# Oracle® Retail Store Inventory Management

Implementation Guide, Volume 1 – Configuration

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Oracle Retail Store Inventory Management Implementation Guide, Volume 1 – Configuration, Release 14.0.1

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# Preface

The *Oracle Retail Store Inventory Management Implementation Guide, Volume 1–Configuration* provides detailed information that is important when implementing SIM. The *Oracle Retail Store Inventory Management Implementation Guide, Volume 1–Configuration* provides the following information and more:

- System and store administration

  Details the SIM system and store options. System option parameters allow a user to change the parameter for the entire system and all stores. Store option parameters are only specific to the store the current user is logged in to.

- Functional design and overview

  Provides detailed information concerning the various aspects of the SIM functional areas.

## Audience

This document is intended for the Oracle Retail Store Inventory Management application integrators and implementation staff, as well as the retailer's IT personnel.

## Related Documents

For more information, see the following documents in the Oracle Retail Store Inventory Management Release 14.0.1 documentation set:

- *Oracle Retail Store Inventory Management Implementation Guide, Volume 2 – Integration with Oracle Retail Applications*
- *Oracle Retail Store Inventory Management Implementation Guide, Volume 3 – Mobile Store Inventory Management*
- *Oracle Retail Store Inventory Management Implementation Guide, Volume 4 – Extension Solutions*
- *Oracle Retail Store Inventory Management Installation Guide*
- *Oracle Retail Store Inventory Management Operations Guide*
- *Oracle Retail Store Inventory Management Release Notes*
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(Data Model documents are not available through Oracle Technology Network. These documents are packaged with released code, or you can obtain them through My Oracle Support.)

Documentation should be available on this Web site within a month after a product release.

## 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

Oracle Retail Store Inventory Management (SIM) empowers store personnel to sell, service, and personalize customer interactions by providing users the ability to perform typical back office functionality on the store sales floor. The results are greatly enhanced customer conversion rates, improved customer service, lower inventory carrying costs, and fewer markdowns. SIM delivers the information and flexible capabilities that store employees need to maintain optimal inventory levels and to convert shoppers into buyers.

The SIM solution does the following:

- Improves perpetual inventory levels by enabling floor-based inventory management through handheld devices and store PCs.
- Minimizes the time needed to process receipt and check-in of incoming merchandise.
- Receives, tracks, and transfers merchandise accurately, efficiently, and easily.
- Reduces technology costs by centralizing hardware requirements.
- Guides users through required transactions.
- Allows customizations to the product through an extensible technology platform.

The retailer's modifications are isolated during product upgrades, lowering the total cost of ownership.

## Skills Needed for Implementation

The implementer needs an understanding of the applications and technical concepts described in this chapter.

### Applications

**Note:** See the *Oracle Retail Store Inventory Management Installation Guide* for a list of the Oracle Retail applications that are certified with this version of SIM.

The implementer should understand the interface requirements of the integrated applications (with or without Retail Integration Bus (RIB)) and data sources for the foundation data. Depending on the version of SIM that you are using, SIM might be deployed either as:

- Standalone (that is, without RIB)

- With Oracle Retail Merchandising System (RMS), Oracle Retail Price Management (RPM) and Oracle Retail Integration Bus (RIB)
- With Oracle Retail Merchandising System, Oracle Retail Price Management, Oracle Retail Warehouse Management System (RWMS) and Oracle Retail Integration Bus
- With Oracle Retail Point-of-Service (ORPOS) alone
- With Oracle Retail Merchandising System, Oracle Retail Price Management, Oracle Retail Warehouse Management System, Oracle Retail Integration Bus, and Oracle Retail Point-of-Service

The implementer needs functional knowledge of the following applications:

- RMS
- RIB
- RPM
- ORPOS
- RWMS

## Technical Concepts

The implementer should understand the following technical concepts:

- UNIX system administration, shell scripts, and job scheduling
- WebLogic application server (for Oracle Retail deployments)
- Performance constraints based on the retailer's infrastructure
- Technical architecture, deployment options with load balancer
- Retailer's hierarchical (SKU/store/day) data
- Knowledge of Enterprise-Java including web services, PL/SQL
- LDAP setup and usage
- BIPublisher (Oracle printing engine) and Internet printing protocol

# 2

# Technical Architecture

This chapter describes the technical architecture for Oracle Retail Store Inventory Management.

## SIM Technology Stack

SIM has an n-tier architecture consisting of a client tier, a middle (server) tier, and a data tier. The client tier contains a PC client (a Java desktop application) and handheld devices. The middle (server) tier contains the SIM server (deployed as a J2EE application inside the Oracle Application Server) and the Wavelink server (a standalone server for the handheld devices). The data tier consists of an Oracle 11g database and an LDAP directory.

## Advantages of the Architecture

SIM's robust distributed computing platform enables enhanced performance and allows for scalability.

The n-tier architecture of SIM allows for the encapsulation of business logic, shielding the client from the complexity of the back-end system. Any given tier need not be concerned with the internal functional tasks of any other tier.

The following list is a summary of the advantages that accompany SIM's use of an n-tier architectural design.

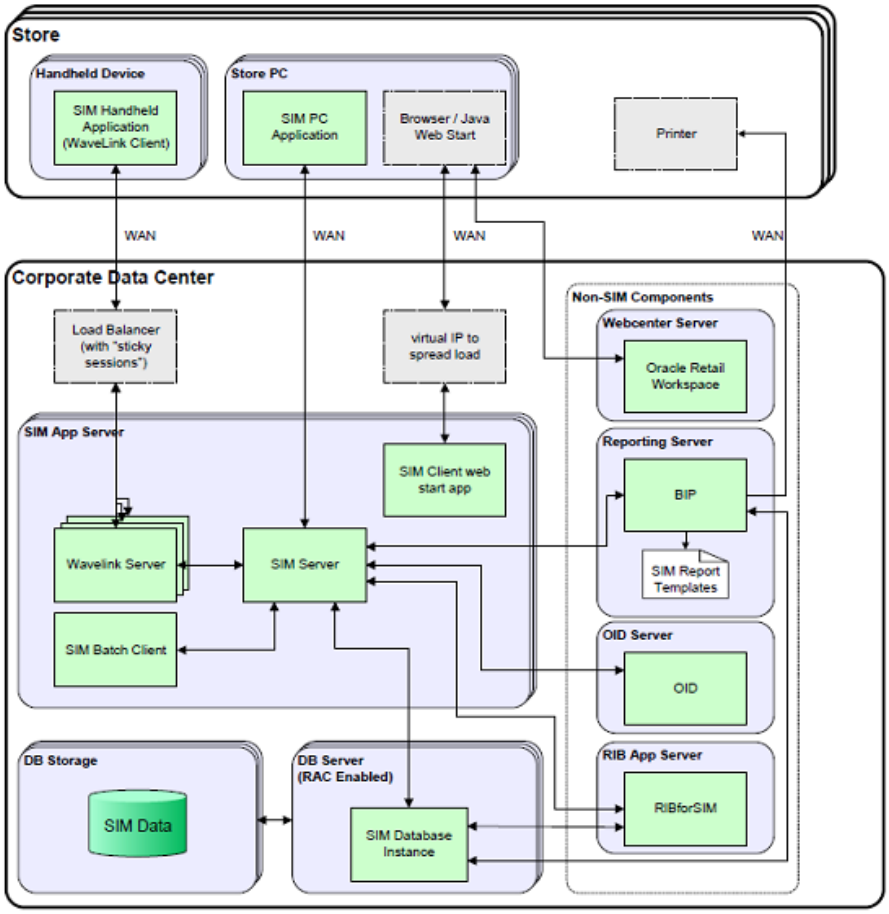
- Scalability: Hardware and software can be added to meet retailer requirements for each of the tiers.
- Maintainability: The separation of presentation, business logic, and data makes the software cleaner, more maintainable, and easier to modify.
- Platform independence: The code is written once, but can run anywhere that Java can run.
- Cost effectiveness: Open source market-proven technology is utilized, while object-oriented design increases reusability for faster development and deployment.
- Ease of integration: The reuse of business objects and function allows for faster integration to enterprise subsystems. N-tier architecture has become an industry standard.
- High availability: Middleware is designed to run in a clustered environment or on a low-cost blade server.

- Endurance: Multi-tiered physically distributed architecture extends the life of the system.
- Flexibility: The system allocates resources dynamically based on the workload.

# SIM Technical Architecture Diagrams and Description

This section provides a high-level overview of SIM's technical architecture. Figure 2–1 illustrates the major pieces of the typical three-tiered SIM implementation.

***Figure 2–1 SIM Technical Architecture***




## Client Tier

SIM can be deployed on a wide variety of clients, including a desktop computer, a hand-held wireless device, and so on. The GUI is responsible for presenting data to the user and for receiving data directly from the user through the front end. The presentation tier only interacts with the middle tier (as opposed to the database tier). To optimize performance, the SIM PC front end facilitates robust client-side processing.

The PC side of SIM is built upon a fat client architecture, which was developed using Swing, a toolkit for creating rich graphical user interfaces (GUIs) in Java applications.

The handheld communication infrastructure piece, known as the Oracle Retail Wireless Foundation Server, enables the handheld devices to communicate with the SIM server. The handheld devices talk to the Oracle Retail Wireless Foundation Server, which in turn makes calls as a client to the SIM server.

## Middle (Server) Tier

By providing the link between the SIM client and the database, the middle tier handles virtually all of the business logic processing that occurs within SIM's multi-tiered architecture. The middle tier is comprised of services, most of which are related to business functionality. For example, an item service gets items, and so on. Within SIM, business objects are beans (that is, Java classes that have one or more attributes and corresponding set/get methods) that represent a functional entity. Most business objects have very few operations; in other words, business objects can be thought of as data containers, which by themselves have almost no business functionality.

Although the PC client and the handheld client use the middle tier's functionality differently, the middle tier is the same for both clients. For example, the handheld device, used on the fly, performs frequent commits to the database, while the PC performs more infrequent commits. The application is flexible in that it accommodates the different styles of client-driven processing.

The middle tier is designed to operate in a stateless manner, meaning it receives whatever instruction it needs to access the database from the client and does not retain any information between client calls. Further, SIM has failover abilities; if a specific middle tier server fails, processing can roll over to another SIM server for continued processing.

If the workload warrants, SIM can be vertically scaled by adding additional application servers. Because SIM servers are running on multiple application servers in a stateless system, work can be seamlessly distributed among the servers. The result of this feature is that SIM clients do not need to know that additional application servers have been added to help with the workload. SIM application servers can contain multiple containers, each of which is related to a unique Java Virtual Machine (JVM). Each container corresponds to a specific SIM instance. Introducing multiple instances of a container allows SIM retailers to more effectively distribute the processing among several containers and thereby horizontally scale the platform. As the request load for a service increases, additional instances of the service are automatically created to handle the increased workload.

The middle tier consists of the following core components, which allow it to make efficient and reliable calls to the SIM database:

- Server services contain the pertinent business logic.
- DAO classes handle database interaction.
- Databeans contain the SQL necessary to retrieve data from and save data to the database.

> **Note:** There is at least one databean for every table and view in the database, but there may be more, used for different specific purposes.

### Data Access Objects (DAO)

DAOs are classes that contain the logic necessary to find and maintain data persistence. They are used by services when database interaction is required.

### Java Database Connectivity (JDBC)

DAOs communicate with the database through the industry standard JDBC protocol. In order for the SIM client to retrieve the desired data from the database, a JDBC connection must exist between the middle tier and the database. JDBC facilitates the communication between a Java application and a relational database. In essence, JDBC is a set of Application Programming Interfaces (APIs) that offer a database-independent means of extracting and/or inserting data to or from a database. To perform those insertions and extractions, SQL code also resides in this tier facilitating create, read, update, and delete actions.

## Database Tier

The database tier is the application's storage platform, containing the physical data used throughout the application. The database houses data in tables and views; the data is used by the SIM server and then passed to the client. The database also houses stored procedures to do data manipulation in the database itself.

# Distributed Topology

One of SIM's most significant advantages is its flexible distributed topology. SIM offers complete location transparency because the location of data and/or services is based upon the retailer's business requirements, not upon technical limitations. SIM's client server communication is an EJB call (which uses RMI). Because the server does not have to be in the same store as the in-store clients, the clients log onto the server over the wire.

