon the items associated to the hierarchy. This service defines operations to manage transfer delivery information by integration with an external system.

Service Base URL

The Cloud service base URL follows the format:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Find Baskets — GET

This section describes the Find Baskets API. This API finds up to 10,000 item basket headers for the input criteria.

Method

```
GET
```

URL

```
/itembaskets
```

Request Parameters

This section describes the request parameters.

Table 4-311 Find Baskets — Request Parameters

Parameters	Required	Data Type/ Example	Description
referenceId	NA	number($int12) (query)	Include only item baskets with this reference identifier.
alternateId	NA	number($int12) (query)	Include only item baskets with this alternate identifier.
storeId	NA	number($int10) (query)	Include only item baskets with this store identifier.
typeId	NA	number($int18) (query)	Include only item baskets with this item basket type.
status	NA	integer($int4) (query)	Include only item baskets with this status. Valid values are 1 - In Progress 2 - Completed 3 - Canceled *Available values* : 1, 2, 3

Table 4-311 (Cont.) Find Baskets — Request Parameters

Parameters	Required	Data Type/ Example	Description
updateDateFrom	NA	string($date-time) (query)	Include only item baskets with an update date on or after this date.
updateDateTo	NA	string($date-time) (query)	Include only item baskets with an update date on or before this date.
itemId	NA	string($text25) (query)	Include only item baskets that contain this item.

Responses

This section describes the responses of the Find Baskets API.

Reason Code: 200

Successful response

The media type is application/json.

Example Value


```
[
  {
    "basketId": 11111,
    "referenceId": 211933,
    "alternateId": 83027,
    "storeId": 5000,
    "typeId": 5,
    "description": "Broken item investigation",
    "status": 1,
    "createDate": "2024-10-28T14:18:42.543Z",
    "updateDate": "2024-10-28T14:18:42.543Z",
    "expirationDate": "2024-10-28T14:18:42.543Z"
  }
]
```


Schema — ItemBasketHeaderIdo

This section describes the ItemBasketHeaderIdo schema.

Table 4-312 ItemBasketHeaderIdo — Object

Element Name	Required	Data Type/ Example	Description
basketId	NA	number($int12) example: 11111	The unique identifier of the item basket.
referenceId	NA	number($int12) example: 211933	An external reference identifier to the item basket.
alternateId	NA	number($int12) example: 83027	An alternate identifier assigned by the user to the item basket.
storeId	NA	number($int10) example: 5000	A store identifier if the item basket belongs to a particular store. An empty or not-included store identifier indicates it can be used by all stores.
typeId	NA	number($int18) example: 5	The unique identifier of the item basket type.
description	NA	string($text255) example: Broken item investigation	A description of the item basket.
status	NA	integer($int4) example: 1	The current status of the item basket. Valid values are: 1 - In Progress 2 - Completed 3 - Canceled Enum: [1, 2, 3]
createDate	NA	string($date-time)	The date the item basket was created.
updateDate	NA	string($date-time)	The date the item basket was last updated.
expirationDate	NA	string($date-time)	The date the item basket will expire.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Create Basket

This section describes the Create Basket API. This API creates an in-progress item basket.

Method

```
POST
```

URL

```
/itembaskets
```

Request Parameters

There are not request parameters.

Request body is application/json.

The item basket details of the new item basket.

Example Value

```
{
  "alternateId": 83027,
  "storeId": 5000,
  "typeId": 5,
  "description": "Broken item investigation",
  "expirationDate": "2024-10-28T15:00:53.432Z",
  "hierarchies": [
    {
      "departmentId": 1000,
      "classId": 2000,
      "subclassId": 3000
    }
  ],
  "lineItems": [
    {
      "itemId": "11111",
      "caseSize": 1,
      "quantity": 20
    }
  ]
}
```

Schema — ItemBasketCreateIdo

This section describes the ItemBasketCreateIdo schema.

Table 4-313 ItemBasketCreateIdo — Object

Element Name	Required	Data Type/ Example	Description
alternateId	NA	number($int12) example: 83027	An alternate identifier assigned by rgw user to the item basket
storeId	NA	number($int10) example: 5000	A store identifier if the item basket belongs to a particular store. An empty or not-included store identifier indicates it can be used by all stores.
typeId	Yes	number($int18) example: 5	The unique identifier of the item basket type.
description	NA	string($text255) example: Broken item investigation	A description of the item basket.
expirationDate	NA	string($date-time)	The date the item basket will expire.
hierarchies	NA	object	A collection of hierarchies in the basket.
lineItems	NA	object	A collection of items in the basket.

Table 4-314 ItemBasketHierarchyIdo — Object

Element Name	Required	Data Type/ Example	Description
departmentId	NA	number($int12) example: 1000	The unique identifier of the department.
classId	NA	number($int12) example: 2000	The unique identifier of the class.
subclassId	NA	number($int12) example: 3000	The unique identifier of the subclass.

Table 4-315 ItemBasketCreateItemIdo — Object

Element Name	Required	Data Type/ Example	Description
itemId	NA	string($text25) example: 11111	The unique identifier of the item.
caseSize	NA	number($decimal(10,2)) example: 1	The case size of the item for this record.

Table 4-315 (Cont.) ItemBasketCreateItemIdo — Object

Element Name	Required	Data Type/ Example	Description
quantity	NA	number($decimal(12,4)) example: 20	The quantity of the item in the basket.

Responses

This section describes the responses of the Create Baskets API.

Reason Code: 200

Successful response

The media type is application/json.

Example Value

```
[
  {
    "basketId": 11111,
    "typeId": 5,
    "status": 1
  }
]
```

Schema — ItemBasketStatusIdo

This section describes the ItemBasketStatusIdo schema.

Table 4-316 ItemBasketStatusIdo

Element Name	Required	Data Type/ Example	Description
basketId	NA	number($int12) example: 11111	The unique identifier of the item basket.
typeId	NA	number($int18) example: 5	The unique identifier of the item basket type.
status	NA	integer($int4) example: 1	The current status of the item basket. Valid values are: 1 - In Progress 2 - Completed 3 - Canceled Enum: [1, 2, 3]

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Read Basket

This section describes the Read Basket API. This API retrieves all the details about an item basket.

Method

```
GET
```

URL

```
/itembaskets/{basketId}
```

Request Parameters

Table 4-317 Read Basket — Request Parameters

Parameter	Required	Data Type/ Example	Description
basketId	Yes	number($int12) (path)	The unique identifier of the item basket.

Responses

This section describes the responses of the Read Baskets API.

Reason Code: 200

Successful response

The media type is application/json.

Example Value

```
[
  {
    "basketId": 11111,
```

```
    "referenceId": 211933,
    "alternateId": 83027,
    "storeId": 5000,
    "typeId": 5,
    "description": "Broken item investigation",
    "status": 1,
    "createDate": "2024-10-30T12:43:35.561Z",
    "updateDate": "2024-10-30T12:43:35.561Z",
    "expirationDate": "2024-10-30T12:43:35.561Z",
    "createUser": "smith123",
    "updateUser": "smith123",
    "dynamic": true,
    "hierarchies": [
      {
        "departmentId": 1000,
        "classId": 2000,
        "subclassId": 3000
      }
    ],
    "lineItems": [
      {
        "lineId": 11111,
        "itemId": "11111",
        "caseSize": 1,
        "quantity": 20
      }
    ]
  }
]
```


Schema — ItemBasketStatusIdo

This section describes the ItemBasketStatusIdo schema.

Table 4-318 ItemBasketStatusIdo

Element Name	Required	Data Type/ Example	Description
basketId	NA	number($int12) example: 11111	The unique identifier of the item basket.
typeId	NA	number($int18) example: 5	The unique identifier of the item basket type.
status	NA	integer($int4) example: 1	The current status of the item basket. Valid values are: 1 - In Progress 2 - Completed 3 - Canceled Enum: [1, 2, 3]

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Update Basket

This section describes the Update Basket API. This API updates an item basket.

Method

```
POST
```

URL

```
/itembaskets/{basketId}
```

Request Parameters

Table 4-319 Update Basket — Request Parameters

Parameter	Required	Data Type/ Example	Description
basketId	Yes	number($int12) (path)	The unique identifier of the item basket.

The request body is application/json.

Item basket details to update.

Example Value

```
{
  "alternateId": 83027,
  "description": "Broken item investigation",
  "expirationDate": "2024-10-30T13:17:43.434Z",
  "hierarchies": [
    {
      "departmentId": 1000,
      "classId": 2000,
      "subclassId": 3000
    }
  ],
  "lineItems": [
    {
      "itemId": "11111",
      "caseSize": 1,
      "quantity": 20
```

```
      }
    ]
}
```

Schema — ItemBasketUpdateIdo

Table 4-320 ItemBasketUpdateIdo — Object

Element Name	Required	Data Type/ Example	Description
alternateId	NA	number($int12) example: 83027	An alternate identifier assigned by the user to the item basket.
description	NA	string($text255) example: Broken item investigation	A description of the item basket.
expirationDate	NA	string($date-time)	The date the item basket will expire.
hierarchies	NA	object	A collection of hierarchies in the basket.
lineItems	NA	object	A collection of items in the basket.

Table 4-321 ItemBasketHierarchyIdo — Object

Element Name	Required	Data Type/ Example	Description
departmentId	NA	number($int12) example: 1000	The unique identifier of the department.
classId	NA	number($int12) example: 2000	The unique identifier of the class.
subclassId	NA	number($int12) example: 3000	The unique identifier of the subclass.

Table 4-322 ItemBasketUpdateItemIdo — Object

Element Name	Required	Data Type/ Example	Description
itemId	NA	string($text25) example: 11111	The unique identifier of the item.
caseSize	NA	number($decimal(10,2)) example: 1	The case size of the item for this record.

Table 4-322 (Cont.) ItemBasketUpdateItemIdo — Object

Element Name	Required	Data Type/ Example	Description
quantity	NA	number($decimal(12,4)) example: 20	The quantity of the item in the basket.

Responses

This section describes the responses of the Update Baskets API.

Response Code: 204

no content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Copy Basket

This section describes the Copy Basket API. This API copies an item basket returning the newly copied basket.

Method

```
POST
```

URL

```
/itembaskets/{basketId}/copy
```

Request Parameters

Table 4-323 Copy Basket — Request Parameters

Parameter	Required	Data Type/ Example	Description
basketId	Yes	number($int12) (path)	The unique identifier of the item basket.

Responses

This section describes the responses of the Copy Baskets API.

Response Code: 200

The response has been successful.

The media type os application/json.

Example Value


```
[
  {
    "basketId": 11111,
    "referenceId": 211933,
    "alternateId": 83027,
    "storeId": 5000,
    "typeId": 5,
    "description": "Broken item investigation",
    "status": 1,
    "createDate": "2024-10-30T14:05:24.790Z",
    "updateDate": "2024-10-30T14:05:24.790Z",
    "expirationDate": "2024-10-30T14:05:24.790Z",
    "createUser": "smith123",
    "updateUser": "smith123",
    "dynamic": true,
    "hierarchies": [
      {
        "departmentId": 1000,
        "classId": 2000,
        "subclassId": 3000
      }
    ],
    "lineItems": [
      {
        "lineId": 11111,
        "itemId": "11111",
        "caseSize": 1,
        "quantity": 20
      }
    ]
  }
]
```


Schema — ItemBasketStatusIdo

This section describes the ItemBasketStatusIdo schema.

Table 4-324 ItemBasketStatusIdo

Element Name	Required	Data Type/ Example	Description
basketId	NA	number($int12) example: 11111	The unique identifier of the item basket.
typeId	NA	number($int18) example: 5	The unique identifier of the item basket type.
status	NA	integer($int4) example: 1	The current status of the item basket. Valid values are: 1 - In Progress 2 - Completed 3 - Canceled Enum: [1, 2, 3]

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Confirm Basket

This section describes the Confirm Basket API. This API confirms the item basket making it available for usage.

Method

```
POST
```

URL

```
/itembaskets/{basketId}/confirm
```

Responses

This section describes the responses of the Confirm Basket API.

Response Code: 204

no content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Delete Basket

This section describes the Delete Basket API. This API deletes the item basket.

Method

```
POST
```

URL

```
/itembaskets/{basketId}/delete
```

Request Parameters

Table 4-325 Delete Basket — Request Parameters

Parameter	Required	Data Type/ Example	Description
basketId	Yes	number($int12) (path)	The unique identifier of the item basket.

Responses

This section describes the responses of the Delete Basket API.

Response Code: 204

no content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Find Basket Types

This section describes the Find Basket Types API. This API finds all the available item basket types for an item basket.

Method

```
GET
```

URL

```
/itembaskets/types
```

Request Parameters

No parameters

Responses

This section describes the responses of the Find Basket Types API.

Response Code: 200

The response has been successful.

The media type os application/json.

Example Value

```
[
  {
    "typeId": 1,
    "code": "INV",
    "description": "Investigation"
  }
]
```

Schema — ItemBasketTypeIdo

This section describes the ItemBasketTypeIdo schema.

Table 4-326 ItemBasketTypeIdo — Object

Element Name	Required	Data Type/ Example	Description
typeId	NA	number($int18) example: 1	The unique identifier of the item basket type.
code	NA	string($text6) example: INV	A short code of the item basket type.
description	NA	string($text120) example: Investigation	The description of the item basket type.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

REST Service: Product Area

A product area consists of an item basket (group of items) associated to a group of stores. Areas are used within customer order picking and to manage store order restrictions.

Service Base URL

The Cloud service base URL follows the format:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Find Product Areas

This section describes the Find Product Areas API. This API finds up to 1000 product areas for the input criteria.

Method

```
GET
```

URL

```
/productareas
```

Request Parameters

Table 4-327 Find Product Areas — Request Parameters

Parameter	Required	Data Type	Description
itemBasketId	NA	number($int12) (query)	Include only product areas that are associated to this item basket.
description	NA	string($text255) (query)	Include only product areas with this description.
status	NA	integer($int4) (query)	Include only product areas with this status. Valid values are: 1 - In Progress 2 - Completed 3 - Canceled Available values : 1, 2, 3
type	NA	integer($int2) (query)	Include only product areas with this type. Valid values are 1 - Customer Order Picking Available values : 1
updateDateFrom	NA	string($date-time) (query)	Include only product areas with an update date on or after this date.
updateDateTo	NA	string($date-time) (query)	Include only product areas with an update date on or before this date.

Responses

This section describes the responses of the Find Product Areas API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "productAreaId": 11111,
    "itemBasketId": 211933,
    "description": "Cold Items",
    "status": 1,
    "type": 1,
    "createStoreId": 5000,
    "updateDate": "2024-11-04T14:16:17.231Z",
    "updateUser": "john.smith"
  }
]
```

Schema — ProductAreaHeaderIdo

Table 4-328 ProductAreaHeaderIdo — Object

Element Name	Required	Data Type/ Example	Description
productAreaId	NA	number($int12) example: 11111	The unique identifier of the product area.
itemBasketId	NA	number($int12) example: 211933	The identifier of an item basket associated to the product area.
description	NA	string($text255) example: Cold Items	A description of the product area.
status	NA	integer($int4) example: 1	The current status of the product area. Valid values are 1 - In Progress 2 - Completed 3 - Canceled Enum: [1, 2, 3]
type	NA	integer($int4) example: 1	The type of the product area. Valid values are: 1 - Customer Order Picking Enum: [1]
createStoreId	NA	number($int10) example: 5000	The identifier of the store that created the product area.
updateDate	NA	string($date-time)	The date the product area was last updated.
updateUser	NA	string($text128) example: john.smith	The user that last updated the product area.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Create Product Area

This section describes the Create Product Area API. This API creates an in-progress product area.

Method

```
POST
```

URL

```
/productareas
```

Request Parameters

There are no parameters.

The request body is application/json.

Example Value

```
{
  "itemBasketId": 211933,
  "description": "Cold Items",
  "type": 1,
  "createStoreId": 5000,
  "stores": [
    5000,
    5001
  ]
}
```

Schema — ProductAreaCreateIdo

Table 4-329 ProductAreaCreateIdo — Object

Element Name	Required	Data Type/ Example	Description
itemBasketId	NA	number($int12) example: 211933	The identifier of an item basket associated to the product area.
description	NA	string($text255) example: Cold Items	A description of the product area.
type	Yes	integer($int4) example: 1	The type of the product area. Valid values are 1 - Customer Order Picking Enum: Array [1]
createStoreId	Yes	number($int10) example: 5000	The identifier of the store that created the product area.

Table 4-329 (Cont.) ProductAreaCreateIdo — Object

Element Name	Required	Data Type/ Example	Description
stores	NA	example: List [5000, 5001]	The stores associated to this product area.

Responses

This section describes the responses of the Create Product Areas API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value

```
[
  {
    "productAreaId": 11111,
    "status": 1,
    "type": 1
  }
]
```

Schema — ProductAreaStatusIdo

Table 4-330 ProductAreaStatusIdo — Object

Element Name	Required	Data Type/ Example	Description
productAreaId	NA	number($int12) example: 11111	The unique identifier of the product area.
status	NA	integer($int4) example: 1	The current status of the product area. Valid values are 1 - In Progress 2 - Completed 3 - Canceled Enum: Array [3]
type	NA	integer($int4) example: 1	The type of the product area. Valid values are 1 - Customer Order Picking Enum: Array [1]

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Read Product Area

This section describes the Read Product Area API. This API retrieves all the details about a product area.

Method

```
GET
```

URL

```
/productareas/{areaId}
```

Request Parameters

Table 4-331 Read Product Area — Request Parameters

Parameter	Required	Data Type	Description
areaId	Yes	number($int12) (path)	The unique identifier of the product area.

Responses

This section describes the responses of the Read Product Areas API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value

```
[
  {
    "productAreaId": 11111,
    "itemBasketId": 211933,
```

```
    "description": "Cold Items",
    "status": 1,
    "type": 1,
    "createStoreId": 5000,
    "createDate": "2024-11-05T11:49:20.419Z",
    "createUser": "smith123",
    "updateDate": "2024-11-05T11:49:20.419Z",
    "updateUser": "smith123",
    "stores": [
      5000,
      5001
    ]
  }
]
```


Schema — ProductAreaIdo

Table 4-332 ProductAreaIdo — Object

Element Name	Required	Data Type/Example	Description
productAreaId	NA	number($int12) example: 11111	The unique identifier of the product area.
itemBasketId	NA	number($int12) example: 211933	The identifier of an item basket associated to the product area.
description	NA	string($text255) example: Cold Items	A description of the product area.
status	NA	integer($int4) example: 1	The current status of the product area. Valid values are 1 - In Progress 2 - Completed 3 - Canceled Enum: [1, 2, 3]
type	NA	integer($int4) example: 1	The type of the product area. Valid values are 1 - Customer Order Picking Enum: Array [1]
createStoreId	NA	number($int10) example: 5000	The identifier of the store that created the product area.
createDate	NA	string($date-time)	The date the product area was created.
createUser	NA	string($text128) example: smith123	The user that created the product area.
updateDate	NA	string($date-time)	The date the product area was last updated.
updateUser	NA	string($text128) example: smith123	The user that last updated the product area.

Table 4-332 (Cont.) ProductAreaIdo — Object

Element Name	Required	Data Type/Example	Description
stores	NA	number($int10)] example: List [5000, 5001]	The stores associated to this product area.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Update Product Area

This section describes the Update Product Area API. This API updates a product area.

Method

```
POST
```

URL

```
/productareas/{areaId}
```

Request Parameters

Table 4-333 Update Product Area — Request Parameters

Element Name	Required	Data Type/Example	Description
areaId	Yes	number($int12) (path)	The unique identifier of the product area.

The request body is application/json.

Item basket details to update.

Example Value

```
{
  "description": "Cold Items",
  "stores": [
    5000,
    5001
```

```
  ]
}
```

Schema — ProductAreaUpdateIdo

Table 4-334 ProductAreaUpdateIdo — Object

Element Name	Required	Data Type/ Example	Description
description	NA	string($text255) example: Cold Items	A description of the product area.
stores	NA	example: List [5000, 5001]	The stores associated to this product area.

Responses

This section describes the responses of the Update Product Area API.

Response Code: 204

No content.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Cancel Product Area

This section describes the Cancel Product Area API. This API cancels a product area.

Method

```
POST
```

URL

```
/productareas/{areaId}/cancel
```

Request Parameters

Table 4-335 Cancel Product Area — Request Parameters

Element Name	Required	Data Type/Example	Description
areaId	Yes	number($int12) (path)	The unique identifier of the product area.

Responses

This section describes the responses of the Cancel Product Area API.

Response Code: 204

No content.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Confirm Product Area

This section describes the Confirm Product Area API. This API confirms the product area making it available for usage.

Method

`POST`

URL

`/productareas/{areaId}/confirm`

Request Parameters

Table 4-336 Confirm Product Area — Request Parameters

Element Name	Required	Data Type/Example	Description
areaId	Yes	number($int12) (path)	The unique identifier of the product area.

Responses

This section describes the responses of the Confirm Product Area API.

Response Code: 204

No content.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

REST Service: Product Group Schedule

A product group schedule allows the customer to schedule different kinds of product groups for work. A product group can be scheduled for a date range where the start date must be greater than or equal to today. However, for unit and amount counts, the start date must be greater that today plus the configured stock count lockout days. Schedules are be setup daily, weekly, monthly, or yearly. Schedules may be assigned to execute for all stores or created for selected specific stores. Once a product group schedule is created, it becomes available for the system batches to pick up and execute. This service defines operations to manage product group schedule information by integration with an external system.

Service Base URL

The Cloud service base URL follows the format:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Find Schedules

This section describes the Find Schedules API. This API finds up to a maximum of 5,000 schedule summary headers based on input search criteria.

Method

```
GET
```

URL

```
/productgroupschedules
```

Request Parameters

Table 4-337 Find Schedules — Request Parameters

Parameter	Required	Data Type	Description
productGroupId	NA	integer($int10) (query)	Include only schedules associated to this product group.
description	NA	string($text250) (query)	Include only schedules that contain this text in its description.
type	NA	integer($int3) (query)	Include only schedules that match this schedule type. Valid values are: 1 - Daily 2 - Daily By Weekday 3 - Weekly 4 - Monthy by Day 5 - Monthly By Week 6 - Yearly By Day 7 - Yearly By Week Available values : 1, 2, 3, 4, 5, 6, 7
status	NA	integer($int3) (query)	Include only schedules that match this status. Valid values are: 1 - Open 2 - Closed Available values : 1, 2
updateDateFrom	NA	string($date-time) (query)	Include only schedules with an update date on or after this date.
updateDateTo	NA	string($date-time) (query)	Include only schedules with an update date on or before this date.

Responses

This section describes the responses of the Find Schedules API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "scheduleId": 11111,
    "productGroupId": 223343,
    "description": "Test Schedule",
    "type": 1,
    "status": 1,
    "startDate": "2024-11-07T11:17:51.016Z",
    "endDate": "2024-11-07T11:17:51.016Z",
    "updateDate": "2024-11-07T11:17:51.016Z"
```

```
    }
]
```


Schema — ProductGroupScheduleHeaderIdo

Table 4-338 ProductGroupScheduleHeaderIdo — Object

Element Name	Required	Data Type/ Example	Description
scheduleId	NA	integer($int8) example: 11111	The unique identifier of the schedule.
productGroupId	NA	number($int12) example: 223343	The unique identifier of the product group the schedule is for.
description	NA	string($text250) example: Test Schedule	A description of the schedule.
type	NA	integer($int4) example: 1	The type of schedule. Valid values are: 1 - Daily 2 - Daily By Weekday 3 - Weekly 4 - Monthly by Day 5 - Monthly By Week 6 - Yearly By Day 7 - Yearly By Week Enum: [1, 2, 3, 4, 5, 6, 7]
status	NA	integer($int4) example: 1	The current status of the schedule. Valid values are: 1 - Open 2 - Closed Enum: [1, 2]
startDate	NA	string($date-time)	The date the schedule becomes active.
endDate	NA	string($date-time)	The date the schedule terminates.
updateDate	NA	string($date-time)	The date the schedule was last updated.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Create Schedule

This section describes the Create Schedule API. This API creates a new open schedule.

Method

```
POST
```

URL

```
/productgroupschedules
```

Request Parameters

There are no request parameters.

The request body is application/json.

Details about the schedule to create.

Example Value

```
{
  "productGroupId": 223343,
  "description": "Test Schedule",
  "type": 1,
  "startDate": "2024-11-07T11:44:35.142Z",
  "endDate": "2024-11-07T11:44:35.142Z",
  "dailySchedule": {
    "dailyFrequency": 3
  },
  "dailyByWeekSchedule": {
    "weeklyFrequency": 3,
    "sunday": false,
    "monday": false,
    "tuesday": false,
    "wednesday": false,
    "thursday": false,
    "friday": false,
    "saturday": false
  },
  "weeklySchedule": {
    "weeklyFrequency": 3,
    "sunday": false,
    "monday": false,
    "tuesday": false,
    "wednesday": false,
    "thursday": false,
    "friday": false,
    "saturday": false
  },
  "monthlyByDaySchedule": {
    "monthlyFrequency": 6,
    "dayOfMonth": 10
```

```
  },
  "monthlyByWeekSchedule": {
    "monthlyFrequency": 6,
    "weekOfTheMonth": 1,
    "dayOfTheWeek": 7
  },
  "yearlyByDaySchedule": {
    "monthOfTheYear": 1,
    "dayOfTheMonth": 20
  },
  "yearlyByWeekSchedule": {
    "monthOfTheYear": 1,
    "weekOfTheMonth": 1,
    "dayOfTheWeek": 7
  },
  "stores": [
    333,
    444
  ]
}
```


Schema — ProductGroupScheduleCreateIdo

Table 4-339 ProductGroupScheduleCreateIdo — Object

Element Name	Required	Data Type/ Example	Description
productGroupId	yes	number($int12) example: 223343	The unique identifier of the product group the schedule is for.
description	yes	string($text250) example: Test Schedule	A description of the schedule.
type	yes	integer($int4) example: 1	The type of schedule. Only the data set matching this type needs to be included. Valid values are 1 - Daily 2 - Daily By Weekday 3 - Weekly 4 - Monthly by Day 5 - Monthly By Week 6 - Yearly By Day 7 - Yearly By Week Enum: [1, 2, 3, 4, 5, 6, 7]
startDate	NA	string($date-time)	The date the schedule becomes active.
endDate	NA	string($date-time)	The date the schedule terminates.
dailySchedule		object	daily schedule
dailyByWeekSchedule		object	daily schedule

Table 4-339 (Cont.) ProductGroupScheduleCreateIdo — Object

Element Name	Required	Data Type/ Example	Description
weeklySchedule		object	weekly schedule
monthlyByDaySchedule		object	monthly by day schedule
monthlyByWeekSchedule		object	monthly by week schedule
yearlyByDaySchedule		object	yearly by day schedule
yearlyByWeekSchedule		object	yearly by week schedule
stores	yes	number($int15)] example: List [333, 444]	A list of store identifiers the schedule applies to.

Table 4-340 ScheduleDailyIdo — Object

Element Name	Required	Data Type/ Example	Description
dailyFrequency	yes	number ($int12) example: 3	The number of days between occurrences of the schedule.

Table 4-341 ScheduleDailyByWeekIdo — Object

Element Name	Required	Data Type/ Example	Description
weeklyFrequency	yes	number($int12) example: 3	The number of weeks between occurrences of the schedule.
sunday	NA	boolean example: false	True if scheduled on Sunday.
monday	NA	boolean example: false	True if scheduled on Monday.
tuesday	NA	boolean example: false	True if scheduled on Tuesday.
wednesday	NA	boolean example: false	True if scheduled on Wednesday.
thursday	NA	boolean example: false	True if scheduled on Thursday.
friday	NA	boolean example: false	True if scheduled on Friday.
saturday	NA	boolean example: false	True if scheduled on Saturday.

Table 4-342 ScheduleDailyByWeekIdo — Object

Element Name	Required	Data Type/ Example	Description
weeklyFrequency	yes	number($int12) example: 3	The number of weeks between occurrences of the schedule.
sunday	NA	boolean example: false	True if scheduled on Sunday.
monday	NA	boolean example: false	True if scheduled on Monday.
tuesday	NA	boolean example: false	True if scheduled on Tuesday.
wednesday	NA	boolean example: false	True if scheduled on Wednesday.
thursday	NA	boolean example: false	True if scheduled on Thursday.
friday	NA	boolean example: false	True if scheduled on Friday.
saturday	NA	boolean example: false	True if scheduled on Saturday.

Table 4-343 ScheduleWeeklyIdo — Object

Element Name	Required	Data Type/ Example	Description
weeklyFrequency	yes	number($int12) example: 3	The number of weeks between occurrences of the schedule.
sunday	NA	boolean example: false	True if scheduled on Sunday.
monday	NA	boolean example: false	True if scheduled on Monday.
tuesday	NA	boolean example: false	True if scheduled on Tuesday.
wednesday	NA	boolean example: false	True if scheduled on Wednesday.
thursday	NA	boolean example: false	True if scheduled on Thursday.
friday	NA	boolean example: false	True if scheduled on Friday.
saturday	NA	boolean example: false	True if scheduled on Saturday.

Table 4-344 ScheduleMonthlyByDayIdo — Object

Element Name	Required	Data Type/ Example	Description
monthlyFrequency	yes	number($int12) example: 6	The number of months between occurrences.

Table 4-344 (Cont.) ScheduleMonthlyByDayIdo — Object

Element Name	Required	Data Type/ Example	Description
dayOfMonth	yes	number($int2) example: 10	The day of the month to execute the schedule on. Valid values are 1-31

Table 4-345 ScheduleMonthlyByWeekIdo— Object

Element Name	Required	Data Type/ Example	Description
monthlyFrequency	yes	number($int12) example: 6	The number of months between occurences.
weekOfTheMonth	yes	number($int2) example: 1	The week of the month to execute the schedule on. Valid values are 1-5.
dayOfTheWeek	yes	number($int2) example: 7	The day of the week to execute the schedule on. Valid values are 1-7.

Table 4-346 ScheduleYearlyByDayIdo— Object

Element Name	Required	Data Type/ Example	Description
monthOfTheYear	yes	number($int2) example: 1	The month of the year to execute the schedule on. Valid values are 1-12.
dayOfTheMonth	yes	number($int2) example: 20	The day of the month to execute the schedule on. Valid values are 1-31.

Table 4-347 ScheduleYearlyByWeekIdo — Object

Element Name	Required	Data Type/ Example	Description
monthOfTheYear	yes	number($int2) example: 1	The month of the year to execute the schedule on. Valid values are 1-12.
weekOfTheMonth	yes	number($int2) example: 1	The week of the month to execute the schedule on. Valid values are 1-5.
dayOfTheWeek	yes	number($int2) example: 7	The day of the week to execute the schedule on. Valid values are 1-7.

Responses

This section describes the responses of the Create Schedules API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "scheduleId": 11111,
    "productGroupId": 223343,
    "description": "Test Schedule",
    "type": 1,
    "status": 1,
    "startDate": "2024-11-07T11:17:51.016Z",
    "endDate": "2024-11-07T11:17:51.016Z",
    "updateDate": "2024-11-07T11:17:51.016Z"
  }
]
```


Schema — ProductGroupScheduleHeaderIdo

Table 4-348 ProductGroupScheduleHeaderIdo — Object

Element Name	Required	Data Type/ Example	Description
scheduleId	NA	integer($int8) example: 11111	The unique identifier of the schedule.
productGroupId	NA	number($int12) example: 223343	The unique identifier of the product group the schedule is for.
description	NA	string($text250) example: Test Schedule	A description of the schedule.
type	NA	integer($int4) example: 1	The type of schedule. Valid values are: 1 - Daily 2 - Daily By Weekday 3 - Weekly 4 - Monthly by Day 5 - Monthly By Week 6 - Yearly By Day 7 - Yearly By Week Enum: [1, 2, 3, 4, 5, 6, 7]
status	NA	integer($int4) example: 1	The current status of the schedule. Valid values are: 1 - Open 2 - Closed Enum: [1, 2]

Table 4-348 (Cont.) ProductGroupScheduleHeaderIdo — Object

Element Name	Required	Data Type/ Example	Description
startDate	NA	string($date-time)	The date the schedule becomes active.
endDate	NA	string($date-time)	The date the schedule terminates.
updateDate	NA	string($date-time)	The date the schedule was last updated.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Read Schedule

This section describes the Read Schedules API. This API retrieves all the details about a product group schedule.

Method

```
GET
```

URL

```
/productgroupschedules/{scheduleId}
```

Request Parameters

Table 4-349 Read Schedule — Request Parameters

Parameter	Required	Data Type	Description
scheduleId	yes	integer($int12) (path)	The unique identifier of the schedule.

Responses

This section describes the responses of the Read Schedule API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "scheduleId": 11111,
    "productGroupId": 223343,
    "description": "Test Schedule",
    "type": 1,
    "status": 1,
    "startDate": "2024-11-11T12:49:09.159Z",
    "endDate": "2024-11-11T12:49:09.159Z",
    "updateDate": "2024-11-11T12:49:09.159Z",
    "dailySchedule": {
      "dailyFrequency": 3
    },
    "dailyByWeekSchedule": {
      "weeklyFrequency": 3,
      "sunday": false,
      "monday": false,
      "tuesday": false,
      "wednesday": false,
      "thursday": false,
      "friday": false,
      "saturday": false
    },
    "weeklySchedule": {
      "weeklyFrequency": 3,
      "sunday": false,
      "monday": false,
      "tuesday": false,
      "wednesday": false,
      "thursday": false,
      "friday": false,
      "saturday": false
    },
    "monthlyByDaySchedule": {
      "monthlyFrequency": 6,
      "dayOfMonth": 10
    },
    "monthlyByWeekSchedule": {
      "monthlyFrequency": 6,
      "weekOfTheMonth": 1,
      "dayOfTheWeek": 7
    },
    "yearlyByDaySchedule": {
      "monthOfTheYear": 1,
      "dayOfTheMonth": 20
    },
```

```
    "yearlyByWeekSchedule": {
      "monthOfTheYear": 1,
      "weekOfTheMonth": 1,
      "dayOfTheWeek": 7
    },
    "stores": [
      {
        "storeId": 5000,
        "lastExtractedDate": "2024-11-11T12:49:09.159Z"
      }
    ]
  }
]
```


Schema — ProductGroupScheduleIdo

Table 4-350 ProductGroupScheduleIdo — Object

Element Name	Required	Data Type/ Example	Description
scheduleId	NA	integer($int8) example: 11111	The unique identifier of the schedule.
productGroupId	NA	number($int12) example: 22334	The unique identifier of the product group the schedule is for.
description	NA	string($text250) example: Test Schedule	A description of the schedule.
type	NA	integer($int4) example: 1	The type of schedule. Valid values are 1 - Daily 2 - Daily By Weekday 3 - Weekly 4 - Monthly by Day 5 - Monthly By Week 6 - Yearly By Day 7 - Yearly By Week Enum: [1, 2, 3, 4, 5, 6, 7]
status	NA	integer($int4) example: 1	The current status of the schedule. Valid values are 1 - Open 2 - Closed Enum: [1, 2]
startDate	NA	string($date-time)	The date the schedule becomes active.
endDate	NA	string($date-time)	The date the schedule terminates.
updateDate	NA	string($date-time)	The date the schedule was lasted updated.
dailySchedule	NA	object	daily schedule

Table 4-350 (Cont.) ProductGroupScheduleIdo — Object

Element Name	Required	Data Type/ Example	Description
dailyByWeekSchedule	NA	object	daily by week schedule
weeklySchedule	NA	object	weekly schedule
monthlyByDayScheduleSchedule	NA	object	monthly by day schedule
monthlyByWeekSchedule	NA	object	monthly by week schedule
yearlyByDaySchedule	NA	object	yearly by day schedule
yearlyByWeekSchedule	NA	object	yearly by week schedule
stores	NA	object	A list of stores associated to the schedule.

Table 4-351 ScheduleDailyIdo — Object

Element Name	Required	Data Type/ Example	Description
dailyFrequency	yes	number($int12) example: 3	The number of days between occurrences of the schedule.

Table 4-352 ScheduleDailyByWeekIdo — Object

Element Name	Required	Data Type/ Example	Description
weeklyFrequency	yes	number($int12) example: 3	The number of weeks between occurrences of the schedule.
sunday	NA	boolean example: false	True if scheduled on Sunday.
monday	NA	boolean example: false	True if scheduled on Monday.
tuesday	NA	boolean example: false	True if scheduled on Tuesday.
wednesday	NA	boolean example: false	True if scheduled on Wednesday.
thursday	NA	boolean example: false	True if scheduled on Thursday.
friday	NA	boolean example: false	True if scheduled on Friday.
saturday	NA	boolean example: false	True if scheduled on Saturday.

Table 4-353 ScheduleWeeklyIdo — Object

Element Name	Required	Data Type/ Example	Description
weeklyFrequency	yes	number($int12) example: 3	The number of weeks between occurrences of the schedule.
sunday	NA	boolean example: false	True if scheduled on Sunday.
monday	NA	boolean example: false	True if scheduled on Monday.
tuesday	NA	boolean example: false	True if scheduled on Tuesday.
wednesday	NA	boolean example: false	True if scheduled on Wednesday.
thursday	NA	boolean example: false	True if scheduled on Thursday.
friday	NA	boolean example: false	True if scheduled on Friday.
saturday	NA	boolean example: false	True if scheduled on Saturday.

Table 4-354 ScheduleMonthlyByDayIdo — Object

Element Name	Required	Data Type/ Example	Description
weeklyFrequency	yes	number($int12) example: 3	The number of weeks between occurrences of the schedule.
dayOfMonth	yes	number($int2) example: 10	The day of the month to execute the schedule on. Valid values are 1-31.

Table 4-355 ScheduleMonthlyByWeekIdo — Object

Element Name	Required	Data Type/ Example	Description
weeklyFrequency	yes	number($int12) example: 3	The number of months between occurrences.
weekOfTheMonth	yes	number($int2) example: 1	The week of the month to execute the schedule on. Valid values are 1-5.
dayOfTheWeek	yes	number($int2) example: 7	The day of the week to execute the schedule on. Valid values are 1-7.

Table 4-356 ScheduleYearlyByDayIdo — Object

Element Name	Required	Data Type/ Example	Description
weeklyFrequency	yes	number($int12) example: 1	The month of the year to execute the schedule on. Valid values are 1-12.

Table 4-356 (Cont.) ScheduleYearlyByDayIdo — Object

Element Name	Required	Data Type/ Example	Description
dayOfTheMonth	yes	number($int2) example: 20	The day of the month to execute the schedule on. Valid values are 1-31.

Table 4-357 ScheduleYearlyByWeekIdo — Object

Element Name	Required	Data Type/ Example	Description
monthOfTheYear	yes	number($int12) example: 1	The month of the year to execute the schedule on. Valid values are 1-12.
weekOfTheMonth	yes	number($int12) example: 1	The week of the month to execute the schedule on. Valid values are 1-5.
dayOfTheWeek	yes	number($int2) example: 7	The day of the week to execute the schedule on. Valid values are 1-7.

Table 4-358 ProductGroupScheduleStoreIdo — Object

Element Name	Required	Data Type/ Example	Description
storeId	NA	number($int10) example: 5000	The unique identifier of the store.
lastExtractedDate	NA	string($date-time)	The date the schedule was lasted extracted for this store.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Update Schedule

This section describes the Update Schedule API. This API updates the details of an open schedule.

Method

`POST`

URL

```
/productgroupschedules/{scheduleId}
```

Request Parameters

Table 4-359 Update Schedule — Request Parameters

Parameter	Required	Data Type	Description
scheduleId	yes	integer($int12) (path)	The unique identifier of the schedule.

The request body is application/json.

Details to update within the schedule.

Example Value

```
{
  "description": "Test Schedule",
  "type": 1,
  "endDate": "2024-11-11T14:08:23.049Z",
  "dailySchedule": {
    "dailyFrequency": 3
  },
  "dailyByWeekSchedule": {
    "weeklyFrequency": 3,
    "sunday": false,
    "monday": false,
    "tuesday": false,
    "wednesday": false,
    "thursday": false,
    "friday": false,
    "saturday": false
  },
  "weeklySchedule": {
    "weeklyFrequency": 3,
    "sunday": false,
    "monday": false,
    "tuesday": false,
    "wednesday": false,
    "thursday": false,
    "friday": false,
    "saturday": false
  },
  "monthlyByDaySchedule": {
    "monthlyFrequency": 6,
    "dayOfMonth": 10
  },
```

```
  "monthlyByWeekSchedule": {
    "monthlyFrequency": 6,
    "weekOfTheMonth": 1,
    "dayOfTheWeek": 7
  },
  "yearlyByDaySchedule": {
    "monthOfTheYear": 1,
    "dayOfTheMonth": 20
  },
  "yearlyByWeekSchedule": {
    "monthOfTheYear": 1,
    "weekOfTheMonth": 1,
    "dayOfTheWeek": 7
  },
  "stores": [
    333,
    444
  ]
}
```


Schema — ProductGroupScheduleUpdateIdo

Table 4-360 ProductGroupScheduleUpdateIdo — Object

Element Name	Required	Data Type/ Example	Description
description	yes	string($text250) example: Test Schedule	A description of the schedule.
type	yes	integer($int4) example: 1	The type of schedule. Only the data set matching this type needs to be included. Valid values are 1 - Daily 2 - Daily By Weekday 3 - Weekly 4 - Monthly by Day 5 - Monthly By Week 6 - Yearly By Day 7 - Yearly By Week Enum: [1, 2, 3, 4, 5, 6, 7]
endDate	NA	string($date-time)	The date the schedule terminates.
dailySchedule	NA	object	daily schedule
dailyByWeekSchedule	NA	object	daily by week schedule
weeklySchedule	NA	object	weekly schedule
monthlyByDaySchedule	NA	object	monthly by day schedule
monthlyByWeekSchedule	NA	object	monthly by week schedule

Table 4-360 (Cont.) ProductGroupScheduleUpdateIdo — Object

Element Name	Required	Data Type/ Example	Description
yearlyByDaySchedule	NA	object	yearly by day schedule
yearlyByWeekSchedule	NA	object	yearly by week scheulde
stores	yes	example: List [333, 444]	A list of store identifiers the schedule applies to.

Table 4-361 ScheduleDailyIdo — Object

Element Name	Required	Data Type/ Example	Description
dailyFrequency	yes	number($int12) example: 3	The number of days between occurrences of the schedule.

Table 4-362 ScheduleDailyByWeekIdo — Object

Element Name	Required	Data Type/ Example	Description
weeklyFrequency	yes	number($int12) example: 3	The number of weeks between occurrences of the schedule.
sunday	NA	boolean example: false	True if scheduled on Sunday.
monday	NA	boolean example: false	True if scheduled on Monday.
tuesday	NA	boolean example: false	True if scheduled on Tuesday.
wednesday	NA	boolean example: false	True if scheduled on Wednesday.
thursday	NA	boolean example: false	True if scheduled on Thursday.
friday	NA	boolean example: false	True if scheduled on Friday.
saturday	NA	boolean example: false	True if scheduled on Saturday.

Table 4-363 ScheduleWeeklyIdo — Object

Element Name	Required	Data Type/ Example	Description
weeklyFrequency	yes	number($int12) example: 3	The number of weeks between occurrences of the schedule.
sunday	NA	boolean example: false	True if scheduled on Sunday.

Table 4-363 (Cont.) ScheduleWeeklyIdo — Object

Element Name	Required	Data Type/ Example	Description
monday	NA	boolean example: false	True if scheduled on Monday.
tuesday	NA	boolean example: false	True if scheduled on Tuesday.
wednesday	NA	boolean example: false	True if scheduled on Wednesday.
thursday	NA	boolean example: false	True if scheduled on Thursday.
friday	NA	boolean example: false	True if scheduled on Friday.
saturday	NA	boolean example: false	True if scheduled on Saturday.

Table 4-364 ScheduleMonthlyByDayIdo — Object

Element Name	Required	Data Type/ Example	Description
weeklyFrequency	yes	number($int12) example: 3	The number of weeks between occurrences of the schedule.
dayOfMonth	yes	number($int2) example: 10	The day of the month to execute the schedule on. Valid values are 1-31.

Table 4-365 ScheduleMonthlyByWeekIdo — Object

Element Name	Required	Data Type/ Example	Description
weeklyFrequency	yes	number($int12) example: 3	The number of months between occurrences.
weekOfTheMonth	yes	number($int2) example: 1	The week of the month to execute the schedule on. Valid values are 1-5.
dayOfTheWeek	yes	number($int2) example: 7	The day of the week to execute the schedule on. Valid values are 1-7.

Table 4-366 ScheduleYearlyByDayIdo — Object

Element Name	Required	Data Type/ Example	Description
weeklyFrequency	yes	number($int12) example: 1	The month of the year to execute the schedule on. Valid values are 1-12.
dayOfTheMonth	yes	number($int2) example: 20	The day of the month to execute the schedule on. Valid values are 1-31.

Table 4-367 ScheduleYearlyByWeekIdo — Object

Element Name	Required	Data Type/ Example	Description
monthOfTheYear	yes	number($int12) example: 1	The month of the year to execute the schedule on. Valid values are 1-12.
weekOfTheMonth	yes	number($int12) example: 1	The week of the month to execute the schedule on. Valid values are 1-5.
dayOfTheWeek	yes	number($int2) example: 7	The day of the week to execute the schedule on. Valid values are 1-7.

Responses

This section describes the responses of the Update Schedule API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Delete Schedule

This section describes the Delete Schedule API. This API deletes a schedule from the system.

Method

```
DELETE
```

URL

```
/productgroupschedules/{scheduleId}
```

Request Parameters

Table 4-368 Delete Schedule — Request Parameters

Parameter	Required	Data Type	Description
scheduleId	yes	integer($int12) (path)	The unique identifier of the schedule.

Responses

This section describes the responses of the Delete Schedule API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

REST Service: Radio Frequency Identification Scanning (RFID)

Radio Frequency Identification Scanning is the automated scanning of electronic product codes (SGTIN-96), or RFID tags. This service deals with setting up zones for RFID scanning and receiving scan events from an automated RFID scanning system.

Service Base URL

The Cloud service base URL follows the format:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Find Zones

This section describes the Find Zones API. This API finds RFID zones by location type and identifier.

Method

```
GET
```

URL

```
/rfids/zones
```

Request Parameters

Table 4-369 Find Zones — Request Parameters

Parameter	Required	Data Type	Description
locationType	NA	integer($int2) (query)	Include only zones with this location type. Valid values are: 1 — Store 2 —Warehouse Available values : 1, 2
locationId	NA	number($int10) (query)	Include only zones within this locaiton.

Responses

This section describes the responses of the Find Zones API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "zoneId": 11111,
    "locationType": 1,
    "locationId": 5000,
    "externalId": 789012,
    "zoneType": 1,
    "description": "Front Sale Counter"
  }
]
```


Schema —RfidZoneIdo

Table 4-370 RfidZoneIdo — Object

Element Name	Required	Data Type/ Example	Description
zoneId	NA	number($int15) example: 11111	The unique identifier of the zone.
locationType	NA	integer($int2) example: 1	The type of location of the zone. Valid values are: 1 - Store 2 - Warehouse Enum: [1, 2]
locationId	NA	number($int10) example: 5000	The unique identifier of the location.
externalId	NA	number($int15) example: 789012	A unique identifier of the zone in an extrenal system.
zoneType	NA	integer($int2) example: 1	The zone type. Valid values are: 1 - Shopfloor 2 - Backroom 3 - None Enum: [1, 2, 3]
description	NA	string($text255) example: Front Sale Counter	A description of the RFID scanning zone.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Create Zone

This section describes the Create Zone API. This API create a new RFID zone.

Method

```
POST
```

URL

```
/rfids/zones
```

Request Parameters

There are no request parameters.

The request body is application/json.

The details of the new zone.

Example Value

```
{
  "locationType": 1,
  "locationId": 5000,
  "externalId": 789012,
  "zoneType": 1,
  "description": "Front Sale Counter"
}
```

Schema — RfidZoneIdo

Table 4-371 RfidZoneCreateIdo — Object

Element Name	Required	Data Type/ Example	Description
locationType	Yes	integer($int2) example: 1	The type of location of the zone. Valid values are: 1 - Store 2 - Warehouse Enum: [1, 2]
locationId	Yes	number($int10) example: 5000	The unique identifier of the location.
externalId	NA	number($int15) example: 789012	A unique identifier of the zone in an external system.
zoneType	Yes	integer($int2) example: 1	The zone type. Valid values are: 1 - Shopfloor 2 - Backroom 3 - None Enum: [1, 2, 3]
description	NA	string($text255) example: Front Sale Counter	A description of the RFID scanning zone.

Responses

This section describes the responses of the Create Zone API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "zoneId": 11111,
    "locationType": 1,
    "locationId": 5000,
    "externalId": 789012,
    "zoneType": 1,
    "description": "Front Sale Counter"
  }
]
```


Schema —RfidZoneIdo

Table 4-372 RfidZoneIdo — Object

Element Name	Required	Data Type/ Example	Description
zoneId	NA	number($int15) example: 11111	The unique identifier of the zone.
locationType	NA	integer($int2) example: 1	The type of location of the zone. Valid values are: 1 - Store 2 - Warehouse Enum: [1, 2]
locationId	NA	number($int10) example: 5000	The unique identifier of the location.
externalId	NA	number($int15) example: 789012	A unique identifier of the zone in an extrenal system.
zoneType	NA	integer($int2) example: 1	The zone type. Valid values are: 1 - Shopfloor 2 - Backroom 3 - None Enum: [1, 2, 3]
description	NA	string($text255) example: Front Sale Counter	A description of the RFID scanning zone.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Update Zone

This section describes the Update Zone API. This API updates an existing RFID zone.

Method

```
POST
```

URL

```
/rfids/zones/{zoneId}
```

Request Parameters

Table 4-373 Update Zone — Request Parameters

Parameter	Required	Data Type	Description
zoneId	yes	number($int12) (path)	The unique identifier of the RFID zone.

The request body is application/json.

The details to update about the zone.

Example Value

```
{
  "externalId": 789012,
  "zoneType": 1,
  "description": "Front Sale Counter"
}
```

Schema — RfidZoneUpdateIdo

Table 4-374 RfidZoneUpdateIdo — Object

Element Name	Required	Data Type/ Example	Description
externalId	NA	number($int15) example: 789012	A unique identifier of the zone in an external system.
zoneType	yes	integer($int2) example: 1	The zone type. Valid values are 1 - Shopfloor 2 - Backroom 3 - None Enum: [1, 2, 3]
description	NA	string($text255) example: Front Sale Counter	A description of the RFID scanning zone.

Responses

This section describes the responses of the Update Zone API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Delete Zone

This section describes the Delete Zone API. This API deletes an RFID zone.

Method

```
DELETE
```

URL

```
/rifds/zones/{zoneId}/delete
```

Request Parameters

Table 4-375 Delete Zone — Request Parameters

Parameter	Required	Data Type	Description
zoneId	yes	number($int12) (path)	The unique identifier of the RFID zone.

Responses

This section describes the responses of the Delete Zone API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Import Events

This section describes the Import Events API. This API processes up to 1,500 Radio Frequency Identification based events. This processing will update the tag information based on the event as well as the stock on hand positions for the item. Events should be sent in groups of 50-100 at a time for optimal processing speed..

Method

```
POST
```

URL

```
/rfids/events
```

Request Parameters

There are no request parameters.

The request type is application/json.

Details about the events to import.

Example Value


```
{
  "events": [
    {
      "locationType": 1,
      "locationId": 5000,
      "itemId": "100637120",
      "epc": "8347492243434",
      "zoneId": 11111,
      "eventType": "OBSERVE",
      "eventDate": "2024-11-12T10:28:01.725Z"
    }
  ]
}
```


Schema — RfidEventListIdo

Table 4-376 RfidEventListIdo — Object

Element Name	Required	Data Type/Example	Description
events	yes	object	Events

Table 4-377 RfidEventIdo — Object

Element Name	Required	Data Type/Example	Description
locationType	yes	integer($int2) example: 1	The type of location of the zone. Valid values are: 1 - Store 2 - Warehouse Enum: [1, 2]
locationId	yes	number($int10) example: 5000	The unique identifier of the location.
itemId	yes	string($text25) example: 100637120	The identifier of the item on the RFID tag.
epc	yes	string($text255) example: 8347492243434	The electronic product code (SGTIN-96) of the RFID tag.
zoneId	NA	number($int15) example: 11111	The unique identifier of the zone the tag is in.

Table 4-377 (Cont.) RfidEventIdo — Object

Element Name	Required	Data Type/Example	Description
eventType	yes	string($text7) example: OBSERVE	The type of the event. Valid values are: ADD - Indicates a new tag at the facility DELETE - Indicates deactivation at a facility OBSERVE - Indicates tag is present at the facility
eventDate	yes	string($date-time)	The date and time the scan event occurred.

Responses

This section describes the responses of the Import Event API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

REST Service: Shelf Replenishment Gap

The gap scanning method is the easiest method of all the various types of shelf replenishment. With this method, you scan the goods that need replenishment and a replenishment list is created from the units scanned. The system uses this replenishment list to move the goods from the back room to the shop floor based on back room availability. The reason to have a separate process between scanning and generating is that one user can create a list and another user can execute the shelf replenishment allowing for distribution of workload. Since this process does not have a dependency with either sales or capacity, it gives an advantage to the retailer to move goods without any complex setup.

Service Base URL

The Cloud service base URL follows the format:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Find Gap

This section describes the Find Gap API. This API finds up to 10,000 replenishment gap summary headers for the input criteria.

Method

```
GET
```

URL

```
/replenishgaps
```

Request Parameters

Table 4-378 Find Gap — Request Parameters

Parameter	Required	Data Type	Description
storeId	NA	number($int10) (query)	Include only replenishment gaps for this store.
status	NA	integer($int2) (query)	Include only replenishment gaps with this status. Valid values are: 1 - In Progress 2 - Complete Available values : 1, 2
type	NA	integer($int2) (query)	Include only replenishment gaps with this type. Valid values are: 1 - Display Scan 2 - Gap Scan Backroom Available values : 1, 2
itemId	NA	string($text25) (query)	Include only replenishment gaps with this item.
updateDateFrom	NA	string($date-time) (query)	Include only replenishment gaps with an update date on or after this date.
updateDateTo	NA	string($date-time) (query)	Include only replenishment gaps with an update date on or before this date.

Responses

This section describes the responses of the Find Gap API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "gapId": 11111,
    "storeId": 5000,
    "type": 1,
    "status": 1,
    "userName": "smith123",
    "createDate": "2024-11-12T11:27:17.130Z",
    "updateDate": "2024-11-12T11:27:17.130Z"
  }
]
```


Schema — ShelfReplenishmentGapHearderIdo

Table 4-379 ShelfReplenishmentGapHearderIdo — Object

Element Name	Required	Data Type/ Example	Description
gapId	NA	number($int15) example: 11111	The unique identifier of the replenishment gap.
storeId	NA	number($int10) example: 5000	The store identifier of the replenishment gap.
type	NA	integer($int4) example: 1	The type of replenishment gap. Valid values are: 1 - Display Scan 2 - Gap Scan Enum: [1, 2] Enum: [1, 2]
status	NA	integer($int4) example: 1	The current status of the replenishment gap. Valid values are: 1 - In Progress 2 - Complete
userName	NA	string($text128) example: smith123	The name of the user that last updated the replenishment gap.
createDate	NA	string($date-time)	The date the replenishment gap was created.
updateDate	NA	string($date-time)	The date the replenshment gap was last updated.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Create Gap

This section describes the Create Gap API. This API creates an in progress shelf replenishment gap.

Method

```
POST
```

URL

```
/replenishgaps
```

Request Parameters

There are no request parameters.

The request body is application/json.

The details of the new shelf replenishment gap.

Example Value

```
{
  "storeId": 5000,
  "type": 1,
  "lineItems": [
    {
      "itemId": "11111",
      "caseSize": 1,
      "suggestedQuantity": 20
    }
  ]
}
```

Schema — ShelfReplenishmentGapCreateIdo

Table 4-380 ShelfReplenishmentGapCreateIdo — Object

Element Name	Required	Data Type/ Example	Description
storeId	yes	number($int 10) example: 5000	The store of the replenishment gap.

Table 4-380 (Cont.) ShelfReplenishmentGapCreateIdo — Object

Element Name	Required	Data Type/ Example	Description
type	yes	integer($int4) example: 1	The type of replenishment gap. Valid values are: 1 - Display Scan 2 - Gap Scan Enum: [1, 2]
lineItems	yes	object	A collection of line items on the shelf replenishment gap.

Table 4-381 ShelfReplenishmentGapCreateItemIdo — Object

itemId	yes	string($text25) example: 11111	The unique identifier of the item.
caseSize	NA	number($decimal(10,2)) example: 1	The case size of the item for this record.
suggestedQuantity	yes	number($decimal(20,4)) example: 20	The quantity suggested to repelnish for the item.

Responses

This section describes the responses of the Create Gap API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value

```
[
  {
    "gapId": 11111,
    "storeId": 5000,
    "type": 1,
    "status": 1
  }
]
```

Schema — ShelfReplenishmentGapStatusIdo

Table 4-382 ShelfReplenishmentGapStatusIdo — Object

Element Name	Required	Data Type/ Example	Description
gapId	NA	number($int15) example: 11111	The unique identifier of the replenishment gap.
storeId	NA	number($int10) example: 5000	The store of the replenishment gap.
type	NA	integer($int4) example: 1	The type of replenishment gap. Valid values are: 1 - Display Scan 2 - Gap Scan Enum: [1, 2]
status	NA	integer($int4) example: 1	The current status of the replenishment gap. Valid values are: 1 - In Progress 2 - Complete Enum: [1, 2]

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Read Gap

This section describes the Read Gap API. This API retrieves all the details about a shelf replenishment gap.

Method

```
GET
```

URL

```
/replenishgaps/{gapId}
```

Request Parameters

Table 4-383 Read Gap — Request Parameters

Parameter	Required	Data Type	Description
gapId	yes	number($int15) (path)	The unique identifier of the replenishment gap.

Responses

This section describes the responses of the Read Gap API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "gapId": 11111,
    "storeId": 5000,
    "type": 1,
    "status": 1,
    "userName": "smith123",
    "createDate": "2024-11-14T13:43:09.417Z",
    "updateDate": "2024-11-14T13:43:09.417Z",
    "lineItems": [
      {
        "lineId": 11111,
        "itemId": "11111",
        "caseSize": 1,
        "suggestedQuantity": 20
      }
    ]
  }
]
```


Schema — ShelfReplenishmentGapIdo

Table 4-384 ShelfReplenishmentGapIdo — Object

Element Name	Required	Data Type/Example	Description
gapId	NA	number($int15) example: 11111	The unique identifier of the replenishment gap.
storeId	NA	number($int10) example: 5000	The store of the replenishment gap.

Table 4-384 (Cont.) ShelfReplenishmentGapIdo — Object

Element Name	Required	Data Type/Example	Description
type	NA	integer($int4) example: 1	The type of replenishment gap. Valid values are: 1 - Display Scan 2 - Gap Scan Enum: [1, 2]
status	NA	integer($int4) example: 1	The current status of the replenishment gap. Valid values are: 2 - Complete 1 - In Progress Enum: [1, 2]
userName	NA	string($text128) example: smith123	The name of the user that last updated the replenishment gap.
createDate	NA	string($date-time)	The date the replenishment gap was created.
updateDate	NA	string($date-time)	The date the replenishment gap was last updated.
lineItems	NA	object	A collection of line items on the replenishment gap.

Table 4-385 ShelfReplenishmentGapLineItemIdo — Object

lineId	NA	number($int15) example: 11111	The unique identifier of the line item record.
itemId	NA	string($text25) example: 11111	The unique identifier of the item.
caseSize	NA	number($decimal(10, 2)) example: 1	The case size of the item for this record.
suggestedQuantity	NA	number($decimal(20, 4)) example: 20	The quantity suggested to replenish for the item.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Update Gap

This section describes the Update Gap API. This API updates an active shelf replenishment gap.

Method

```
POST
```

URL

```
/replenishgaps/{gapId}
```

Request Parameters

Table 4-386 Update Gap — Request Parameters

Parameter	Required	Data Type	Description
gapId	yes	number($int15) (path)	The unique identifier of the shelf replenishment gap.

The request body is application/json.

Shelf replenishment gap details to update.

Example Value

```
{
  "lineItems": true
}
```

Schema — ShelfReplenishmentGapUpdateIdo

Table 4-387 ShelfReplenishmentGapUpdateIdo — Object

Element Name	Required	Data Type/ Example	Description
lineItems	yes	object	A collection of line items on the shelf replenishment gap.

Table 4-388 ShelfReplenishmentGapUpdateItemIdo — Object

itemId	Yes	string($text25) example: 11111	The unique identifier of the item.
caseSize	NA	number($decimal(10,2)) example: 1	The case size of the item for this record.

Table 4-388 (Cont.) ShelfReplenishmentGapUpdateItemIdo — Object

suggestedQuantity	Yes	number($decimal(20,4)) example: 20	The quantity suggested for the item. Setting the quantity to zero will remove the line item.

Responses

This section describes the responses of the Update Gap API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Delete Gap

This section describes the Delete Gap API. This API deletes a shelf replenishment gap.

Method

`POST`

URL

`/replenishgaps/{gapId}/delete`

Request Parameters

Table 4-389 Delete Gap — Request Parameters

Parameter	Required	Data Type	Description
GapId	yes	number($int15) (path)	The unique identifier of the shelf replenishment gap.

Responses

This section describes the responses of the Delete Gap API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

REST Service: Purchase Order

A purchase order is a document that indicates items and quantities that have been ordered for delivery to the store within a specific timeframe. The order can be created by the supplier or store user on the fly or alternatively by corporate users. These are used for Direct Store Delivery (or vendor/supplier deliveries). This service allows the direct integration of customer orders from a third party system as well as some management of the order with the system.

Service Base URL

The Cloud service base URL follows the format:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Find Orders

This section describes the Find Orders API. This API finds up to 5,000 purchase orders headers for the input criteria. No item information is returned.

Method

```
GET
```

URL

```
/purchaseorders
```

Request Parameters

Table 4-390 Find Orders — Request Parameters

Parameter	Required	Data Type	Description
orderNumber	NA	string($text128) (query)	Include only purchase orders associated to this external order number.
storeId	NA	number($int10) (query)	Include only purchase orders for this store.
supplierId	NA	number($int10) (query)	Include only purchase orders for this supplier.
status	NA	integer($int4) (query)	Include only purchase orders in this status. Valid values are: 1 - Approved 2 - In Progress 3 - Canceled 4 - Completed 99 - Active Available values : 1, 2, 3, 4, 99
updateDateFrom	NA	string($date-time) (query)	Include only purchase orders with an update date on or after this date.
updateDateTo	NA	string($date-time) (query)	Include only purchase orders with an update date on or before this date.

Responses

This section describes the responses of the Find Orders API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
  {
    "purchaseOrderId": 11111,
    "orderNumber": "4823534",
    "storeId": 5000,
    "supplierId": 5101,
    "status": 1,
    "customerOrderId": "799003",
    "fulfillmentOrderId": "7994203",
    "notBeforeDate": "2025-01-02T09:18:14.032Z",
    "notAfterDate": "2025-01-02T09:18:14.032Z",
    "updateDate": "2025-01-02T09:18:14.032Z",
    "completeDate": "2025-01-02T09:18:14.032Z"
  }
]
```

Schema — PurchaseOrderHearderIdo

Table 4-391 PurchaseOrderHearderIdo— Object

Element Name	Required	Data Type/ Example	Description
purchaseOrderId	NA	number($int12) example: 11111	The unique identifier of the purchase order.
orderNumber	NA	string($text128) example: 4823534	The non-unique order number of the purchase order in an external system.
storeId	NA	number($int10) example: 5000	The identifier of the store receiving the inventory.
supplierId	NA	number($int10) example: 5101	The identifier of the supplier shipping the goods.
status	NA	integer($int4) example: 1	The current status of the purchase order. Valid values are: 1 - Approved 2 - In Progress 3 - Canceled 4 - Completed Enum: [1, 2, 3, 4]
customerOrderId	NA	string($text128) example: 799003	A customer order identifier if associated to a customer order.
fulfillmentOrderId	NA	string($text128) example: 7994203	A fulfillment order identifier if associated to a customer order.
notBeforeDate	NA	string($date-time)	Earliest date that the inventory should arrive at the store for this order.
notAfterDate	NA	string($date-time)	Latest date that the inventory can arrive at the store for this order.
updateDate	NA	string($date-time)	The date the purchase order was last updated.
completeDate	NA	string($date-time)	The date the purchase order was completed.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Read Order By ID

This section describes the Read Order By ID API. This API reads a store level purchase order by its unique system identifier. This operation retrieves the full information of the purchase order within the context of the store including items and quantities.

Method

```
GET
```

URL

```
/replenishgaps/{gapId}
```

Request Parameters

Table 4-392 Read Order By ID — Request Parameters

Parameter	Required	Data Type	Description
purchaseOrderId	yes	number($int12) (path)	The unique EICS identifier of the purchase order.

Responses

This section describes the responses of the Read Order By ID API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "purchaseOrderId": 11111,
    "orderNumber": "4823534",
    "storeId": 5000,
    "supplierId": 5101,
    "status": 1,
    "externalStatus": 1,
    "notBeforeDate": "2025-01-02T09:59:21.146Z",
    "notAfterDate": "2025-01-02T09:59:21.146Z",
    "comments": "Summer product pre-order",
    "customerOrderId": "799003",
    "fulfillmentOrderId": "7994203",
    "source": "POXD",
    "createUser": "smith123",
```

```
    "createDate": "2025-01-02T09:59:21.146Z",
    "updateDate": "2025-01-02T09:59:21.146Z",
    "completeDate": "2025-01-02T09:59:21.146Z",
    "lineItems": [
      {
        "lineId": 11111,
        "itemId": "11111",
        "supplierCountryCode": "US",
        "supplierCaseSize": 5,
        "quantityOrdered": 20,
        "quantityReceived": 20,
        "unitCostCurrency": "USD",
        "unitCostValue": 10,
        "preferredUom": "LBS",
        "published": true
      }
    ]
  }
]
```


Schema — PurchaseOrderIdo

Table 4-393 PurchaseOrderIdo — Object

Element Name	Required	Data Type/Example	Description
purchaseOrderId	NA	number($int12) example: 11111	The unique identifier of the purchase order.
orderNumber	NA	string($text128) example: 4823534	The non-unique order number of the purchase order in an external system.
storeId	NA	number($int10) example: 5000	The identifier of the store receiving the inventory.
supplierId	NA	number($int10) example: 5101	The identifier of the supplier shipping the goods.
status	NA	integer($int4) example: 1	The current status of the purchase order. Valid values are: 1 - Approved 2 - In Progress 3 - Canceled 4 - Completed Enum: [1, 2, 3, 4]
externalStatus	NA	integer($int4) example: 1	The current status of the purchase order in the originating system. Valid values are: 1 - Worksheet 2 - Submitted 3 - Approved 4 - Closed Enum: [1, 2, 3, 4]

Table 4-393 (Cont.) PurchaseOrderIdo — Object

Element Name	Required	Data Type/Example	Description
notBeforeDate	NA	string($date-time)	Earliest date that the inventory should arrive at the store for this order.
notAfterDate	NA	string($date-time)	Latest date that the inventory can arrive at the store for this order.
comments	NA	string($text2000) example: Summer product pre-order	Comments associated to the purchase order.
customerOrderId	NA	string($text128) example: 799003	A customer order identifier if associated to a customer order.
fulfillmentOrderId	NA	string($text128) example: 7994203	A fulfillment order identifier if associated to a customer order.
source	NA	string($text25) example: POXD	Text indicating the system that originated the purchase order.
createUser	NA	string($text128) example: smith123	The user that created the purchase order within the system.
createDate	NA	string($date-time)	The date the purchase order was created within the system.
updateDate	NA	string($date-time)	The date the purchase order was last updated.
completeDate	NA	string($date-time)	The date the purchase order was completed.
lineItems	NA	object	A collection of line items on the purchase order.

Table 4-394 PurchaseOrderLineItemIdo — Object

Element Name	Required	Data Type/Example	Description
lineId	NA	number($int15) example: 11111	The unique identifier of the line item record.
itemId	NA	string($text25) example: 11111	The unique identifier of the item.
supplierCountryCode	NA	string($text3) example: US	The country code of the supplier country of origin.
supplierCaseSize	NA	number($decimal(10, 2)) example: 5	The case size coming from the supplier.
quantityOrdered	NA	number($decimal(20, 4)) example: 20	The number of units (in standard unit of measure) expected to be delivered to the store.
quantityReceived	NA	number($decimal(20, 4)) example: 20	The number of units (in standard unit of measure) received to date against the order.
unitCostCurrency	NA	string($text3) example: USD	The unit cost ISO currency code.
unitCostValue	NA	number($decimal(12, 4)) example: 10	The unit cost value of the line item.

Table 4-394 (Cont.) PurchaseOrderLineItemIdo — Object

Element Name	Required	Data Type/Example	Description
preferredUom	NA	string($text4) example: LBS	The preferred unit of measure of the line item.
published	NA	boolean example: true	True indicates the line item has been published out to an exteral system, false otherwise. This is used when the purchase order originates within EICS.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Read Order

This section describes the Read Order API. This API reads a store level purchase order by its external identifier. This operation retrieves the full information of the purchase order within the context of the store including items and quantities.

Method

```
GET
```

URL

```
/purchaseorders/{orderNumber}/{storeId}
```

Request Parameters

Table 4-395 Read Order — Request Parameters

Parameter	Required	Data Type	Description
orderNumber	yes	string($text128) (path)	The external identifier of the purchase order.
storeId	yes	number ($int10) (path)	The store identifier of the purchase order.