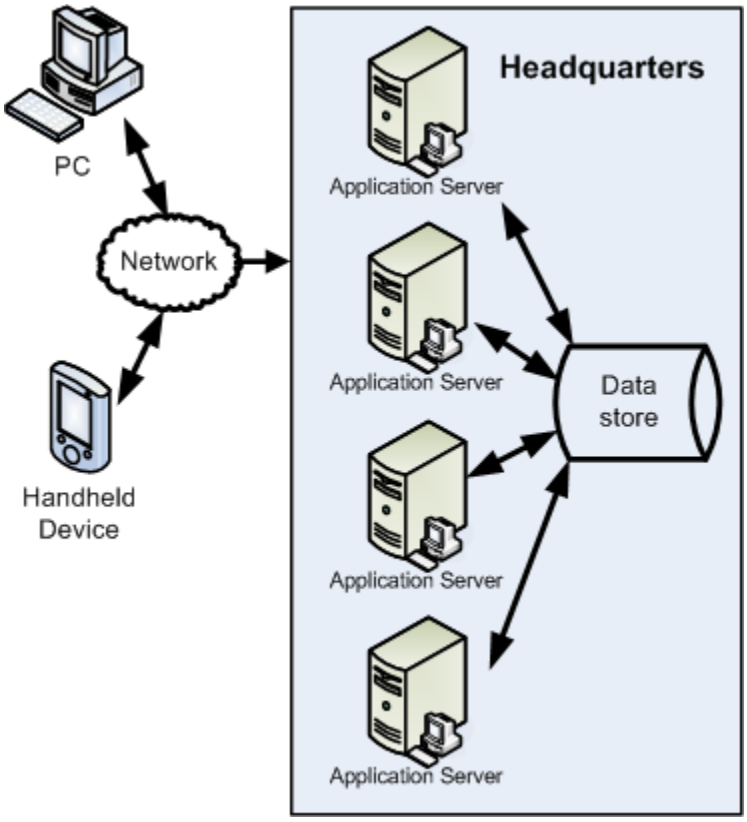
SIM's client code makes use of helper and framework classes that contain the logic to look up remote references to EJBs on the server and make calls to them. These helper and framework contain no business logic but contain only enough code to communicate with the server.

For example, if a helper class is called by the client to perform the method update shipment, the helper class appears to have that capability, though in reality it only behaves as a passage to the EJB remote reference, which is looked up from the server. The EJB remote reference communicates across the network with the server to complete the business-logic driven processing. The server performs the actual update shipment business logic and returns any return values or errors to the client.

Connectivity between the SIM client and the middle tier is achieved through the Java Naming and Directory Interface (JNDI), which the SIM client accesses with the necessary IP address and port. JNDI contains the means for the client to look up services available on the application server.

Figure 2–2, "SIM Deployment" illustrates SIM's deployment.

***Figure 2–2 SIM Deployment***



# 3

# Setup and Configuration

**Note:** For information about Oracle Single Sign-On and Oracle Retail Store Inventory Management, see the *Oracle Retail Store Inventory Management Installation Guide*.

## Security

SIM provides role-based user access control in order to manage application functionality and data available to users.

This role-based user access control allows security to be managed in a way that corresponds closely to the organization's structure.

This model provides improved support for customization, maintenance, and management of security in SIM, simplifying customer implementations while maintaining a high degree of control and flexibility.

Security is handled by assigning privileges (permissions) to a role in SIM. These roles are assigned to stores and users (in LDAP or SIM). If the user does not have permission, the feature will not be available for user.

At this time, SIM secures buttons and drop down values on the PC and menu options on the handheld.

To allow flexibility on how security is implemented, four modes of deployment exist:

#### External Authentication/Authorization

An external system controls security (LDAP). Users and role/store assignments are administered in LDAP. Roles are set up in SIM and need to match those set up in LDAP. Authentication is performed in LDAP. Note that Oracle LDAP (for example, OID) is the only supported LDAP. This is the default and recommended model of deployment.

#### Internal Authentication/Authorization

SIM controls all aspects of security. Users, roles, user/role/store assignments are all administered in SIM. Authentication is performed in SIM.

#### External/Internal Authentication and Internal Authorization

A hybrid approach will be used for authentication. Each time a user is successfully authenticated in an external system, the user information in SIM will be updated, including password. Then if the external security system is temporarily unavailable, SIM will try to authenticate the user internally with the password that was used during the last successful authentication.SIM will be able to authenticate internally created users as well in this mode. Note that this is only meant to be used as exception

mechanism and not a permanent deployment model. Also, this is not a two-way process flow. It is uni-directional from LDAP to internal.

**External/Internal Authentication/Authorization**
All users and roles are kept in SIM only, but the password can be handled externally. The external password can be cached in case of connection failure, but LDAP retains the master password configuration. SIM will check the password externally. If it cannot be found, SIM will look internally. If LDAP rejects the password, then the assumption is that the password is externally controlled. SIM will be able to authenticate internally created users as well in this mode.

***Table 3–1 LDAP and SIM Process Control***

| Mode of Deployment | Application Control | Process Control |
|---|---|---|
| Internal Authentication/ Authorization | | SIM:<br>■ User<br>■ Role<br>■ Store<br>■ Password<br>■ Login |
| External Authentication/ Authorization | | LDAP:<br>■ User<br>■ Role<br>■ Store<br>■ Password<br>■ Login |
| External/Internal Authentication and Internal Authorization | LDAP control | LDAP:<br>■ User<br>■ Role<br>■ Store<br>■ Password<br>■ Login<br>SIM:<br>■ Login (use cache in case LDAP is not reachable) |
| External/Internal Authentication and Internal Authorization | SIM & LDAP control | LDAP:<br>■ User<br>■ Password<br>■ Login<br>SIM:<br>■ User<br>■ Role<br>■ Store<br>■ Login (use cache in case LDAP is not reachable) |

*Table 3–1 (Cont.) LDAP and SIM Process Control*

| Mode of Deployment | Application Control | Process Control |
|---|---|---|
| External/Internal Authentication and Internal Authorization | SIM Control | SIM:<br>■ User<br>■ Role<br>■ Store<br>■ Password<br>■ Login |
| External/Internal Authentication/ Authorization | LDAP control | LDAP:<br>■ Password<br>■ Login<br>■ User<br>■ Role<br>■ Store<br>SIM:<br>■ Login (use cache in case LDAP is not reachable) |
| External/Internal Authentication/ Authorization | LDAP & SIM control | LDAP:<br>■ Password<br>■ Login<br>■ User<br>■ Role<br>■ Store<br>SIM:<br>■ Role<br>■ Store<br>■ Login (use cache in case LDAP is not reachable) |
| External/Internal Authentication/ Authorization | SIM Control | SIM:<br>■ User<br>■ Role<br>■ Store<br>■ Password<br>■ Login |

Definition of process controls:

- User – user create
- Role – role user assignment
- Store – store user assignment
- Password – password creation/maintenance
- Login – user authentication control

## How SIM Associates Menus and Menu Items

Menus and buttons on the PC are defined in the PC_MENU_ITEM table. In order to add a new button, a new row must be put into the PC_MENU_ITEM table.

For more information, see "Update the PC Screen" in *Oracle Retail Store Inventory Management Implementation Guide – Volume 4, Extension Solutions*.

## SIM Permission Definitions

The permissions used in SIM are stored in the SECURITY_PERMISSION table. Permissions are identified by a unique name, which is used by the application to control user access and in the navigation.xml file to associate menus with permissions.

Permissions can be associated with a device type (PC, handheld, server) which is used to retrieve a user's authorized permissions during log in. When a user logs in on the PC client, only permissions with a device type of PC (or no device type) are available to the user.

Permissions can be associated with a permission group, which are stored in the SECURITY_PERMISSION_GROUP table. Permission groups are sets of permissions that allow permissions to be filtered by category during role creation or searches.

For more information, see Appendix A, "Appendix: SIM Permissions".

## SIM Role Definitions

A role is a named collection of permissions. Roles are created and edited in SIM using the security administration screens, and are stored in the SECURITY_ROLE, SECURITY_ROLE_PERMISSION tables. When using external security, the role header information is also stored in LDAP as a simRole, although only the roleName is used by SIM and the role information is retrieved from the SIM database. Roles can contain any combination of available permissions and can overlap with other roles.

Roles are associated with a role type, which is defined in the SECURITY_ROLE_TYPE table. The default role types include Store and Corporate. Role types are used to control which roles a user is allowed to assign based on their permissions. A user with permission to assign store roles is not allowed to assign corporate roles without additional permissions.

The role detail screen also allows the assignment of data permissions, which control access to specific types of data. For example, data permissions can be used to control access to specific inventory adjustment reason codes, item request timeslots, role types, or product group types.

In case external/internal authentication/authorization is used, LDAP will only need to store those roles assigned to users that are controlled by LDAP.

### Technical Overview

The following describes the technical overview.

#### User

This class represents the header information for a user. This includes information such as:

- username
- first name
- last name
- locale
- user type
- user status

- start/end dates
- default store ID
- other state information

User objects are used to hold both internal and cached user data. Users are primarily identified by their username instead of their database ID.

#### UserPassword

This class represents a user password. It contains information for an individual password record such as date and status. It is used for both current passwords and password history. User password objects are used to hold both internal and cached password records.

#### UserRole

This class represents a role assignment for a user. It includes information such as start/end date, store ID, and other state information. User role objects are used to hold both internal and cached assignments. A role assignment with no specified store ID applies to all available stores.

#### UserStore

This class represents a store assignment for a user. Store assignments do not exist for super users as they have implicit access to all stores. User store objects are used to hold both internal and cached assignments.

#### Permission

This class represents an individual permission. It is mostly used when managing roles as it contains additional information used for assignment to roles, such as description, device type, and permission group. Permissions with no device type apply to all devices. Permissions are primarily identified by their name instead of their database ID.

#### PermissionGroup

Permission groups are used to categorize and filter permissions for filtering and display purposes. It is mostly used for security management operations.

#### PermissionSet

This class represents a set of permissions and any associated parameters. It is used to hold the set of permissions that have been assigned to a role. Permission sets are also used to hold the union of permissions for multiple roles that a user has been authorized to access. This class includes methods to test for the presence and absence of permissions in the set.

#### Role

This class represents the header information for a role. It contains the role name, description, role type, and whether an end date is required for assignment to a user. It is mostly used for security management operations. Roles are primarily identified by their name instead of their database ID.

#### RoleType

This class represents a role type that has been defined in the database. Role types are used for filtering and display purposes but are also used with data permissions to restrict access to functionality for certain types of roles. It is mostly used for security management operations.

### External Authentication/Authorization Setup (LDAP)

The external security model uses LDAP. In this mode LDAP is the only responsible application for all security control (with exception of assigning permissions to roles). LDAP will need to be set up before users can login.

### SIM User Definitions

Users are defined in LDAP as simUser records.

User records contain information such as:

- user name
- status
- user type
- default store
- locale
- other data defined by the schema

To log in to SIM, a user must have an active status (**0**). Users can be assigned start or end dates to restrict their authorization by date.

### SIM User Allowed Stores

Users are assigned stores to which they are allowed access. To log in to a store, the user must first be assigned to that store. The user's allowed stores also restrict which stores the user can be assigned roles for.

Users that are defined as super users are allowed access to all stores, but still require role assignments in order to gain permissions.

Store assignments are stored in LDAP as userStores attributes in simUser records.

When a user logs into SIM using the PC client, their default store is automatically selected. The user can change stores by selecting one of their allowed stores from the combo box on the main screen.

### SIM User Role Assignments

Users are given permissions by assigning roles to users. Permissions are never directly assigned to users. A user can be assigned multiple roles, producing a combined permission set that is the union of the role permissions.

Role assignments are stored in LDAP for an external model as simUserRole records, which are child nodes of simUser records. Role assignments can have start or end dates to restrict their validity by date. The userRoleStores attribute of the simUserRole record specifies which stores are valid for the role assignment. If no store is specified then the role assignment applies to all stores available to the user.

When a user logs into SIM they are given permissions for all valid role assignments for the store that was selected.

## Oracle Software Security Assurance (OSSA)

Sensitive information such as user credentials must be encrypted and stored in a secure location, known as password stores or wallets. These password stores are secure software containers that store the encrypted user credentials.

SIM has implemented using wallet alias names in the following areas:

- LDAP connection credentials
- RIB service credentials (publish and subscribe)
- RSL service credentials (RMS, RPM)
- BIP service credentials
- Web service consumer credentials (OMS, manifest)
- WebLogic user credentials (batch, server, wireless users)

SIM uses external secure password stores for the SIM client to look up SIM remote services:

- SIM stores the database password in a secure password store for the database standalone program which invokes sqlplus or sqlldr.
- SIM stores the application remote login password in a secure password store for java application programs.

SIM also modifies programs to use security alias names for accessing database or remote applications:

- The data seeding (import) program passes the user and password when invoking the sqlplus and sql loader (sqlldr) inside the program.
- Any other data import utility or adhoc batch program uses SIM standard java wrapper to call the stored procedure; if using java wrapper is not applicable, and if connecting to the database through a database client utility such as sqlplus or sqlldr, then the secure pass store is used and tnsalias for database connection credential stored in the wallet must be used.

For more information, see "Appendix: Setting Up Password Stores with Oracle Wallet" in *Oracle Retail Store Inventory Management Installation Guide*.

## Setting up LDAP Data for SIM

SIM is intended to work with any Lightweight Directory Access Protocol (LDAP) product. Out of the box, SIM ships sample .ldif files that can be used to create data in an LDAP system. We expect customers to use these files as examples to create their own data load files and hook into their own pre-existing corporate LDAP authentication system.

Once an LDAP server has been installed, the SIM data schema (SIM.schema) must be loaded on top of the default LDAP core schema (core.schema) supplied by the server. The following sample LDIF files are included in this release at SIM_INSTALL_DIR/sim/application/sim14/ldap. For more information, see Appendix B, "Appendix: LDAP Schema".

> **Note:** The following scripts and configuration files are provided as examples only. Variations will be necessary to match the data setup in SIM and the LDAP server that is chosen and installed.

**readme.txt**
Descriptions of the files in the directory and an overview of how the data needs to be structured in LDAP.

**sim_objectclasses.ldif**
The objectclasses that are used and required by SIM. This file can be used directly to create the required objectclasses in your LDAP directory.

**sim_add_company.ldif**
The base company container. This file must be modified before it is imported into your LDAP system.

**sim_add_containers.ldif**
The containers for holding users, stores, and roles. This file must be modified before it is imported into your LDAP system.

**sim_data_roles.ldif**
Sample role data. This file must be modified before it is imported into your LDAP system.

**sim_data_stores.ldif**
Sample store data. This file must be modified before it is imported into your LDAP system.

**sim_data_users.ldif**
Sample user data. This file must be modified before it is imported into your LDAP system.

**sim_data_users_roles.ldif**
Sample user role assignment data. This file must be modified before it is imported into your LDAP system.

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**Note:** A simUser can have more than one simStore by simply repeating the userStores line, but should only have one defaultStore. A simUserRole can also have more than one simStore by repeating the userRoleStores line.

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**Note:** Any user store entry for the user object must have corresponding Store data populated in the SIM Oracle database to allow a successful login (table STORE). Any simUserRole object must have corresponding role and store data populated in the SIM Oracle database.

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## Using Oracle Virtual Directory to Authenticate SIM

This document explains how to use the Oracle Virtual Directory (OVD) to authenticate Oracle Retail Store Inventory Management.

The following document is available through My Oracle Support (formerly MetaLink).

Access My Oracle Support at the following URL:

https://support.oracle.com

Oracle Retail Store Inventory Management: Using Oracle Virtual Directory to Authenticate Oracle Retail Store Inventory Management (**Doc ID: 840179.1**)

## Internal Authentication/Authorization Setup (SIM)

The default security model in SIM is LDAP authentication (external authentication). To change the security model to use internal security, run the following SQL script:

```
update CONFIG_SYSTEM set CONFIG_VALUE = '0' where config_key = 'SECURITY_
AUTHENTICATION_METHOD';
```

### SIM User Definitions

Users are defined in SIM through the UI.

User records contain information such as:

- user name
- status
- user type
- default store
- locale
- other data defined by the UI

To log in to SIM, a user must have an active status. Users can be assigned start or end dates to restrict their authorization by date.

### SIM User Allowed Stores

Users are assigned stores to which they are allowed access. To log in to a store, the user must first be assigned to that store. The user's allowed stores also restrict which stores the user can be assigned roles for.

Users that are defined as super users are allowed access to all stores, but still require role assignments in order to gain permissions. New stores are automatically assigned to this user, but role assignments are not.

When a user logs into SIM using the PC client their default store is automatically selected. The user can change stores by selecting one of their allowed stores from the combo box on the main screen.

### SIM User Role Assignments

Users are given permissions by assigning roles to users in the SIM UI. Permissions are never directly assigned to users. A user can be assigned multiple roles, producing a combined permission set that is the union of the role permissions.

Role assignments can have start or end dates to restrict their validity by date.

Since users can have different roles at different stores (for example, a manager in Store One, but sales associate in Store Two), roles and stores are assigned as a pair to a user. This allows for very specific setup in SIM.

When a user logs into SIM they are given permissions for all valid role assignments for the store that was selected.

## External/Internal Authentication/Authorization Setup (SIM/LDAP)

This hybrid setup will cache external user role and store assignment as well as password information. This allows users to continue to log in when LDAP is down. SIM Internal assigned stores/roles will be added to the external user assigned

roles/stores. In case the user is fully internal to SIM, SIM password information will be used to authenticate.

It is optional to create a user in SIM, or assign roles and stores in SIM.

#### SIM User Definitions

Users are defined in SIM through the UI or in LDAP. If a user at some point will have SIM-assigned roles/stores, and corporate-assigned roles/stores, the user needs to be first created in SIM, before that user has logged in to LDAP. Once cached information is pulled down into SIM, the user can no longer be created in SIM. The password initially assigned to the user will be trumped by the password assigned in LDAP.

Users can be created externally, internally or exist both in SIM and LDAP.

#### SIM User Allowed Stores

Can be assigned in SIM or in LDAP, or both.

#### SIM User Role Assignments

Roles are assigned to SIM or LDAP, or both.

### External/Internal Authentication and Internal Authorization Setup (SIM/LDAP)

This hybrid setup will only cache password information. Users, stores and role assignment information are all handled inside of SIM.

This allows corporate control on which users can log in, but detailed authorization assignments can be controlled by a different group of users (for example, Store manager). The user will also continue to be able to log in when LDAP is down.

In case the user is fully internal to SIM, SIM password information will be used to authenticate.

#### SIM User Definitions

Users are defined in SIM through the user interface and in LDAP. The user has to be first created in SIM, before they should log in. The password initially assigned to the user will be replaced by the password assigned in LDAP.

Users have to exist both in LDAP and SIM, since LDAP authenticates and SIM authorizes.

#### SIM User Allowed Stores

Should only be assigned in SIM.

#### SIM User Role Assignments

Roles are assigned in SIM only.

## Time Zones

For many SIM retailers, a corporate server is located in a different time zone than the stores connected to that corporate server. When a transaction is processed at these respective locations, there is time stamp information associated with these transactions. SIM has the ability to reconcile these time zone differences.

SIM requires a valid time zone set up for each store, for stores imported from external source which have no time zones assigned, the retailer needs to set valid time zone for the store. SIM store time zone is stored in column STORE.TIMEZONE.

**Note:** The SIM database view TIME_ZONE_NAMES_V contains a complete list of time zones.

## Defaulting Store Configuration Parameters

There are a number of store options related to functionality in SIM. These can be configured at the store level; however it is best to have reasonable default values for these options so that when new stores are created in SIM (either through data seeding or by getting a message from the RIB), the default value will be copied from default configuration for new added store.

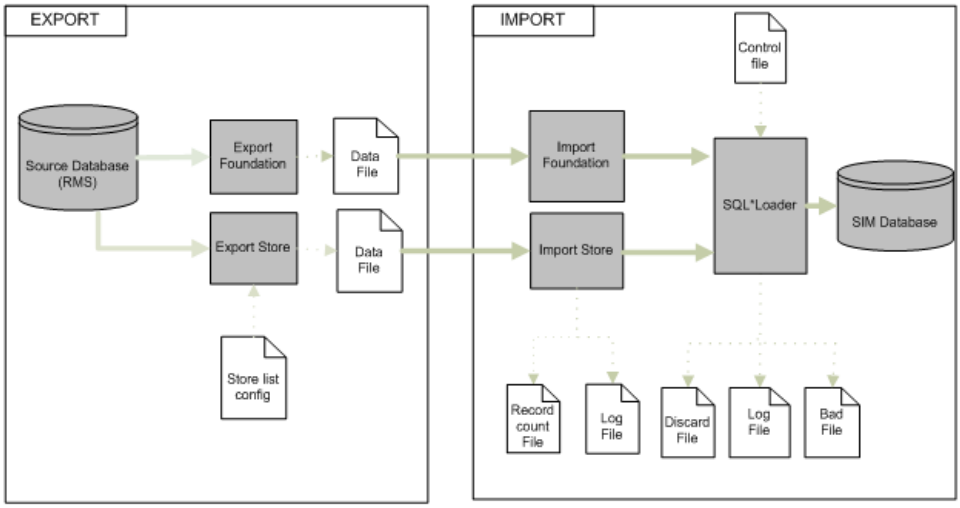
## Data Seeding

SIM data seeding scripts provide a means of importing store inventory data from external data sources. The data files being imported into SIM can be exported from ORMS (Oracle Retail Merchandise System), or the retailer needs to provide their own utility to setup store and store inventory data in SIM prior to using the SIM application.

**Note:** Data seeding is only applicable for full SIM release to load store foundation data into SIM after SIM database is installed.

Data seeding and upgrade process are mutually exclusive. For upgrading from old versions of SIM, see *Oracle Retail Store Inventory Management Upgrade Guide* for details.

***Figure 3–1 Data Seeding Technical Architecture***




The inventory base data contains following two categories:

- **Inventory Foundation Data**: Inventory data which are not store specific.
- **Store Inventory Data**: Store specific inventory data.

***Table 3–2 Inventory Base Data - Foundation Data***

| Category | Table Name | Note |
|---|---|---|
| Foundation | ADDRESS | Seed warehouse, partner, and supplier addresses (store addresses are seeded as part of store data). |
| | BRAND | |
| | DELIVERY_SLOT | |
| | DIFFERENTIATOR | |
| | DIFFERENTIATOR_ TYPE | |
| | ITEM | |
| | ITEM_COMPONENT | |
| | ITEM_HIERARCHY | |
| | ITEM_IMAGE | |
| | ITEM_TICKET_TYPE | Item ticket type.<br>This table contains SIM system control data. The external seeded data are inserted into this table only if the same item ticket types are not part of the SIM pre-installed system data. |
| | ITEM_UDA | |
| | PARTNER | |
| | PARTNER_ITEM | |
| | RELATED_ITEM_TYPE | |
| | RELATED_ITEM | |
| | STORE_TRANSFER_ ZONE | |
| | SUPPLIER | |
| | SUPPLIER_ITEM | |
| | SUPPLIER_ITEM_ COUNTRY | |
| | SUPPLIER_ITEM_ COUNTRY_DIM | |
| | SUPPLIER_ITEM_ MANUFACTURE | |
| | SUPPLIER_ITEM_UOM | |
| | UDA | |
| | UDA_LOV | |
| | UIN_LABEL | UIN Label<br>This table contains SIM system control data. The external seeded data are inserted into this table only if the same item ticket types are not part of the SIM pre-installed system data. |
| | UOM_CLASS | |
| | UOM_CONVERSION | |

*Table 3–2 (Cont.) Inventory Base Data - Foundation Data*

| Category | Table Name | Note |
|---|---|---|
| | WAREHOUSE | |
| | WAREHOUSE_ITEM | |

*Table 3–3 Inventory Base Data - Store Data*

| Category | Table Name | Note |
|---|---|---|
| | ADDRESS | Seed store addresses (warehouse, supplier, and partner addresses are seeded as part of foundation data). |
| Store | CONFIG_STORE | CONFIG_STORE records are created for each store seeded into SIM by copying the default settings from CONFIG_STORE_DEFAULT table. |
| | ITEM_PRICE | The RMS item location selling unit retail price is seeded into SIM as initial regular item price. |
| | ITEM_PRICE_HISTORY | For each ITEM_PRICE record, a price record is inserted into ITEM_PRICE_HISTORY. |
| | REPORT_FORMAT | REPORT_FORMAT records are created for each store seeded into SIM by copying the default settings from REPORT_FORMAT_ DEFAULT table. |
| | STORE | |
| | STORE_ITEM | |
| | STORE_ITEM_STOCK | |
| | STORE_ITEM_STOCK_ NONSELL | |
| | STORE_SEQUENCE_ AREA | For each store seeded into SIM, a default record is created for the store. |
| | STORE_UIN_ADMIN_ ITEM | |

## Data Seeding Components

Following are the main data seeding components and their usage descriptions:

*Table 3–4 Data Seedling Components and Usage Descriptions*

| Component Name | Description |
|---|---|
| setup | Creates temporary objects, it also disable foreign key constraints, and generate a file which contains the snapshot of the disabled foreign key constraints file before data seeding process starts. |
| Export Foundation Data | Export base foundation data (non-store specific data) from RMS database. |
| Export Store Data | Export store specific data from RMS database. The process creates a store_list.dat file which contains each exported store. The export data file for each store data is contained in the folder which is named by store ID. See "Defining Store List"section for details. |

*Table 3–4 (Cont.) Data Seedling Components and Usage Descriptions*

| Component Name | Description |
|---|---|
| Import Foundation Data | Import inventory foundation data from export data file into SIM inventory foundation table. See Table 3–2, " Inventory Base Data - Foundation Data" for target tables. |
| Import Store Data | Import inventory store data from export data file into SIM inventory store table. See Table 3–3, " Inventory Base Data - Store Data" for target tables. See "Defining Store List"section for details. |
| cleanup | Remove temporary objects, enable constraints. |

## Defining Store List

By default, export store data exports all SIM relevant stores from RMS into flat files, and import process will import all exported stores into SIM database.