Responses

This section describes the responses of the Read Order API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "purchaseOrderId": 11111,
    "orderNumber": "4823534",
    "storeId": 5000,
    "supplierId": 5101,
    "status": 1,
    "externalStatus": 1,
    "notBeforeDate": "2025-01-02T10:32:05.695Z",
    "notAfterDate": "2025-01-02T10:32:05.695Z",
    "comments": "Summer product pre-order",
    "customerOrderId": "799003",
    "fulfillmentOrderId": "7994203",
    "source": "POXD",
    "createUser": "smith123",
    "createDate": "2025-01-02T10:32:05.695Z",
    "updateDate": "2025-01-02T10:32:05.695Z",
    "completeDate": "2025-01-02T10:32:05.695Z",
    "lineItems": [
      {
        "lineId": 11111,
        "itemId": "11111",
        "supplierCountryCode": "US",
        "supplierCaseSize": 5,
        "quantityOrdered": 20,
        "quantityReceived": 20,
        "unitCostCurrency": "USD",
        "unitCostValue": 10,
        "preferredUom": "LBS",
        "published": true
      }
    ]
  }
]
```


Schema — PurchaseOrderIdo

Table 4-396 PurchaseOrderIdo — Object

Element Name	Required	Data Type/Example	Description
purchaseOrderId	NA	number($int12) example: 11111	The unique identifier of the purchase order.

Table 4-396 (Cont.) PurchaseOrderIdo — Object

Element Name	Required	Data Type/Example	Description
orderNumber	NA	string($text128) example: 4823534	The non-unique order number of the purchase order in an external system.
storeId	NA	number($int10) example: 5000	The identifier of the store receiving the inventory.
supplierId	NA	number($int10) example: 5101	The identifier of the supplier shipping the goods.
status	NA	integer($int4) example: 1	The current status of the purchase order. Valid values are: 1 - Approved 2 - In Progress 3 - Canceled 4 - Completed Enum: [1, 2, 3, 4]
externalStatus	NA	integer($int4) example: 1	The current status of the purchase order in the originating system. Valid values are: 1 - Worksheet 2 - Submitted 3 - Approved 4 - Closed Enum: [1, 2, 3, 4]
notBeforeDate	NA	string($date-time)	Earliest date that the inventory should arrive at the store for this order.
notAfterDate	NA	string($date-time)	Latest date that the inventory can arrive at the store for this order.
comments	NA	string($text2000) example: Summer product pre-order	Comments associated to the purchase order.
customerOrderId	NA	string($text128) example: 799003	A customer order identifier if associated to a customer order.
fulfillmentOrderId	NA	string($text128) example: 7994203	A fulfillment order identifier if associated to a customer order.
source	NA	string($text25) example: POXD	Text indicating the system that originated the purchase order.
createUser	NA	string($text128) example: smith123	The user that created the purchase order within the system.
createDate	NA	string($date-time)	The date the purchase order was created within the system.
updateDate	NA	string($date-time)	The date the purchase order was last updated.
completeDate	NA	string($date-time)	The date the purchase order was completed.
lineItems	NA	object	A collection of line items on the purchase order.

Table 4-397 PurchaseOrderLineItemIdo — Object

Element Name	Required	Data Type/Example	Description
lineId	NA	number($int15) example: 11111	The unique identifier of the line item record.
itemId	NA	string($text25) example: 11111	The unique identifier of the item.
supplierCountryCode	NA	string($text3) example: US	The country code of the supplier country of origin.
supplierCaseSize	NA	number($decimal(10, 2)) example: 5	The case size coming from the supplier.
quantityOrdered	NA	number($decimal(20, 4)) example: 20	The number of units (in standard unit of measure) expected to be delivered to the store.
quantityReceived	NA	number($decimal(20, 4)) example: 20	The number of units (in standard unit of measure) received to date against the order.
unitCostCurrency	NA	string($text3) example: USD	The unit cost ISO currency code.
unitCostValue	NA	number($decimal(12, 4)) example: 10	The unit cost value of the line item.
preferredUom	NA	string($text4) example: LBS	The preferred unit of measure of the line item.
published	NA	boolean example: true	True indicates the line item has been published out to an exteral system, false otherwise. This is used when the purchase order originates within EICS.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Close Order

This section describes the Close Order API. This API closes an existing purchase order. An already closed order will ignore the request and successfully return. If a store is not managed and the system is not configured to override, the request will also be ignored. If quantities are already received, the purchase order will go to completed status, otherwise it will be cancelled. A forbidden error response will occur if the application is integrated with Oracle Merchandising.

Method

```
POST
```

URL

```
/purchaseorders/{orderNumber}/close
```

Request Parameters

Table 4-398 Close Order— Request Parameters

Parameter	Required	Data Type	Description
orderNumber	yes	string($text128) (path)	The external order number of the purchase order.

Responses

This section describes the responses of the Close Order API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Import Order

This section describes the Import Order API. This API imports of approved purchase orders ared is staged and processed asynchronously by the MPS work queue DcsOrder. If the order number exists already, the order will be treated as an update. If the order number does not exist, a new order will be created. If a record for item and store combination is found for an item, then the item will be updated, otherwise a new line item will be created for the item-store combination. Items cannot be removed from already existing purchase orders, however, their ordered quantity can be reduced to zero. If the system is integrated with Oracle Merchandising, then this operation will return a Forbidden response. As an asynchronous service, minimal validation will be done prior to submitting the information for later processing. Business validation that fails during asynchronous processing can be found along with the processing message in the MPS staged message table.

Method

```
POST
```

URL

```
/purchaseorders/{orderNumber}/import
```

Request Parameters

Table 4-399 Import Order— Request Parameters

Parameter	Required	Data Type	Description
orderNumber	yes	string($text128) (path)	The external order number of the purchase order.

The request body is application/json.

Example Value

```
{
  "supplierId": 5101,
  "externalStatus": 1,
  "notBeforeDate": "2025-01-02T11:14:26.297Z",
  "notAfterDate": "2025-01-02T11:14:26.297Z",
  "unitCostCurrency": "799003",
  "customerOrderId": "799003",
  "fulfillmentOrderId": "7994203",
  "source": "POXD",
  "comments": "Summer product pre-order",
  "lineItems": [
    {
      "itemId": "11111",
      "storeId": 5000,
      "supplierCountryCode": "US",
      "supplierCaseSize": 5,
      "quantityOrdered": 20,
      "unitCost": 10,
      "preferredUom": "LBS",
      "published": true
    }
  ]
}
```

Schema — PurchaseOrderImportIdo

Table 4-400 PurchaseOrderImportIdo — Object

Element Name	Required	Data Type/Example	Description
supplierId	Yes	number($int10) example: 5101	The identifier of the supplier shipping the goods.
externalStatus	Yes	integer($int4) example: 1	The current status of the purchase order. Valid values are 1 - Worksheet 2 - Submitted 3 - Approved 4 - Closed Enum: [1, 2, 3, 4]
notBeforeDate	NA	string($date-time)	Earliest date that the inventory should arrive at the store for this order.
notAfterDate	NA	string($date-time)	Latest date that the inventory can arrive at the store for this order.
unitCostCurrency	Yes	string($text3) example: 799003	The currency code of the unit costs of the items on this purchase order.
customerOrderId	NA	string($text128) example: 799003	A customer order identifier if associated to a customer order. This is only accepted only when the purchase order is originally created and will not be modified on an update.
fulfillmentOrderId	NA	string($text128) example: 7994203	A fulfillment order identifier if associated to a customer order. This is accepted only when the purchase order is originally created and will not be modified on an update.
source	Yes	string($text25) example: POXD	Text indicating the system that originated the purchase order. This is only used when the purchase order is originally created and will not be modified on an update.
comments	NA	string($text2000) example: Summer product pre-order	Comments associated to the purchase order.
lineItems	Yes	object	A collection of line items on the purchase order.

Table 4-401 PurchaseOrderImportItemIdo — Object

Element Name	Required	Data Type/Example	Description
itemId	Yes	string($text25) example: 11111	The unique identifier of the item.
storeId	Yes	number($int10) example: 5000	The identifier of the store receiving the inventory.

Table 4-401 (Cont.) PurchaseOrderImportItemIdo — Object

Element Name	Required	Data Type/Example	Description
supplierCountry Code	Yes	string($text3) example: US	The country code of the supplier country of origin. This value will be ignored on an update of the item/ store combination.
supplierCaseSize	NA	number($decimal(10, 2)) example: 5	The case size coming from the supplier.
quantityOrdered	Yes	number($decimal(20, 4)) example: 20	The number of units (in standard unit of measure) expected to be delivered to the store.
unitCost	NA	number($decimal(12, 4)) example: 10	The unit cost value of the line item.
preferredUom	NA	string($text4) example: LBS	The preferred unit of measure of the line item.
published	NA	boolean example: true	True indicates the line item has been published out to an exteral system, false otherwise. This is used when the purchase order originates within EICS.

Responses

This section describes the responses of the Import Order API.

Response Code: 202

Accepted

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

REST Service: Allocation

Allocation documents defined the intent to ship goods from a warehouse to a store. Allocations may be managed by Oracle Merchandising, and if so, then some operations within this service will be blocked.

Service Base URL

The Cloud service base URL follows the format:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Find Allocation

This section describes the Find Allocation API. This API finds up to 5,000 purchase orders headers for the input criteria. No item information is returned.

Method

```
GET
```

URL

```
/allocations
```

Request Parameters

Table 4-402 Find Allocation — Request Parameters

Parameter	Required	Data Type	Description
allocationId	NA	integer($int12) (query)	Include only allocations with this allocation identifier.
itemId	NA	string($text25) (query)	Include only allocations for this item.
storeId	NA	integer($int10) (query)	Include only allocations for this store.
warehouseId	NA	integer($int10) (query)	Include only allocations for this warehouse.
deliveryDateFrom	NA	string($date-time) (query)	Include only allocations where the delivery date is on or after this date.
deliveryDateTo	NA	string($date-time) (query)	Include only allocations where the delivery date is on or before this date.
status	NA	integer($int4) (query)	Include only allocations in this status. Valid values are: 1 - Approved 2 - Completed 3 - Canceled Available values : 1, 2, 3

Responses

This section describes the responses of the Find Allocation API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "allocationId": 11111,
    "itemId": "100637121",
    "storeId": 5000,
    "warehouseId": 7000,
    "scheduleDate": "2025-01-02T12:38:48.481Z",
    "status": 1,
    "contextId": 14562,
    "contextValue": "Season End",
    "distributionParentId": "19384731",
    "deliverySlotId": 134143,
    "quantityExpected": 20,
    "quantityReceived": 10,
    "quantityDamaged": 10
  }
]
```


Schema — AllocationIdo

Table 4-403 AllocationIdo— Object

Element Name	Required	Data Type/ Example	Description
allocationId	NA	number($int12) example: 11111	The unique identifier of the allocation.
itemId	NA	string($text25) example: 100637121	The identifier of the item.
storeId	NA	number($int10) example: 5000	The identifier of the store receiving the goods.
warehouseId	NA	number($int10) example: 7000	The identifier of the warehouse shipping the goods.
scheduleDate	NA	string($date-time)	The date the allocation is expected to be delivered.
status	NA	integer($int4) example: 1	The current status of the allocation. Valid values are: 1 - Approved 2 - Completed 3 - Canceled Enum: [1, 2, 3]
contextId	NA	number($int18) example: 14562	The identifier of a context associated to the allocation.

Table 4-403 (Cont.) AllocationIdo— Object

Element Name	Required	Data Type/ Example	Description
contextValue	NA	string($text25) example: Season End	A value associated to the context.
distributionParentId	NA	string($text25) example: 19384731	A unique identifier of a parent allocation document.
deliverySlotId	NA	number($int15) example: 134143	The identifier of the delivery slot of the expected delivery time.
quantityExpected	NA	number($decimal(20,4)) example: 20	The quantity expected to be delivered.
quantityReceived	NA	number($decimal(20,4)) example: 10	The quantity of the allocation that has been received.
quantityDamaged	NA	number($decimal(20,4)) example: 10	The quantity of the allocation that has been received as damaged.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Import Allocation

This API imports an allocation order approved in an external system through an asynchronous process. These allocations will be staged as a message for later processing in the MPS queue (DcsAllocation).

Method

```
POST
```

URL

```
/allocations/import
```

Request Parameters

There are no request parameters.

The request body is application/json.

The allocation details of the allocation to import.

Example Value


```
{
  "allocationId": 11111,
  "itemId": "100637121",
  "warehouseId": 7000,
  "distributionParentId": 19384731,
  "contextId": 14562,
  "contextValue": "Season End",
  "details": [
    {
      "storeId": 5000,
      "deliveryDate": "2025-01-02T13:18:14.085Z",
      "quantity": 20
    }
  ]
}
```


Schema — AllocationImportIdo

Table 4-404 AllocationImportIdo — Object

Element Name	Required	Data Type/Example	Description
allocationId	Yes	number($int12) example: 11111	The unique identifier of the allocation.
itemId	Yes	string($text25) example: 100637121	The identifier of the item.
warehouseId	Yes	number($int10) example: 7000	The unique identifier of the warehouse shipping the goods.
distributionParentId	NA	number($int15) example: 19384731	A unique identifier of a parent allocation document.
contextId	NA	number($int18) example: 14562	The identifier of a context associated to the allocation.
contextValue	NA	string($text25) example: Season End	A value associated to the context.
details	Yes	object	A set of stores and quantities for delivery.

Table 4-405 AllocationImportDetailIdo — Object

Element Name	Required	Data Type/Example	Description
storeId	Yes	number($int10) example: 5000	The identifier of the store receiving the goods.
deliveryDate	NA	string($date-time)	The date the allocation is expected to be delivered.

Table 4-405 (Cont.) AllocationImportDetailIdo — Object

Element Name	Required	Data Type/Example	Description
quantity	Yes	number($decimal(20, 4)) example: 20	The quantity to be delivered.

Responses

This section describes the responses of the Import Allocation API.

Response Code: 202

Accepted

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Complete Allocation

This section describes the Complete Allocation API. This API completes an allocation. This operation will return a forbidden response if the application is integrated with Oracle Merchandising.

Method

`POST`

URL

`/allocations/{allocationId}/complete`

Request Parameters

Table 4-406 Complete Allocation — Request Parameters

Parameter	Required	Data Type	Description
allocationId	yes	integer($int12) (path)	The allocation identifier.

Responses

This section describes the responses of the Complete Allocation API.

Response Code: 202

Accepted

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Cancel Allocation

This section describes the Cancel Allocation API. This API cancels an allocation. This operation will return a forbidden response if the application is integrated with Oracle Merchandising.

Method

```
POST
```

URL

```
/allocations/{allocationId}/cancel
```

Request Parameters

Table 4-407 Cancel Allocation — Request Parameters

Parameter	Required	Data Type	Description
allocationId	yes	integer($int12) (path)	The allocation identifier.

Responses

This section describes the responses of the Cancel Allocation API.

Response Code: 202

Accepted

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

REST Service: Shelf Replenishment

The replenishment process attempts to ensure that the shop floor inventory is set at a level best suited for enticing customers to buy a product and to prevent empty shelves. Shelf replenishment functionality within the mobile application is related to the movement of goods from the back room to the shop floor and shop floor to back room. For example, when a certain soda quantity is low, you can initiate a replenishment process so that more of the soda is moved from the back room. Similarly, if there is excess stock on the shop floor, the mobile application supports processes to move inventory to the back room. Some of the processes require capacity setup and some form of plan-o-gram sequenced data, while others do not. See user's guide for additional information. This service provides the ability to manage shelf replenishment through public interfaces.

Service Base URL

The Cloud service base URL follows the format:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Find Replenishment

This section describes the Find Replenishment API. This API finds up to 10,000 shelf replenishment headers for the input criteria.

Method

```
GET
```

URL

```
/shelfreplenishments
```

Request Parameters

Table 4-408 Find Replenishment — Request Parameters

Parameter	Required	Data Type	Description
storeId	NA	number($int10) (query)	Include only replenishments with this store identifier.
type	NA	integer($int2) (query)	Include only replenishments with this type. Valid values are: 1 - Capacity 2 - Display 3 - Gap 4 - Sales Available values : 1, 2, 3, 4
status	NA	integer($int2) (query)	Include only replenishments with this status. Valid values are: 1 - New 2 - In Progress 3 - Complete 4 - Canceled Available values : 1, 2, 3, 4
mode	NA	integer($int2) (query)	Include only replenishments with this mode. Valid values are: 1 - End of Day 2 - Within Day Available values : 1, 2
productGroupId	NA	number($int12) (query)	Include only replenishments with this product group.
departmentId	NA	number($int15) (query)	Include only replenishments with this department.
replenishmentGapId	NA	number($int15) (query)	Include only replenishments with this replenishment gap.
statusDateFrom	NA	string($date-time) (query)	Include only replenishments with a status date on or after this date.
statusDateTo	NA	string($date-time) (query)	Include only replenishments with a status date on or before this date.
createDateFrom	NA	string($date-time) (query)	Include only replenishments with an create date on or after this date.
createDateTo	NA	string($date-time) (query)	Include only replenishments with an create date on or before this date.
itemId	NA	string($text25) (query)	Include only shelf replenishments with this item.

Responses

This section describes the responses of the Find Replenishment API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "replenishmentId": 11111,
    "storeId": 5000,
    "type": 1,
    "status": 1,
    "statusDate": "2025-01-03T10:08:47.605Z",
    "mode": 1,
    "createUser": "smith123",
    "createDate": "2025-01-03T10:08:47.605Z"
  }
]
```


Schema — ShelfReplenishmentHeaderIdo

Table 4-409 ShelfReplenishmentHeaderdo— Object

Element Name	Required	Data Type/ Example	Description
replenishmentId	NA	number($int15) example: 11111	The unique identifier of the shelf replenishment.
storeId	NA	number($int10) example: 5000	The store of the shelf replenishment.
type	NA	integer($int4) example: 1	The type of shelf replenishment. Valid values are: 1 - Capacity 2 - Display 3 - Gap 4 - Sales Enum: [1, 2, 3, 4]
status	NA	integer($int4) example: 1	The current status of the shelf replenishment. Valid values are: 1 - New 2 - In Progress 3 - Complete 4 - Canceled Enum: [1, 2, 3, 4]
statusDate	NA	string($date-time)	string($date-time) The date the last time the status of the shelf replenishment was altered.
mode	NA	integer($int4) example: 1	The current status of the shelf replenishment. Valid values are: 1 - End of Day 2 - Within Day Enum: [1, 2]

Table 4-409 (Cont.) ShelfReplenishmentHeaderdo— Object

Element Name	Required	Data Type/ Example	Description
createUser	NA	string($text128) example: smith123	The name of the user that created the shelf replenishment.
createDate	NA	string($date-time)	The date the shelf replenishment was created.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Create Replenishment

This API creates an in progress shelf replenishment.

Method

```
POST
```

URL

```
/shelfreplenishments
```

Request Parameters

There are no request parameters.

The request body is application/json.

The details of the new shelf replenishment..

Example Value

```
{
  "storeId": 5000,
  "type": 1,
  "checkAvailableStockOnHand": true,
  "productGroupId": 5683232,
  "replenishmentGapId": 5834134,
  "departmentId": 1000,
```

```
  "classId": 2000,
  "subclassId": 3000,
  "mode": 1
}
```


Schema — ShelfReplenishmentCreateIdo

Table 4-410 ShelfReplenishmentCreateIdo — Object

Element Name	Required	Data Type/ Example	Description
storeId	Yes	number($int10) example: 5000	The store of the shelf adjustment.
type	Yes	integer($int4) example: 1	The type of shelf replenishment. Valid values are: 1 - Capacity 2 - Display 3 - Gap 4 - Sales Enum: [1, 2, 3, 4]
checkAvailableStockOnHand	NA	boolean example: true	True indicates that items with no available stock will not be placed on the replenishment list. If false, they will be included.
productGroupId	NA	number($int12) example: 5683232	The identifier of an associated product group.
replenishmentGapId	NA	number($int15) example: 5834134	The identifier of an associated replenishment gap.
departmentId	NA	number($int12) example: 1000	The identifier of a department.
classId	NA	number($int12) example: 2000	The identifier of a class within the department.
subclassId	NA	number($int12) example: 3000	The identifier of a subclass within the class.
mode	NA	integer($int4) example: 1	The mode of the shelf replenishment. Valid values are: 1 - End of Day 2 - Within Day Enum: [1, 2]

Responses

This section describes the responses of the Import Allocation API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "replenishmentId": 11111,
    "storeId": 5000,
    "type": 1,
    "status": 1
  }
]
```


Schema — ShelfReplenishmentStatusIdo

Table 4-411 ShelfReplenishmentStatusIdo — Object

Element Name	Required	Data Type/Example	Description
replenishmentId	NA	number($int15) example: 11111	The unique identifier of the shelf replenishment.
storeId	NA	number($int10) example: 5000	The store of the shelf adjustment.
type	NA	integer($int4) example: 1	The type of shelf replenishment. Valid values are: 1 - Capacity 2 - Display 3 - Gap 4 - Sales Enum: [1, 2, 3, 4]
status	NA	integer($int4) example: 1	The current status of the shelf replenishment. Valid values are: 1 - New 2 - In Progress 3 - Complete 4 - Canceled Enum: [1, 2, 3, 4]

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Read Replenishment

This API retrieves all the details about a shelf replenishment.

Method

```
GET
```

URL

```
/shelfreplenishments/{replenishmentId}
```

Request Parameters

Table 4-412 Read Replenishment— Request Parameters

Parameter	Required	Data Type	Description
replenishmentId	Yes	number ($int15) (path)	The unique identifier of the shelf replenishment.

Responses

This section describes the responses of the Read Replenishment API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "replenishmentId": 11111,
    "storeId": 5000,
    "type": 1,
    "status": 1,
    "statusDate": "2025-01-03T11:46:50.199Z",
    "mode": 1,
    "productGroupId": 5683232,
    "departmentId": 1000,
    "classId": 2000,
    "subclassId": 3000,
    "replenishmentGapId": 5834134,
    "transactionEventId": 23894134,
    "transactionEventDescription": "Flash Sale",
    "createUser": "smith123",
    "createDate": "2025-01-03T11:46:50.199Z",
```

```
    "lineItems": [
      {
        "lineId": 11111,
        "itemId": "200167123",
        "pickFromArea": 1,
        "pickFromRequest": 20,
        "pickAount": 10,
        "caseSize": 1,
        "unitOfMeasure": "LBS",
        "substituteLineId": 3243
      }
    ]
  }
]
```

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Update Replenishment

This section describes the Update Replenishment API. This API updates an active shelf replenishment.

Method

```
POST
```

URL

```
/shelfreplenishments/{replenishmentId}
```

Request Parameters

Table 4-413 Update Replenishment — Request Parameters

Parameter	Required	Data Type	Description
replenishmentId	yes	integer($int15) (path)	The unique identifier of the shelf replenishment.

The request body is application/json.

Shelf replenishment details to update.

Responses

This section describes the responses of the Update Replenishment API.

Response Code: 204

No Content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Confirm Replenishment

This section describes the Confirm Replenishment API. This API confirms a shelf replenishment moving the inventory.

Method

```
POST
```

URL

```
/shelfreplenishments/{replenishmentId}/confirm
```

Request Parameters

Table 4-414 Confirm Replenishment — Request Parameters

Parameter	Required	Data Type	Description
replenishmentId	yes	integer($int15) (path)	The unique identifier of the shelf replenishment.

Responses

This section describes the responses of the Confirm Replenishment API.

Response Code: 204

No Content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Cancel Replenishment

This section describes the Cancel Replenishment API. This API cancels a shelf replenishment.

Method

```
POST
```

URL

```
/shelfreplenishments/{replenishmentId}/cancel
```

Request Parameters

Table 4-415 Cancel Replenishment — Request Parameters

Parameter	Required	Data Type	Description
replenishmentId	yes	integer($int15) (path)	The unique identifier of the shelf replenishment.

Responses

This section describes the responses of the Cancel Replenishment API.

Response Code: 204

No Content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

REST Service: Shelf Adjustment

A shelf adjustment moves quantities between locations within the store. A shelf adjustment to move to back room will move quantities from the shop floor to the back room. A shelf adjustment to update the shop floor will update the shop floor positions with the adjustment quantity. A shelf adjustment to update the backroom will adjust the back room quantities.

Service Base URL

The Cloud service base URL follows the format:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Find Adjustment

This section describes the Find Adjustment API. This API finds up to 1,500 shelf adjustments headers for the input criteria.

Method

```
GET
```

URL

```
/shelfadjustments
```

Request Parameters

Table 4-416 Find Adjustment — Request Parameters

Parameter	Required	Data Type	Description
storeId	NA	number($int10) (query)	Include only adjustments for this store.
status	NA	integer($int2) (query)	Include only adjustments with this status. Valid values are: 1 - In Progress 2 - Complete Available values : 1, 2

Table 4-416 (Cont.) Find Adjustment — Request Parameters

Parameter	Required	Data Type	Description
type	NA	integer($int2) (query)	Include only adjustments with this type. Valid values are: 1 - Move To Backroom 2 - Update Shopfloor 3 - Update Backroom Available values : 1, 2, 3
itemId	NA	string($text25) (query)	Include only shelf adjsutments with this item.
userName	NA	string($text128) (query)	Include only shelf adjsutments with this username.
updateDateFrom	NA	string($date-time) (query)	Include only adjustments with an update date on or after this date.
updateDateTo	NA	string($date-time) (query)	Include only adjustments with an update date on or before this date.

Responses

This section describes the responses of the Find Adjustment API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value

```
[
  {
    "adjustmentId": 11111,
    "storeId": 5000,
    "type": 1,
    "status": 1,
    "userName": "smith123",
    "createDate": "2025-01-03T13:12:18.180Z",
    "updateDate": "2025-01-03T13:12:18.180Z"
  }
]
```

Schema — ShelfAdjustmentHeaderIdo

Table 4-417 ShelfAdjustmentHeaderIdo— Object

Element Name	Required	Data Type/ Example	Description
adjustmentId	NA	number($int15) example: 11111	The unique identifier of the shelf adjustment.
storeId	NA	number($int10) example: 5000	The store of the shelf adjustment.
type	NA	integer($int4) example: 1	The type of shelf adjustment. Valid values are 1 - Move To Backroom 2 - Update Shopfloor 3 - Update Backroom Enum: [1, 2, 3]
status	NA	integer($int4) example: 1	The current status of the shelf adjustment. Valid values are 1 - In Progress 2 - Complete Enum: [1, 2]
userName	NA	string($text128) example: smith123	The name of the user that last updated the shelf adjustment.
createDate	NA	string($date-time)	The date the shelf adjustment was created.
updateDate	NA	string($date-time)	The date the shelf adjustment was last updated.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Create Adjustment

This API creates an in progress shelf adjustment.

Method

```
POST
```

URL

```
/shelfadjustments
```

Request Parameters

There are no request parameters.

The request body is application/json.

The details of the new shelf adjustment.

Example Value

```
{
  "storeId": 5000,
  "type": 1,
  "lineItems": true
}
```

Schema — ShelfAdjustmentCreateIdo

Table 4-418 ShelfAdjustmentCreateIdo — Object

Element Name	Required	Data Type/ Example	Description
storeId	Yes	number($int 10) example: 5000	The store of the shelf adjustment.
type	Yes	integer($int4) example: 1	The type of shelf adjustment. Valid values are: 1 - Move To Backroom 2 - Update Shopfloor 3 - Update Backroom Enum: [1, 2, 3]
lineItems	Yes	object	A collection of line items on the shelf adjustment.

Table 4-419 ShelfAdjustmentCreateItemIdo — Object

Element Name	Required	Data Type/ Example	Description
itemId	Yes	string($text25) example: 11111	The unique identifier of the item.
caseSize	NA	number($decimal(10,2)) example: 1	The case size of the item for this record.

Table 4-419 (Cont.) ShelfAdjustmentCreateItemIdo — Object

Element Name	Required	Data Type/ Example	Description
quantity	Yes	number($decimal(12,4)) example: 20	The quantity to adjust.

Responses

This section describes the responses of the Create Adjustment API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value

```
[
  {
    "adjustmentId": 11111,
    "storeId": 5000,
    "type": 1,
    "status": 1
  }
]
```

Schema — ShelfAdjustmentStatusIdo

Table 4-420 ShelfAdjustmentStatusIdo — Object

Element Name	Required	Data Type/Example	Description
adjustmentId	NA	number($int15) example: 11111	The unique identifier of the shelf adjustment.
storeId	NA	number($int10) example: 5000	The store of the shelf adjustment.
type	NA	integer($int4) example: 1	The type of shelf adjustment. Valid values are: 1 - Move To Backroom 2 - Update Shopfloor 3 - Update Backroom Enum: [1, 2, 3]

Table 4-420 (Cont.) ShelfAdjustmentStatusIdo — Object

Element Name	Required	Data Type/Example	Description
status		integer($int4) example: 1	The current status of the shelf adjustment. Valid values are: 1 - In Progress 2 – Complete Enum: [1, 2]

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Read Adjustment

This API retrieves all the details about a shelf adjustment.

Method

```
GET
```

URL

```
/shelfadjustments/{adjustmentId}
```

Request Parameters

Table 4-421 Read Adjustment— Request Parameters

Parameter	Required	Data Type	Description
adjustmentId	Yes	number ($int15) (path)	The unique identifier of the shelf adjustment.

Responses

This section describes the responses of the Read Adjustment API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "adjustmentId": 11111,
    "storeId": 5000,
    "type": 1,
    "status": 1,
    "userName": "smith123",
    "createDate": "2025-01-08T11:10:30.977Z",
    "updateDate": "2025-01-08T11:10:30.977Z",
    "lineItems": [
      {
        "lineId": 11111,
        "itemId": "11111",
        "caseSize": 1,
        "quantity": 20
      }
    ]
  }
]
```


Schema — ShelfAdjustmentStatusIdo

Table 4-422 ShelfAdjustmentStatusIdo — Object

Element Name	Required	Data Type/Example	Description
adjustmentId	NA	number($int15) example: 11111	The unique identifier of the shelf adjustment.
storeId	NA	number($int10) example: 5000	The store of the shelf adjustment.
type	NA	integer($int4) example: 1	The type of shelf adjustment. Valid values are: 1 - Move To Backroom 2 - Update Shopfloor 3 - Update Backroom Enum: [1, 2, 3]
status		integer($int4) example: 1	The current status of the shelf adjustment. Valid values are: 1 - In Progress 2 – Complete Enum: [1, 2]

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Update Adjustment

This section describes the Update Adjustment API. This API updates an active shelf adjustment.

Method

```
POST
```

URL

```
/shelfadjustments/{adjustmentId}
```

Request Parameters

Table 4-423 Update Adjustment— Request Parameters

Parameter	Required	Data Type	Description
adjustmentId	yes	integer($int15) (path)	The unique identifier of the shelf adjustment.

The request body is application/json.

Shelf adjustment details to update.

Responses

This section describes the responses of the Update Adjustment API.

Response Code: 204

No Content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Confirm Adjustment

This section describes the Confirm Adjustment API. This API confirms a shelf adjustment updating the appropriate quantities of inventory position depending on the type of shelf adjustment.

Method

```
POST
```

URL

```
/shelfadjustments/{adjustmentId}/confirm
```

Request Parameters

Table 4-424 Confirm Adjustment — Request Parameters

Parameter	Required	Data Type	Description
adjustmentId	yes	integer($int12) (path)	The unique identifier of the shelf adjustment.

Responses

This section describes the responses of the Confirm Adjustment API.

Response Code: 204

No Content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Delete Adjustment

This section describes the Delete AdjustmentAPI. This API deletes a shelf adjustment.

Method

```
POST
```

URL

```
/shelfadjustments/{adjustmentId}/delete
```

Request Parameters

Table 4-425 Delete Adjustment — Request Parameters

Parameter	Required	Data Type	Description
adjustmentId	yes	integer($int12) (path)	The unique identifier of the shelf adjustment.

Responses

This section describes the responses of the Delete Adjustment API.

Response Code: 204

No Content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

REST Service: Customer Fulfillment Order

This service defines operations to manage customer fulfillment order information by integration with an external system. A fulfillment order the portion of a customer order to be fulfilled at a particular store. There can be many fulfillment orders for the same customer order.

Service Base URL

The Cloud service base URL follows the format:

```
https://<external_load_balancer>/<cust_env>/siocs-int-services/api
```

Find Fulfillment Order

This section describes the Find Fulfillment Order API. This API finds up to a maximum of 3,0000 fulfillment order headers based on input search criteria.

Method

```
GET
```

URL

```
/fulfillmentorders
```

Request Parameters

Table 4-426 Find Fulfillment Order — Request Parameters

Parameter	Required	Data Type	Description
fulfillmentOrderNumber	NA	string($text128) (query)	Include only fulfillment orders with this external fulfillment order number.
customerOrderNumber	NA	string($text128) (query)	Include only fulfillment orders with this external customer order number.
storeId	NA	integer($int10) (query)	Include only fulfillment orders for this store.
orderType	NA	integer($int4) (query)	Include only fulfillment orders with this order type. Valid values are: 1 - Layaway 2 - Pickup and Delivery 3 - Customer Order 4 - Pending Purchase 5 - Special Order 6 - Web Order 7 - On Hold Available values : 1, 2, 3, 4, 5, 6, 7

Table 4-426 (Cont.) Find Fulfillment Order — Request Parameters

Parameter	Required	Data Type	Description
status	NA	integer($int4) (query)	Include only fulfillment orders with this status. Value values are: 1 - New 2 - In Progress 3 - Completed 4 - Canceled 5 - Reverse Pick 6 - Pick In Progress 7 - Delivery In Progress 8 - Ready To Ship 9 - Ready For Pickup 10 - Picking Required 11 - Under Review Available values : 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
releaseDateFrom	NA	string($date-time) (query)	Include only fulfillment orders with an release date on or after this date.
releaseDateTo	NA	string($date-time) (query)	Include only fulfillment orders with an release date on or before this date.
updateDateFrom	NA	string($date-time) (query)	Include only fulfillment orders with an update date on or after this date.
updateDateTo	NA	string($date-time) (query)	Include only fulfillment orders with an update date on or before this date.
itemId	NA	string($text25) (query)	Include only fulfillment orders containing this item.