You only need to define store list in one of the following scenarios:

Do not export all SIM relevant stores from RMS, only export some of the stores.

Do not import from all exported stores, only import some of the exported stores.

1. Create the store_list.conf file and put it at following location:

   <data_seeding_base_dir>/export/store/config

   Example:

   *store_list.cfg*

   *1111*

   *1112*

2. **Export process:** If store_list.cfg file is not defined, then the export process generates the store_list.dat which contains all SIM relevant stores from RMS, otherwise only the stores listed in the store_list.cfg file will be exported.

3. **Import process:** The import process reads the file from<data_seeding_base_dir>/data/export/store/ store_list.dat which was generated by the export store processes, and import store data from export files for each store listed in the store_list.dat file.

## Executing Data Seeding Scripts

See "Running Data Seeding" in the *Oracle Retail Store Inventory Management Installation Guide* for data seeding execution step details.

# Security FAQ

The default security model in SIM is LDAP authentication (external authentication). To change the security model to use internal security, run the following SQL script:

```
update CONFIG_SYSTEM set CONFIG_VALUE = '0' where config_key = 'SECURITY_
AUTHENTICATION_METHOD';
```

For internal security, use the installation user created during application installation to setup SIM configuration and user/role management.

- The default algorithm used to store passwords in SIM is Secure Hashing Algorithm (SHA).

This can be configured in the server.cfg file to be any algorithm recognized by the Java encryption API.

- When creating roles, job functions and corporate hierarchies must be considered and taken into account.

# 4

# Functional Design and Overviews

This chapter provides information concerning the various aspects of SIM's functional areas.

## Store Inventory Management Overview

SIM empowers store personnel to sell, service, and personalize customer interactions by providing users the ability to perform typical back office functionality on the store sales floor. The results are:

- Greatly enhanced customer conversion rates
- Improved customer service
- Lower inventory carrying costs
- Fewer markdowns

Store Inventory Management ensures that all available salespeople are on the sales floor selling to customers.

The benefits of the Store Inventory Management solution include:

- Improve customer service and coverage
- Ability to perform back office functionality anywhere in the store, even on Oracle Retail Point-of-Service terminals
- Improve perpetual inventory levels by enabling floor-based inventory management through handheld devices and store PCs
- Minimize the time required to process a receipt and check-in of incoming merchandise
- Receive, track, and transfer merchandise accurately, efficiently, and easily
- Reduce technology costs by centralizing hardware requirements
- Easy to use GUI interface guiding users through the required transactions
- Extensible technology platform that allows customizations to the product. This ensures the retailer's modifications are isolated during product upgrades and lowering the total cost of ownership.

Store Inventory Management has been specifically designed to meet the needs of a high turnover labor force by providing easy to use screens that guide a user through processing a transaction.

Store Inventory Management also provides Store managers and personnel with the ability to easily perform an array of in store operations:

- Receive merchandise
- Replenish stock
- Manage physical inventories
- Look up product information
- Transfer or return stock
- Adjust inventory
- Stock counts
- Order stock
- Fulfillment Customer Orders

Store Inventory Management provides store employees with the information and flexible capabilities that are needed to maintain optimal inventory levels in the store and convert shoppers into buyers.

## Solution and Business Process Overview

Store Inventory Management manages the inventory movement of merchandise within the store and provides users with detailed Item/SKU information needed to perform key tasks. The functionality in SIM includes:

- Lookups – Item, Supplier, Container, Finisher, Transaction History
- Unique Identification Number (UIN) Support
- Receiving – Warehouse, Supplier, Store
- Transfers/Transfer Requests
- Returns/Return Requests
- Receiver Unit Adjustments
- Stock Counts
- Store Ordering
- Item Requests
- Sequencing
- Shelf Replenishment
- Inventory Adjustments
- Wastage
- Price Changes
- Ticketing
- Customer Orders - lookup, picking, delivery, and reverse picks
- Item Basket
- E-mail Alerts
- Printing Reports

SIM also has System Administration functionality, which enables users to configure different parameters within the system based on their business processes. The system administration screens also contain the ability to create product groups. A product

group is a collection of departments, classes, subclasses, or items, which can be used to schedule stock counts, order product, replenish store shelves, and for addressing wastage.

SIM is fully integrated with the Oracle Retail Merchandising System (RMS), a warehouse management system, an invoice matching system, and Oracle Retail Sales Audit (ReSA) is through flat file. Most transactions are direct updates, with only a few using batch processes and some using direct update integration. Any store using SIM, maintains its own inventory and reports those numbers to the merchandising system. Most foundation data within SIM can be populated using the data-seeding program provided.

Deploying SIM as part of the Oracle Retail enterprise ensures the accuracy and timeliness of all inventory information across the retailer's supply chain.

The SIM UI is split up in six parts, each focused on a particular function in the system:

- Administration: All administrative information can be found under this section.
- Shipping/Receiving: This dialog concerns itself with all shipping and receiving matters at the store. It includes, warehouse, store and supplier deliveries as well as returns to these entities.
- Inventory Management focuses on all the elements that can affect inventory positions within the store (excluding point-of-sale).
- Customer Order Management all functions pertaining to the fulfilling of an order to the customer.
- Lookups: Under this dialog the user can find detailed information regarding items, suppliers and containers.
- Reports: This function will call up the reporting tool associated with SIM allowing the user to print custom and base reports.

Most of the inventory features discussed in this section are applicable to both Oracle Retail Mobile Store Inventory Management (the handheld devices) and the Oracle Retail Store Inventory product (the PC).

The handheld device enables the user to register items for the different inventory transactions with more accuracy by scanning barcodes and validating transactions against centrally deployed reference data.

# Inventory Management

This section details inventory management.

## Inventory Adjustments Functional Overview

To assist in maintaining perpetual inventory, SIM provides the ability to create inventory adjustments for all items within a store. SIM conveys changes to the merchandising system. Inventory adjustment functionality within the SIM system can be accomplished on a PC-based deployment, on a wireless handheld device, or on a combination of the two deployment methods.

Inventory adjustment processing within SIM includes the following features:

- Reason codes, which correspond to dispositions, can be assigned to inventory adjustments, thus moving stock to various inventory buckets. This code not only is used for reporting purposes, but also indicates to the system whether the amount

is to be incremented or decremented and in which inventory buckets are impacted based upon the disposition associated with the reason code.

- Sub-buckets allow for the unavailable inventory to be broken down further into smaller buckets. Sub-buckets can be assigned to reason codes that have dispositions moving inventory to or from unavailable stock. Sub-buckets are configurable per store and can be turned on or off.
  - Example 1:

    A reason code of Removed for repair would indicate to the system that the inventory for the selected item is to be decremented from the available stock on hand (SOH) bucket and incremented in the unavailable SOH bucket which is for trouble sub-bucket.
  - Example 2:

    A reason code of Return from repair instructs the system to move the selected inventory by decrementing the unavailable SOH bucket (trouble sub-bucket) and incrementing the available SOH bucket.
- Inventory Adjustments can be saved as In Progress to continue working on later or confirmed which will move it to a Completed status.
- All items on an inventory adjustment are grouped together under a single header transaction. However, the inventory adjustments are sent as individual line items to the merchandising system.
- Stock on Hand and Unavailable inventory are not only used to indicate to a store user what is available to sell, but it also ensures proper replenishment ordering for all the stores through the central replenishment system.
- Manual or automatic adjustments can be made to the SOH inventory level for an item.
- System-generated inventory adjustments will not write actual inventory adjustments within SIM, they will appear as transaction history records. However, an adjustment will be published to the merchandising system.
  - Example: Receive a DSD with damaged goods. An inventory adjustment is made behind the scenes to move the goods from available stock to unavailable stock for the damaged quantity, and this will be used to send on to the merchandising system. The inventory adjustment will not appear in SIM, rather a transaction history record for the receipt of damages.
- The system notifies the merchandise system of all inventory adjustments, unless otherwise specified in the table below.
- Templates:
  - Templates allow for quick application and adjusting of the same items, reasons, and quantities over and over.
  - The template can be created and then it can be applied to an inventory adjustment. It will default in the items, reasons and quantities from the template.
  - A multiplier can be used when applying the template. It will take all quantities on the template times the multiplier.
  - Once a template is applied, the quantities can be updated and items can be added or removed.
- Serialization support:

- Users are allowed to move serialized inventory into unavailable inventory positions or out of unavailable.
- When using auto generated UINs, it is possible to add new serialized inventory into the store when selecting a disposition that would normally increase SOH.
- Moving serialized inventory out of inventory is permitted.
- Serialized inventory cannot be added on templates.

### A Summary of Reason Codes and Dispositions

The following table (shown for example purposes) provides a list of SIM's reason codes that are preloaded, their descriptions, dispositions, and sub-bucket (if configured) that are linked to the reason code.

System reason codes are those used within the SIM system for making stock on hand updates.

The publish indicator will be used for publishing purposes. All reason codes have this indicator defaulted to 'Yes' on the UI. If it is set to 'Yes', then SIM will publish the adjustments that have that reason code. If it is set to 'No', those adjustments for that reason code will not be published. This indicator can only be modified for those reason codes that are not system reason codes. For system reason codes, this indicator is ignored as there instances in the system where things may or may not need to be published.

**Note:** These need to be set up in an identical manner in RMS.

***Table 4–1 Preloaded Reason Codes***

| Code | Reason Description | Disposition | Sub-bucket | UI | System | Transaction | Publish |
|---|---|---|---|---|---|---|---|
| 1 | Wastage | -Stock on Hand | | No | Yes | Wastage | Yes |
| 2 | Shrinkage | -Stock on Hand | | Yes | No | | Yes |
| 3 | Repair - In | -Unavailable | Trouble | Yes | No | | Yes |
| 75 | Stock Count Unavailable to Missing | -Unavailable | Trouble | No | Yes | Stock Count (UIN) | Yes all types except Unit and Amount |
| 76 | Unit Late Sales Increase | +Stock on Hand | | No | Yes | Late Sales | Yes |
| 77 | Unit Late Sales Decrease | -Stock on Hand | | No | Yes | Late Sales | Yes |
| 78 | Unit and Amount Late Sales Increase | +Stock on Hand | | No | Yes | Late Sales | No |
| 79 | Unit and Amount Late Sales Decrease | -Stock on Hand | | No | Yes | Late Sales | No |
| 81 | Damaged - out | -Stock on Hand | | Yes | No | | Yes |