Responses

This section describes the responses of the Find Fulfillment Order API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "orderId": 11111,
    "customerOrderId": "222345666",
    "fulfillmentOrderId": "76544400",
    "storeId": 1234,
    "orderType": 1,
    "deliveryType": 1,
    "status": 1,
```

```
    "holdLocation": "Pickup Desk"
  }
]
```

Schema — FulfillmentOrderHeaderIdo

Table 4-427 FulfillmentOrderHeaderIdo— Object

Element Name	Required	Data Type/ Example	Description
orderId	NA	number($int12) example: 11111	The unique identifier of the fulfillment order.
customerOrderId	NA	string($text128) example: 222345666	The customer order number (from the external ordering system).
fulfillmentOrderId	NA	string($text128) example: 76544400	The fulfillment order number (from the external ordering system).
storeId	NA	number($int10) example: 1234	The identifier of the store at which this order will be fulfilled.
orderType	NA	integer($int4) example: 1	The current status of the inventory adjustment. Valid values are: 1 - Layaway 2 - Pickup and Delivery 3 - Customer Order 4 - Pending Purchase 5 - Special Order 6 - Web Order 7 - On Hold Enum: [1, 2, 3, 4, 5, 6, 7]
deliveryType	NA	integer($int4) example: 1	The delivery type of the customer order. Valid values are: 1 - Customer Pickup 2 - Ship To Store Enum: [1, 2]

Table 4-427 (Cont.) FulfillmentOrderHeaderIdo— Object

Element Name	Required	Data Type/ Example	Description
status	NA	integer($int4) example: 1	The current status of the customer order. Value values are: 1 - New 2 - In Progress 3 - Completed 4 - Canceled 5 - Reverse Pick 6 - Pick In Progress 7 - Delivery In Progress 8 - Ready To Ship 9 - Ready For Pickup 10 - Picking Required 11 - Under Review Enum: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11]
holdLocation	NA	string($text128) example: Pickup Desk	Descripton of where the order is being held for pickup or delivery.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Read Fulfillment Order

This section describes the Read Fulfillment Order API. This API retrieves all the details about a fulfillment order.

Method

```
GET
```

URL

```
/fulfillmentorders/{orderId}
```

Request Parameters

Table 4-428 Read Fulfillment Order — Request Parameters

Parameter	Required	Data Type	Description
orderId	Yes	number($int12) (path)	The unique SIOCS internal identifier of the fulfillment order.

Responses

This section describes the responses of the Read Fulfillment Order API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "orderId": 11111,
    "customerOrderId": "222345666",
    "fulfillmentOrderId": "76544400",
    "storeId": 1234,
    "customerId": "JXA244443",
    "orderType": 1,
    "deliveryType": 1,
    "status": 1,
    "orderDate": "2025-01-15T12:53:31.299Z",
    "releaseDate": "2025-01-15T12:53:31.299Z",
    "deliveryDate": "2025-01-15T12:53:31.299Z",
    "carrierId": 4500674,
    "carrierServiceId": 4500222,
    "allowPartialDelivery": true,
    "deliveryCharge": 12.5,
    "deliveryChargeCurrency": "USD",
    "holdLocation": "Pickup Desk",
    "orderComments": "Customer will arrive by 2pm.",
    "underReview": false,
    "fullFlow": true,
    "deliveryComments1": "First line.",
    "deliveryComments2": "Second line.",
    "deliveryComments3": "Third line.",
    "customerArrivalDate": "2025-01-15T12:53:31.299Z",
    "createDate": "2025-01-15T12:53:31.299Z",
    "updateDate": "2025-01-15T12:53:31.299Z",
    "lineItems": [
      {
        "lineId": 333444,
        "itemId": "55001234",
        "substituteLineId": 5600043,
        "lineNumber": 2,
```

```
        "preferredUom": "KG",
        "comments": "Item packaging slightly damaged.",
        "quantityOrdered": 10,
        "quantityPicked": 6,
        "quantityDelivered": 2,
        "quantityCanceled": 2,
        "quantityReserved": 8,
        "allowSubstitution": true,
        "price": 4500674,
        "priceCurrency": "USD",
        "createDate": "2025-01-15T12:53:31.299Z",
        "updateDate": "2025-01-15T12:53:31.299Z"
      }
    ]
  }
]
```


Schema — FulfillmentOrderIdo

Table 4-429 FulfillmentOrderIdo— Object

Element Name	Required	Data Type/ Example	Description
orderId	NA	number($int12) example: 11111	The unique identifier of the fulfillment order.
customerOrderId	NA	string($text128) example: 222345666	The customer order number (from the external ordering system).
fulfillmentOrderId	NA	string($text128) example: 76544400	The fulfillment order number (from the external ordering system).
storeId	NA	number($int10) example: 1234	The identifier of the store at which this order will be fulfilled.
customerId	NA	string($text14) example: JXA244443	The identifier of the customer for this fulfillment order.
orderType	NA	integer($int4) example: 1	The order type of the customer order. Valid values are: 1 - Layaway 2 - Pickup and Delivery 3 - Customer Order 4 - Pending Purchase 5 - Special Order 6 - Web Order 7 - On Hold Enum: [1, 2, 3, 4, 5, 6, 7]

Table 4-429 (Cont.) FulfillmentOrderIdo— Object

Element Name	Required	Data Type/ Example	Description
deliveryType	NA	integer($int4) example: 1	The delivery type of the customer order. Valid values are: 1 - Customer Pickup 2 - Ship To Store Enum: [1, 2]
status	NA	integer($int4) example: 1	The current status of the customer order. Value values are: 1 - New 2 - In Progress 3 - Completed 4 - Canceled 5 - Reverse Pick 6 - Pick In Progress 7 - Delivery In Progress 8 - Ready To Ship 9 - Ready For Pickup 10 - Picking Required 11 - Under Review Enum: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11]
orderDate	NA	string($date-time)	The date the customer placed the order.
releaseDate	NA	string($date-time)	The date in which the order must be shipped by the store or picked up in the store.
deliveryDate	NA	string($date-time)	The date in which the order is to be delivered.
carrierId	NA	integer($int10) example: 4500674	The identifier of the carrier who will deliver the order.
carrierServiceId	NA	integer($int10) example: 4500222	The identifier of the carrier service used for the delivery.
allowPartialDelivery	NA	boolean example: true	True indicates delivery can occur without all items being available and ready. False indicates all items must be shipped in the delivery.
deliveryCharge	NA	number($decimal(12,4)) example: 12.5	The cost of shipment of this order.
deliveryChargeCurrency	NA	string($text3) example: USD	The current of the delivery charge value.
holdLocation	NA	string($text128) example: Pickup Desk	Descripton of where the order is being held for pickup or delivery.

Table 4-429 (Cont.) FulfillmentOrderIdo— Object

Element Name	Required	Data Type/ Example	Description
orderComments	NA	string($text2000) example: Customer will arrive by 2pm.	Comments entered in the external system for the order.
underReview	NA	boolean example: false	True indicates that the fulfilling system needs to delay either shipping or fulfilling the order until this flag is cleared.
fullFlow	NA	boolean example: true	True indicates this customer order can only be fulfilled using SOCS. If false, it must be fulfilled using JET mobile.
deliveryComments1	NA	string($text128) example: First line.	The first line of delivery comments.
deliveryComments2	NA	string($text128) example: Second line.	The second line of delivery comments.
deliveryComments3	NA	string($text128) example: Third line.	The third line of delivery comments.
customerArrivalDate	NA	string($date-time)	The date that the customer arrived for pickup.
createDate	NA	string($date-time)	The date the fulfillment order was created in SIOCS.
updateDate	NA	string($date-time)	The date the fulfillment order was last updated in SIOCS.
lineItems	NA	object	A collection of line items on the fulfillment order

Table 4-430 FulfillmentOrderLineItemIdo— Object

Element Name	Required	Data Type/ Example	Description
lineId	NA	number($int12) example: 333444	The unique identifier of the line item.
itemId	NA	string($text25) example: 55001234	The SKU level item identifier.
substituteLineId	NA	number($int12) example: 5600043	The identifier of a line item that this item has been substituted for.
lineNumber	NA	number($int10) example: 2	The line number of the fulfillment order this item is fulfilling.

Table 4-430 (Cont.) FulfillmentOrderLineItemIdo— Object

Element Name	Required	Data Type/ Example	Description
preferredUom	NA	string($text4) example: KG	The preferred unit of measure the item quantities should be processed or displayed in.
comments	NA	string($text2000) example: Item packaging slightly damaged.	Comments from an external system associated to this item.
quantityOrdered	NA	number($decimal(12,4)) example: 10	The quantity ordered on this line item.
quantityPicked	NA	number($decimal(12,4)) example: 6	The quantity picked for this line item.
quantityDelivered	NA	number($decimal(12,4)) example: 2	The quantity delivered to date on this line item.
quantityCanceled	NA	number($decimal(12,4)) example: 2	The quantity canceled on this line item.
quantityReserved	NA	number($decimal(12,4)) example: 8	The quantity reserved for this line item.
allowSubstitution	NA	boolean example: true	True indicates a substitution is allowed for this item, false indicates it is not.
price	NA	number($decimal(20,4)) example: 4500674	The amount of the price of the item.
priceCurrency	NA	string($text3) example: USD	The currency of the price of the item.
createDate	NA	string($date-time)	The date the order item was created in SIOCS.

Table 4-430 (Cont.) FulfillmentOrderLineItemIdo— Object

Element Name	Required	Data Type/ Example	Description
updateDate	NA	string($date-time)	The date the order item was last updated in SIOCS.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Import Fulfillment Order

This section describes the Import Fulfillment Order API. This service operation takes a request to import a collection of new fulfillment orders. All orders passed in must be new orders. The sent will be processed asynchronously. A notification of accepted or rejected status will be published out after the processing is finished to a fulfillment order status service. Duplicate fulfillment orders in a single access will immediately return a bad request error. Duplicate fulfillment orders seperated into different requests will cause the second or later orders to be rejected at a later time with a duplicate order error.

Method

```
POST
```

URL

```
/fulfillmentorders/import
```

Request Parameters

There are no request parameters.

The request body is application/json.

Details about the fulfillment orders to import.

Example Value

```
{
  "fulfillmentOrders": [
    {
      "customerOrderId": "222345666",
      "fulfillmentOrderId": "76544400",
```

```
      "storeId": 1234,
      "customerId": "JXA244443",
      "deliveryType": 1,
      "deliveryDate": "2025-01-15T13:25:05.331Z",
      "carrierId": 4500674,
      "carrierServiceId": 4500674,
      "allowPartialDelivery": true,
      "deliveryCharge": 4500674,
      "deliveryChargeCurrency": "USD",
      "holdLocation": "Pickup Desk",
      "orderComments": "Customer will arrive by 2pm.",
      "lineItems": [
        {
          "itemId": "55001234",
          "lineNumber": 2,
          "preferredUom": "KG",
          "comments": "Item packaging slightly damaged.",
          "quantityOrdered": 10,
          "allowSubstitution": true,
          "price": 4500674,
          "priceCurrency": "USD"
        }
      ]
    }
  ]
}
```


Schema — FulfillmentOrderImportListIdo

Table 4-431 FulfillmentOrderImportListIdo — Object

Element Name	Required	Data Type/ Example	Description
fulfillmentOrders	yes	object	A collection of fulfillment orders to import

FulfillmentOrderImportIdo{Jump to path

Table 4-432 FulfillmentOrderImportIdo — Object

Element Name	Required	Data Type/ Example	Description
customerOrderId	yes	string($text128) example: 222345666	The customer order number (from the external ordering system). The combination of customer order number and fulfillment order number will determine if the order is treated a new or existing.
fulfillmentOrderId	NA	string($text128) example: 76544400	The fulfillment order number (from the external ordering system). The combination of customer order number and fulfillment order number will determine if the order is treated a new or existing.
storeId	yes	number($int10) example: 1234	The identifier of the store at which this order will be fulfilled. This value is required but will be ignored if the order already exists.

Table 4-432 (Cont.) FulfillmentOrderImportIdo — Object

Element Name	Required	Data Type/ Example	Description
customerId	yes	string($text14) example: JXA244443	The identifier of the customer for this fulfillment order. The value is required but will be ignored if the order already exists.
deliveryType	yes	integer($int4) example: 1	The delivery type of the fulfillment order. This value is required but will be ignored if the order already exists. Valid values are: 1 - Customer Pickup 2 - Ship To Store Enum: [1, 2]
deliveryDate	NA	string($date-time)	The date in which the order is to be delivered. This value will be ignored if the order already exists.
carrierId	NA	integer($int10) example: 4500674	The identifier of the carrier who will deliver the order. This value will be ignored if the order already exists.
carrierServiceId	NA	integer($int10) example: 4500674	The identifier of the carrier service used for the delivery. This value will be ignored if the order already exists.
allowPartialDelivery	NA	boolean example: true	True indicates delivery can occur without all items being available and ready. False indicates all items must be shipped in the delivery. This value will be ignored if the order already exists.
deliveryCharge	NA	number($decimal(12,4)) example: 4500674	The cost of shipment of this order. This value will be ignored if the order already exists.
deliveryChargeCurrency	NA	string($text3) example: USD	The currency of the delivery charge value. This value will be ignored if the order already exists.
holdLocation	NA	string($text128) example: Pickup Desk	Description of where the order is being held for pickup or delivery.
orderComments	NA	string($text2000) example: Customer will arrive by 2pm.	Comments entered in the external system for the order.
lineItems	yes	object	A collection of line items on the fulfillment order.

Table 4-433 FulfillmentOrderImporLineItemtIdo — Object

Element Name	Required	Data Type/ Example	Description
itemId	yes	string($text25) example: 55001234	The SKU level item identifier.

Table 4-433 (Cont.) FulfillmentOrderImporLineItemtIdo — Object

Element Name	Required	Data Type/ Example	Description
lineNumber	NA	number($int10) example: 2	The line number of the fulfillment order this item is fulfilling.
preferredUom	NA	string($text4) example: KG	The preferred unit of measure the item quantities should be processed or displayed in.
comments	NA	string($text2000) example: Item packaging slightly damaged.	Comments from an external system associated to this item.
quantityOrdered	yes	number($decimal(12,4)) example: 10	The quantity ordered on this line itemm.
allowSubstitution	NA	boolean example: true	True indicates a substitution is allowed for this item, false indicates it is not.
price	NA	number($decimal(20,4)) example: 4500674	The amount of the price of the item.
priceCurrency	NA	string($text3) example: USD	The currency of the price of the item.

Responses

This section describes the responses of the Import Fulfillment Order API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Pickup Fulfillment Order

This section describes the Pickup Fulfillment Order API. This service will update an order to indicate a customer is arriving (or has arrived) to pickup the order.

Method

`POST`

URL

```
/fulfillmentorders/pickup
```

Request Parameters

There are no request parameters.

The request body is application/json.

Details about the fulfillment order for pickup.

Example Value

```
{
  "customerOrderId": "222345666",
  "fulfillmentOrderId": "76544400",
  "storeId": 1234,
  "deliveryComments1": "First line.",
  "deliveryComments2": "Second line.",
  "deliveryComments3": "Third line.",
  "customerArrivalDate": "2025-01-15T14:20:01.431Z"
}
```

Schema — FulfillmentOrderPickupIdo

Table 4-434 FulfillmentOrderPickupIdo — Object

Element Name	Required	Data Type/ Example	Description
customerOrderId	Yes	string($text128) example: 222345666	The customer order number (from the external ordering system).
fulfillmentOrderId	NA	string($text128) example: 76544400	The fulfillment order number (from the external ordering system).
storeId	Yes	number($int10) example: 1234	The identifier of the store at which this order will be fulfilled.
deliveryComments1	NA	string($text128) example: First line.	The first line of delivery comments.
deliveryComments2	NA	string($text128) example: Second line.	The second line of delivery comments.
deliveryComments3	NA	string($text128) example: Third line.	The third line of delivery comments.

Table 4-434 (Cont.) FulfillmentOrderPickupIdo — Object

Element Name	Required	Data Type/ Example	Description
customerArrivalDate	Yes	string($date-time)	The date that the customer arrived for pickup.

Responses

This section describes the responses of the Pickup Fulfillment Order API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Reject Fulfillment Order

This section describes the Reject Fulfillment Order API. This will cause the store to reject the fulfillment order specified notifying external systems that the fulfillment order has been rejected.

Method

```
POST
```

URL

```
/fulfillmentorders/reject
```

Request Parameters

There are no request parameters.

The request body is application/json.

Details about the fulfillment order to reject.

Example Value

```
{
  "customerOrderId": "222345666",
  "fulfillmentOrderId": "76544400",
  "storeId": 1234
}
```

Schema — FulfillmentOrderRejectIdo

Table 4-435 FulfillmentOrderRejectIdo— Object

Element Name	Required	Data Type/ Example	Description
customerOrderId	Yes	string($text128) example: 222345666	The customer order number (from the external ordering system).
fulfillmentOrderId	NA	string($text128) example: 76544400	The fulfillment order number (from the external ordering system).
storeId	Yes	number($int10) example: 1234	The identifier of the store at which this order will be fulfilled.

Responses

This section describes the responses of the Reject Fulfillment Order API.

Response Code: 204

No content

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Cancel Fulfillment Order

This section describes the Cancel Fulfillment Order API. This API will cancel all remaining ordered quantities on the fulfillment order.

Method

```
POST
```

URL

```
/fulfillmentorders/cancel
```

Request Parameters

There are no request parameters.

The request body is application/json.

Details about the fulfillment order to cancel.

Example Value

```
{
  "customerOrderId": "222345666",
  "fulfillmentOrderId": "76544400",
  "storeId": 1234
}
```

Schema — FulfillmentOrderCancelIdo

Table 4-436 FulfillmentOrderCancelIdo— Object

Element Name	Required	Data Type/ Example	Description
customerOrderId	Yes	string($text128) example: 222345666	The customer order number (from the external ordering system).
fulfillmentOrderId	NA	string($text128) example: 76544400	The fulfillment order number (from the external ordering system).
storeId	Yes	number($int10) example: 1234	The identifier of the store at which this order will be fulfilled.

Responses

This section describes the responses of the Read Fulfillment Order API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "customerOrderId": "222345666",
    "fulfillmentOrderId": "76544400",
    "storeId": 1234,
    "lineItems": [
      {
        "itemId": "55001234",
        "lineNumber": 2,
        "preferredUom": "KG",
        "standardUom": "KG",
        "quantityCanceled": 2
      }
    ]
  }
]
```


Schema — FulfillmentOrderCancelStatusIdo

Table 4-437 FulfillmentOrderCancelStatusIdo— Object

Element Name	Required	Data Type/ Example	Description
customerOrderId	NA	string($text128) example: 222345666	The customer order number (from the external ordering system).
fulfillmentOrderId	NA	string($text128) example: 76544400	The fulfillment order number (from the external ordering system).
storeId	NA	number($int10) example: 1234	The identifier of the store at which this order will be fulfilled.
lineItems	NA	object	A collection of line items with the quantities that were cancelled.

Table 4-438 FulfillmentOrderCancelStatusItemIdo— Object

Element Name	Required	Data Type/ Example	Description
itemId	NA	string($text25) example: 55001234	The SKU level item identifier.
lineNumber	NA	number($int10) example: 2	The line number of the fulfillment order this item is fulfilling.

Table 4-438 (Cont.) FulfillmentOrderCancelStatusItemIdo— Object

Element Name	Required	Data Type/ Example	Description
preferredUom	NA	string($text4) example: KG	The preferred unit of measure the item quantities should be processed or displayed in.
standardUom	NA	string($text4) example: KG	The standard unit of measure for the item.
quantityCanceled	NA	number($decimal(12,4)) example: 2	The quantity canceled on this line itemm.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

Cancel Fulfillment Order Quantities

This section describes the Cancel Fulfillment Order Quantities API. This API will cancel quantities on specific line items of a fulfillment order.

Method

```
POST
```

URL

```
/fulfillmentorders/cancelitems
```

Request Parameters

There are no request parameters.

The request body is application/json.

Details about the fulfillment order items to cancel.

Example Value

```
{
  "customerOrderId": "222345666",
  "fulfillmentOrderId": "76544400",
  "storeId": 1234,
```

```
  "lineItems": [
    {
      "itemId": "55001234",
      "lineNumber": 2,
      "preferredUom": "KG",
      "standardUom": "KG",
      "quantityCanceled": 2
    }
  ]
}
```

Schema — FulfillmentOrderItemCancelIdo

Table 4-439 FulfillmentOrderItemCancelIdo— Object

Element Name	Required	Data Type/ Example	Description
customerOrderId	Yes	string($text128) example: 222345666	The customer order number (from the external ordering system).
fulfillmentOrderId	NA	string($text128) example: 76544400	The fulfillment order number (from the external ordering system).
storeId	Yes	number($int10) example: 1234	The identifier of the store at which this order will be fulfilled.
lineItems	NA	object	A collection of line items with the quantities that were cancelled.

Table 4-440 FulfillmentOrderItemCancelLineIdo— Object

Element Name	Required	Data Type/ Example	Description
itemId	Yes	string($text25) example: 55001234	The SKU level item identifier.
lineNumber	NA	number($int10) example: 2	The line number of the fulfillment order this item is fulfilling.
preferredUom	NA	string($text4) example: KG	The preferred unit of measure the item quantities should be processed or displayed in.
standardUom	NA	string($text4) example: KG	The standard unit of measure for the item.
quantityCanceled	Yes	number($decimal(12,4)) example: 2	The quantity canceled on this line itemm.

Responses

This section describes the responses of the Cancel Fulfillment Order Quantities API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "customerOrderId": "222345666",
    "fulfillmentOrderId": "76544400",
    "storeId": 1234,
    "lineItems": [
      {
        "itemId": "55001234",
        "lineNumber": 2,
        "preferredUom": "KG",
        "standardUom": "KG",
        "quantityCanceled": 2
      }
    ]
  }
]
```


Schema — FulfillmentOrderCancelStatusIdo

Table 4-441 FulfillmentOrderCancelStatusIdo— Object

Element Name	Required	Data Type/ Example	Description
customerOrderId	NA	string($text128) example: 222345666	The customer order number (from the external ordering system).
fulfillmentOrderId	NA	string($text128) example: 76544400	The fulfillment order number (from the external ordering system).
storeId	NA	number($int10) example: 1234	The identifier of the store at which this order will be fulfilled.
lineItems	NA	object	A collection of line items with the quantities that were cancelled.

Table 4-442 FulfillmentOrderCancelStatusItemIdo— Object

Element Name	Required	Data Type/ Example	Description
itemId	NA	string($text25) example: 55001234	The SKU level item identifier.

Table 4-442 (Cont.) FulfillmentOrderCancelStatusItemIdo— Object

Element Name	Required	Data Type/ Example	Description
lineNumber	NA	number($int10) example: 2	The line number of the fulfillment order this item is fulfilling.
preferredUom	NA	string($text4) example: KG	The preferred unit of measure the item quantities should be processed or displayed in.
standardUom	NA	string($text4) example: KG	The standard unit of measure for the item.
quantityCanceled	NA	number($decimal(12,4)) example: 2	The quantity canceled on this line itemm.

Response Code: 400

Bad request

The media type is application/json.

See the JSON Error Element and Error Codes section.

5
Sales Integration

EICS integrates with POS systems and Sales Audit systems to ensure that the inventory positions are accurate. This is especially important where accurate up-to-date inventory positions are required to reduce customer disappointment when trying to locate items that appear in inventory or delays in filling customer orders.

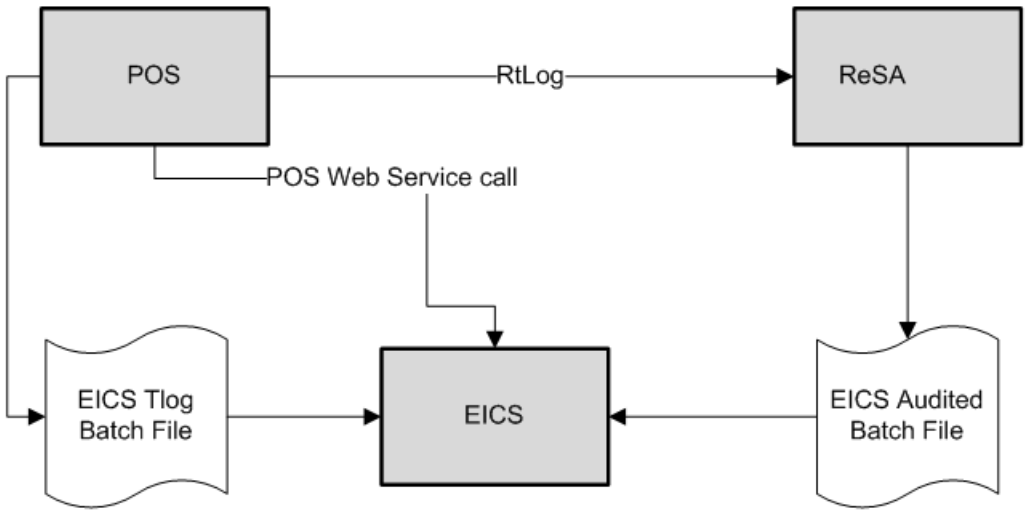
POS is the primary source of sales, returns, void, and some customer order transaction information to EICS.

ReSA sends only modified or new POS transaction records to EICS.

POS systems integrated with EICS can do the transaction notifications using a web service.

Sales Audit systems can only communicate through a file import process.

Figure 5-1 POS and Sales Audit Integration



The following features are part of this integration:

- Real-time web service integration
- Batch integration
- Audited sales data integration
- Automatic disposition processing for returns

Batch processing and ReSA processing are discussed elsewhere as are the store and system configurations that might determine how the sale is processes.

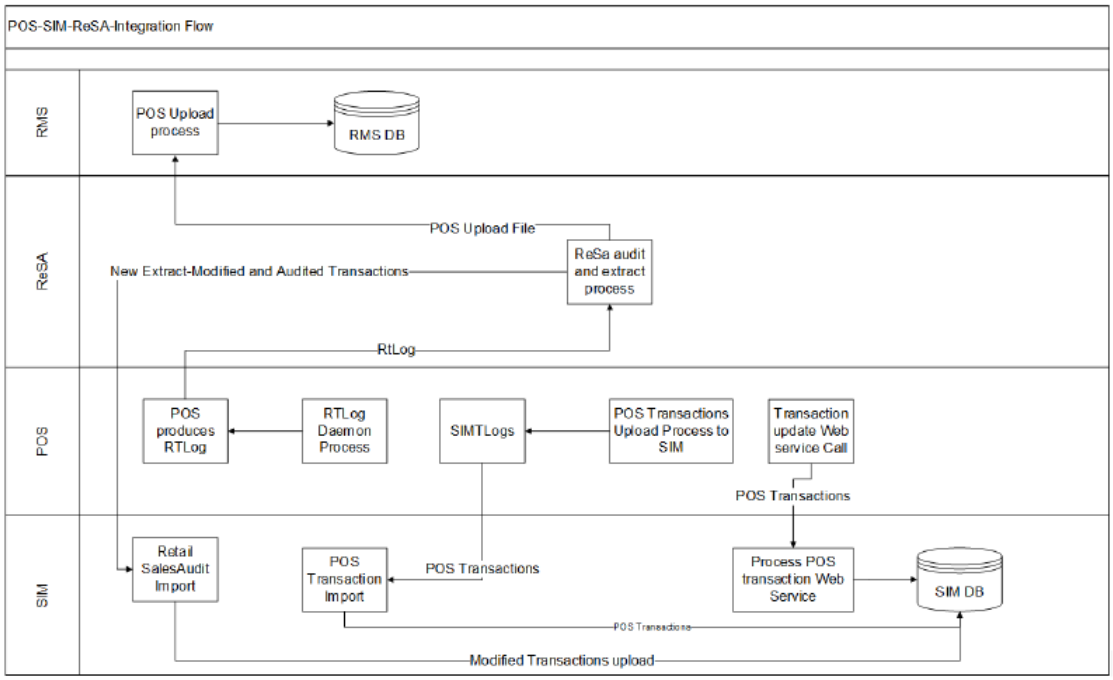
POS and Sales Audit Process Flow

The following figure shows how a POS, Retail Sales Audit, and EICS are integrated. A POS generates an RTLog containing all the POS transactions and sends it to the Oracle Retail Sales Audit system (ReSA). ReSA sends the audited modified or new transactions to EICS. ReSA also sends the POS transaction upload file to merchandising to update inventory.

Please note that Oracle Retail Xstore is interfaced with EICS to update the inventory transactions near real time only through web service. It does not use batch.

Non-Oracle POS systems can use a batch to import transactions directly into EICS. EICS also processes the POS transactions that have been changed or entered into the sales audit system and updates the inventory based on the delta.

Figure 5-2 POS and Sales Audit Process Flow



There are two reasons for POS to send sales data directly to EICS and not to the auditing system:

- Real-time inventory updates to support Commerce Anywhere are critical. A possible round trip from POS to ReSA to EICS takes too long in the dynamic inventory environment of today.
- POS is the application that owns sales data and ReSA owns audited data. Architecturally, it makes more sense to have data supplied by the owner of that data. POS sends sales data and ReSA sends audit changes to EICS.

Sales and Return Processing

As part of the sales processing, EICS updates the inventory depending on the nature of the transaction. The following are the supported transaction types for the sales processing: Sale,

Return, and Post Void of these transactions. The audit system should not modify the post void transactions. A change to a void is not supported by EICS.

Customer Order Processing

In EICS, the Retail Sales Audit import process, POS Transaction import process, and POS Transaction web service process support the following types of customer orders.

- For layaway and on hold, EICS supports create, update, cancel, and pickup/delivery. For external web order type, only pickup transactions performed in POS are sent to EICS.
- Pickup transactions, both in-store and external, cannot be voided or modified by sales audit and if these transactions are modified by sales audit system, EICS just drops the transaction and does not process.

> **Note:**
>
> Current Xstore functionality is limited to only layaway and on hold orders. Web order processing is not supported in this release.

Item Disposition

POS can move inventory for return and post void transactions to 'unavailable' or 'out of stock'. This is especially useful in some environments where items returned must be disposed of or must be reprocessed.

The external sale transaction coming into EICS may include a reason code that is mapped to the inventory adjustment reason codes in EICS. Point of Service maps the EICS reason codes, and the reason codes are sent to EICS in the web service or file extract for the return and post void transactions. EICS first processes the return or post void and updates stock on hand. Next, if the reason code exists, EICS checks this reason code with the one in inventory adjustment reason code table. If a valid match is found, EICS generates an inventory adjustment to notify external systems and execute the disposition instructions tied to the inventory adjustment reason code. Based on the disposition mapped to the reason code, EICS moves the returned inventory to not for sale or out of stock and updates the history trail. If sub-buckets are used, they are also updated if the movement is to not for sale.

If the reason code received is invalid/not present/mapped incorrectly, the system writes an error log and continues to process the stock on hand part of the transaction.

Drop Ship

When the sales records indicate the record is a drop ship, EICS does not perform any processing of this record since the drop ship process implies the inventory is shipped from a third-party location and not from the store.

Item Types

EICS only processes SKU or UPC numbers. GS1 databars, or any other smart barcodes such as VPLUs or Type-E barcodes, should have been extracted to their SKU or UPC number by the POS system.

In addition, EICS only updates inventory for stock holding items. Non-inventory items do not update any stock on hand and are not processed.

Items with the store pack inventory indicator turned off are automatically broken down and the inventory of the component items is updated.

RFID

If the point-of-sale record for an item includes an RFID tag, the tag will be moved to a SOLD status indicating it should be out-of-store.

6

Outbound Integration

This chapter provides information about the following outbound integration processes:

Integration with Customer Order System

Integration with Manifesting Systems

Integration for Notifications

Integration for Sales Forecast

Integration for Store Order

Integration for Ticket Printing

Integration with Customer Order System

CustomerOrderAddressService

When shipping to customer during the fulfillment order workflow, EICS retrieves the address for the order delivery from an external order managements system. When viewing delivery address information within the client application, it also retrieves it from an external system. The web service is defined to connect to an OrderManagementService.

Service Operation	Description
queryCustomerOrderAddress	Retrieves detailed address information for the order and customer information passed to it.

CustomerOrderService

This service connects to OrderManagementService to manage customer orders. It includes operations to create a customer order, query for customer orders, pickup/cancel items from a customer order and return items from customer orders.

Service Operation	Description
requestNewCustomerOrderId	Requests new customer order Id.
cancelNewCustomerOrderId	Cancels the new customer order id.
createCustomerOrder	Creates customer order.
queryCustomerOrder	Queries the customer order present in the system.
PickupCustomerOrderItems	Pickup items from the customer order.
ReturnCustomerOrderItems	Returns items from the customer order.
UpdateReceipt	Updates the receipt of customer order.

REST Service: Fulfillment Order Address (External)

This service must be implemented by an external system that will provide the customer address for a particular customer order. SIOCS does not store customer information and retrieves it from this exteranl endpoint just prior to shipping.

Order Address

This section describes the Order Address API. This API retrieve the address of the customer for a particular order.

Method

```
POST
```

URL

```
/orderaddress
```

Request Parameters

There are no request parameters.

The request body is application/json.

Details about the order and customer in order to retrieve the proper address.

Example Value

```
{
  "customerOrderNo": "111222333",
  "fulfillmentOrderNo": "444555666",
  "storeId": 5000
}
```

Schema — FulfillmentOrderAddressCriticalExtIdo

Table 6-1 FulfillmentOrderAddressCriticalExtIdo— Object

Element Name	Required	Data Type/ Example	Description
customerOrderNo	NA	string($text128) example: 111222333	The customer order number.
fulfillmentOrderNo	NA	string($text128) example: 444555666	The fulfillment order number.
storeId	NA	number($int10) example: 5000	The identifier of the store that will fulfill the order.

Responses

This section describes the responses of the Order Address API.

Response Code: 200

The request has been successful.

The media type is application/json.

Example Value


```
[
  {
    "billingAddress1": "Box 110",
    "billingAddress2": "Apartment Block 2534",
    "billingAddress3": "4th Avenue North",
    "billingCity": "Blaketon",
    "billingState": "MN",
    "billingCountryCode": "USA",
    "billingCounty": "Bernard",
    "billingCompanyName": "Holdings Consolidated",
    "billingEmailAddress": "janice.smith@email.com",
    "billingFirstName": "Janice",
    "billingLastName": "Smith",
    "billingPhoneNumber": "555-765-2452",
    "billingPhoneticFirst": "jan-iss",
    "billingPhoneticLast": "Smith",
    "billingPostalCode": "55555",
    "customerNumber": "A123B44",
    "deliveryAddress1": "Box 110",
    "deliveryAddress2": "Apartment Block 2534",
    "deliveryAddress3": "4th Avenue North",
    "deliveryCity": "Blaketon",
    "deliveryState": "MN",
    "deliveryCountryCode": "USA",
    "deliveryCounty": "Bernard",
    "deliveryPostalCode": "55555",
    "deliveryCompanyName": "Holdings Consolidated",
    "deliveryEmailAddress": "janice.smith@email.com",
    "deliveryFirstName": "Janice",
    "deliveryLastName": "Smith",
    "deliveryPhoneNumber": "555-765-2452",
    "deliveryPhoneticFirst": "jan-iss",
    "deliveryPhoneticLast": "smith",
    "deliveryPreferredName": "Jan"
  }
]
```


Schema — FulfillmentOrderAddressExtIdo

Table 6-2 FulfillmentOrderAddressExtIdo— Object

Element Name	Required	Data Type/ Example	Description
billingAddress1	NA	string($text240) example: Box 110	The first billing address line.
billingAddress2	NA	string($text240) example: Apartment Block 2534	The second billing address line.
billingAddress3	NA	string($text240) example: 4th Avenue North	The third billing address line.
billingCity	NA	string($text120) example: Blaketon	The billing address city name.
billingState	NA	string($text3) example: MN	The billing address state code.
billingCountryCode	NA	string($text3) example: USA	The billing address country code.
billingCounty	NA	string($text250) example: Bernard	The billing address county name.
billingCompanyName	NA	string($text120) example: Holdings Consolidated	The billing address company name.
billingEmailAddress	NA	string($text100) example: janice.smith@email.com	The billing contact email address.
billingFirstName	NA	string($text120) example: Janice	The billing contact first name.
billingLastName	NA	string($text120) example: Smith	The billing contact last name.
billingPhoneNumber	NA	string($text20) example: 555-765-2452	The billing contact phone number.
billingPhoneticFirst	NA	string($text120) example: jan-iss	The billing contact phonetic spelling of first name.
billingPhoneticLast	NA	string($text120) example: Smith	The billing contact phonetic spell of last name.
billingPostalCode	NA	string($text30) example: 55555	The billing address postal code.