***Table 4–1 (Cont.) Preloaded Reason Codes***

| Code | Reason Description | Disposition | Sub-bucket | UI | System | Transaction | Publish |
|---|---|---|---|---|---|---|---|
| 82 | Damaged - Hold | +Unavailable | Trouble | Yes | Yes | Receiving: Store Transfer, DSD, Wh Delivery | |
| 83 | Theft | -Stock on Hand | | Yes | No | | Yes |
| 84 | Store Use | -Stock on Hand | | Yes | No | | Yes |
| 85 | Repair - Out | +Unavailable | Trouble | Yes | No | | Yes |
| 86 | Charity | -Stock on Hand | | Yes | No | | Yes |
| 87 | Stock Count In | +Stock on Hand | | No | Yes | Stock Count | Yes all types except Unit and Amount |
| 88 | Stock Count Out | -Stock on Hand | | No | Yes | Stock Count | Yes all types except Unit and Amount |
| 89 | Dispose from on Hold | -Stock on Hand & -Unavailable | Trouble | Yes | No | | Yes |
| 90 | Dispose from SOH | -Stock on Hand | | Yes | No | | Yes |
| 91 | Stock - Hold | +Unavailable | Trouble | Yes | No | | Yes |
| 92 | Admin | -Stock on Hand | | Yes | No | | Yes |
| 93 | Store Customer Return | +Stock on Hand | | Yes | No | | Yes |
| 96 | Ready to Sell | -Unavailable | Trouble | Yes | Yes | Receiving: Store Transfer, DSD, Wh Delivery | Yes |
| 180 | Customer Order Reservations In | +Customer Order | | No | Yes | Reserve POS (pickup) Customer Order | Yes |
| 181 | Customer Order Reservations Out | -Customer Order | | No | Yes | Cancel Fulfil POS (Pickup) Customer Order | Yes |
| 182 | Stock In | +Stock on Hand | | Yes | Yes | Moving UIN from another store in Inventory Adjustments | Yes |
| 183 | Stock Out | -Stock on Hand | | Yes | No | | Yes |
| 184 | Unit Late Inventory Adjustment Increase SOH | +Stock on Hand | | No | Yes | Late Inventory Adjustments | Yes |

*Table 4–1 (Cont.) Preloaded Reason Codes*

| Code | Reason Description | Disposition | Sub-bucket | UI | System | Transaction | Publish |
|---|---|---|---|---|---|---|---|
| 185 | Unit Late Inventory Adjustment Decrease SOH | -Stock on Hand | | No | Yes | Late Inventory Adjustments | Yes |
| 186 | Unit and Amount Late Inventory Adjustment Increase | +Stock on Hand | | No | Yes | Late Inventory Adjustments | Yes |
| 187 | Unit and Amount Late Inventory Adjustment Decrease | -Stock on Hand | | No | Yes | Late Inventory Adjustments | Yes |

**Updating Reason Codes** SIM provides a UI which allows the user to add new reason codes to synchronize with those setup in RMS. It is also possible to hide them from users, and it will indicate which are system controlled. A brief description indicates the disposition of the item for easier setup.

Inventory Adjustment Reason Maintenance UI will allow for Inventory Adjustment Reasons to be maintained in a UI versus directly through the database:

- This screen lists external code, description, disposition, sub-bucket (if configured) use in UI and system required indicator of all the available reason codes in SIM.
- All the system required reason codes would have its system required indicator checked. Any reason that is marked as system required can not have its reason code, disposition, sub-bucket, and system required indicator changed through this UI. Only description and the use UI indicator are allowed to be modified.
- The user will not be allowed to delete the inventory adjustment reason codes that are marked as system required.

> **Note:** Some reason codes are flagged as system-required. Do not remove these reason codes. If they are removed, SIM will not function properly.

- Only records that have a checked value for the use in UI will be allowed for use in the inventory adjustment screen.
- The change made through this UI is not integrated with RMS. Retailers have to make sure that the changes done in this screen are in sync with RMS.

***Figure 4–1 Business Process Flow – Inventory Adjustments PC***

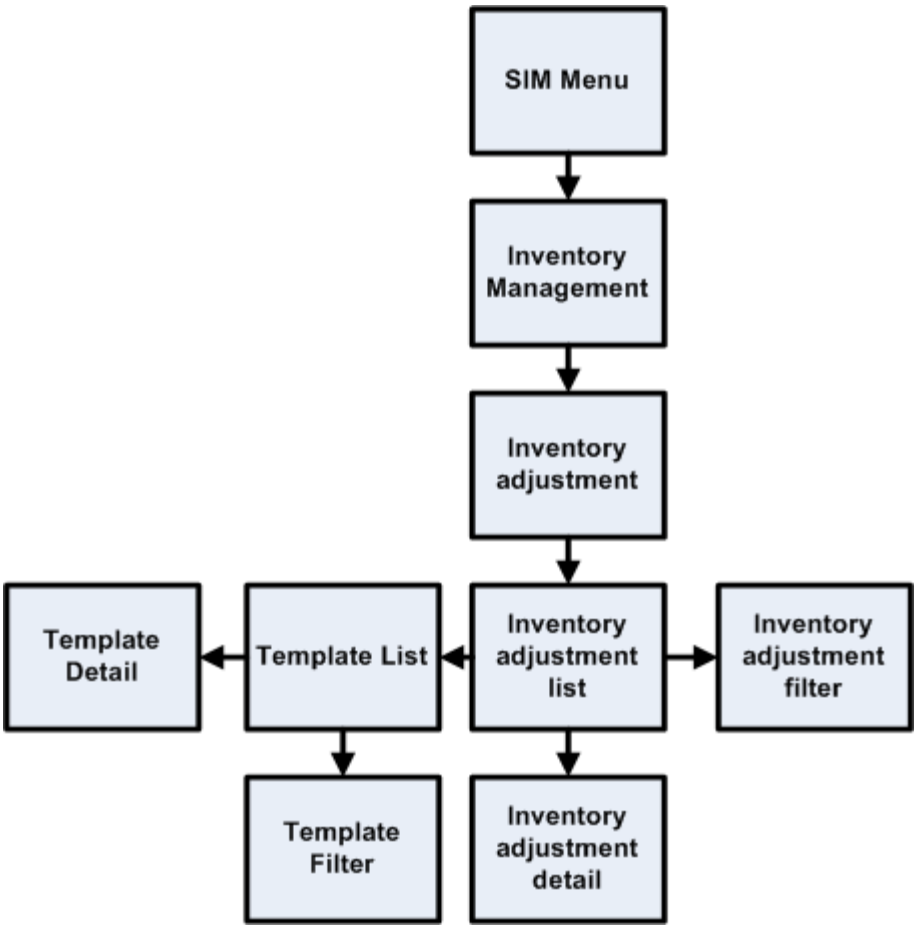
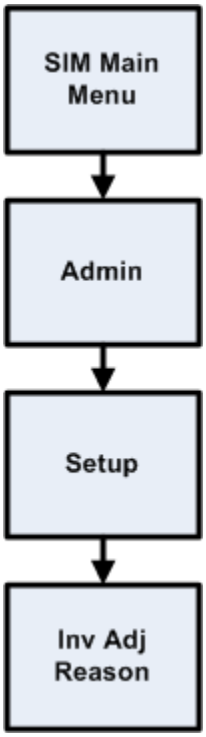


*Figure 4–2 Business Process Flow - Inventory Adjustment Reason Maintenance PC*




## Wastage Functional Overview

Wastage is the process through which inventory is lost over time (for example, bananas turning black).

In order to maintain more accurate inventory values, SIM uses two methods to control wastage:

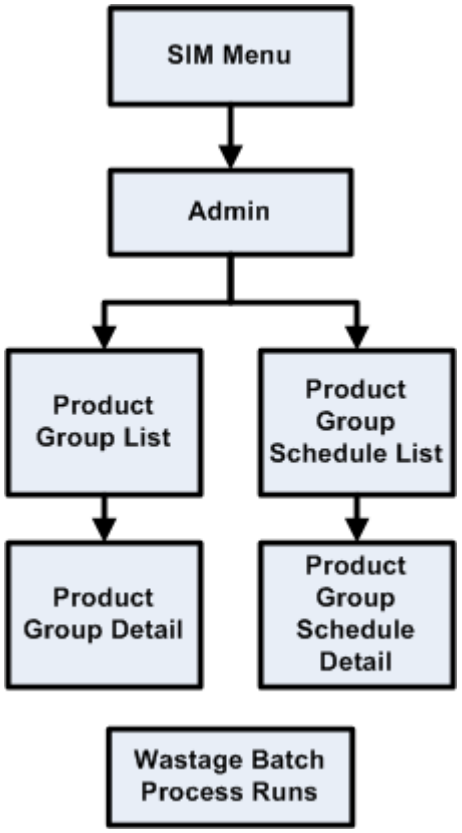
- The first method provides users in stores the ability to create wastage product groups. Variance percentage or standard UOM amounts can be set up on the wastage product group. Individual items and item hierarchies can be associated into a product group.

  A user can schedule the date when a wastage product group batch process is run, and inventory adjustments are automatically made based upon the variances setup on the product group. Inventory adjustments are sent over the Oracle Retail Integration Bus (RIB) to the merchandising system.

- The second method is controlled through the sales process. The external audit system provides a percentage or quantity in its sales upload file that indicates by how much the inventory needs to be reduced in addition to the sold quantity.

Each of these methods has a specific use or need. The first method is usually used when an item's size is reduced because of not being sold over time. For example, meat will become lighter as fluids evaporate. Other items, such as cheese or ham, will only be reduced when the outside layers are cut off to sell the item.

*Figure 4–3 Business Process Flow (non-sale bases)*




## Store Orders Functional Overview

Store orders are used to create, change and approve orders to a supplier or transfers requests to a warehouse. When there is a shortage of items, or demand for particular items increases, store users need to have the ability to create store orders. The user selects either a warehouse or a supplier and adds the items and quantities. The store orders use Oracle Retail Service Layer (RSL) to action the order in RMS.

Store ordering functionality is very similar to item request functionality. Unlike item request functionality, which is only valid for items that are on the store order replenishment process, store order functionality is valid for all items, cannot be scheduled and is only available on the PC.

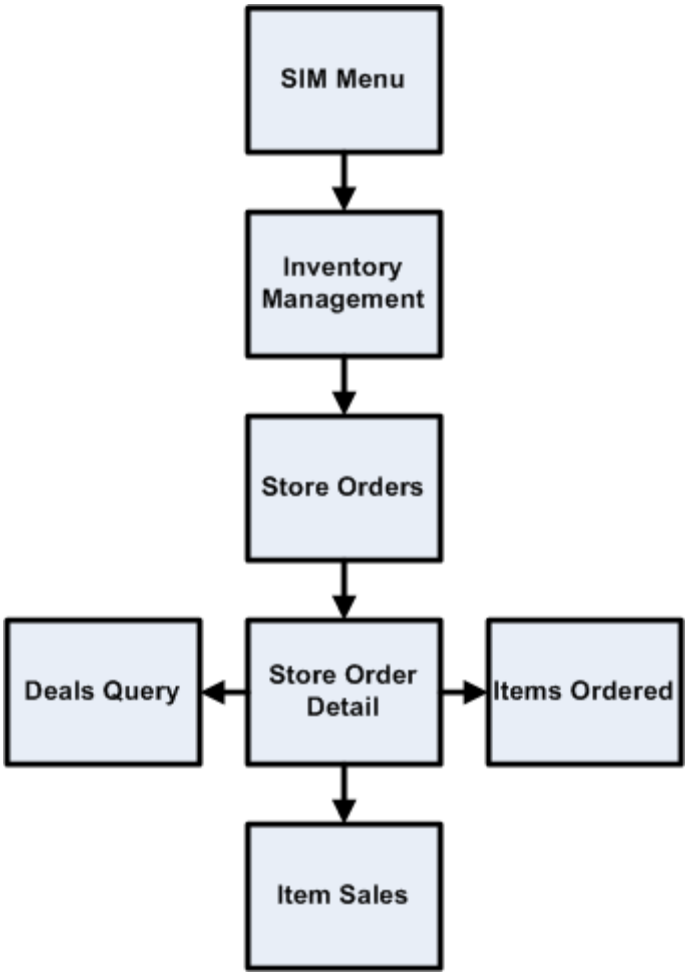
Store Orders also create the purchase order or the warehouse transfer immediately, while Item Requests depend on replenishment attributes and the nightly batch run from RMS.

Store order processing within SIM includes the following features:

- Create orders for the supplier or the warehouse.
- Save the creation of the order without approving it.
- Amend items and orders in SIM that were created either manually or through replenishment in RMS.
- Delete pending orders.
- Approve store orders.
- Query off-invoice deals when editing an existing Store Order to a Supplier.

- Query item's sales and store orders when editing an existing Store Order.

***Figure 4–4 Store Orders Business Process Flow – PC***




## Item Requests

The item request functionality gives the user the ability to request inventory for individual items using the replenishment and sourcing parameters of the merchandising system (RMS) from within the SIM application directly. It is integrated with RMS, whether it is through RIB or RSL. This functionality empowers the store by giving the store user the ability to manage stock shortages and increased demand using the SIM application.

This functionality differs from that of "Store Orders Functional Overview". In terms of item requests, SIM sends a request to the merchandising system that is generally processed using the merchandising system replenishment and sourcing parameters. Store orders functionality, on the other hand, allows the user direct access to the merchandising system (RMS) and does not enforce the replenishment or sourcing parameters of the merchandising system.

A SIM user is able to use item request functionality to request items regardless of the replenishment type normally used by the merchandising system to replenish the item.

All items are sourced from either a warehouse or through a supplier depending on the sourcing parameters for the item specified in the merchandising system. Items specified as using Store Order replenishment (or items that are not set up for auto-replenishment at all) are sourced through the creation of one-off purchase orders or warehouse transfer requests only after the store has requested inventory using the Item Request functionality.

Any quantities requested for items that have a replenishment type other than Store Order are added above and beyond the quantity that is normally sourced through the merchandising system on the item's next replenishment review date. However, if the requested delivery date falls prior to such an item's next replenishment review date, the request is sourced through the creation of a one-off purchase order or warehouse delivery request instead. All inventory requested is sourced to the store at the earliest possible date given the replenishment review date, the supplier or warehouse lead time, and any other factors that may influence the time it takes a delivery to reach the store.

For store order replenishment items, the user can specify a time slot during the day by which the ordered items are to be delivered to the store. This is useful for ordering breakfast items early morning (doughnuts), lunch items (sandwiches), and hot meals for the evening. Item requests can be created with timeslot deliveries for as early as today's date.  Security exists on the delivery timeslot fields, at both the store level and the user level.  The user cannot delete line items or the master item request if the user does not have data permissions for a selected timeslot.

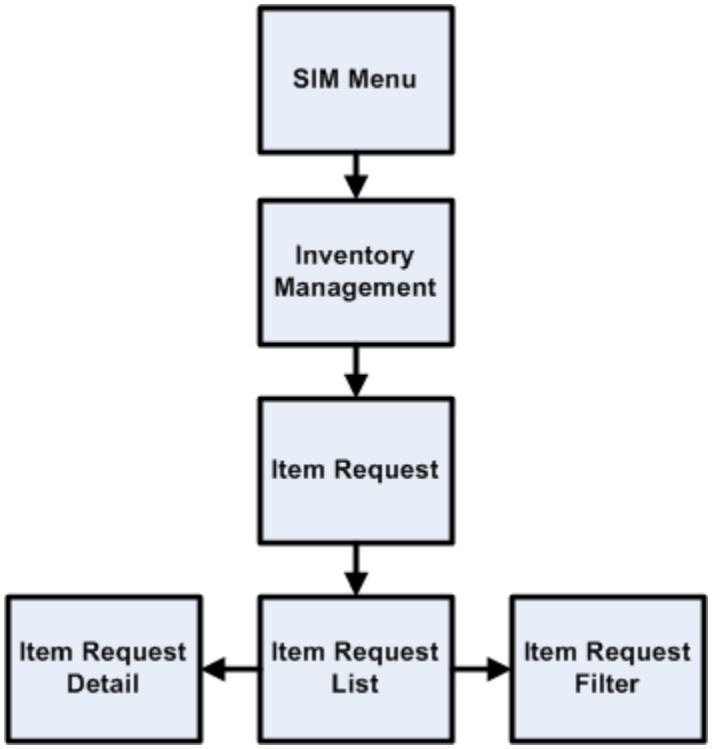
In addition to being able to manually create Item Requests, the SIM user is able to schedule Item Requests for review through front-end product group screens on a cyclical basis. This functionality facilitates the request of items that are specified as using Store Order replenishment by allowing the user to add individual items, as well as entire sections of the merchandise hierarchy, to an Item Request Product Group. When the Item Request Product Group is scheduled for review, SIM automatically generates a blank Item Request and adds all items within the specified merchandise hierarchies that have a **Store Order** replenishment type to the Item Request, along with any individual items specified as part of the Item Request Product Group. The user can then enter the actual quantities of the items necessary, and submit the request. Note that the user also has the ability to add items that do not have a **Store Order** replenishment type to an Item Request Product Group, but only on an individual item-by-item basis.

The following list summarizes the Item Request functionality that is available in SIM. Because of this functionality, the SIM user has the ability:

- To create an item request product group and schedule it for review.
- To manually create an unscheduled item request.
- To search for and view an item request whether created manually by a user or automatically by the product group scheduler.
- To edit a pending item request.
- To delete a pending item request.
- To request a pending item request.
- To save changes to a Pending Item Request without requesting it.
- To print an Item Request Report.

The SIM database contains a view called the Item_Request_Report_V that contains all of the data for this report.

*Figure 4–5 Item Requests Business Process Flow – PC*




## Price Changes Functional Overview

The retailer uses price changes to change the price of a particular item at a location. Price changes are performed only on the PC.

In the merchandising system (such as RMS), users create the initial retail prices for items that will flow into SIM. After the initial prices have been set, ensuing control of prices is handled through a price management system. The price management system uses price zone structures or different levels to ensure consistent pricing within an area. Regardless of the level at which the initial prices are set, all prices in RMS and SIM are held at the item/location level.

Once users are managing prices in a price management system, they can use a flexible structure to control the retail prices through permanent, promotion or clearance changes. This functionality allows the user to use different sets of locations to control the retail prices of items without being locked into a zone structure. As a result of this flexibility, all prices are held at the item/location level, while they can be managed at higher levels.

In RMS, an indicator at the item/location level determines whether SIM users can request changes to an item's retail price at a specific location. This indicator is editable and controls behavior going forward but not in the past.

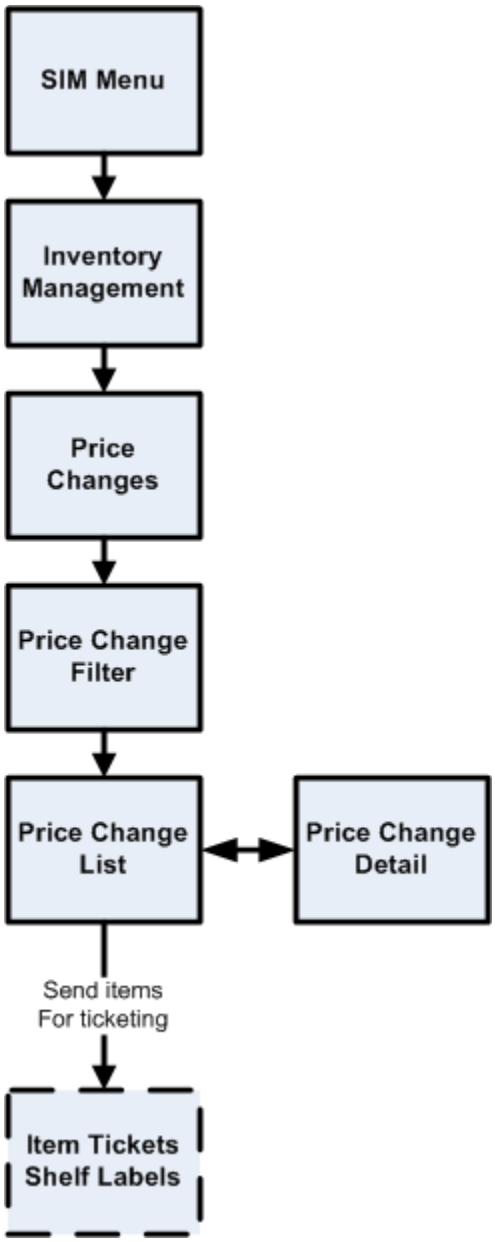
If SIM users have control of the retail price for an item at a location, they are able to send price change requests for permanent price changes, clearances or simple promotions to a price management system. The price management system checks for any conflicts and provides a response to SIM regarding the status of the request. If the request is accepted, the price management system also sends a price change event back to SIM.

SIM users are able to edit and create price events given the following assumptions and restrictions:

- The item/location store control-pricing indicator must be set to **Y** for an item.
- The price event must not be a complex promotion (such as multiple promotions or regular price changes on the same day, buy/get, threshold, min/max).
- Any change requests, if approved, update the existing price event in the price management system.
- SIM can modify the retail price and effective dates for a price event. If a user requests a new price change for the same item/location/date instead of changing/correcting the existing price event, the request is sent to a price management system as a new event request. It undergoes conflict checking in the price management system. If any conflicts are found with existing price events, a rejected response is communicated to SIM.
- If an item/location is not set up for store controlled pricing in RMS, SIM users view all price events that are sent from a price management system, but they have no control over them. SIM is unable to create new price change requests to be sent to a price management system.
- Communication between SIM and a price management system is handled by RSL (providing a direct update connection between the applications). Normal operation of pricing assumes that RSL and a price management application are both available. No manual override is provided within SIM.
- Time based promotions created in the pricing system can be interfaced with SIM, but these promotions cannot be created through SIM price change request.
- Prices are interfaced to SIM through the RIB or the bulk price batch.

It is recommended to only run one of the two interfaces at the time.

*Figure 4–6 Price Changes Business Process Flow – PC*




## Ticketing Functional Overview

Tickets and labels can be generated from price changes, item description changes and from purchase orders (PO) that have been received.

SIM allows stores to print shelf edge labels and item tickets for stock.

Item tickets and shelf labels can be created and printed for individual items in the Item Tickets dialogs that exist on both the PC and the wireless device. Items in the ticket-printing list can be filtered by:

- Hierarchy
- PO
- Ticket type

- Label type
- Promotion ID
- From and to effective dates

Multiple items can be selected to be printed at once.

Tickets can be created on the PC in the following ways:

1. Manual:
    a. Individual ticket—When creating an item ticket, the user provides the quantity of the item to print and an override price (if necessary). The override price in ticketing is used to indicate the old price or a special promotion allowing the user to show the mark down.

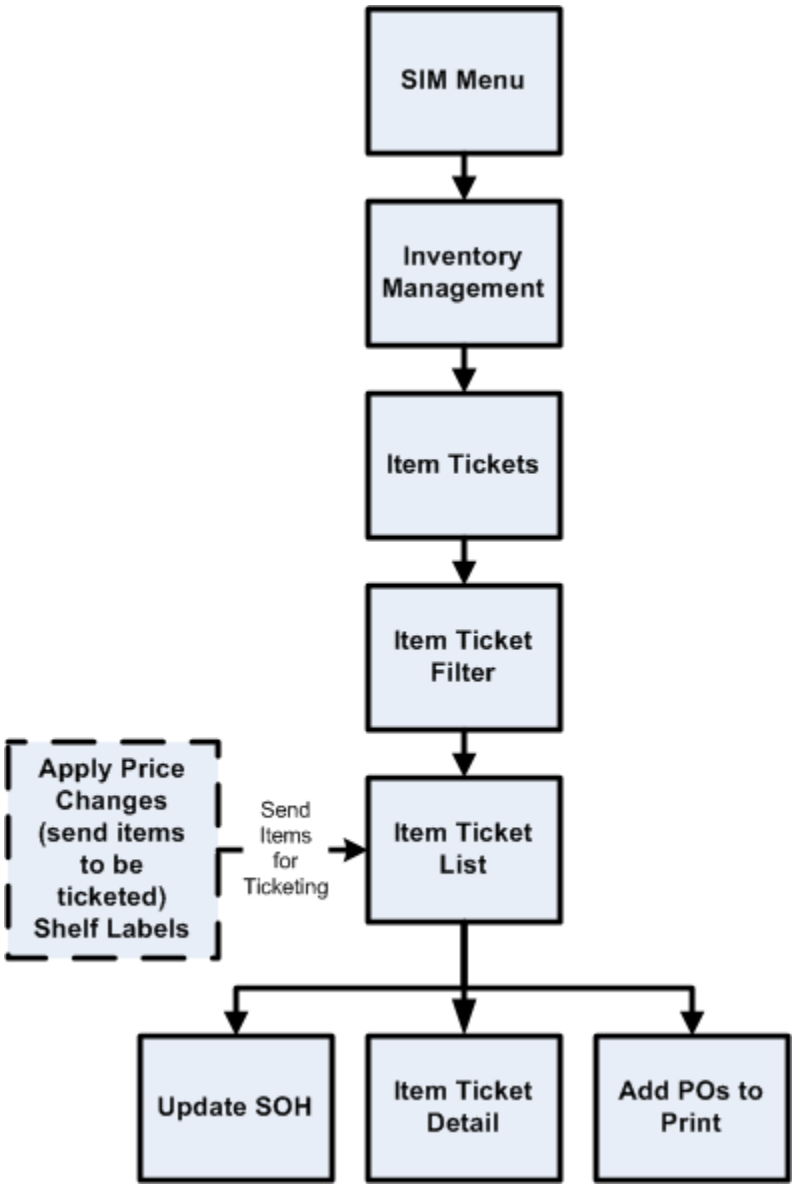
    **Note:** This override price does not generate a price change.

    b. Pricing dialog —Users can also send tickets to the Item tickets dialog to print at a later time by selecting price changes from the price change list screen and then and having it added to the Item Tickets dialog.
    c. PO receipts —Users can also create item tickets for purchase orders that have been received: the purchase order is selected and the corresponding received shipment on the Add PO screen is accessed from the Item Tickets. Item Tickets would then be generated for the items on the purchase order for the received quantities.
2. Automatic:
    a. Item description changes
    b. Price changes received from an external system
    c. UDA changes for an item

The handheld can only print manual individual created tickets. It is possible to use belt printers as long as they have their own unique printer network ID.