Table 6-2 (Cont.) FulfillmentOrderAddressExtIdo— Object

Element Name	Required	Data Type/ Example	Description
customerNumber	NA	string($text140) example: A123B44	The customer number of the customer who placed the order.
deliveryAddress1	NA	string($text240) example: Box 110	The first delivery address line.
deliveryAddress2	NA	string($text240) example: Apartment Block 2534	The second delivery address line.
deliveryAddress3	NA	string($text240) example: 4th Avenue North	The third delivery address line.
deliveryCity	NA	string($text120) example: Blaketon	The delivery address city name.
deliveryState	NA	string($text3) example: MN	The delivery address state code.
deliveryCountryCode	NA	string($text3) example: USA	The delivery address country code.
deliveryCounty	NA	string($text250) example: Bernard	The delivery address county name.
deliveryPostalCode	NA	string($text30) example: 55555	The delivery address postal code.
deliveryCompanyName	NA	string($text120) example: Holdings Consolidated	The company name at the delivery address.
deliveryEmailAddress	NA	string($text100) example: janice.smith@email.com	The email address of the delivery contact.
deliveryFirstName	NA	string($text120) example: Janice	The first name of the delivery contact.
deliveryLastName	NA	string($text120) example: Smith	The last name of the delivery contact.
deliveryPhoneNumber	NA	string($text20) example: 555-765-2452	The phone number of the delivery contact.
deliveryPhoneticFirst	NA	string($text120) example: jan-iss	The phonetic spelling of the first name of the delivery contact.

Table 6-2 (Cont.) FulfillmentOrderAddressExtIdo— Object

Element Name	Required	Data Type/ Example	Description
deliveryPhoneticLast	NA	string($text120) example: smith	The phonetic spelling of the last name of the delivery contact.
deliveryPreferredName	NA	string($text120) example: Jan	The preferred name of the delivery contact.

Integration with Manifesting Systems

In order for access to an external manifesting system to take place, the customer must first setup Carrier Type as "Third Party" and the Carrier Service (Manifest Type) must be Parcel (P). Configuration controls whether manifesting is done for a transfer to store, finisher, or warehouse. In addition, configuration controls manifesting for a return to vendor shipment or a customer order delivery.

Carrier services with manifest type of "O" (Other) and "H" (Home Fleet) do not go through the manifesting system. When Manifest Type is "O," EICS prompts the user to enter the carrier address where the shipment is to be sent for fulfillment. Manifest Type of "H" is within the company and therefore, does not prompt the user for an address.

Some carriers require weight, dimension, or both values to be sent in the manifest payload. If so, the carrier's service should have either the weight indicator or carton dimension indicate set to active (or both) during their carrier service setup.

EICS supplies an outbound and inbound Shipment Manifest SOAP web service. The following are supported service operations:

A web service is used to send all the shipment information to the external manifesting system and also to receive close shipment requests from external systems.

A web service accepts requests from external systems to close shipments. It is used to find those "Submitted" shipments for the provided tracking ID, carrier, service and date, and dispatch those shipments.

> **Note:**
>
> EICS supplies a WSDL and XSD that defines the web service, operation, and data content. This web service will need to be implemented either for the manifesting system or a plug-in set up.

ShipmentManifestService

This web service notifies an external manifesting system that a manifest needs to be created.

Service Operation	Description
createManifest	Requests the external manifesting system to create a new parcel manifest for an input transaction.

StoreShipmentManifestService

This web service receives a message from an external manifesting system that the items on the manifest have been picked up.

Service Operation	Description
closeManifest	Instructs EICS that submitted shipments have been picked up by the carrier.

Integration for Notifications

StoreExtNotificationService

When store order with external ID is approved, EICS sends notification to the external system.

This service is applicable only for externally created store orders.

Service Operation	Description
createNotification	Sends notification to external system on approving the externally created store orders with its items information.

Integration for Sales Forecast

SalesForecastService

EICS may retrieves item sales forecasting information from a third-party sales forecasting system.

Service Operation	Description
retrieveSalesForecast	Retrieves sales forecast data for the next 30 days for a particular item and store.

Integration for Store Order

OrderApproveNotificationService

When store order is approved, EICS sends notification to a third-party item management system.

This notification will be sent out for store orders that are created manually or system generated.

It is not applicable to store orders created by external system.

Service Operation	Description
orderRequestApproved	Sends notification to external item management system that the order request is approved.

StoreExtNotificationService

When store order with external ID is approved, EICS sends notification to the external system.

This service is applicable only for externally created store orders.

Service Operation	Description
createNotification	Sends notification to external system on approving the externally created store orders with its items information.

Integration for Ticket Printing

When printing tickets, EICS sends ticket information to an external system for printing. This web service needs to be implemented for printing tickets to a physical printer. In the JET administration screen for configuration external service, this endpoint can be configured to connect to either a SOAP or a REST service implemntation.

SOAP Ticket Printing

The details of the SOAP ticket printing endpoint is captured in the associated web service WSDL.

TicketPrintService

Service Operation	Description
printTickets	Sends item tickets to an external system to be printed. It must be implemented by the external system to receive the tickets.

REST Service: Ticket Printing

This web service defines an endpoint that can be developed by a third party in order to allow EICS to send item ticket printing information to an end system service that handles ticket printing.

The endpoint inputs and outputs must be adhered to by the provider.

API Publish Tickets

This API receives ticket printing information from EICS.

API Basics

Endpoint URL	{base URL}
Method	POST
Success Response	200 OK
Input	Input Print Request For Store and Printer
Output	None

Input Data Definition (Ticket Print Request)

Payload	Type	Definition
storeId	Long(10)	The identifier of the store.
printerName	String(200)	The name of the printer.
printerAddress	String(300)	The URI (or network address) of the printer.
printerId	String(5)	The identifier of the printer.
formatType	Integer(4)	The type of ticket format to print. See Index
formatReference	String(255)	A reference to the format content to use.
templateId	Long(12)	The identifier of a template to use to print the tickets.
zplContent	**String(3500)**	**The content of the ZPL print template.**
tickets	List<Tickets>	A collection of tickets to print.

Tickets

Payload	Type	Definition
ticketId	Long(12)	The identifier of the ticket.
itemId	String(25)	The identifier of the item/sku.
primaryUpc	Strin(25)	The primary Unique Produce Code for the item.
originType	Integer	The origin of the ticket.
sequenceNumber	Integer(3)	The sequence number of the ticket within its grouping.
ticketCount	Integer(3)	The number of instances of this ticket to print.
printQuantity	BigDecimal(12,4)	The quantity to be printed on each ticket.
shortDescription	String(255)	A short description for the item.
longDescription	String(400)	A long description for the item.
shortDescriptionLang	String(255)	A short descripton for the item at the store.
longDescriptionLang	String(400)	A long descripton for the item at the store.
diffType1	String(255)	The description of the first differentiator type.
diffType2	String(255)	The description of the second differentiator type.
diffType3	String(255)	The description of the third differentiator type.
diffType4	String(255)	The description of the fourth differentiator type.
diffDescription1	String(255)	The description of the first differentiator.
diffDescription2	String(255)	The description of the second differentiator.
diffDescription3	String(255)	The description of the third differentiator.
diffDescription4	String(255)	The description of the fourth differentiator.
departmentId	Long(12)	The department identifier of the item.
departmentName	String(360)	The department name.
classId	Long(12)	The class identifier of the item.
className	String(360)	The class name.
subclassId	Long(12)	The subclass identifier of the item.
subclassName	String(360)	The subclass name.
priceCurrency	String(3)	The currency code of the ticket price.

priceValue	BigDecimal(12,4)	The value of the ticket price.
priceType	Integer(3)	The type of the ticket price. See Index.
priceUom	String(4)	The unit of measure of the ticket price.
priceActiveDate	Date	The date the ticket price became active.
priceExpireDate	Date	The date the ticket price expired.
overridePriceCurrency	String(3)	An override price currency code.
overridePriceValue	BigDecimal(20,4)	The amount of an override price.
previousPriceCurrency	String(3)	A previous price currency code.
previousPriceValue	BigDecimal(20,4)	The amount of a previous price.
previousPriceType	Integer(3)	The price type of the previous price. See Index.
lowestMonthlyPriceCurrency	String(3)	The currency code of the lowest monthly price.
lowestMontlyPriceValue	BigDecimal(20,4)	The amount of the lowest monthly price.
lowestMonthlyPriceType	Integer(3)	The price type of the lowest montly price. See Index.
multiUnitPriceCurrency	String(3)	The currency code of the multi-unit price.
multiUnitValue	BigDecimal(20,4)	The amount of the multi-unit price.
multiUnitUom	String(4)	The unit of measure of the multi-unit price.
multiUnitQuantity	BigDecimal(12,4)	The multi-unit quantity associated to the price.
countryOfManufacture	String(3)	The country code of the country of manufacture of the item.
udas	List<TicketUdaExtIdo>	A list of user defined attributes associated to the ticket.

TicketUdaExtIdo

Payload	Type	Definition
name	String(120)	The name of the user defined attribute.
value	String(250)	The value of the user defined attribute.

Additional Data Definitions

Table Format Type

ID	Origin
1	Item Ticket
2	Shelf Label

Ticket Price Type

ID	Origin

1	Permanent
2	Promotional
3	Clearance
4	Clearance Reset

Ticket Origin Type

ID	Origin
1	External
2	Price Change
3	Foundation
4	Manual
5	Promotional Price Change
6	Clearance Price Change
7	Permanent Price Change

7

File Transfer Services

This chapter covers the following topics:

- Overview
- How to Call FTS APIs
- Handling Import Data Files
- Handling Export Data Files
- File Transfer Service UI
- FTS API Specifications
- File Transfer Service Troubleshooting
- Test FTS API using Postman

Overview

Oracle Cloud Infrastructure Object Storage is an internet-scale, high-performance storage platform that offers reliable and cost-efficient data durability.

File Transfer Service (FTS) for the Store Inventory Cloud Services is available as JSON REST services. These APIs allows you to manage uploading and downloading files to Object Storage.

Access to files is through a Pre-Authenticated Request (PAR), which is a URL that requires no further authentication to upload or download to the application's object storage. To retrieve a PAR, you must use the appropriate FTS services.

The FTS APIs enables external application to import files to and export files from Object Storage used by the solutions.

These APIs provides following services:

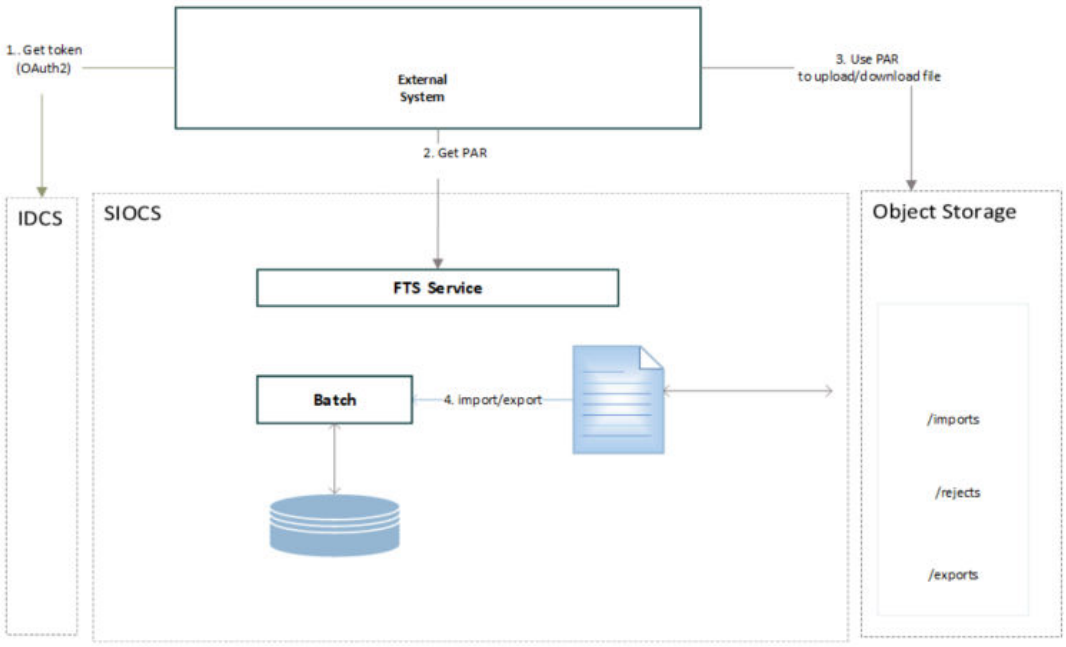
- Ping to check FTS Service health
- List storage prefixes
- List files in object storage
- Move files from object storage
- Delete Files from object storage
- Request Upload PAR
- Request Download PAR

The general process flow below describes how the external solution application interacts with FTS service for transferring files to cloud solution service:

1. The external application gets an Oauth2 token from IDCS.
2. The external application makes an FTS request with the Oauth2 token to request Pre-Authentication.

3. Once the PAR is received, the external application uploads a file to object storage using the URL included within the response.
4. The file uploads to application object storage and will be processed by the application batch jobs.

Figure 7-1 File Transfer Service Process Flow



In addition to public FTS endpoints, SIOCS also provides a File Transfer Service User Interface to view files in cloud solution object storage, to upload and download file interactively once logged into the SIOCS web client. Refer to File Transfer Service UI section for details.

How to Call FTS APIs

To interact with FTS, you must use the REST APIs provided. The endpoints URLs are relative to cloud solution integration base URL, and endpoints also include the object storage bucket name which is allocated for your environment for file services.

- Service Base URL
- FTS Bucket Name
- FTS Endpoints
- Preparing for Authorization
- Retrieving Access Client Token
- FTS API Call Common Headers
- How to Use FTS API to find Object Storage Prefixes
- How to Use FTS APIs to Upload Files to Object Storage
- How to Use FTS API to List Files in Object Storage

- How to Use FTS APIs to Download Files from Object Storage

Service Base URL

The Cloud service base URL follows the format:

https://rex.retail.<Region Name>.ocs.oraclecloud.com/<Customer Subnamespace>/siocs-int-services/api/

> **Note:**
>
> The <Region Name> and <Customer Subnamespace> part of the URL should be replaced with the one specific to your environment. This will be the same as your cloud service Application URL provided in the Welcome email.

FTS Bucket Name

For each customer environment, logical containers (buckets) are created in Object Storage for storing objects used by the cloud application. The file transfer bucket name is created and set when the environment is provisioned. The bucket name is required to move files between Oracle Cloud and your local system using file transfer services.

rgbu_rex_cnprod_<cust_env>

Example:

rgbu_rex_cnprod_rgbu-rex-custA-stg1-siocs

The ' File Transfer Service Bucket Name' is a restricted system configuration parameter on the EICS System Configuration screen. A customer Admin user (with the IDCS application role *sim_admin_users*) can perform the following steps to view the bucket name.

1. Log in to EICS web client as customer Admin user.
2. Go to **Configuration System**.
3. Check the values setting for name **File Transfer Service Bucket Name**.

FTS Endpoints

Open API documents can be viewed via the following URL:

https://{external_load_balancer}/{cust_env}/siocs-int-services/public/api/Fts.json

The table below lists the API end points for different file operations. See FTS API Specifications for details.

Table 7-1 FTS Endpoints

Service	Method	FTS Endpoint URLs
Ping	GET	{Service Base URL}/fts/ping
List Prefixes	GET	{Service Base URL}/fts/{FTS Bucket Name}/listprefixes
List Files	GET	{Service Base URL}/fts/{FTS Bucket Name}/listfiles
Move Files	POST	{Service Base URL}/fts/{FTS Bucket Name}/movefiles

Table 7-1 (Cont.) FTS Endpoints

Service	Method	FTS Endpoint URLs
Delete Files	POST	{Service Base URL}/fts/{FTS Bucket Name}/delete
Request Upload PAR	POST	{Service Base URL}/fts/{FTS Bucket Name}/upload
Request Download PAR	POST	{Service Base URL}/fts/{FTS Bucket Name}/download

> **Note:**
>
> The example in this section uses curl command line tools. You may also use Postman to test the FTS REST APIs for testing purpose. Refer to Test FTS API using Postman.

Preparing for Authorization

FTS Client Id and Client Secret

FTS APIs use OAuth2.0 for authorization.

To generate a token from IDCS, an IDCS application client will need to be created for you to use.

The Customer Administration users must create their own client credential IDCS application using the Oracle Retail Home Cloud Service. For additional details, refer to Oracle® Retail Home Administration Guide- Chapter: Oauth Application Configuration chapter – Section: Creating OAuth Client Applications.

The App name and scope that should be used for the FTS IDCS application creation should be environment specific using the format :

App Name- RGBU_SIOCS_<ENV>_EICS_FTS_INT

Scope- rgbu:siocs:integration-<ENV>

Example:

App Name- RGBU_SIOCS_STG1_ EICS_FTS_INT

Scope- rgbu:siocs:integration-STG1

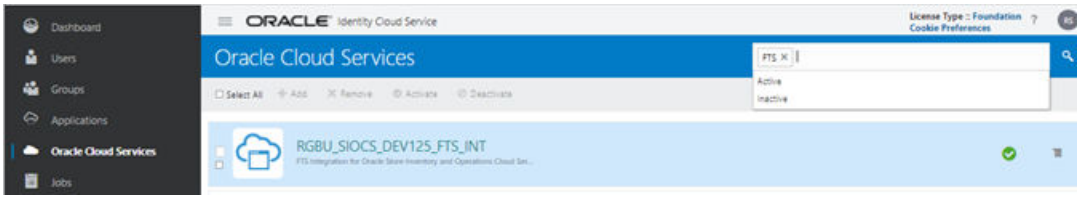
Steps to retrieve the FTS Client ID and Client Secret from IDCS:

1. Customer's IDCS Administrator log into Oracle Identity Cloud Service (IDCS) console.
2. In the left navigation panel, select **Oracle Cloud Service.**
3. On the search field, type in "FTS".
4. From the search result, find your FTS client application for cloud environment.

   FTS Client ID is like: RGBU_SIOCS_<ENV>_EICS_FTS_INT_APPID

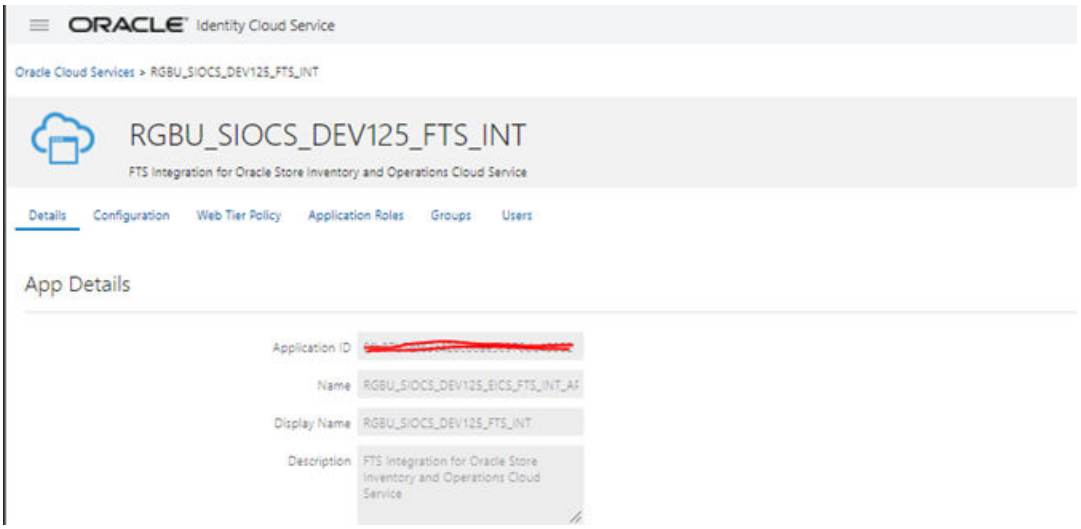
   (Example <ENV>: DEV1, STG1, PROD1 ..)

Figure 7-2 FTS Client Application



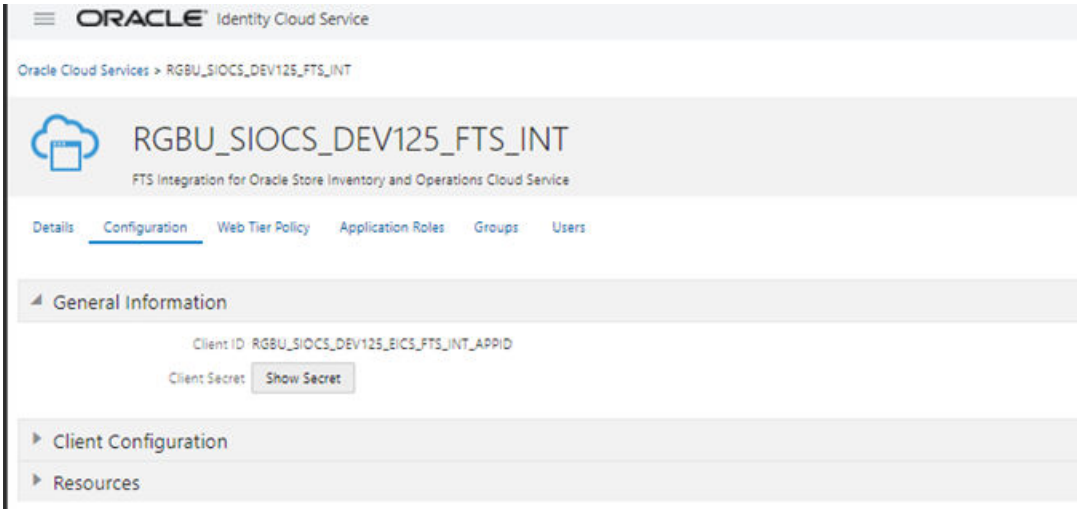
5. Click the client application, which will take you to the **Application Detail Panel**.

Figure 7-3 Application Detail Panel



6. Select the **Configuration** tab to view client Id.

Figure 7-4 Configuration Tab



7. Click **Show Secret** to see the password.

OAuth Scopes for FTS

Custom environment specific scope.

The scope pattern that is used in the FTS IDCS application creation template is rgbu:siocs:integration-{env}

For example:

rgbu:siocs:integration-STG1

IDCS OAuth2 Token URL

IDCS token URL to obtain Oauth2 token.

Example IDCS_TOKENT_URL:

https://idcs-XXXXXXXX.identity.oraclecloud.com/

Using the above URL,

IDCS_TOKENT_URL = {IDCL_BASE_URL}/oauth2/v1/token

Retrieving Access Client Token

The following is required in headers for making OAuth2.0 enabled REST Services.

- Please contact customer's IDCS administrator for FTS Client ID and Client Secret.
- An access token using the Client ID and secret from IDCS.

Example: get access Token Use Curl

```
export ACCESS_TOKEN="$(curl -u <Client ID>:<Secret> -H 'Content-Type:
application/x-www-form-urlencoded;charset=UTF-8' --request POST https://
<IDCS_BASE_URL>/oauth2/v1/token -d 'grant_type=client_credentials&scope=<Scope>'
| jq -r '.access_token')"
```

In above example, substitute the variables with proper values for your environment. See FTS Client Id and Client Secret section for obtaining Credential Client ID and Client Secret.

> **Note:**
>
> You need to have curl and jq client tool installed on your client machine for using curl for testing.

For example:

```
export ACCESS_TOKEN="$(curl -u RGBU_SIOCS_ZZZZ_EICS_FTS_INT_APPID:<secret> -H
'Content-Type: application/x-www-form-urlencoded;charset=UTF-8' --request POST
https://idcs-ZZZZ/oauth2/v1/token -d
'grant_type=client_credentials&scope=rgbu:siocs:integration-X' | jq -r
'.access_token')"
```

FTS API Call Common Headers

Each call to FTS Endpoint should contain the following Request headers:

- **Content-Type**: application/json
- **Accept**: application/json

- **Accept**: Language: en
- **Authorization**: Bearer {ACCESS_TOKEN}

Before calling FTS API, you need to get the ACCESS_TOKEN use step Retrieving Access Client Token.

How to Use FTS API to find Object Storage Prefixes

First you need to get the ACCESS_TOKEN use step Retrieving Access Client Token, then you may call the endpoint List Prefixes as below:

Sample Request:

```
curl --request GET https://rex.retail.<Region Name>.ocs.oraclecloud.com/<Customer
Subnamespace>/ /siocs-int-services/api/fts/vvvvv-siocs/listprefixes -H 'content-
type: application/json' -H 'Accept: application/json' -H 'Accept-Language: en' -H
"Authorization: Bearer ${ACCESS_TOKEN}"
```

Sample Response:

```
{"values":["archives","rejects","imports","exports"]}
```

How to Use FTS APIs to Upload Files to Object Storage

- Step1: Request upload PAR
- Step2: Use PAR to upload data files to Object Storage

Step1: Request upload PAR

First get the ACCESS_TOKEN use step Retrieving Access Client Token, then call the endpoint Request Upload PAR as below:

Sample Request:

```
curl --request POST https://rex.retail.<Region Name>.ocs.oraclecloud.com/
<Customer Subnamespace>/ /siocs-int-services/api/fts/{bucketname}/upload -H
'content-type: application/json' -H 'Accept: application/json' -H 'Accept-
Language: en' -H "Authorization: Bearer ${ACCESS_TOKEN}" -d "{\"listOfFiles\":
[{\"storagePrefix\": \"imports\",\"fileName\": \"EXTPC_1.dat\"},
{\"storagePrefix\": \"imports\",\"fileName\": \"RFID_1.dat\"}]}"
```

Sample Response:

```
{"par-List":[{"id":"zzzzzzz/:imports/
EXTPC_1.dat","name":"EXTPC_1.dat","accessUri":"https://objectstorage.us-ZZZ-
siocs/o/imports/
EXTPC_1.dat","accessType":"ObjectWrite","timeExpires":"2022-02-13T21:39:40.265Z",
"timeCreated":"2022-02-13T21:34:40.329Z","objectName":"imports/EXTPC_1.dat"},
{"id":"ZZZZ:imports/RFID_1.dat","name":"RFID_1.dat","accessUri":"https://zzzz-
siocs/o/imports/
RFID_1.dat","accessType":"ObjectWrite","timeExpires":"2022-02-13T21:39:40.411Z","
timeCreated":"2022-02-13T21:34:40.472Z","objectName":"imports/RFID_1.dat"}]}
```

Step2: Use PAR to upload data files to Object Storage

Use the accessUri returned in the get PAR response to upload the data file.

Sample Request:

```
curl https://ZZZZZ-siocs/o/imports/RFID_1.dat --upload-file C:\\temp\\RFID_1.dat
```

How to Use FTS API to List Files in Object Storage

First get the ACCESS_TOKEN using step Retrieving Access Client Token, then call the endpoint List Files as below:

Sample Request:

```
curl --request GET https://<external_load_balancer>/<cust_ env>/siocs-int-
services/api/fts//<bucketname>/listfiles?contains=RFID -H 'content-type:
application/json' -H 'Accept: application/json' -H 'Accept-Language: en' -H
"Authorization: Bearer ${ACCESS_TOKEN}"
```

Sample Response:

```
{"lim-it":999,"count":1,"offset":0,"hasMore":false,"resultSet":[{"name":"imports/
RFID_1.dat","createdDate":"2022-02-13T21:35:26Z","modifiedDate":"2022-02-13T21:35
:26Z","scanStatus":"Passed","scanDate":"2022-02-13T21:35:56.187Z","md5":"xxxx==",
"version":"xxxxx","etag":"zzzzzzz","size":75}]}
```

How to Use FTS APIs to Download Files from Object Storage

- Step1: Find what files are available for downloads
- Step2: Request Download PAR for downloading data files from Object Storage
- Step3: Download the file using the par returned from step2

Step1: Find what files are available for downloads

First get the ACCESS_TOKEN using step Retrieving Access Client Token, then call the endpoint List Files as below:

Sample Request:

```
curl --request GET https://<external_load_balancer>/<cust_ env>//siocs-int-
services/api/fts/<bucketname>/listfiles?contains=RFID -H 'content-type:
application/json' -H 'Accept: application/json' -H 'Accept-Language: en' -H
"Authorization: Bearer ${ACCESS_TOKEN}"
```

Sample Response:

```
{"lim-it":999,"count":1,"offset":0,"hasMore":false,"resultSet":[{"name":"imports/
RFID_1.dat","createdDate":"2022-02-13T21:35:26Z","modifiedDate":"2022-02-13T21:35
:26Z","scanStatus":"Passed","scanDate":"2022-02-13T21:35:56.187Z","md5":"xxxxx==",
"version":"xxxxx","etag":"ZZZZZ","size":75}]}
```

Step2: Request Download PAR for downloading data files from Object Storage

First get the ACCESS_TOKEN using step Retrieving Access Client Token, then call the endpoint Request Download PAR as below:

Sample Request:

```
curl --request POST https://ZZZZZZ-siocs/siocs-int-services/internal/fts/
rgbu_rex_cndevcorp_rgbu-rex-rgbu-dev125-siocs/download -H 'content-type:
application/json' -H 'Accept: application/json' -H 'Accept-Language: en' -H
"Authorization: Bearer ${ACCESS_TOKEN}" -d "{\"listOfFiles\":
[{\"storagePrefix\": \"imports\",\"fileName\": \"RFID_1.dat\"}]}"
```

Sample Response:


```
{"par-List":[{"id":"i91P0nFIIsgj05qrUH2ibTZ2npmbTdq1TKsGtWOerAYaE6/MYZE7840lR/
QEhaFk:imports/RFID_1.dat","name":"RFID_1.dat","accessUri":"https://
objectstorage.us-phoenix-1.oraclecloud.com/p/
ZG89KsLS_5SY7D2p7nVQt8KfJ6rLJ40FSmI97zASLRK2VrsICbvoRP0bgoQGxk3S/n/ZZZZZ-siocs/o/
imports/RFID_1.dat","accessType":"ObjectRead","timeEx-
pires":"2022-02-13T23:07:00.962Z","timeCreated":"2022-02-13T23:02:01.105Z","objec
tName":"imports/RFID_1.dat"}]}
```


Step3: Download the file using the par returned from step2

```
curl -o <destinationFileName> -X GET <PAR>
```

For example:

```
curl -o RFID_1_download.dat -X GET https://ZZZZZ-siocs/o/imports/RFID_1.dat
```

Handling Import Data Files

This section describes the general steps for an external solution application to transfer batch data files from external system to cloud application object storage.

The data to be processed can be provided as a single data file, or a zip file contains multiple data files.

The application batch imports the inbound data files from Object Storage, after the files have passed an anti-virus and malware scan. Once the files are downloaded from Object Storage, the batch process deletes the files from Object Storage to ensure it is not re-processed in next batch run. Rejected records are placed in the rejects file when applicable.

Supported Import Data Files

Table 7-2 Supported Import Data Files

File Name	Description	File Layout
Clearance File Import	The file is processed by Clearance File Import Batch. For additional details, see Batches.	Filename Format: Clearance_Tx_<YYYYMMddHHMMss>.csv See Appendix: Batch File Layout Specifications for details.
Initial Inventory Import File	The file is processed by Initial Inventory Import Batch. For additional details, see Batches.	File name prefix: EXTSTK_* See Appendix: Batch File Layout Specifications for details.

Table 7-2 (Cont.) Supported Import Data Files

File Name	Description	File Layout
Price Change File Import	The file is processed by Price Change File Import Batch. For additional details, see Batches.	Filename Format: PriceChange_Tx_<YYYYMMddHHMMss>.csv See Appendix: Batch File Layout Specifications for details.
ReSA Import File	The file is processed by Retail Sale Audit Import Batch. For additional details, see Batches.	Zip Filename Format SIMT_< YYYYMMDDHH24MISS>.zip See Appendix: Batch File Layout Specifications for details.
RFID Import File	The file is processed by Third Party RFID Import Batch. For additional details, see Batches.	Zip Filename Format RFID_<YYYYMMDDHH24MISS>.zip See Appendix: Batch File Layout Specifications for details.
Store Sequence Import	The file is processed by Store Sequence Import Batch. For additional details, see Batches.	Filename Format: SSEQ date in YYYYMMDDHH24MISS format>_<loc id>.dat See Appendix: Batch File Layout Specifications for details.
Third Party Price Import File	The file is processed by Third Party Price File Import Batch. For additional details, see Batches.	Zip Filename Format EXTPC_<YYYYMMDDHH24MISS>.zip See Appendix: Batch File Layout Specifications for details.
Third Party Stock Count Import File	The file is processed by Third Party Stock Count Import Batch. For additional details, see Batches.	Zip Filename Format STK_<YYYYMMDDHH24MISS>.zip See Appendix: Batch File Layout Specifications for details.

Upload Import Data Files to Object Storage

To upload data files to object storage, the external solution application needs to perform following steps:

1. The external application gets the Oauth2 token from IDCS.
2. The external application makes an FTS request with the Oauth2 token to requesting Pre-Authentication.
3. Once the PAR is received, the external application uploads the file to object storage using the URL included within the response.
4. Files uploaded to application object storage will be processed by cloud application batches.

Handling Export Data Files

The following describes the supported export data files which are supported by cloud application. These export data files are available for external solution applications to download.

Supported Export Data Files

Table 7-3 Supported Export Data Files

Export File Name	Description	File Name Format
Inventory Extract File	The file is generated by via Inventory export batch. For additional details, see Batches.	Filename Format: PRODUCT_LOCATION_INV_* See Appendix: Batch File Layout Specifications for details.
Stock Count Export File	The stock count export file is generated when a unit and amount stock count authorization is completed.	Zip Filename Format STK_* See Appendix: Batch File Layout Specifications for details.

Steps to Download Export Data Files from Object Storage

For retailer to download the export data files from application object storage, perform the following steps:

1. The external solution application gets the Oauth2 token from IDCS.
2. The external solution application calls the FTS service with the Oauth2 token to list the available export files in Object Storage which are generated by cloud app.
3. The external solution application calls the FTS service with the Oauth2 token, requesting Pre-Authentication to download files from object storage used by cloud app.
4. Once the PAR is received, the file is downloaded using the URL included within its response. A PAR is valid for 10 minutes. A download can take longer than 10 minutes, but it must be started within 10 minutes of the PAR being received.

File Transfer Service UI

In addition to the FTS Wrapper Service REST Services, SIOCS File Transfer Service UI provides user to upload/download a file or view a list of files in object storage.

Security Consideration to access File Transfer Service UI:

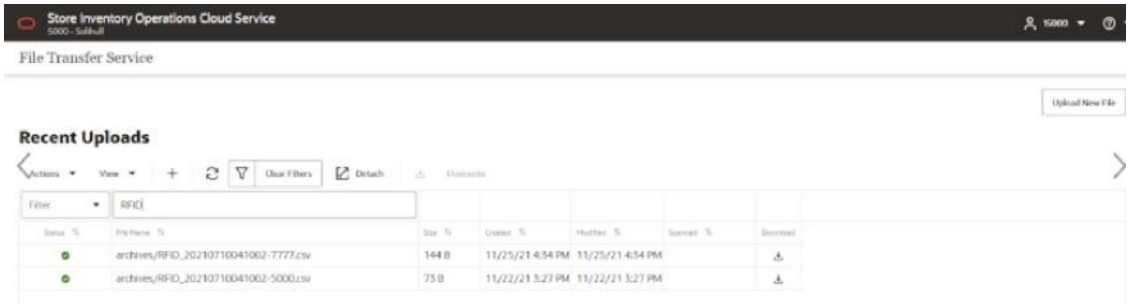
- The customer admin user should be assigned the following PSRAF groups to access the FTS JET UI

  PSRAF Users and PSRAF Admin Users

  The naming convention for the group is <EICS_IDCS_APP_DISPLAY_NAME>.psraf_users where EICS_IDCS_APP_DISPLAY_NAME is the display name of EICS app on IDCS or OCI IAM.

  The naming convention for the group is <EICS_IDCS_APP_DISPLAY_NAME>.psraf_admin_users where EICS_IDCS_APP_DISPLAY_NAME is the display name of EICS app on IDCS or OCI IAM
- Security Permission **Access File Transfer Service** must be assigned to user who needs to access the File Transfer Service UI.
- The IDCS or OCI IAM Application role **admin_users** is required for the user to perform the upload/download operations.

Figure 7-5 File Transfer Service UI

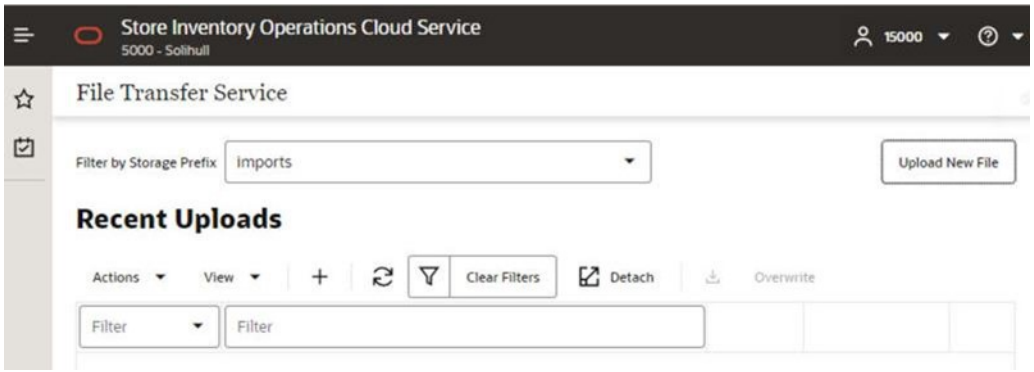


The main form lists the recently uploaded files.

Actions:

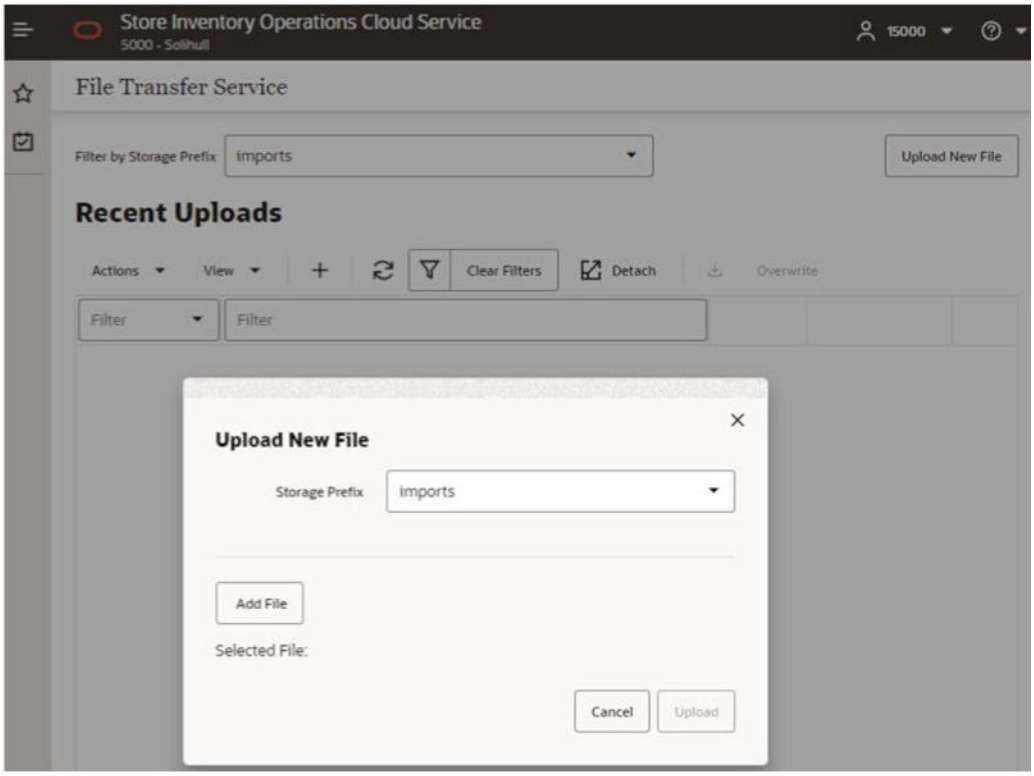
- To filter the files by store prefix, select a file storage prefix.
- To filter by file name by choosing the **Actions** choice selector on the screen.
- To upload new files, click **Upload New File** button:

Figure 7-6 Upload New File



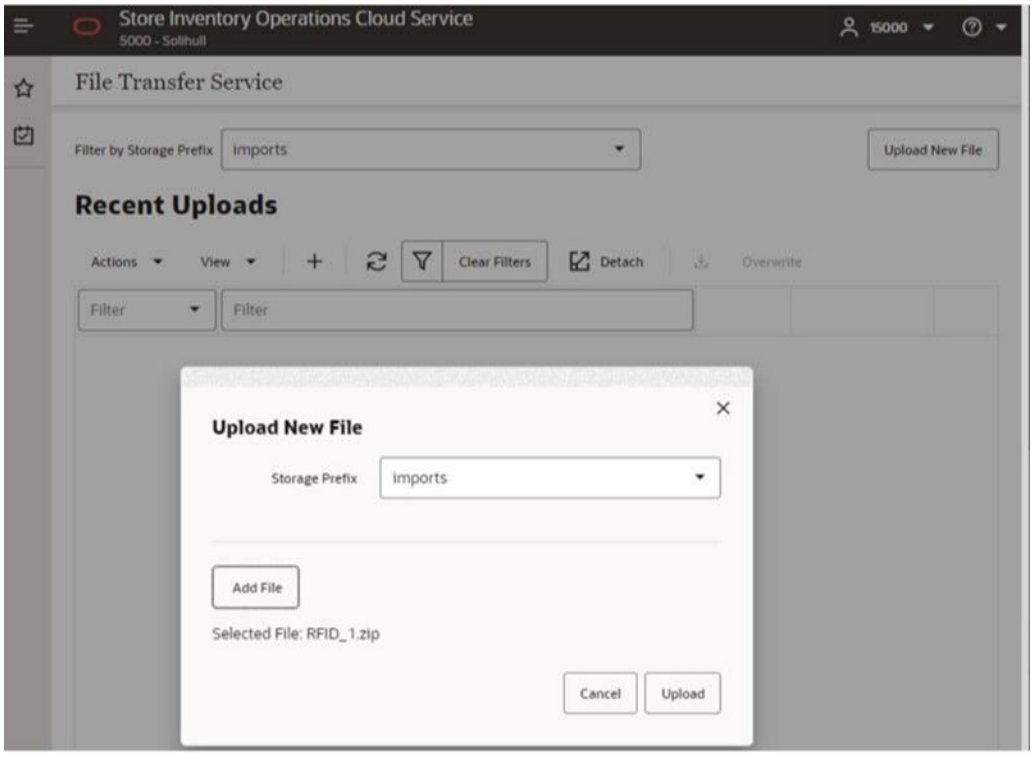
In the **Upload New File** popup dialog, choose storage prefix **Imports** and click **Add File** button.

Figure 7-7 Upload New File Dialog



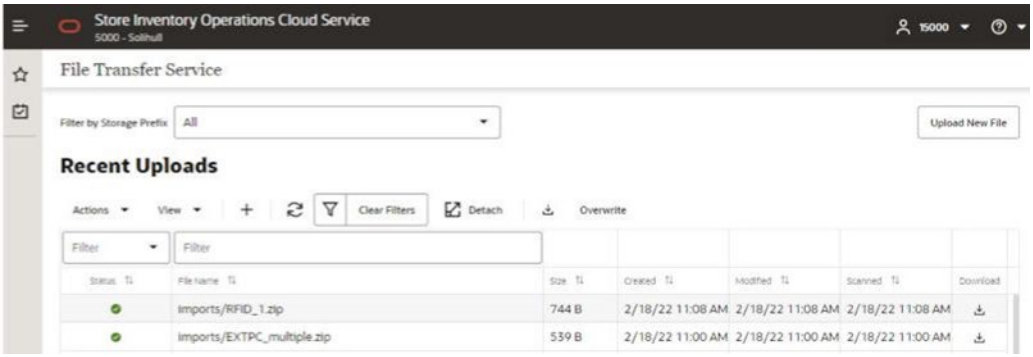
Next, choose files from your client machine, then click **Upload**:

Figure 7-8 File Added



Once the uploaded file has passed a virus scan, the file is ready for a cloud application batch to import the file from object storage into the application.

Figure 7-9 Recent Uploads



FTS API Specifications

This section describes FTS API specifications.

- Ping
- List Prefixes
- List Files
- Move Files
- Delete Files
- Request Upload PAR
- Request Download PAR

Ping

Returns the status of the service and provides an external health-check.

Method	GET
Endpoint	{Service Base URL}/fts/ping
HTTP Header	See Common Request Headers in making FTS API Call Common Headers.
Parameters	[{ "name": "pingMessage", "description": "Optional value to be included in the ping response.", "in": "query", "required": false, "schema": { "type": "string" } }],
Request Body	None

Response	"200": {
	"description": "OK - The service operation produced a successful response."
	},
	"400": {
	"description": "Bad Request - The path params or query params or body was not valid for this operation."
	}

List Prefixes

Returns a list of the known storage prefixes. These are analogous to directories and are restricted to predefined choices per service. SIOCS has list of pre-defined storage prefixes: import, exports, rejects and archives.

Method	GET
Endpoint	{Service Base URL}/fts/{FTS Bucket Name}/listprefixes
HTTP Header	See Common Request Headers in making FTS API Call Common Headers.

Parameters	[
	{
	"name": "bucketName",
	"description": "Bucket identifier.",
	"in": "path",
	"required": true,
	"schema": {
	"type": "string"
	}
	}
	],

Request Body	None

Response	A JSON array of strings containing the known prefixes.
	{
	"200": {
	"description": "OK - The service operation produced a successful response."
	},
	"400": {
	"description": "Bad Request - The path params or query params or body was not valid for this operation."
	}
	}

List Files

Returns a list of the files within a given storage prefix.

Method	GET
Endpoint	{Service Base URL}/fts/{FTS Bucket Name}/listfiles
HTTP Header	See Common Request Headers in making FTS API Call Common Headers.

Method	GET
Parameters	{ "name": "bucketName", "description": "Bucket identifier.", "in": "path", "required": true, "schema": { "type": "string" } }, { "name": "prefix", "description": "The object filter in object storage.", "in": "query", "required": false, "schema": { "type": "string" } }, { "name": "contains", "description": "The object filter in object storage.", "in": "query", "required": false, "schema": { "type": "string" } }, { "name": "scanStatus", "description": "The object filter in object storage.", "in": "query", "required": false, "schema": { "type": "string" } },

Method	GET

	{
	"name": "offset",
	"description": "The object filter in object storage.",
	"in": "query",
	"required": false,
	"schema": {
	"type": "integer"
	}
	},
	{
	"name": "limit",
	"description": "The object filter in object storage.",
	"in": "query",
	"required": false,
	"schema": {
	"type": "integer"
	}
	},
	{
	"name": "sort",
	"description": "The object filter in object storage.",
	"in": "query",
	"required": false,
	"schema": {
	"type": "string"
	}
	}
	],

Request Body	None

Response	A JSON resultSet containing array of files. For each file, there is metadata including: name, size, created and modified dates, scan status and date, scan output message.
	{
	"200": {
	"description": "OK - The service operation produced a successful response."
	},
	"400": {
	"description": "Bad Request - The path params or query params or body was not valid for this operation."
	}

Move Files

Moves one or more files between storage prefixes, while additionally allowing the name to be modified.

Method	POST
Endpoint	{Service Base URL}/fts/{FTS Bucket Name}/movefiles
HTTP Header	See Common Request Headers in making FTS API Call Common Headers.

Parameters	[
	{
	"name": "bucketName",
	"description": "Bucket identifier.",
	"in": "path",
	"required": true,
	"schema": {
	"type": "string"
	}
	}
	]

Request Body	{"listOfFiles": [{"currentPath": { "storagePrefix": "string", "fileName": "string"}, "newPath": { "storagePrefix": "string", "fileName": "string" } } }}

Delete Files

Deletes one or more files.

Method	POST
Endpoint	{Service Base URL}/fts/{FTS Bucket Name}/delete
HTTP Header	See Common Request Headers in making FTS API Call Common Headers.

Parameters	[
	{
	"name": "bucketName",
	"description": "Bucket identifier.",
	"in": "path",
	"required": true,
	"schema": {
	"type": "string"
	}
	}
	]

Request Body	A JSON array of files to be deleted. One or more pairs of storagePrefix and filename elements can be specified within the array. Required: true{ " {"listOfFiles": [[{ " {"storagePrefix": "string", "fileName": "string" }]}

Response	A JSON array of each file deletion attempted and the result.
	{
	"200": {
	"description": "OK - The service operation produced a successful response."
	},
	"400": {
	"description": "Bad Request - The path params or query params or body was not valid for this operation."

Request Upload PAR

Request PAR for uploading one or more files.

Method	POST
Endpoint	{Service Base URL}/fts/{FTS Bucket Name}/upload
HTTP Header	See Common Request Headers in making FTS API Call Common Headers.

Parameters	[
	{
	"name": "bucketName",
	"description": "Bucket identifier.",
	"in": "path",
	"required": true,
	"schema": {
	"type": "string"
	}
	}]

Request Body	A JSON array of files to be uploaded. One or more pairs of storagePrefix and filename elements can be specified within the array.
	Required: true
	{ "listOfFiles":
	[
	{
	"storagePrefix": "string",
	"fileName": "string"
	}
	]
	}

Method	POST

Response	A parList containing an array containing elements corresponding to the request including the PAR accessUri and name of file.
	{
	"parList": [
	{
	"id": "string",
	"name": "string",
	"accessUri": "string",
	"objectName": "string",
	"accessType": "string",
	"timeExpires": "2021-09-07T16:35:27.390Z",
	"timeCreated": "2021-09-07T16:35:27.390Z"
	}
	]
	}
	Response Status:
	{
	"200": {
	"description": "OK - The service operation produced a successful response."
	},
	"400": {
	"description": "Bad Request - The path params or query params or body was not valid for this operation."
	}

Request Download PAR

Request PAR for downloading one or more files.

Method	POST
Endpoint	{Service Base URL}/fts/{Bucket Name}/download
HTTP Header	See Common Request Headers in making FTS API Call Common Headers.

Parameters	[
	{
	"name": "bucketName",
	"description": "Bucket identifier.",
	"in": "path",
	"required": true,
	"schema": {
	"type": "string"
	}
	}
	]

Request Body	A JSON array of files to be downloaded. One or more pairs of storagePrefix and filenames can be specified within the array. Required: true
	{
	"listOfFiles": [
	{
	"storagePrefix": "string",
	"fileName": "string"
	}
	]
	}

Response	A parList containing an array containing elements corresponding
	to the request including the PAR accessUri and name of file.
	"parList": [
	{
	"id": "string",
	"name": "string",
	"accessUri": "string",
	"objectName": "string",
	"accessType": "string",
	"timeExpires": "2021-09-07T16:35:27.390Z",
	"timeCreated": "2021-09-07T16:35:27.390Z"
	}
	]
	}
	Response Status:
	{
	"200": {
	"description": "OK - The service operation produced a successful response.
	"

File Transfer Service Troubleshooting

These troubleshooting topics covers common file transfer service issues and possible solutions.

Troubleshooting File Transfer Service Internal Server Error

1. Try to connect to File Transfer Ping endpoint. If you can connect ping endpoints, continue to step2.
2. Try to invoke List Files endpoint, if get response status 200, continue to step3.
3. Verify the bucket name. The bucket name should have value like rgbu_rex_cnprod_<cust_env>
4. Make sure the bucket name in service request matches the configuration value set for 'File Transfer Service Bucket Name' in the system configuration screen.

   If the above steps do not resolve the internal server error, you may raise a Service Request on My Oracle Support.

Test FTS API using Postman

- Step 1: Get Client Access Token
- Step 2: Call FTS Endpoints

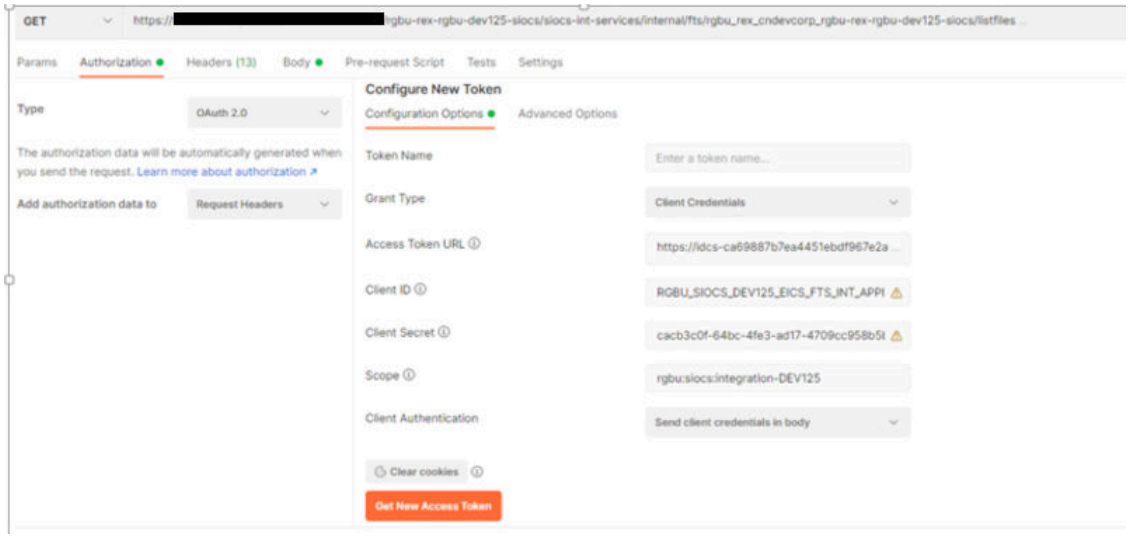
Step 1: Get Client Access Token

OAuth tokens can also be obtained by REST client tools like postman for testing purposes.

When using Postman testing, fill in the required details:

- **Authorization**: OAuth 2.0
- **Access Token URL**: https://{IDCS_BASE_URL}/oauth2/v1/token
- **Client ID**: Client if of the OAuth
- **Client Secret**: Client secret of OAuth Client app
- **Grant Type**: client_credentials
- **Scope**: The scope pattern that is used in the FTS IDCS app creation template is rgbu:siocs:integration-{env}{env index}

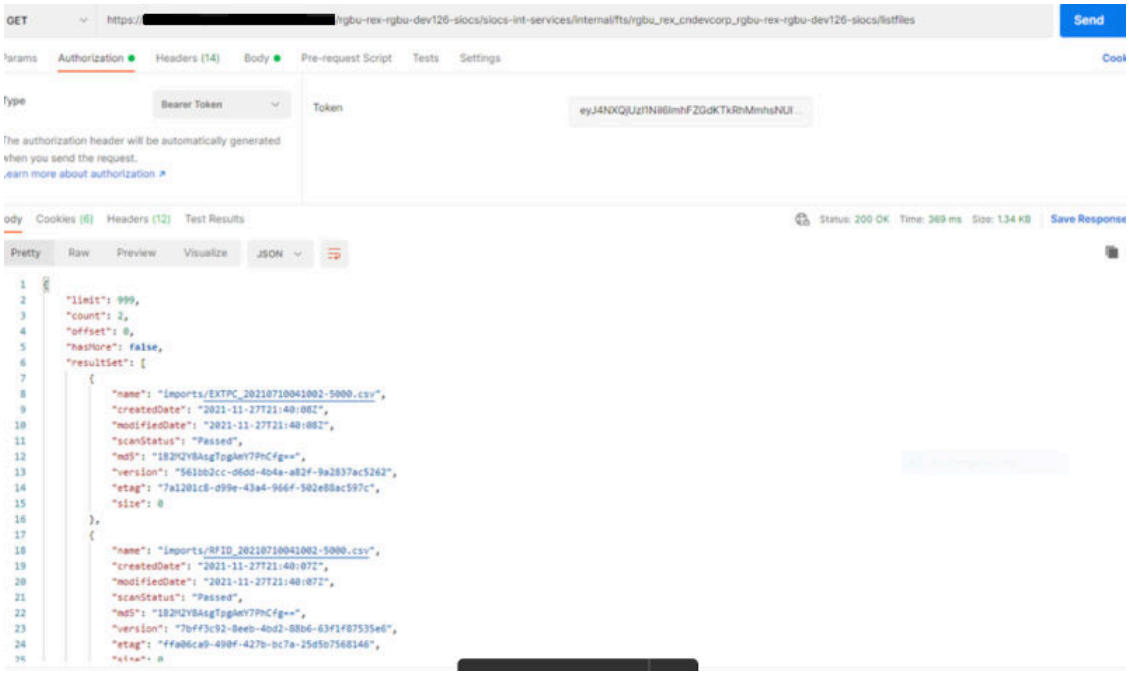
Figure 7-10 Get Client Access Token



Step 2: Call FTS Endpoints

Change **Authorization Type** to **Bearer Token**, use the access token returned from step1 as the **Token Value** as below:

Figure 7-11 Call FTS Endpoints



8

File Transfer Wrapper Service

This chapter covers the following topics:

- Overview
- Prerequisites
- How to Switch Using File Transfer Wrapper Service
- How to Use Transfer Wrapper Service APIs
- File Transfer Service UI
- File Transfer Wrapper Service API Specification
- File Transfer Wrapper Service Troubleshooting

Overview

Oracle Cloud Infrastructure Object Storage is an internet-scale, high-performance storage platform that offers reliable and cost-efficient data durability.

In addition to the Legacy File Transfer Integration Service, a new File Transfer Services (FTS) Wrapper Service is added to allows customer to manage files in object storage. The FTS Wrapper service provides a directory-based access to files using a storage prefix and filename. The storage prefix represents a directory path.

File Transfer Wrapper Services provides a common way to allow customer to upload to/ download from object storage direct via common platform implementation.

For each customer environment, logical containers (buckets) are created in Object Storage for storing objects used by the cloud application. The file transfer bucket name is created and set when the environment is provisioned. The bucket name is required to move files between Oracle Cloud and your local system using file transfer services.

Access to files is through a Pre-Authenticated Request (PAR), which is a URL that requires no further authentication to upload or download to the application's object storage. To retrieve a PAR, you must use the appropriate FTS Wrapper service.

The File Transfer Wrapper service enables external application to import files to and export files from Object Storage used by the solutions.

These APIs provides following operations:

- Ping
- List storage prefixes
- List files in object storage
- Move Files
- Delete Files
- Request Upload PAR

- Request Download PAR

Service Use Cases

Use Case 1: External Application lists the files in object storage via Service API.

Use Case 2: External Application Uploads data files via Service API to object storage.

Use Case 3: External Application downloads data files via Service API from object storage.

Use Case 4: External application user imports/uploads files use File Transfer Service UI.

Prerequisites

Before you can use File Transfer Wrapper Service, you need to have the following resources in your Oracle Cloud Infrastructure tenancy:

- Object Storage bucket
- File Transfer Wrapper Service URL and Scopes
- Setup Client ID and Client Secret
- Configure FTS Wrapper User

Some of these resources are automatically created for you upon SIOCS deployments. See details about FTS service in the following sections.

Object Storage Bucket

For each customer environment, logical containers (buckets) are created in Object Storage for storing objects used by the cloud application. The file transfer bucket name is created and set when the environment is provisioned.

File Transfer Wrapper Service URL and Scopes

Upon SIOCS deployment, File Transfer Wrapper Service URL and scopes are automatically created, by default the service is disabled. Customer would need to enable the File Transfer Wrapper Service if they intent to use this service.

OAUTH Security Considerations

Setup Client ID and Client Secret

File Transfer Wrapper Service use OAuth2.0 for authorization. The Customer Administration users must create their own client credential IDCS application in IDCS.

Once the client id and client secret are generated, please notes down the credentials, those will be used to get the Authentication Token for using File Transfer Wrapper Service.

When creating the Credentials, the App name and scope for the FTS Wrapper IDCS client application creation should be environment specific using the formats as below:

App Name: RGBU_SIOCS_<ENV>_EICS_FTS_WRAPPER

Where <ENV>: DEV1, STG1, PROD1

For example, RGBU_SIOCS_STG1_ EICS_FTS_WRAPPER

Scope: rgbu:siocs:psraf-<ENV>

For example, rgbu:siocs:psraf-STG1

See the *Oracle® Retail Home Administration Guide* OAuth Application Configuration chapter for Creating OAuth Client Applications.

How to Switch Using File Transfer Wrapper Service

Configure FTS Wrapper Credentials

The FTS Wrapper user credentials are required for SIOCS batch upload/download files via File Transfer Wrapper Service.

1. Login SIOCS JET webclient.
2. From task menu, under Admin, click **Technical Maintenance**, then click **Credential Administration**.
3. Select Alias **ftswrapper-user**, update the client id and client secret with the one that was created in step “Setup Client ID and Client Secret”.
4. Click **Apply and Save** .

Enable File Transfer Wrapper Service

Upon SIOCS deployment, by default the service will be disabled. To enable the service, customer will need to perform following steps:

1. Login SIOCS JET.
2. From task menu, under Admin, click **Technical Maintenance**, then click **External Service Administration**.
3. Edit the FtsWrapperExternalService, set Active to **Yes**.
4. Click **Apply and Save**.

Update Your External Applications to Use FTS Wrapper Service APIs

Evaluate if your application is accessing the object storage via SIOCS legacy FTS endpoint (siocs-int-services/api/fts), then you are on earlier version of the service, update your application to point to the FTS Wrapper service endpoints. See section How to use File Transfer Wrapper Service APIs for details.

How to Use File Transfer Wrapper Service APIs

To interact with FTS, you must use the REST APIs provided. The endpoints URLs are relative to service base URL.

- Service Base URL

- Service Endpoints
- Retrieving Access Client Token
- Service Request Headers
- How to Use Service API to find Object Storage Prefixes
- How to User Service API to List Files in Object Storage
- How to Use Service APIs to Upload Import Data Files to Object Storage
- How to Use FTS Wrapper APIs to Download Files from Object Storage

Service Base URL

The File Transfer Wrapper Service Base URL is automatically configurate upon SIOCS deployment.

The URL has the following format:

https://rex.retail.<Region Name>.ocs.oraclecloud.com/<Customer Subnamespace>/RetailAppsPlatformServices/services/private/FTSWrapper/

> **Note:**
>
> The <Region Name> and <Customer Sub Namespace> part of the URL should be replaced with the one specific to your environment. This will be the same as your cloud service application URL provided in the welcome email.

To view the URL via SIOCS External Service Administration Screen.

1. Login SIOCS JET.
2. From task menu, under Admin, click **Technical Maintenance**, then click **External Service Administration.**

Service Endpoints

The table below lists the API end points for different file operations. See File Transfer Wrapper Service API Specifications for details.

Table 8-1 FTS Endpoints

Service	Method	FTS Wrapper Endpoint URLs
Ping	GET	{Service Base URL}/ping
List Prefixes	GET	{Service Base URL}/listprefixes
List Files	GET	{Service Base URL}/listfiles
Move Files	POST	{ Service Base URL}//movefiles
Delete Files	DELETE	{Service Base URL}/delete
Request Upload PAR	POST	{Service Base URL}/upload

Table 8-1 (Cont.) FTS Endpoints

Service	Method	FTS Wrapper Endpoint URLs
Request Download PAR	POST	{ Service Base URL}/download

Retrieving Access Client Token

IDCS OAuth2 Token URL

IDCS token URL to obtain Oauth2 token.

Example IDCS_TOKENT_URL:

https://idcs-XXXXXXXX.identity.oraclecloud.com/

Using the above URL,

IDCS_TOKENT_URL = {IDCL_BASE_URL}/oauth2/v1/token

The following is required in headers for making OAuth2.0 enabled REST Services.

- Please contact customer's IDCS administrator for FTS Client ID and Client Secret.
- An access token using the Client ID and secret from IDCS.

Example: get access Token Use Curl

> **Note:**
>
> You need to have curl and jq client tool installed on your client machine for using curl for testing.

```
export ACCESS_TOKEN="$(curl -u <Client ID>:<Secret> -H 'Content-Type:
application/x-www-form-urlencoded;charset=UTF-8' --request POST https://
<IDCS_BASE_URL>/oauth2/v1/token -d
'grant_type=client_credentials&scope=<Scope>' | jq -r '.access_token')"
```

In the example above, substitute the variables with proper values for your environment.

Service Request Headers

Each call to FTS Endpoint should contain the following Request headers:

- Content-Type: application/json
- Accept: application/json
- Accept-Language: en
- Authorization: Bearer {ACCESS_TOKEN}

Before calling FTS Wrapper API, you need to get the ACCESS_TOKEN use step Retrieving Access Client Token.

How to Use Service API to find Object Storage Prefixes

First you need to get the ACCESS_TOKEN use step Retrieving Access Client Token, then you may call the endpoint List Prefixes as below:

Sample Request:

```
curl --request GET <Service Base URL>/listprefixes -H 'content-type: application/
json' -H 'Accept: application/json' -H 'Accept-Language: en' -H "Authorization:
Bearer ${ACCESS_TOKEN}"
```

Sample Response:

```
{"values":["archives","rejects","imports","exports"]}
```

How to Use Service API to List Files in Object Storage

First get the ACCESS_TOKEN using step Retrieving Access Client Token, then call the endpoint List Files as below:

Sample Request:

```
curl --request <Service Base URL>/listfiles?contains=RFID -H 'content-type:
application/json' -H 'Accept: application/json' -H 'Accept-Language: en' -H
"Authorization: Bearer ${ACCESS_TOKEN}"
```

Sample Response:

{"limit":999,"count":1,"offset":0,"hasMore":false,"resultSet":[{"name":"imports/
RFID_1.dat","createdDate":"2022-02-13T21:35:26Z","modifiedDate":"2022-02-13T21:35 :26Z",
"scanStatus":"Passed","scanDate":"2022-02-13T21:35:56.187Z","md5":"xxxx==",
"version":"xxxxx","etag":"zzzzzzz","size":75}]}

How to Use Service APIs to Upload Import Data Files to Object Storage

To upload data files to object storage, the external solution application needs to perform following steps:

1. The external application gets the Oauth2 token from IDCS. See the Retrieving Access Client Token section.
2. The external application makes an FTS request with the Oauth2 token to requesting Pre-Authentication.

   Then call the endpoint Request Upload PAR as below:

   Sample Request:

   ```
   curl --request POST <Service Base URL>/upload -H 'content-type: application/
   json' -H 'Accept: application/json' -H 'Accept-Language: en' -H
   "Authorization: Bearer ${ACCESS_TOKEN}" -d "{\"listOfFiles\":
   [{\"storagePrefix\": \"imports\",\"fileName\": \"EXTPC_1.dat\"},
   {\"storagePrefix\": \"imports\",\"fileName\": \"RFID_1.dat\"}]}"
   ```

   Sample Response:

   ```
   {"parList":[{"id":"zzzzzzz/:imports/
   EXTPC_1.dat","name":"EXTPC_1.dat","accessUri":"https://objectstorage.us-ZZZ-
   ```

siocs/o/imports/
EXTPC_1.dat","accessType":"ObjectWrite","timeExpires":"2022-02-13T21:39:40.265
Z", "timeCreated":"2022-02-13T21:34:40.329Z","objectName":"imports/
EXTPC_1.dat"}, {"id":"ZZZZ:imports/
RFID_1.dat","name":"RFID_1.dat","accessUri":"https://zzzz-siocs/o/imports/
RFID_1.dat","accessType":"ObjectWrite","timeExpires":"2022-02-13T21:39:40.411Z
"," timeCreated":"2022-02-13T21:34:40.472Z","objectName":"imports/
RFID_1.dat"}]}

3. Once the PAR is received, the external application uploads the file to object storage using the URL included within the response.

   Sample Request:

   ```
   curl https://ZZZZZ-siocs/o/imports/RFID_1.dat --upload-file C:\\temp\
   \RFID_1.dat
   ```

4. Files uploaded to application object storage will be processed by cloud application batches.

How to Use Service APIs to Download Data Files from Object Storage

For retailer to download the export data files from application object storage, perform the following steps:

1. The external solution application gets the Oauth2 token from IDCS. See the Retrieving Access Client Token section.
2. The external solution application calls the FTS service with the Oauth2 token to list the available export files in Object Storage which are generated by cloud app.

   Sample Request:

   ```
   curl --request GET <Service Base URL>/listfiles?contains=RFID -H 'content-
   type: application/json' -H 'Accept: application/json' -H 'Accept-Language: en'
   -H "Authorization: Bearer ${ACCESS_TOKEN}"
   ```

   Sample Response:


   ```
   {"limit":999,"count":1,"offset":0,"hasMore":false,"resultSet":
   [{"name":"imports/
   RFID_1.dat","createdDate":"2022-02-13T21:35:26Z","modifiedDate":"2022-02-13T21
   :35 :26Z","scanStatus":"Passed","scanDate":"2022-02-13T21:35:56.187Z","md5":"x
   xxxx==" ,"version":"xxxxx","etag":"ZZZZZ","size":75}]}
   ```


3. The external solution application calls the FTS service with the Oauth2 token, requesting Pre-Authentication to download files from object storage used by cloud app.

   Sample Request:

   ```
   curl --request POST <Service Base URL>/download -H 'content-type: application/
   json' -H 'Accept: application/json' -H 'Accept-Language: en' -H
   "Authorization: Bearer ${ACCESS_TOKEN}" -d "{\"listOfFiles\":
   [{\"storagePrefix\": \"imports\",\"fileName\": \"RFID_1.dat\"}]}"
   ```

   Sample Response:


   ```
   {"parList":[{"id":"i91P0nFIIsgj05qrUH2ibTZ2npmbTdq1TKsGtWOerAYaE6/MYZE7840lR/
   QEhaFk:imports/RFID_1.dat","name":"RFID_1.dat","accessUri":"https://
   objectstorage.us-phoenix-1.oraclecloud.com/p/
   ZG89KsLS_5SY7D2p7nVQt8KfJ6rLJ40FSmI97zASLRK2VrsICbvoRP0bgoQGxk3S/n/ZZZZZ-
   siocs/o/ imports/RFID_1.dat","accessType":"ObjectRead","timeEx-
   ```


```
pires":"2022-02-13T23:07:00.962Z","timeCreated":"2022-02-13T23:02:01.105Z","ob
jec tName":"imports/RFID_1.dat"}]}
```

4. Once the PAR is received, the file is downloaded using the URL included within its response. A PAR is valid for 10 minutes. A download can take longer than 10 minutes, but it must be started within 10 minutes of the PAR being received.