Label formats and label quantities will be maintained at the micro sequence location level for items setup in sequencing. This allows for defaulting label types based on Primary Location.

*Figure 4–7 Ticketing Business Process Flow – PC*




### Ticketing UIN Support

SIM automatically prints tickets when a serial number is auto-generated. A ticket for the AGSN can also be printed using the Item ticketing dialog. Serial numbers cannot be printed.

## Sequencing Functional Overview

Sequencing functionality provides users the ability to know the relative location of an item in a store. Sequencing a store improves store processes and reduces the time that employees spend looking for items (during a stock count, for example). The retailer can sequence all items in the store and create unique locations to hold the items. The system can prompt users to a specific location to look for a specific item. Sequencing functionality within the SIM system can be accomplished on a PC based deployment, on a wireless handheld device, or on a combination of the two deployment methods.

Sequencing functionality includes two means by which items can be assigned to places within a store: Macro sequencing and micro sequencing. When ordering, the system follows this pattern.

Macro sequences represent the highest level of locations that are set up in the store. The user can create macro locations, assign items to macro locations, remove items from macro locations, move items within macro locations and re-sequence an entire macro location (wireless only).

A micro sequence is the lowest (most granular) item location level.

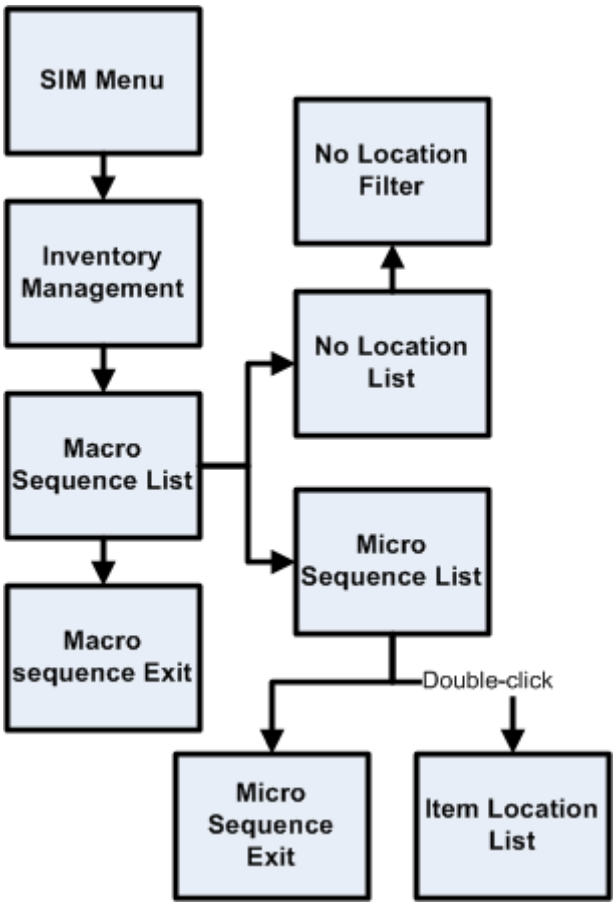
The following table provides an example of sequencing:

***Table 4–2 Micro Versus Macro Sequencing***

| Macro Sequence | Micro Sequence |
|---|---|
| Produce | Oranges |
| | Apples |
| | Bananas |
| | Oranges |
| Frozen foods | TV dinners |
| | Burritos |
| | Burritos |
| Cereal | Toasted oats |

Sequencing is used within Stock Counts and Shelf Replenishment to aid the user in proceeding to the next item during a count.

*Figure 4–8 Sequencing Business Process Flow – PC*




## Shelf Replenishment Functional Overview

The replenishment process attempts to ensure that the shop floor inventory is set at a level best suited for customers.

Shelf replenishment functionality within SIM is related to the movement of goods from the back room to the shop floor. For example, when a user sees that a certain soda quantity is low, he or she can instigate a replenishment process so that more of the soda is moved from the back room.

Shelf replenishment-related processing within SIM includes the following features:

- The system calculates what should be held on the shop floor to ensure that customers' expectations of availability are maintained. Store employees are driven to replenish the most urgently needed items first.
- The system offers a display of the location from which stock can be replenished to ease the search for stock when the shelf replenishment lists are being filled.
- The system allows shelf replenishment requests to be generated on demand.
- The system leads the user around the back room in micro sequence order, so that items can be picked in the most efficient matter.

Replenishment requires the available SOH be divided into three buckets: shop floor, back room, and delivery bay. Because of these buckets, shelf replenishment affects almost every area in the application. For example, inventory adjustments and transfers are affected because the system must take the inventory buckets into account when

engaging in these areas of functional processing. The system's available inventory is the sum of the three buckets.

When merchandise becomes available (enters the store through a transfer, a DSD, and so on), the merchandise is always placed in the back room bucket.

The user can create a within-day or an end-of-day shelf replenishment list. The two different types of shelf replenishment lists have store level configurations for the fill level. Typically an end-of-day shelf replenishment list would have a higher fill level than a within-day shelf replenishment list, as there would be more time to stock the shelves.

When the user creates a shelf replenishment list, the system runs a replenishment calculation that checks for those items that belong to shelf replenishment list product groups. The system takes those items and compares their capacity to their shop floor SOH. The system then generates a shelf replenishment list in order of the items that need replenishment the most and orders them in sequential order for the user. For within-day shelf replenishment lists the system will stop when the amount to shelf replenishment is equal to the amount suggested by the system. For end-of-day shelf replenishment lists the system continues until all items that need replenishing are replenished.

Shelf replenishment lists can be created on the PC or the handheld and can be fulfilled on either device. If they are created on the PC, the user is able to action them on the handheld.

### Replenishment Calculation Summary

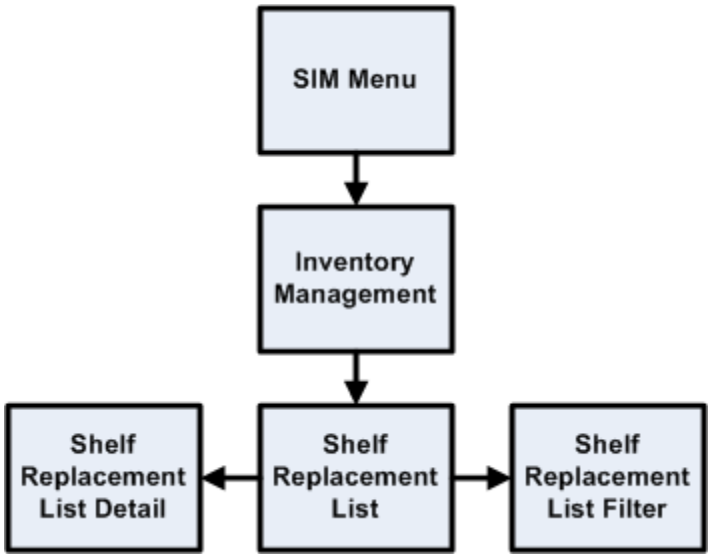
Once the calculation is started, the system engages in the following processing:

- The system gets all the items that are sequenced on the shop floor with capacity in the product group.
- If a previous shelf replenishment list exists for the selected group and it is in progress, the system assumes that all of the items on the shelf replenishment list will be completed. If a previous shelf replenishment list exists and is not started, the system deletes the old shelf replenishment list and creates a new one.
- The system checks and gets the configuration parameters established through the GUI (group unit of measure, fill percentage, and so on).
- The system gets the shelf quantities and available SOH for the items found.
- The system converts the quantities to the correct group default unit of measure.
- The system compares the shelf quantity to the summed shop floor capacity for every item to determine the percentage the item is out of stock.
- Once the out of stock percentage is calculated for every item, the system orders the items from the highest out of stock percentage to the lowest. If any of the items have the same out of stock percentage, the system uses the item that has the least amount on the shelf. For example, if item A has 10 out of 100 on the shelf, and item B has 1 out of 10 on the shelf, they both have the same out of stock percentage. However, the system considers item B a higher priority because there is less of it on the shelf.
- For each item, the system calculates the replenishment amount that should be brought from the back room/delivery bay to the shop floor. Keeping the items in priority order, the system looks at the available SOH, the items in the back room/delivery bay, and to what percentage the shop floor needs to be filled. The system takes the inventory from the back room first and then takes the inventory

from the delivery bay. The shop floor quantity can only be equal or less than the capacity.

- If the shelf replenishment list type is within day, the system stops when the amount to replenish is equal to the summed replenish amount calculated by the system.
- If the shelf replenishment list type is end of day, the system continues until all of the items are completed.
- If the system generated replenishment amount is a decimal, the system rounds down to the nearest whole number.
- The system generates and displays the list in sequence order to the user. If the items are not sequenced in the back room, the system displays the items in item ID order.

***Figure 4–9 Shelf Replenishment Business Process Flow – PC***




## Stock Counts Functional Overview

SIM provides the ability to schedule, perform, and authorize stock counts. SIM includes the following types of stock counts, each of which is described in this section:

- Ad hoc
- Unit
- Unit and Amount
- Problem line

> **Note:** The counting processing is identical among the unit only, unit and amount, and problem line stock count types. What differs among these three stock count types is either the setup or the items being counted.

SIM includes the following types of counting methods for stock counts, each of which is described in this section:

- Un-guided
- Guided
- Third Party

Portions of the stock count functionality, such as the setup of product groups, schedules, and authorizations, are performed on the PC only. The actual counting of inventory can be performed on both the PC and the wireless device. A master count is created for a single product group and is then broken down into one or more child counts based on the counting method or hierarchy breakdown chosen during the product group setup. The user is able to save the child stock count on the PC or handheld and resume at a later time.

### Future Stock Counts

Future stock counts are stock counts for which the scheduled date has not yet arrived. The user can view a list of future stock counts, and the user also has the option to generate a future count to view the count details. The user cannot take any action on a future stock count, the purpose is to allow the store to view future workload so that the store can plan ahead for staffing.

### Unscheduled Counts – Ad Hoc Stock Counts

An ad hoc stock count is performed by a user walking through the store scanning any items that need to be counted. They have no group or schedule functionality associated with them.

Ad hoc stock count processing within SIM includes the following features:

- The system creates an inventory snapshot as each item is identified and added to the stock count.
- Ad hoc counts can only be initiated on the handheld. Once the count has been saved on the handheld, it can be completed later on the handheld or PC; any existing ad hoc stock count can be retrieved and resumed on the handheld and PC.
- The system utilizes discrepancy thresholds (established in administration setup by the retailer) based on a percentage or standard unit of measure by the item's class in the merchandise hierarchy.
- On the PC, the system allows for the authorization of items that are discrepant (based on the percentage or standard unit of measure thresholds).
- Where the authorized item quantities entered by the user differ from the SOH, the system creates inventory adjustments that are sent to the merchandising system. See "Inventory Adjustments Functional Overview" in this chapter.
- It is possible to have multiple users scan for the same ad hoc stock count.
- Since the user determines the order the items are scanned in, and no predefined list exists, sequencing has no impact to these counts.

### Scheduled Stock Counts

Several different scheduled stock counts exist, each with their own specific differences. They do however have common setup pieces.

- Individual items or item hierarchies are associated into a single unit product group for the purpose of scheduling a stock count.
- Stock Count product groups can be scheduled for a stock count on a specified day or on scheduled intervals (for example, daily, weekly, monthly, or annually).