   ```
   curl -o <destinationFileName> -X GET <PAR>
   ```

   For example:

   ```
   curl -o RFID_1_download.dat -X GET https://ZZZZZ-siocs/o/imports/RFID_1.dat
   ```

File Transfer Service UI

In addition to the FTS Wrapper Service REST Services, SIOCS File Transfer Service UI provides user to upload/download a file or view a list of files in object storage.

Security Consideration to access File Transfer Service UI:

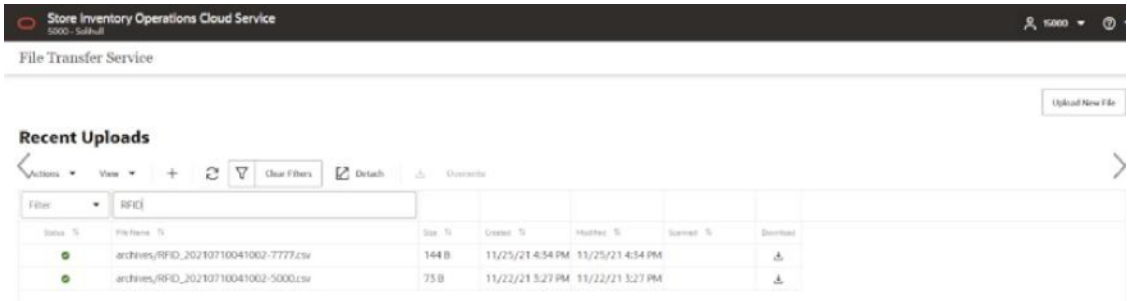
- The customer admin user should be assigned the following PSRAF groups to access the FTS JET UI

  PSRAF Users and PSRAF Admin Users

  The naming convention for the group is <EICS_IDCS_APP_DISPLAY_NAME>.psraf_users where EICS_IDCS_APP_DISPLAY_NAME is the display name of EICS app on IDCS or OCI IAM.

  The naming convention for the group is <EICS_IDCS_APP_DISPLAY_NAME>.psraf_admin_users where EICS_IDCS_APP_DISPLAY_NAME is the display name of EICS app on IDCS or OCI IAM
- Security Permission **Access File Transfer Service** must be assigned to user who needs to access the File Transfer Service UI.
- The IDCS or OCI IAM Application role **admin_users** is required for the user to perform the upload/download operations.

Figure 8-1 File Transfer Service UI



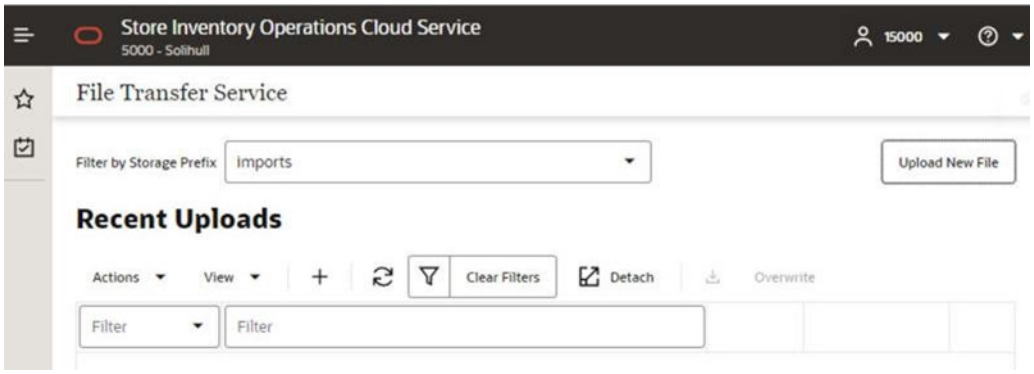
The main form lists the recently uploaded files.

Actions:

- To filter the files by store prefix, select a file storage prefix.
- To filter by file name by choosing the **Actions** choice selector on the screen.

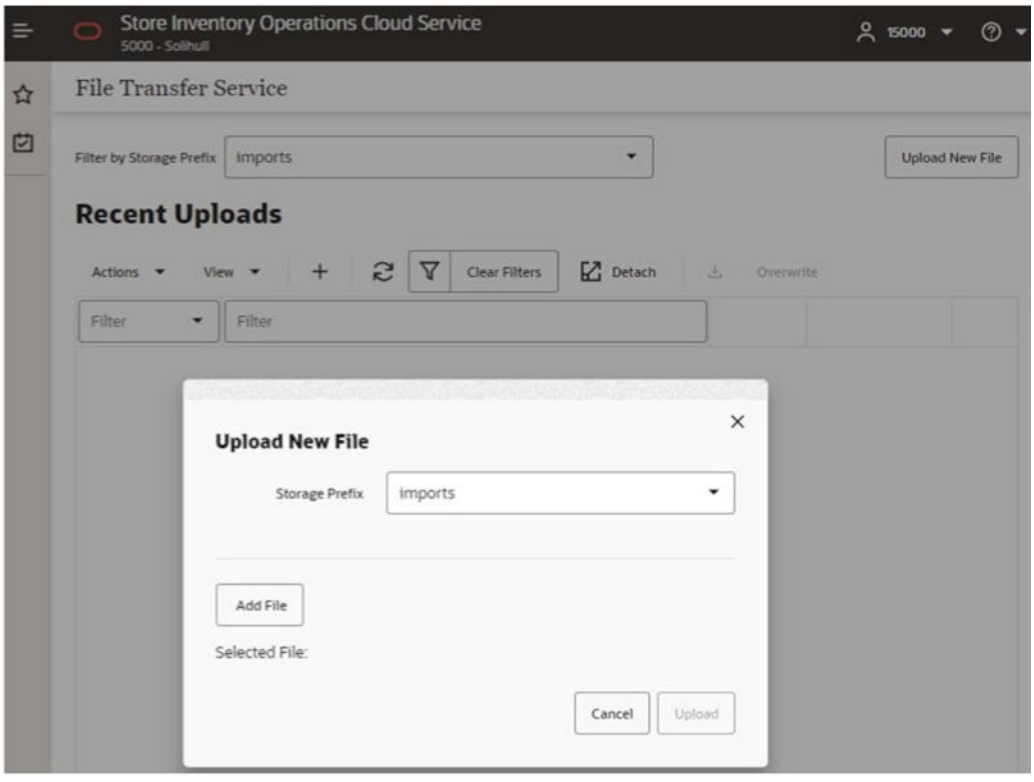
- To upload new files, click **Upload New File** button:

Figure 8-2 Upload New File



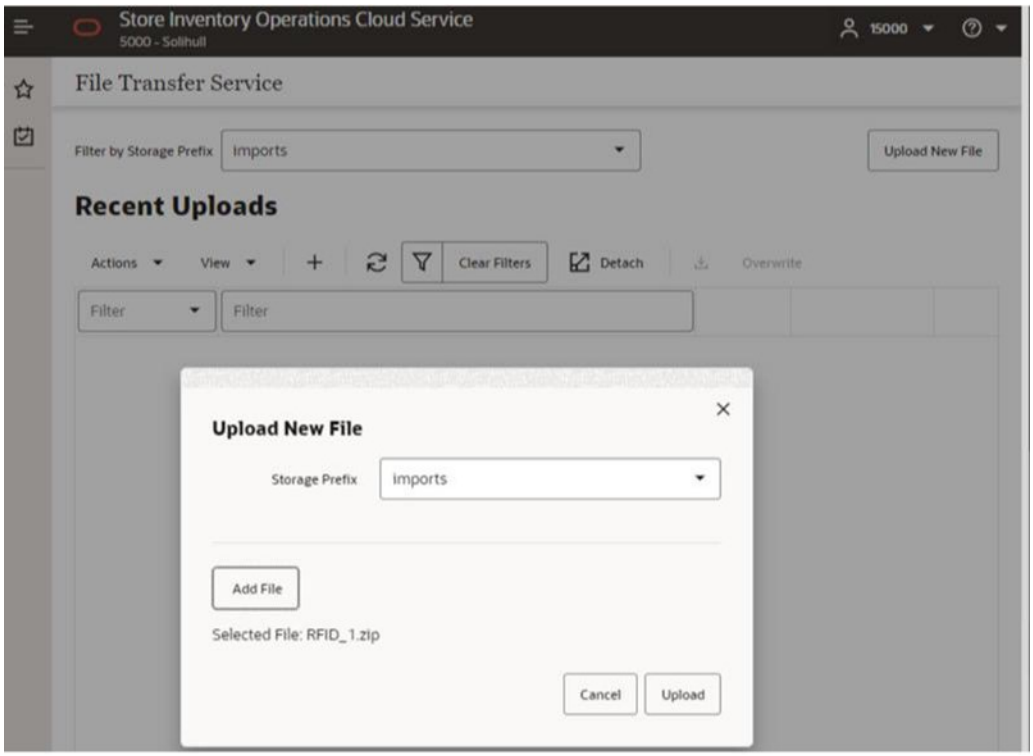
In the **Upload New File** popup dialog, choose storage prefix **Imports** and click **Add File** button.

Figure 8-3 Upload New File Dialog



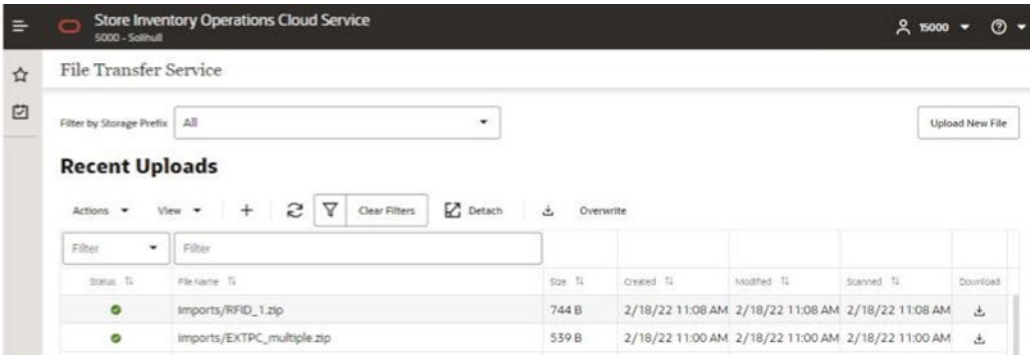
Next, choose files from your client machine, then click **Upload**:

Figure 8-4 File Added



Once the uploaded file has passed a virus scan, the file is ready for a cloud application batch to import the file from object storage into the application.

Figure 8-5 Recent Uploads



File Transfer Wrapper Service API Specification

This section describes FTS API specifications.

- Ping
- List Prefixes
- List Files

- Move Files
- Delete Files
- Request Upload PAR
- Request Download PAR

Ping

Returns the status of the service and provides an external health-check.

Method	GET
Endpoint	{Service Base URL}/ping
HTTP Header	See FTS Wrapper API Call Headers.
Request Body	None

Response	
	
	"200": {
	"description": "OK - The service operation produced a successful response."
	},
	"400": {
	"description": "Bad Request - The path params or query params or body was not valid for this operation."
	}

List Prefixes

Returns a list of the known storage prefixes. These are analogous to directories and are restricted to predefined choices per service. SIOCS has list of pre-defined storage prefixes: import, exports, rejects and archives.

Method	GET
Endpoint	{Service Base URL}/listprefixes
HTTP Header	See FTS Wrapper API Call Headers.
Request Body	None

Method	GET

Response	A JSON array of strings containing the known prefixes.
	
	{
	"200": {
	"description": "OK - The service operation produced a successful response."
	},
	"400": {
	"description": "Bad Request - The path params or query params or body was not valid for this operation."
	}
	}

List Files

Returns a list of the files within a given storage prefix.

Method	GET
Endpoint	{Service Base URL}/listfiles
HTTP Header	See FTS Wrapper API Call Headers.

Method	GET

Parameters	{
	"name": "prefix",
	"description": "The object filter in object storage.",
	"in": "query",
	"required": false,
	"schema": {
	"type": "string"
	}
	},
	{
	"name": "contains",
	"description": "The object filter in object storage.",
	"in": "query",
	"required": false,
	"schema": {
	"type": "string"
	}
	},
	{
	"name": "scanStatus",
	"description": "The object filter in object storage.",
	"in": "query",
	"required": false,
	"schema": {
	"type": "string"
	}
	},
	{
	"name": "offset",
	"description": "The object filter in object storage.",
	"in": "query",
	"required": false,
	"schema": {
	"type": "integer"
	}
	},
	{
	"name": "limit",
	"description": "The object filter in object storage.",
	"in": "query",
	"required": false,
	"schema": {
	"type": "integer"
	}
	},
	{

Method	GET

	"name": "sort",
	"description": "The object filter in object storage.",
	"in": "query",
	"required": false,
	"schema": {
	"type": "string"
	}
	}
	],

Request Body	None

Response	A JSON resultSet containing array of files. For each file, there is metadata including: name, size, created and modified dates, scan status and date, scan output message.
	
	{
	"200": {
	"description": "OK - The service operation produced a successful response."
	},
	"400": {
	"description": "Bad Request - The path params or query params or body was not valid for this operation."
	}

Move Files

Moves one or more files between storage prefixes, while additionally allowing the name to be modified.

Method	POST
Endpoint	{Service Base URL}/movefiles
HTTP Header	See FTS Wrapper API Call Headers.
Request Body	{"listOfFiles": [{"currentPath": { "storagePrefix": "string", "fileName": "string"}, "newPath": { "storagePrefix": "string", "fileName": "string" } } }}

Delete Files

Deletes one or more files.

Method	DELETE
Endpoint	{Service Base URL}/ delete
HTTP Header	See FTS API Call Common Headers
Request Body	A JSON array of files to be deleted. One or more pairs of storagePrefix and filename elements can be specified within the array. Required: true `{ " {"listOfFiles": [ [ { " {"storagePrefix": "string", "fileName": "string" } ]}`
Response	200 The request has succeeded. 500 The server has encountered a situation it does not know how to handle.

Request Upload PAR

Request PAR for uploading one or more files.

Method	POST
Endpoint	{Service Base URL}/upload
HTTP Header	See FTS Wrapper Request Headers.

Request Body	A JSON array of files to be uploaded. One or more pairs of storagePrefix and filename elements can be specified within the array.
	Required: true
	
	`{ "listOfFiles":`
	`[`
	`{`
	`"storagePrefix": "string",`
	`"fileName": "string"`
	`}`
	`]`
	`}`

Method	POST

Response	A parList containing an array containing elements corresponding to the request including the PAR accessUri and name of file.
	
	{
	"parList": [
	{
	"id": "string",
	"name": "string",
	"accessUri": "string",
	"objectName": "string",
	"accessType": "string",
	"timeExpires": "2021-09-07T16:35:27.390Z",
	"timeCreated": "2021-09-07T16:35:27.390Z"
	}
	]
	}
	Response Status:
	{
	"200": {
	"description": "OK - The service operation produced a successful response."
	},
	"400": {
	"description": "Bad Request - The path params or query params or body was not valid for this operation."
	}

Request Download PAR

Request PAR for downloading one or more files.

Method	POST
Endpoint	{Service Base URL}/download
HTTP Header	FTS Wrapper Service Request Headers.

Method	POST

Request Body	A JSON array of files to be downloaded. One or more pairs of storagePrefix and filenames can be specified within the array. Required: true
	
	`{ "listOfFiles":`
	`[`
	`{`
	`"storagePrefix": "string",`
	`"fileName": "string"`
	`}`
	`]`
	`}`

Response	A parList containing an array containing elements corresponding to the request including the PAR accessUri and name of file.
	
	`"parList": [`
	`{`
	`"id": "string",`
	`"name": "string",`
	`"accessUri": "string",`
	`"objectName": "string",`
	`"accessType": "string",`
	`"timeExpires": "2021-09-07T16:35:27.390Z",`
	`"timeCreated": "2021-09-07T16:35:27.390Z"`
	`}`
	`]`
	`}`
	`Response Status:`
	`{`
	`"200": {`
	`"description": "OK - The service operation produced a successful response.`

File Transfer Wrapper Service Troubleshooting

These troubleshooting topics covers common file transfer service issues and possible solutions.

Troubleshooting File Transfer Service Internal Server Error

1. Try to connect to File Transfer Ping endpoint. If you can connect ping endpoints, continue to step2.
2. Try to invoke List Files endpoint, if get response status 200.
3. If the above steps do not resolve the internal server error, you may raise a Service Request on My Oracle Support.

9

SOAP Web Services

EICS provides a large range of web services to manage the processing of information that is controlled within EICS. Each web service covers a topical area of functionality within EICS and contains numerous operations within to accomplish this functionality. This document is only meant as an outline or summary into using EICS web services and assumes the user has access to the fully documented APIs through the publishing of the web services themselves.

- Security Considerations
- Functionality
- Available Web Services
- Web Services Basic Design Principles
- Internally Managed vs Externally Managed
- Web Service Operation Basic Design Standards
- Interpreting Validation Errors

> **Note:**
>
> The WSDL files are available to download from My Oracle Support (MOS) Document 2614551.1.

Security Considerations

The SOAP web services provided by EICS are secured by Policy A using Oracle WebLogic WS-Policy configurations defined in the xml files included in Oracle WebLogic:

- Policy A
  - **Description**: Message must be sent over SSL and requires authentication of a plain text UsernameToken.
  - **Configuration**: Wssp1.2-2007-Https-UsernameToken-Plain.xml

Customers should create IDCS or OCI IAM user and the user should be assigned integration_users IDCS or OCI IAM application role to access the web-service endpoints.

See *Oracle Retail Enterprise Inventory Cloud Service Security Guide* and *Oracle Retail Enterprise Inventory Cloud Service User Guide* - Security chapter.

For REST web service security see REST WEB Services Security Considerations later in this guide.

Functionality

This document is intended to be used by someone who has read and understands all the functional areas and business functionality described in the *Oracle Retail EICS User Guide* and *Oracle Retail EICS Administration Guide.*

Available Web Services

The following list contains a summary of the web services available in EICS.

Web Service	Description
ActivityLock	This service is used to manage the locking of data within EICS. Data needs to be locked to be updated securely.
FulfillmentOrderDelivery	This service is used to manage fulfillment order deliveries (outgoing shipment to customers). It allows the creation, cancellation, and dispatch of deliveries.
FulfillmentOrderPick	This service is used to manage fulfillment order picking within EICS. It allows the creation, deletion, and confirmation of a pick to complete a fulfillment order.
FulfillmentOrderReversePick	This service is used to manage fulfillment order reverse picking within EICS. It allows the creation, update, deletion, and confirmation of a reverse pick.
InventoryAdjustment	This service is used to manage inventory adjustments within EICS. It allows the creation, update, cancellation, and confirmation of inventory adjustments.
ItemBasket	This service is used to manage item baskets within EICS. It allows the creation, update, and removal of item baskets.
OrderRequest	This service is used to create, read, update, approve, cancel and lookup store orders.
POSTransaction	This service processes external point-of-sale transactions updating the inventory accordingly. A point-of-sale is considered an externally managed transaction (internally and externally managed transaction are covered later in this document).
ProductGroup	This service is used to create or update a product group.
ProductGroupSchedule	This service is used to create, update, or cancel a product group schedule.
ReplenishmentGap	This service is used to create, update, or delete a replenishment gap.
RfidInventory	This service is used to create, update, or delete a RFID facility zone. It is also used to refresh inventory and to process RFID events.
ShelfAdjustment	This service is used to create, update, cancel or confirm a shelf adjustment.
ShelfReplenishment	This service is used to create, update, cancel or confirm a shelf replenishment.
StockCount	This service is used to retrieve the details of a stock count or a stock count child (section of stock count).
Store	This service is used to retrieve information about stores such as store detail, associated stores, or transfer zones.
StoreFulfillmentOrder	This service is used to manage fulfillment orders within EICS. It allows for the cancellation and rejection of orders and items.

Web Service	Description
StoreInventory	This service is used to lookup information about inventory positions and has several different operations to do so.
StoreInventoryISN	This service is used to create, update, or delete ISN data in EICS.
StoreInventoryUIN	This service is used to create, update, generate or read a UINs.
StoreItem	This service is used to lookup various information about an item within the store.
StoreItemPrice	This service is used to lookup prices about items within a store.
StoreNotification	This service is used to create new notifications within the system.
StoreShipmentManifest	This service is used to close documents based on shipped container information.
StoreShipmentReason	This service is used to retrieve shipment reasons codes to use when creating shipments.
StoreTicket	This service is used to create tickets and lookup ticket formats.
StoreTransfer	This service is used to create, update, and request a transfer, which describes the intent to ship items to another store or to a warehouse. It is also used to approve or reject that request. It can be used to directly create, update, approve, cancel, or close an actual transfer.
TransferDelivery	This service is used to update, receive, or confirm a transfer delivery (delivery arriving from another store or warehouse). It is also used to create, update, receive, cancel, or confirm the containers on that delivery.
TransferShipment	This service is used to create, update, submit, or dispatch a transfer shipment (shipment going out to another store or warehouse). It is also used to create, update, cancel, or confirm the containers on that shipment.
VendorDelivery	This service is used to update, receive, reject, or confirm a vendor delivery (delivery arriving from a supplier). It is also used to create, update, cancel, or confirm the containers on that delivery.
VendorReturn	This service is used to create, update, approve, cancel, or close a vendor return document, which describes the intent to ship items to a supplier.
VendorShipment	This service is used to create, update, open, submit, cancel submit or dispatch a vendor shipment (outgoing shipment to a supplier). It is also used to create, update, cancel, submit, or confirm the containers on that shipment.

Web Services Basic Design Principles

Empty Response

In the cast that a web service does not return any information (an empty list), the external system needs to understand that this is a valid response that indicates no item, transaction or queried information was found or retrieved. For example, performing a lookup in which the search criteria entered matched no input.

Error Return Key

Errors returned through a web service will be in the form of a key. This key should be translated into correct language and verbiage by the external system. EICS will not do this translation or provide English verbiage for the encountered web service error.

Boolean Data Type

If a Boolean is the data type on the interface to EICS, and no value is provided, EICS will default the value to False.

Configured System Options in EICS

Web services apply system configurations to the request that are coming in through the web service but assumes that all input validation that requires user interaction to confirm has been completed by the consumer of the web service (the third party system). This system configuration user-interaction option will be assumed to have been confirmed during the web service processing. In case the system option is a fixed restriction that does not require user interaction, and the input fails this restriction, the web service will return an error. For example:

- Shipping inventory when inventory is less than 0 can be allowed by the user of EICS. The web service assumes that the third party application did prompt the user or that their business always allows the user to do this activity.
- Adding a non-ranged item requires both a system configuration option to be enabled and the user to confirm the process. If the system configuration does not allow it, the web service will block the transaction and return an error. If the system configuration does allow adding non-ranged items, it is automatically assumed that a user confirmed its addition, and the web service adds the item.
- Allowing Receiver Unit Adjustments are dependent on a period of time. If a receiver unit adjustment were to come into EICS after that period, it would automatically be rejected, and the web service would return an error regardless of presentation or confirmation of user done by the external system.

Internally Managed vs Externally Managed

Internally Initiated

Internally initiated indicates the EICS was responsible for the original creation of the transaction being processed. A web service that creates a new transaction within EICS to be managed creates an internally initiated transaction.

Externally Initiated

Externally initiated indicates that another system created the transaction, has information about it, and notifies EICS of its creation through a notification system, not by requesting EICS create new information. EICS might manage the data after the notification but did not create the data.

Internally Managed

Internally managed data is information in which EICS is responsible for tracking its state and processing its life cycle. Our deliveries and shipments are primary examples of this. They may be externally initiated or internally initiated, but either way, they are internally managed. EICS is responsible for approving, picking, packing, manifesting, and dispatching the system and internally manages that process.

Externally Managed

Externally managed data is information that EICS does not process or track and is simply informed about after the externally managed data is complete. Point-of-sale transactions are a perfect example of this. We do not manage the sale, but once it is complete, EICS is notified and adjusts the inventory accordingly.

Web Services

EICS web services are intended for integration to allow a system using those services to control the flow and processing within EICS. Our web services are primarily designed (almost all of them) to internally manage the information. The services are intended to be used real time with the steps such as approving, picking, and dispatching occurring with real time access to EICS web services while the process is happening.

EICS web services are not designed for externally managed information. If a system is controlling the state managements itself and not informing EICS until later, this will produce out-of-sync inventory. For example, if you create a shipment, pack the shipment, and send it out and then a day later use the web service, to create, update, and dispatch the shipment, all dates and processing of inventory movements will be tagged with the later date as if they occurred real time when the web service is used.

The point-of-sale service is an externally managed service, where the timestamp on the service can be any date and EICS handles the logic of dating things according to that timestamp. Inventory Adjustment also has an "adjustment date" which represents the time the adjustment took place and so the movement of inventory can be controlled externally.

Web Service Operation Basic Design Standards

This section discusses the general approach and design standards for naming and intent regarding operations within a web service.

Lookup

Lookup operations take either an identifier of a set of criteria and find all the relevant records associated to it. A thin or light view of the data being asked for is returned giving reference to information you can do further interrogation on.

Read

Read operations take an identifier and return all relevant information to it. It may only be one level, however. For example, reading a transfer shipment returns only all the information at the shipment level and does not read information at the container or item level. Usually, the entity that contains items will also retrieve the items. Reading a container will return the container information and the item information within.

Create

Create usually inserts and generates something new and returns an identifier, reference, or handle to that information. Create normally does not take a great deal of information, such as items or anything, but rather gives you a set of IDs that then lets you update the transaction with that reference.

Save or Update

Save or update is used to modify the data usually without changing state on the transaction. The save or update operation is used to add items, remove items, edit attributes, change quantities and all the other tasks one does during a process.

Approve, Cancel, Confirm or Dispatch

Activities that change state take in a simple identifier and then process that state change. To dispatch a shipment, you pass in a reference only to the shipment and it becomes shipped,

updating the inventory. This means all changes are done through the save operations prior to making the state change.

Interpreting Validation Errors

If some data could not be processed, the web service will return a fault or a validation fault. The general form that a fault will take is to be a series of problem detail nodes containing a key and value that describes the fault. The first problem detail node will have the key ERROR and the value will be a description of the error type such as INVALID_INPUT. This will be followed by a series of nodes where the KEY is an object class name (ex: Transfer) and the value is its identifier (ex: 123) describing the hierarchy of data the error took place in. For example, a transfer container fault would have two nodes (Transfer:123) and then (TransferCarton:456). If a specific attribute is known, the final node in any problem detail series, it will have the key ATTRIBUTE and the value will be the name of the attribute of the error (ex: ITEM_ID:A5X).

Problem Detail Name	Value
ERROR	This describes the error (for example: INVALID_INPUT)
ATTRIBUTE	Identifies the specific attribute that had an error.

EICS follows the same business rules when processing information from a web service as it does from any of its clients, so the same business rules and functionality that exist in the User's Guide also exists for the web service. Understanding the basic functionality will help interpret why the validation or processing error occurred.

Common Error Codes

The following codes are paired as values to the ERROR Key:

Error Code	Description
ACTIVITY_LOCK_NOT_GRANTED	Indicates that a requested activity lock on a piece of data was not granted.
DUPLICATE_INPUT	Indicates the service would create a duplication of input that should be unique.
INVALID_DATE_RANGE	Indicates the end date of a date range is prior to the start date.
INVALID_INPUT	Indicates that the input is invalid. This error is usually followed by object and attribute information.
INVALID_ITEM	Indicates the item does not exist in the system.
INVALID_STATE_FOR_UPDATE	Indicates the transaction or data specified is not in a state that allows it to be updated (such as canceled).
INPUT_MISMATCH	Indicates the input to the web service has been altered incorrectly when compared to existing data. For example, the store identifier is different on the web service request than the currently existing transaction.
INPUT_TOO_LARGE	Indicates the input in the web service is larger than is allowed in the transaction date.
ITEM_NOT_RANGED	Indicates the item has not been activated in the location for which the request is made.
MULTIPLE_STORE	Indicates a batch of input data (such as a point-of-sale transaction) was for more than one store in a single web service call.
TIMEZONE_NOT_GMT	Indicates the time input of the web services was not in GMT.

Error Code	Description
UOM_MISMATCH	Indicates a mismatch of unit of measure information between the input and currently existing data that does not allow the information to be accurately merged.

Validation Error (Fault Example)

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">

<S:Body>

<ns0:Fault xmlns:ns0="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ns1="http://www.w3.org/2003/05/soap-envelope">

<faultcode>ns0:Server</faultcode>

<faultstring>VALIDATION_ERROR</faultstring>

<detail>

<ns0:ValidationWSFaultException xmlns:ns0="http://www.oracle.com/retail/integration/services/exception/v1">

<ns0:shortErrorMessage>VALIDATION_ERROR</ns0:shortErrorMessage>

<ns0:BusinessProblemDetail>

<ns0:problemDescription>VALIDATION_ERROR</ns0:problemDescription>

<ns0:ProblemDetailEntry>

<ns0:name>ERROR</ns0:name>

<ns0:value>INVALID_INPUT</ns0:value>

</ns0:ProblemDetailEntry>

<ns0:ProblemDetailEntry>

<ns0:name>ShlfAdjRef</ns0:name>

<ns0:value>1</ns0:value>

</ns0:ProblemDetailEntry>

<ns0:ProblemDetailEntry>

<ns0:name>ATTRIBUTE</ns0:name>

<ns0:value>shelfAdjustmentId</ns0:value>

</ns0:ProblemDetailEntry>

</ns0:BusinessProblemDetail>

</ns0:ValidationWSFaultException>

</detail>

</ns0:Fault>

</S:Body>

```
</S:Envelope>
```

Business Error (Fault Example)

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
<S:Body>
<ns0:Fault xmlns:ns0="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ns1="http://www.w3.org/2003/05/soap-envelope">
<faultcode>ns0:Server</faultcode>
<faultstring>BUSINESS_ERROR</faultstring>
<detail>
<ns0:ValidationWSFaultException xmlns:ns0="http://www.oracle.com/retail/integration/services/exception/v1">
<ns0:shortErrorMessage>BUSINESS_ERROR</ns0:shortErrorMessage>
<ns0:BusinessProblemDetail>
<ns0:problemDescription>BUSINESS_ERROR</ns0:problemDescription>
<ns0:ProblemDetailEntry>
<ns0:name>ERROR CODE</ns0:name>
<ns0:value>ADJUSTMENT_NOT_FOUND</ns0:value>
</ns0:ProblemDetailEntry>
</ns0:BusinessProblemDetail>
</ns0:ValidationWSFaultException>
</detail>
</ns0:Fault>
</S:Body>
</S:Envelope>
```

Web Services

Web services available in EICS:

ActivityLock

The following operations are available within the ActivityLock web service.

Operation	Description
lookupActivityLock	Retrieves information about one or more activity locks that match the input criteria.
readActivityLock	Retrieves detailed information about a single lock using its identifying reference.

Operation	Description
createActivityLock	Created an activity lock on a transaction.
deleteActivityLock	Deletes an activity lock thereby releasing processing on a transaction.

Standard Usage

An activity lock is a record indicating the user, time, and a piece of information (a transaction) that should be considered "locked". All server processing validates that the accessing user has a lock on the information before updating, notifying the current user if someone else has modified the information while they were locked and preventing the stale update.

Developers should create locks on information prior to performing update calls and delete locks when the update if finished. For example, create a lock on inventory adjustment with ID 123 with the ActivityLock service, then use `saveInventoryAdjustment` in the Inventory Adjustment service with Adjustment 123, and then delete the activity lock using the ActivityLock service. If you do not gain the lock, you will receive an error when attempting to save an inventory adjustment.

FulfillmentOrderDelivery

The following operations are available within the FulfillmentOrderDelivery web service.

Operation	Description
lookupFulfillmentOrderDeliveryHeaders	Retrieves summary information for fulfillment order deliveries that match the search criteria input.
readFulfillmentOrderDeliveryDetail	Reads the complete detailed information about a fulfillment order including items and quantities.
createFulfillmentOrderDelivery	Creates a new fulfillment order delivery including items and quantities in an in-progress status to be further worked on.
cancelFulfillmentOrderDeliverySubmission	Cancels the fulfillment order review and moves it back into in-progress status for further work.
dispatchFulfillmentOrderDelivery	Dispatches the fulfilment order delivery completing the delivery and updating the inventory.
submitFulfillmentOrderDelivery	Submits the fulfillment order delivery for review prior to dispatching.
updateFulfillmentOrderDelivery	Updates a fulfillment order delivery including items and quantities. This operation requires an activity lock.
lookupCustomAttributeAdmins	Retrieves the custom attribute administration information that describes what customized attributes are available on the fulfillment order delivery.

Standard Usage

A user can create a delivery by using `createFulfillmentOrderDelivery` references the fulfillment order to make a delivery for. The user can then use `updateFulfillmentOrderDelivery` to fill in all the quantities that are going to be shipped and finally use `dispatchFullfillmentOrderDelivery` to indicate that the order has been shipped out, which moves the inventory appropriately.

FulfillmentOrderPick

The following operations are available within the FulfillmentOrderPick web service.

Operation	Description
lookupFulfillmentOrderPickHeaders	Retrieves summary information for fulfillment order picks that match the search criteria input.
readFulfillmentOrderPick	Reads the complete detailed information about a fulfillment order pick including items and quantities.
confirmFulfillmentOrderPick	Confirm the fulfillment order pick which allows it to move on to the delivery cycle.
deleteFulfillmentOrderPick	Deletes a fulfillment order pick.
createFulfillmentOrderPickByFulfillmentOrder	Generate a pick based on the information in a fulfillment order.
createFulfillmentOrderPickByBin	Generate a pick based on a number of bins selecting orders as needed to fill the bins.
updateFulfillmentOrderPick	Update the item and quantity information about a pick. This operation requires an activity lock.
lookupCustomAttributeAdmins	Retrieves the custom attribute administration information that describes what customized attributes are available on the fulfillment order pick.

Standard Usage

Picking is used to reserve or set aside quantities for a later delivery. The user can create a pick for an order using `createFulfillmentOrderPickByFulfillmentOrder` or create a bin to places multiple orders in with `createFulfillmentOrderPickByBin`. The picked quantities can be updated through the `updateFullfillmentOrderPick` operation and when the pick is finished, it can be finalized with `confirmFulfillmentOrderPick` which sets assigned the goods as reserved in inventory.

FulfillmentOrderReversePick

The following operations are available within the FulfillmentOrderReversePick web service.

Operation	Description
lookupReversePickHeaders	Retrieves summary information for fulfillment order reverse picks that match the search criteria input.
lreadReversePickDetail	Reads the complete detailed information about a fulfillment order reverse pick including items and quantities.
createReversePick	Creates a new fulfillment order reverse pick for the specified fulfillment order.
deleteReversePick	Deletes a fulfillment order reverse pick.
updateFulfillmentOrderReversePick	Updates the items and quantities on a fulfillment order reverse pick. This operation requests an activity lock.
confirmReversePick	Confirms the fulfillment order reverse pick completing the process and assigning the inventory back to a location within the store system.
lookupCustomAttributeAdmins	Retrieves the custom attribute administration information that describes what customized attributes are available on the fulfillment order reverse pick.

Standard Usage

Reverse Picking is used to take reserved quantities and place them back into available inventory. The user can create a reverse pick with `createReversePick`. The quantities to return

can be updated through the `updateFulfillmentOrderReversePick` operation and when the reverse pick is ready, it can be finalized with `confirmReversePick` which moves reserved inventory back into available inventory.

InventoryAdjustment

The following operations are available within the InventoryAdjustment web service.

Operation	Description
lookupInventoryAdjustmentReason	Retrieve a complete list of adjustment reasons that can be used when updating or saving an inventory adjustment. Reason codes are attached to each line item.
lookupNonSellableQuantityType	Retrieve a complete list of non-sellable quantity types. These codes indicate the reason that unavailable inventory in unavailable.
lookupInventoryAdjustmentHeader	Retrieve summary information about inventory adjustment transactions based on the search criteria sent.
readInventoryAdjustmentDetail	Retrieve the complete detailed information about an inventory adjustment, including its item information, based on a unique reference/id.
saveInventoryAdjustment	Creates or updates the information about an inventory adjustment in the data store. You can alter information about items and quantities using this operation. This operation requires having an activity lock.
confirmInventoryAdjustment	Confirms the inventory adjustment, updating all the inventory positions, and closing the adjustment.
saveAndConfirmInventoryAdjustment	Performs the functionality of saveInventoryAdjustment and immediately thereafter performs the confirmInventoryAdjustment functionality. See those operations.
cancelInventoryAdjustment	Cancel an inventory adjustment. This can only be done prior to the inventory adjustment being confirmed.
lookupCustomAttributeAdmins	Retrieves the custom attribute administration information that describes what customized attributes are available on the inventory adjustment.

Standard Usage

A new inventory adjustment can be created using the `saveInventoryAdjustment` operation. Alternatively, the user can `lookupInventoryAdjustmentHeader` to find a specific inventory adjustment to work on. Either way, `saveInventoryAdjustment` can be used to update the information on an open adjustment. The `lookupInventoryAdjustmentReasons` will retrieve the reasons codes that need to be assigned to items when you update an adjustment. When the adjustment contains all the information you need, the `confirmInventoryAdjustment` operation will finalize the inventory adjustment and shift the inventory appropriately.

ItemBasket

The following operations are available within the Item Basket web service.

Operation	Description
lookupItemBasketHeaders	Retrieve a list of item basket headers based on search criteria which contain summary information about the item basket.
lookupItemBasketTypes	Retrieve a complete list of item basket types to use when creating a new item basket.

Operation	Description
createItemBasket	Creates a new item basket.
readItemBasket	Retrieve the complete detailed information about an item basket based on an identifier.
deleteItemBasket	Cancels an item basket. The basket will no longer be usable and will be marked for eventual purge from the data store. This operation requires an activity lock.
saveItemBasket	Updates an item basket. This operation requires an activity lock.
copyItemBasket	Creates a new item basket with the same information as an existing item basket.
confirmItemBasket	Moves the item basket to a completed state and allows it to be used within logic throughout the system. This operation requires an activity lock.
lookupCustomAttributeAdmins	Retrieves the custom attribute administration information that describes what customized attributes are available on the item basket.

Standard Usage

A new item basket can be created using the `saveItemBasket` operation. Alternatively, the user can `lookupItemBasketHeader` and `readItemBasket` to find a specific item basket to work on. Either way, `saveItemBasket` can be used to update the information on an item basket. When the item basket contains all the information you need, the `confirmItemBasket` operation will finalize the item basket and make it available to use in other areas of the system.

OrderRequest

The following operations are available within the Order Request web service.

Operation	Description
lookupOrderRequestHeader	Retrieves store order request headers based on the query criteria.
readOrderRequest	Retrieves detailed information about a store order request.
createOrderRequest	Creates a new store order request.
updateOrderRequest	Updates an existing store order request.
approveOrderRequest	Approve a store order request.
cancelOrderRequest	Cancels a store order request.
lookupDeliveryTimeSlot	Retrieves delivery time slots.
lookupOrderContext	Retrieves contexts available for store order requests.
lookupOrderArea	Retrieves store order request areas that could be used for restriction.
lookupCustomAttributeAdmins	Retrieves all the custom attributes admins configured for store order requests.

Standard Usage

A new store order can be created using the `createOrderRequest` operation. The information about store order can be read by `readOrderRequest`. The store order can be updated using `updateOrderRequest` and can be approved using `approveOrderRequest` or can be canceled using `cancelOrderRequest`. The `lookupOrderRequestHeader` is used to find the store orders.

POSTransaction

The following operations are available within the POSTransaction web service.

Operation	Description
processPOSTransactions	Processes a point-of-sale transaction or transactions through an asynchronous process. This is designed to optimize the processing at 500 PosTrnItm (across any number of transactions).

Standard Usage

POS may integrate its transactions to EICS using this web service. The service processes point-of-sale transactions through an asynchronous process. This service has a default limit of 1000 total PosTrnItms, though they may be distributed between any number of actual PosTrn transactions. Exceeding this limit causes a web service fault to occur. However, the web service is optimized for speed at greater than 400 and less than 500 total PosTrnItms per service call. These transactions may belong to multiple store identifiers. The processing operation validates the input, parses the payload information, creates a POSTransaction object within EICS, and stores these records to be processed later. See Sales Integration for additional information.

REST Web Service

A REST web service for POSTransaction exists and is the preferred service to use in order to process point-of-sale transactions (see REST WEB Services). This SOAP based web service will be deprecated and eventually removed.

ProductGroup

The following operations are available within the ProductGroup web service.

Operation	Description
lookupProductGroupHeader	Retrieves list of summary information about a product group that match the search criteria input.
readProductGroup	Retrieves the detailed information about a single product group based on its unique reference.
saveProductGroup	Creates or updates a product group. The input contains all the detailed information about the product group. An activity lock is needed for this operation.

Standard Usage

With this web service, the user can create or update the contents of a product group, a collection of items associated with a certain type of grouping, such as stock counts. The user can find the product group with `lookupProductGroupHeader`, read in the entire product group with `readProductGroup` and then, if the group is still open, update the contents of the product group with `saveProductGroup`.

ProductGroupSchedule

The following operations are available within the ProductGroupSchedule web service.

Operation	Description
lookupProductGroupScheduleHeader	Retrieves list of summary information about a product group schedule that match the search criteria input.
readProductGroupSchedule	Retrieves the detailed information about a single product group schedule based on its unique reference.
saveProductGroupSchedule	Creates or updates a product group. The input contains all the detailed information about the product group schedule. An activity lock is needed for this operation.
cancelProductGroupSchedule	Cancels the product group schedule.

Standard Usage

With this web service, the user can create or update the contents of schedule, which uses a product group to generate activity within EICS. The user can find the schedule with `lookupProductGroupScheduleHeader`, read in the entire schedule with `readProductScheduleGroup` and then, if the schedule is still open, update the contents of the schedule with `saveProductGroupSchedule`.

ReplenishmentGap

The following operations are available within the ReplenishmentGap web service.

Operation	Description
lookupReplenishmentGapHeaders	Retrieves list of summary information about replenishment gaps that match the search criteria input
readReplenishmentGap	Retrieves the detailed information about a single replenishment gap based on its unique reference.
saveReplenishmentGap	Creates a new replenishment gap or updates the detailed information about a replenishment gap. If update, this operation requires an activity lock.
deleteReplenishmentGap	Deletes a replenishment gap.
lookupCustomAttributeAdmins	Retrieves the custom attribute administration information that describes what customized attributes are available on the replenishment gap.

Standard Usage

With this web service, the user can create or update the contents of replenishment gap list which can then be used in creation of shelf replenishment within EICS. A new replenishment gap list can be created using `saveReplenishmentGap`. The user can update existing replenishment gap list with `saveReplenishmentGap`, find replenishment gap lists with `lookupReplenishmentGapHeaders`, read in the entire replenishment gap list with `readReplenishmentGap` and delete a replenishment gap list with `deleteReplenishmentGap`.

RfidInventory

The following operations are available within the RfidInventory web service.

Operation	Description
deleteRfidZone	Deletes a zone within a facility. A zone cannot be deleted if RFID tags still exist within the zone.

Operation	Description
lookupRfidZones	Returns details about all the zones within a particular facility.
processRfidEvents	Processes Radio-Frequency-Identification based events.
saveRfidZone	Creates or updates the details of a facility zone.

Standard Usage

With this web service, the user can create or update RFID zones within EICS. A new RFID zone can be created using `saveRfidZone`. The user can update an existing RFID zone with `saveRfidZone`, find RFID zones with `lookupRfidZones` and delete a RFID zone with `deleteRfidZone`. The user can process RFID based events using `processRfidEvents`.

ShelfAdjustment

The following operations are available within the ShelfAdjustment web service.

Operation	Description
lookupShelfAdjustmentHeaders	Retrieves list of summary information about shelf adjustments that match the search criteria input.
readShelfAdjustment	Retrieves the detailed information about a single shelf adjustment gap based on its unique reference.
saveShelfAdjustment	Creates a new shelf adjustment or updates the detailed information about a current shelf adjustment. If update, this operation requires an activity lock.
confirmShelfAdjustment	Confirms a shelf adjustment completing the workflow and moving inventory positions.
cancelShelfAdjustment	Deletes a shelf adjustment.
lookupCustomAttributeAdmins	Retrieves the custom attribute administration information that describes what customized attributes are available on the shelf adjustment.

Standard Usage

Shelf adjustments are used to adjust the shop-floor or backroom stock in case of any discrepancy. A new shelf adjustment can be created using `saveShelfAdjustment`. The user can update existing shelf adjustment with `saveShelfAdjustment`, find shelf adjustments with `lookupShelfAdjustmentHeaders`, read in the entire shelf adjustment with `readShelfAdjustment`, cancel a shelf adjustment with `cancelShelfAdjustment` and confirm a shelf adjustment with `confirmShelfAdjustment`.

ShelfReplenishment

The following operations are available within the ShelfReplenishment web service.

Operation	Description
lookupShelfReplenishmentHeaders	Retrieves list of summary information about shelf replenishments that match the search criteria input.
readShelfReplenishment	Retrieves the detailed information about a single shelf replenishment gap based on its unique reference.
createShelfReplenishment	Creates a new shelf replenishment.

Operation	Description
updateShelfReplenishment	Updates the detailed information about a current shelf replenishment. This operation requires an activity lock.
confirmShelfReplenishment	Confirms a shelf replenishment completing the workflow and moving inventory positions.
cancelShelfReplenishment	Deletes a shelf replenishment.
lookupCustomAttributeAdmins	Retrieves the custom attribute administration information that describes what customized attributes are available on the shelf replenishment.

Standard Usage

Shelf replenishment is used to replenish shop-floor stock from backroom or delivery bay. A new shelf replenishment can be created with `createShelfReplenishment`. The user can find shelf replenishments with `lookupShelfReplenishmentHeaders`, read in the entire shelf replenishment with `readShelfReplenishment`, update the shelf replenishment with `updateShelfReplenishment`, confirm the shelf replenishment with `confirmShelfReplenishment` and cancel the shelf replenishment with `cancelShelfReplenishment`.

StockCount

The following operations are available within the StockCount web service.

Operation	Description
lookupStockCountHeaders	Retrieves list of summary information about a stock count that match the search criteria input.
readStockCountDetail	Retrieves the detailed information about a single stock count based on its unique reference. This contains a list of summary information about the child counts.
readStockCountChild	Retrieves the detailed information about a single stock count child.
activateStockCount	This activates are starts the stock counting process including taking a snapshot of current inventory positions.
completeStockCountChild	Completes the counting or recounting of a stock count child, depending on which phase the stock count is in. This process will calculate discrepancies and move the child to the next phase.
updateCountQuantities	Updates the counted or recounted quantity fields for a stock count child based on the current phase of the stock count.
lookupCustomAttributeAdmins	Retrieves the custom attribute administration information that describes what customized attributes are available on the stock count.

Standard Usage

The stock count web services are design primarily to export information for third party counting. You first lookup the headers, choose your stock count, and then retrieve all the details for the stock count. These details do not contain item information but rather a list of child count references. You can use these references to grab the full details of a child count which includes items and quantities, and then update those quantities.

REST Web Service

A StockCount REST web service exists that allows for the snapshot of a stock count (see REST WEB Services).

Store

The following operations are available within the Store web service.

Operation	Description
lookupAutoReceiveStore	Retrieves all stores that allow auto-receiving of inventory from the input store.
lookupAssociatedStore	Retrieves all stores that are associated to the input store. They are sometimes called buddy stores.
lookupStoresInTransferZone	Retrieves all stores in the same transfer zone as the input store.
readStoreDetail	Retrieves the detailed information about a single store from the input unique reference.

Standard Usage

The Store web service is used to retrieve information about stores. There are no updates. They are used to determine such information as whether you can ship to certain stores (such as those in transfer zones).

StoreFulfillmentOrder

The following operations are available within the StoreFulfillmentOrder web service.

Operation	Description
lookuFulfillmentOrdersHeaders	Retrieves summary information for fulfillment orders that match the search criteria input.
readFulfillmentOrderDetail	Reads the complete detailed information about a fulfillment order including items and quantities.
createFulfillmentOrderDetail	Creates a new fulfillment order with detailed information, including items and quantities.
cancelFulfillmentOrderDetail	Cancels quantities on a fulfillment order. This may cancel the entire order or just reduce or cancel quantities for specific items.
rejectFulfillmentOrder	Rejects the fulfillment order indicating that the store will be unable to fulfill that order.
lookupCustomAttributeAdmins	Retrieves the custom attribute administration information that describes what customized attributes are available on the fulfillment order.

Standard Usage

Unlike some of the other web services, fulfillment order is not managed within EICS. Instead, EICs manages the picking and delivery, but the order itself is managed by an external order management system.

Oracle Retail Order Broker (OB) calls SIOCS for inventory availability.

Web services are supplied to find and read the details of a fulfillment order, but updates are not allowed. Instead, the external system uses `createFulfillmentOrderDetail` to notify EICS of a

new order to ship, `cancelFulfillmentOrderDetail` to reduce or cancel quantities (note that they cannot be increased) or call `rejectFulfillmentOrder` to notify EICS that the order has been rejected.

StoreInventory

The following operations are available within the StoreInventory web service.

Operation	Description
lookupAvailableInventory	Retrieves basic availability information for multiple items at multiple locations. Only transaction-levels items are processed (UPCs are not allowed) and only current inventory is returned. The service supports up to 200 items at 150 locations.
lookupAvailableInventoryAllStores	Retrieves basic availability information for a single item at all store locations. Only transaction-levels items are processed (UPCs are not allowed) and only current inventory is returned.
lookupAvailableInventoryAllWarehouses	Retrieves inventory information for a single item at multiple warehouses. Only transaction-level items are processed, and only current inventory is returned.
lookupInventoryInStore	Retrieves a broad set of inventory information for several items at several stores, broken down into various inventory groupings.
lookupInventoryInTransferZone	Retrieves a broad set of inventory information for items within the specific transfer zone, broken down into various inventory groupings.
lookupInventoryForBuddyStores	Retrieves a broad set of inventory information for associated or buddy stores, broken down into various inventory groupings.
lookupFutureInventory	Retrieves the future inventory information (such as inbound, ordered quantities and expected dates) for an item and store location.

Standard Usage

The StoreInventory is meant to retrieve inventory position information. Available inventory lookups are much smaller and quicker to respond than full inventory lookups. Future inventory is separated from current positions as it is much more time consuming to retrieve. Those who access the web services should consider the purpose before choosing which operation to use.

REST Web Service

An InventoryInquiry REST web service exists for inventory lookup and is the preferred service to use in order to retrieve inventory information (see REST WEB Services). This SOAP based web service will be deprecated and eventually removed.

StoreInventoryISN

The following operations are available within the StoreInventoryISN web service.

Operation	Description
lookupIsnTypes	Returns a complete list of Item Scan Number types.
lookupIsn	Returns details about matching Item Scan Numbers in store inventory.
createIsn	Create a new Item Scan Number without changing store inventory.
updateIsn	Updates an existing Item Scan Number without changing store inventory.

Operation	Description
deleteIsn	Deletes an Item Scan Number without changing store inventory.
lookupCustomAttributeAdmins	Retrieves all the custom attribute admins configured for ISNs.

Standard Usage

This web service is used to create, update, or delete ISN in store inventory. An item scan number is any number meant to be scanned to find an item, and potentially a Unique Identification Number, that is not already an item, UPC, UIN, VPN, or other value. Items Scan Numbers are only used to find information and are not tracked as inventory.

StoreInventoryUIN

The following operations are available within the StoreInventoryUIN web service.

Operation	Description
createUIN	Create a new UIN without changing store inventory.
generateUIN	Generate new UINs without changing store inventory.
lookupUINDetails	Returns details about all the UINs in store inventory for a particular item and store. This is limited to 1000 UINs for a particular item and store.
readUINDetail	Returns details about a UIN in store inventory. A UIN reference is not unique, so this may return detailed information for UINs across multiple items.
updateUIN	Updates an existing UIN without changing store inventory.

Standard Usage

This web service is used to create, generate, update, find, or read UINs in store inventory.

StoreItem

The following operations are available within the StoreItem web service.

Operation	Description
lookupItemHeaderByItem	Retrieves list of summary information about an item that match the item-based search criteria input.
lookupItemHeaderBySource	Retrieves list of summary information about an item that match the source or location-based search criteria input.
lookupItemHeaderByUDA	Retrieves list of summary information about an item that match the UDA (User Defined Attribute)-based search criteria input.
lookupItemHeaderByInventory	Retrieves list of summary information about an item that match the inventory-based search criteria input.
lookupItemCfa	Retrieve a list of custom flexible attributes for the specified item and store.
lookupItemUda	Retrieve a list of user defined attributes for the specified item and store.
readItemDetail	Retrieves the complete detailed information a single item based on its unique reference.

Operation	Description
lookupRelatedItem	Retrieves a list of summary information about items related to the item used as input criteria.
saveItemImage	Inserts a new display image or QR code image for the specified item. The service returns immediately, and the information is processed asynchronously.

Standard Usage

This web service is used to find items and retrieve information about items. The only exception is the ability to create new image-based information about an item.

StoreItemPrice

The following operations are available within the StoreItemPrice web service.

Operation	Description
lookupItemPriceHeader	Retrieve a summary list of item price information based on input criteria. This only retrieves information known to EICS and has no access to a pricing system.
readItemPrice	Retrieves the full details a single item price record based on its unique reference.
lookupItemPriceOnEffectiveDate	Retrieves the item price of an item for a specific date.

Standard Usage

This web service is used to retrieve information about prices that are known to EICS. Integration with pricing systems updates EICS information about item prices on a continual basis. These web services give a view into EICS information only.

StoreNotification

The following operations are available within the StoreNotification web service.

Operation	Description
createNotification	Creates a new notification within the system. These notifications are displayed in the client applications.

Standard Usage

This web service is designed for external system that handle related activities to EICS. With this web service, they can send notifications into EICS of activity that needs to take place based on something that has occurred in another system.

StoreShipmentManifest

The following operations are available within the StoreShipmentManifest web service.

Operation	Description
closeManifest	Closes the manifest shipments.

Standard Usage

This web service is designed to close manifest shipments. All manifest shipments matching the input criteria, such like carrier code, and carrier service code will be closed.

StoreShipmentReason

The following operations are available within the StoreShipmentReason web service.

Operation	Description
lookupAllShipmentReasons	Retrieves all the shipment reasons configured for store shipments.

Standard Usage

This web service exists to allow customers to retrieve information about shipment reasons that can be assigned to line items on outgoing shipments. The shipment based web services taking the code identifier and thus, you will need to read in these shipment reasons to be able to select and apply valid reason codes.

StoreTicket

The following operations are available within the StoreTicket web service.

Operation	Description
createTickets	Create a new group of up to 999 tickets to be managed and printed.
lookupTicketFormats	Retrieves available ticket formats for the criteria specified.

Standard Usage

The `createTickets` operation is used to create a new group up to 999 tickets to be managed and printed. The ticket formats can be retrieved using `lookupTicketFormats` operation based on the criteria specified.

StoreTransfer

The following operations are available within the StoreTransfer web service.

Operation	Description
lookupTransferHeader	Retrieve a summary list of transfers that matches the input criteria.
lookupTransferContext	Retrieves all the transfer context options available to assign to a transfer.
readTransfer	Retrieves the detailed information about transfer, including its items and quantities, based on a unique reference.
createTransferRequest	Creates a brand new transfer request (Location 1 requesting a transfer from Location 2).

Operation	Description
saveTransferRequest	Updates a transfer request allowing user to change items and quantities. This must be done prior to requesting it, which finalizes the transfer request. This requires an activity lock.
createTransfer	Generates a new transfer that you can add details to. The saveTransfer method must be used to update details such as items and quantities of the transfer.
saveTransfer	Updates a previously approved transfer item and quantity details. This operation requires an activity lock.
saveTransferApproval	Updates items and quantities on a transfer in requested status that is currently in the process of being approved but has not yet been approved. This operation requires an activity lock.
requestTransfer	Updates the status to Requested, finally the transfer request. This allows the opposite location to view the new request for transfer of goods. This operation requires an activity lock.
approveTransfer	Approves a transfer request converted the transfer request into an approved transfer. This operation requires having an activity lock.
rejectTransfer	Rejects a transfer in request status which prevents the transfer request from becoming a transfer. This operation requires having an activity lock.
cancelTransfer	Cancels an approved transfer. This operation requires having an activity lock.
closeTransfer	Closes a processed or partially processed transfer finalizing the state of the transfer. This operation requires having an activity lock.
lookupCustomAttributeAdmins	Retrieves the custom attribute administration information that describes what customized attributes are available on the transfer.

Standard Usage

The process is started by one store creating a transfer request from a shipping store using `createTransferRequest`. The requesting store can continue modifying the transfer request using `saveTransferRequest` until it is ready to notify the shipping store, when it then uses the `requestTransfer` to send the request to the shipping store. The shipping store can then begin picking items for the transfer and updating the transfer using the `saveTransferApproval` operation. When all the quantities the shipping store are willing to ship are determined, the shipping store uses `approveTransfer` to finalize the approval of the transfer. Alternatively, they can choose to reject the transfer using `rejectTransfer`. It is possible for a shipping store to create a transfer document without going through the request and approval process by using `createTransfer` and `saveTransfer`.

TransferDelivery

The following operations are available within the TransferDelivery web service.

Operation	Description
lookupTransferDeliveryHeaders	Retrieves basic information about one or more transfer deliveries that match the criteria specified. This operation is used to find a delivery arriving at the store.
readTransferDeliveryDetail	Retrieves the entire set of information about a transfer delivery header based on the identifier you pass to it.

Operation	Description
updateTransferDelivery	Updates the header information on a transfer delivery. This operation requires an activity lock.
receiveTransferDelivery	Receives all the currently open and active containers on a transfer delivery by defaulting quantities into all the unreceived items. This does not move inventory, only defaults quantities. This operation requires an activity lock.
confirmTransferDelivery	Confirms a transfer delivery receiving the goods into inventory and updating all the inventory positions. This moves the transfer delivery to a completed status. This operation requires an activity lock.
lookupTransferDeliveryContainerHeaders	Retrieves summary information about every container on a transfer delivery based on the unique delivery reference.
readTransferDeliveryContainerDetail	Reads the entire details of a container including items and quantities based on a unique container reference.
createTransferDeliveryContainer	Generates a new container on the transfer delivery and returns a reference to use so that items and quantity can be added later.
updateTransferDeliveryContainer	Updates the items and quantities on a transfer delivery container. This operation requires an activity lock.
receiveandConfirmTransferDeliveryContainer	It first defaults receiving quantity on the items within the container and then executes the same locking as the confirmTransferDeliveryContainer. This operation requires an activity lock.
confirmTransferDeliveryContainer	Confirms a transfer delivery container as received and updates all the inventory positions. This operation requires an activity lock.
cancelTranferDeliveryContainer	Cancels a transfer delivery container moving it to missing status. Changes cannot be made to a canceled container.
openTransferDeliveryContainer	Re-opens an already confirmed container moving it back into in-progress status.
lookupTransferDeliveryOrders	Retrieves any customer orders associated with the transfer delivery based on the delivery's unique reference.
lookupMisdirectedTransferDeliveryContainers	Retrieves summary information about containers that may have been misdirected based on a set of search criteria as input into the operation.
lookupCustomAttributeAdmins	Retrieves the custom attribute administration information that describes what customized attributes are available on the transfer delivery.

Standard Usage

After reading a transfer delivery using `lookupTransferDeliveryHeader`, you can read the header detail with `readTransferDelivery` or container list with `lookupTransferDeliveryContainers`. You can then use `updateTransferDelivery` to update header attributes and `updateTransferDeliveryContainer` to update items and quantities in the container. To quickly receive the quantities, `receiveTransferDeliveryContainer` automatically fills in quantities, and when quantities are entered `confirmTransferDeliveryContainer` finalizes the container (and if appropriate configurations and business rules apply) immediately updates the inventory. If `receiveTransferDelivery` or `confirmTransferDelivery` is used, then all containers will either be received or confirmed respectively.

TransferShipment

The following operations are available within the TransferShipment web service.

Operation	Description
lookupTransferShipmentHeader	Retrieves basic information about one or more transfer shipments that match the criteria specified. This operation is used to find a shipment.
readTransferShipmentDetail	Retrieves the entire set of information about a transfer shipment header based on a unique reference.
createTransferShipment	Creates a new and empty transfer shipment and returns a reference to the shipment.
saveTransferShipment	Updates the information on a transfer shipment header.
submitTransferShipment	Submits the transfer shipment for review before final dispatch.
cancelSubmittedTransferShipment	Cancels the submission of the transfer shipment for review.
dispatchTransferShipment	Dispatches a transfer shipment. This moves the shipment to dispatched state and updates the inventory. A transfer shipment cannot be modified after dispatch. Dispatch should occur only after all containers are confirmed.
cancelTransferShipment	Cancels a transfer shipment.
lookupTransferShipmentContainer	Finds all the containers on a specific shipment and retrieves basic identification information about each container.
readTransferShipmentContainer	Reads the specific and complete contents of a container.
createTransferShipmentContainer	Creates a new transfer shipment container on the shipment and returns a reference to it.
saveTransferShipmentContainer	Updates the information about a transfer shipment container including adding and removing items and quantities.
confirmTransferShipmentContainer	Confirms that a transfer shipment container is ready for shipment and marks the container as no longer editable.
cancelTransferShipmentContainer	Cancels a transfer shipment container on the shipment.
openTransferShipmentContainer	Re-opens a confirmed container on a shipment prior to the shipment being dispatched so that changes can be made to the container.
lookupCustomAttributeAdmins	Retrieves the custom attribute administration information that describes what customized attributes are available on the transfer shipment.

Standard Usage

To create a shipment for a transfer document, lookup the transfer shipment using `lookupTransferShipmentHeader`. If it does not exist, you may create one for the document using `createTransferShipment`. Create a container on the shipment using `createTransferShipmentContainer` and update the container with items and quantities using `saveTransferShipmentContainer`. Confirm the container using `confirmTransferShipmentContainer`. Repeat the process for each container as needed. Once all containers are confirmed, if configured to require submittal, submit the shipment using `submitTransferShipment` and finally, dispatch the shipment using `dispatchTransferShipment`. Dispatching the shipment finalizes the shipment and relieves the inventory.

VendorDelivery

The following operations are available within the VendorDelivery web service.

Operation	Description
lookupVendorDeliveryHeaders	Retrieves basic information about one or more vendor deliveries that match the criteria specified. This operation is used to find a delivery from a supplier.
lookupPurchaseOrderHeaders	Retrieves basic information about one or more purchase orders that match the criteria specified.
readVendorDeliveryDetail	Retrieves the entire set of information about a vendor delivery header based on a unique reference.
createVendorDelivery	Generate a new vendor delivery heaver and returns a referenced to the delivery.
updateVendorDelivery	Updates the information on a vendor delivery header. This does not include containers, items, or quantities. This operation requires an activity lock.
receiveVendorDelivery	Updates the quantities on a vendor delivery filling in any unreceived items within the containers of the delivery with a default value. It "receives" missing quantities, but no inventory positions are updated. This operation requires an activity lock.
confirmVendorDelivery	Confirms the vendor delivery updating inventory positions and completing the delivery. This operation requires an activity lock.
rejectVendorDelivery	Rejects the vendor delivery placing it in rejected status. This operation requires an activity lock.
cancelVendorDelivery	Cancels the vendor delivery placing it in canceled status. This operation requires an activity lock.
lookupVendorDeliveryContainerHeaders	Retrieves summary information about every container on a vendor delivery based on the unique delivery reference.
readVendorDeliveryContainerDetail	Reads the entire details of a container including items and quantities based on a unique container reference.
createVendorDeliveryContainer	Generates a new container on the vendor delivery and returns a reference to use so that items and quantity can be added later.
updateVendorDeliveryContainer	Updates the items and quantities on a vendor delivery container. This operation requires an activity lock.
confirmVendorDeliveryContainer	Confirms a vendor delivery container as received and updates all the inventory positions. This operation requires an activity lock.
cancelVendorDeliveryContainer	Cancels a vendor delivery container moving it to missing status. Changes cannot be made to a canceled container.
openVendorDeliveryContainer	Open Vendor delivery container. This will re-open a container after receipt allowing it to be received again.
lookupVendorDeliveryOrders	Retrieves any customer orders associated with the vendor delivery based on the delivery's unique reference.
lookupVendorDeliveryAdjustments	Retrieves any external receipt adjustments that exist for the delivery based on the specified unique reference.
cancelSubmitVendorDeliveryContainer	Opens a submitted container for further updates, moving the status to in-progress.
submitVendorDeliveryContainer	Moves the status of the container to submitted and prevents further updates. The container may still be confirmed. No inventory positions are updated via this operation.

Operation	Description
lookupCustomAttributeAdmins	Retrieves the custom attribute administration information that describes what customized attributes are available on the vendor delivery.

Standard Usage

After reading a vendor delivery using `lookupVendorDeliveryHeader`, you can read the header detail with `readVendorDelivery` or container list with `lookupVendorDeliveryContainers`. Use `updateVendorDelivery` to update header attributes and `updateVendorDeliveryContainer` to update items and quantities in the container. To quickly receive the quantities, `receiveVendorDeliveryContainer` automatically fills in quantities, and when quantities are complete `confirmVendorDeliveryContainer` finalizes the container and if appropriate configurations and business rules apply, immediately updates the inventory. If `receiveVendorDelivery` or `confirmVendorDelivery` is used, then all containers will either be received or confirmed respectively. Re-opening a container can be done using `openVendorDeliveryContainer`. To prevent further updates to the container without confirming it, use `submitVendorDeliveryContainer`. Submitted container can be re-opened and moved to in-progress status for further updates using `cancelSubmitVendorDeliveryContainer`.

VendorReturn

The following operations are available within the VendorReturn web service.

Operation	Description
lookupVendorReturnHeader	Retrieves basic information about one or more vendors return documents that match the criteria specified.
readVendorReturnDetail	Retrieves the entire set of information about a vendor return, including items and quantities, based on a unique reference.
saveVendorReturn	Updates the entire set of information about a vendor return, including items and quantities. This operation requires an activity lock.
approveVendorReturn	This marks an in-progress vendor return as approve for shipment. This operation requires an activity lock.
cancelVendorReturn	Cancels a vendor return indicating no further items and quantities should be shipped for the return.
closeVendorReturn	Closes a vendor return document moving it from in-progress to canceled, rejected, or complete status depending on the state of shipped quantities.
lookupCustomAttributeAdmins	Retrieves the custom attribute administration information that describes what customized attributes are available on the vendor return.

Standard Usage

The user may access `lookupVendorReturnHeader` to find vendor returns to deal with. Once the proper vendor return is found, `readVendorReturnDetail` will retrieve all the details of the vendor return including items and quantities. The `saveVendorReturn` operation is then used to update quantities that are expected to ship. Once the vendor return reaches its final state, the operation `approveVendorReturn` will approve the return and get it ready for shipment.

VendorShipment

The following operations are available within the VendorShipment web service.

Operation	Description
lookupVendorShipmentHeaders	Retrieves basic information about one or more vendor shipment headers that match the criteria specified.
lookupReturnContext	Retrieves all the context options that are available to assign to a vendor return shipment.
readVendorShipmentDetail	Retrieves the detailed information about a vendor return header based on a unique reference. It does not include information about containers or items.
saveVendorShipment	Creates a new vendor shipment header if not identifying reference is set or updates the vendor shipment header information if a unique reference is sent as part of the date. When used as an update, an activity lock is needed.
submitVendorShipment	Submits the vendor shipment for review before final dispatch.
cancelVendorShipmentSubmission	Cancels the submission of the vendor shipment for review.
cancelVendorShipment	Cancels a vendor shipment. This moves the shipment to canceled status. Changes cannot be made to a canceled shipment.
dispatchVendorShipment	Dispatches a vendor shipment. This moves the shipment to dispatched state and updates the inventory. A vendor shipment cannot be modified after dispatch. Dispatch should occur only after all containers are confirmed. This operation requires an activity lock.
closeVendorShipment	Closes a vendor shipment using business logic to determine its final state. It cancels the shipment of remaining quantities. Changes cannot be made after a shipment is closed.
lookupVendorShipmentContainerHeaders	Retrieves summary information about all containers within a vendor shipment based on the unique reference of the shipment.
readVendorShipment ContainerDetail	Reads the specific details, including items and quantities, about a container specified by its unique reference.
saveVendorShipmentContainer	Update the details of a container, including items and quantities. This operation requires an activity lock.
confirmVendorShipmentContainer	Confirms that the container is ready for shipment. A confirmed container cannot be modified. This operation requires an activity lock.
cancelVendorShipmentContainer	Cancels a container on the shipment removing it from the shipment.
openVendorShipmentContainer	Opens a confirmed container placing it back into in-progress status so that items can be added or removed from the container.
lookupCustomAttributeAdmins	Retrieves the custom attribute administration information that describes what customized attributes are available on the vendor shipment.

Standard Usage

To create a shipment for a vendor return document, lookup the vendor shipment using `lookupVendorShipmentHeader`. If it does not exist, create one using `createVendorShipment`. Next, create a container on the shipment using `createVendorShipmentContainer`. Update the container with items and quantities using `saveVendorShipmentContainer`. Confirm the container using `confirmVendorShipmentContainer`. Repeat the process for each container as needed. Once all containers are confirmed, if configured to require submit, then submit using `submitVendorShipment` or dispatch the shipment using `dispatchVendorShipment`. Dispatching the shipment finalizes the shipment and relieves the inventory.

Enterprise Documentation

Full web service API document in the form of web services description language files can be downloaded in .zip format. Version specific files are available under ‘Web Services Description Language Files’ section within MOS Document 2614551.1.