- One or more stores can be assigned to the scheduled stock count, and each store will complete their stock count individually.
- A group of valid stock count items is generated at the store level using batch processes.
- Users with proper security are prompted of any discrepancies outside of set tolerances, and the system can automatically force a recount if the discrepancies are too high. The system utilizes discrepancy thresholds (established in administration setup by the retailer) based on a percentage or standard unit of measure by the item's class in the merchandise hierarchy.
- An auto-authorization feature can be selected during the product group setup. If set up for auto authorization, SIM automatically authorizes the stock count after the count or re-count has been completed. In this case, no user intervention is needed to confirm the count. For Sarbanes-Oxley Act or auditing process requirements, this can be the optimal way to process a unit and amount count.
- Retailers can perform their Unit, Problem Line or Unit and Amount stock counts using different counting methods:

**Third Party Stock Counts** These stock counts are scheduled in SIM, but the actual counting process is performed using the third-party system. Once the physical stock counting process has been completed, the third-party system exports the results of the count to SIM.

SIM compares the count information with the stock-on-hand (SOH) value currently held in SIM. In SIM, users can view all items in the stock count that are discrepant and non-discrepant when compared to the SOH figure. Pre-defined variance limits (units, percent, and value difference) are used to determine which items fall outside the acceptable level and are therefore considered discrepant.

Any items SIM does not recognize can be added through the Rejected Items dialog. Items that require UINs can also be assigned UINs through the Rejected Items dialog.

The items associated to a product group will be associated to a master stock count when generated, which in turn can be broken down based on the hierarchy selected by the user during the product group setup (for example Department, Class, Sub-class).

It is possible to create Third Party Stock Counts for any merchandise hierarchy level supported in SIM.

For Third Party Stock Counts to work, the third party counter needs to receive an extract of the items, quantities and UINs to count from SIM .

This report can be printed to the screen and subsequently saved by a user. The report only needs to be accessible in the stock count dialogue.

The Third Party Stock Count Extraction Report allows a retailer to extract the snapshot value and in store UINs in an XML format that should be counted for a specific stock count. This report may need to be modified by individual retailers for different third parties when performing a stock count, and is only meant as a starting point.

If this report is generated before a snapshot is taken, the UIN and snapshot quantity field will be empty, so the assumption is that the extract will be created after the snapshot is taken.

---

**Note:** This will most often be used to print reports for third party stock counts, however it should work for all stock count types.

---

This XML report contains the following information:

- Header:
  - Stock Count ID
  - Store ID
- Detail
  - Item number (SIM SKU number)
  - Item description
  - Total snapshot quantity for the item
  - UINs for the item

**Unguided Stock Counts** When performing a scheduled stock count (unit or unit and amount), the user is able to scan items on the handheld without being prompted for which item to scan. This feature is controlled through the product group setup by choosing Unguided for the counting method. Multiple employees are able to scan items for the same stock count. This feature is controlled through a system option.

Unguided stock counts cut down the time it takes to completely scan a count and provides more flexibility. This process applies to both count and recount processes.

The items associated to a product group will be associated to a master stock count when generated, which in turn can be broken down based on the hierarchy selected by the user during the product group setup (for example Department, Class, Sub-class).

For unguided counts, the retailer can configure SIM to save the item count automatically when the user moves on to count a different item. For example, if the user scans item A three times and then scans item B, the count value for item A is saved when scanning item B. This automatic save reduces the need for store personnel to remember to save count values manually and it allows longer scan times without interrupting the scanning of items for the count. Users might forget to save, and if the system experiences a problem, the data recorded up to that point will be saved if SIM is configured to do so.

**Guided Stock Counts** Guided stock counts prompt the user for the next item in sequence. This feature is available for scheduled Unit, Problem Line and Unit and Amount counts and is controlled through the product group setup by choosing Guided count method.

SIM generates a master count that is broken down by location. A Child count is created for every macro location and the user is prompted to scan the next item based on its location within the store. If an item exists in multiple locations, the user is warned if the item has not been counted in all locations.

If sequencing is not set up for the items, the user is prompted in item order.

It is also possible to have these counts automatically processed, ensuring no store interference. This automatic third-party process does not require any counting or approval from store personnel.

### Unit-Only Stock Counts

Unit-only stock counts are usually small stock counts setup on a recurring pattern every few weeks or monthly. Unit-only stock count processing within SIM includes the following specific features:

- Setup of the stock count can be done at the item, merchandise hierarchy level.

- On the PC, the system allows for the authorization of items that are discrepant (based on the percentage or standard unit of measure thresholds) or non-discrepant, or both.
- Where the authorized item quantities entered by the user differ from the SOH, the system creates inventory adjustments that are sent to the merchandising system. See "Inventory Adjustments Functional Overview", in this chapter.

### Unit and Amount Stock Counts

Unit and amount stock counts are usually only done once or twice a year. They are often required by law to be performed once a year and are done for the entire store or specific merchandise hierarchies. They give the retailer the ability to consolidate the actual counted quantities for merchandise and the booking numbers at year end.

Unit and Amount stock count processing within SIM includes the following features:

- Setup of the stock count can only be done at merchandise hierarchy level.
- Unit and amount counts are scheduled and counted within SIM and then sent to RMS. RMS accepts the unit variances and the user inputs the variance amounts in Central Office.
- Unit and amount product groups are scheduled for a specified day.

The stock count schedule for unit and amount stock counts is sent to the merchandising system anytime it is created, updated or deleted.

- One or more stores can be assigned to the scheduled stock count.
- A stock count item list is generated at the store level using a batch process that runs daily.
- On the PC, the system requires the authorization of all items (based on the value, percentage, or standard unit of measure thresholds).
- Upon completion of authorization, a flat file is sent to the merchandising system with a header that contains the stock count ID, stock count date, and the store number that executed the count. The file contains details for each item and the quantity counted. This information is then staged in the merchandising system and can be used for reporting purposes.

> **Note:** The **Export Results** button has been removed and results will automatically be exported to the merchandising system upon confirmation of the last child count. The user no longer needs to manually export the results to the merchandising system using the GUI.

### Stock Counts UIN Tracking

For items that require UINs, the user must capture the UIN when performing a stock count on the PC or handheld. The count quantity will always equal the number of UINs captured for the item.

The count/re-count stages only allow the user to count UINs that already exist in the store. If a UIN does not exist in the store, the UIN can be added during the Authorize stage. When the count is confirmed, the UIN is created for the current store and the status moves to In Stock.

For UINs that have a status of In Stock after the initial count but move to another status before the count is authorized, SIM does not update the UIN to In Stock upon

confirmation. In order to achieve this, a snapshot of the status is taken at the time the snapshot is taken. The snapshot will always be taken at the beginning of the child count, including Unit and Amount counts.

For UINs that exist for the item in the current store but are not counted on the stock count, the status gets updated to Missing upon confirmation of the count.

For AGSN items, SIM requires the user to scan the UINs to capture the quantity as it does for regular serial numbers. During the authorization process, the user is able to adjust the authorized quantity to account for items that are missing UIN labels. The user can auto generate UINs during the authorization process by selecting **Auto Generate** from the UIN pop-up.

An audit record is created when the stock count is authorized.

### Problem Line Stock Counts

This functionality gives stores the ability to create automated stock counts according to predefined criteria (for example, the retailer could decide to count all of the items that have negative SOH values).

Once stores have established the criteria (based upon problematic areas), a batch process runs to find any items that meet the criteria. The found items are added to the scheduled stock count. They are counted in the same way as in a scheduled unit stock count. Note that problem line stock counts will be executed every day.

Problem line stock count processing within SIM includes the following features:

- Individual items and item hierarchies are associated into a single problem line product group for the purpose of scheduling a stock count.
- Problem Line product groups schedules will be defaulted to daily, every 1 day and cannot be changed
- On the PC, the system allows for the authorization of items that are discrepant (based on the percentage or standard unit of measure thresholds) and non-discrepant.
- Where the authorized item quantities entered by the user differ from the SOH, the system creates inventory adjustments that are sent to the merchandising system. See "Inventory Adjustments Functional Overview", in this chapter.

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**Note:** With the exception of the extraction criteria, the execution (counting, snapshot taking, authorization) is the same as with a regular unit count.

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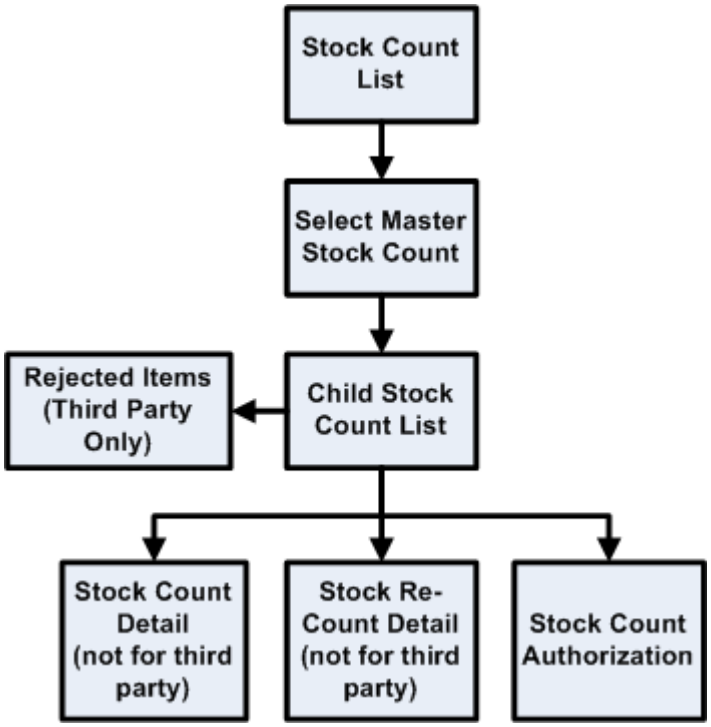
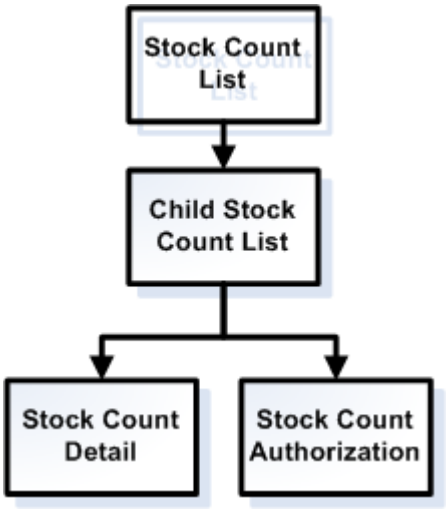
*Figure 4–10 Business Flow (Unit, Problem Line, Unit and Amount and Third Party)*




**Note:** Third Party count/re-count process is not performed in SIM, it is performed through the third party system.

*Figure 4–11 Business Flow – Ad Hoc (PC only)*




**Note:** Ad hoc count process is initiated on the handheld by scanning an item. Once the count has been saved on the handheld, the user is allowed to complete the count from the handheld or PC. There is no re-count for Ad Hoc and an Ad Hoc will only have one child count. Authorization occurs on the PC only.

***Figure 4–12 Business flow – Third Party***

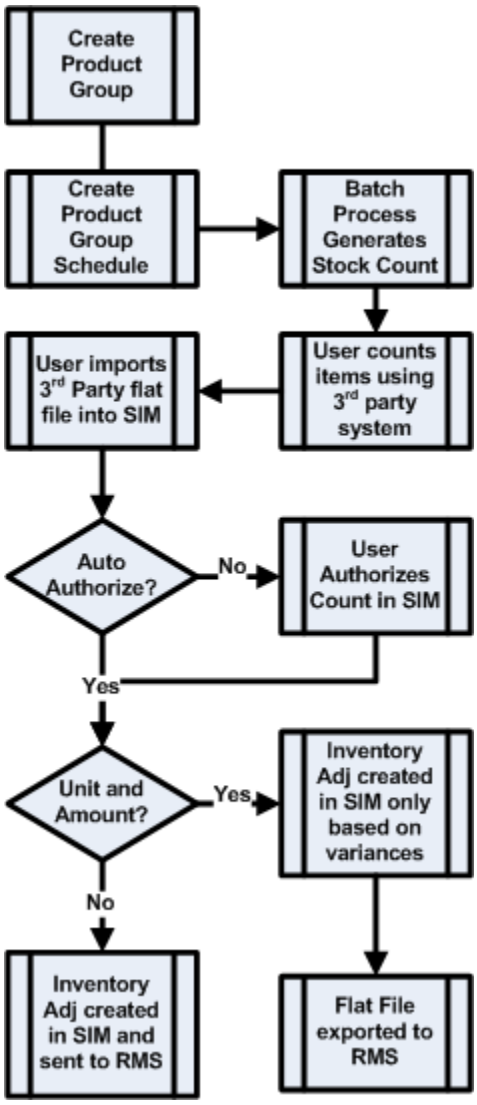
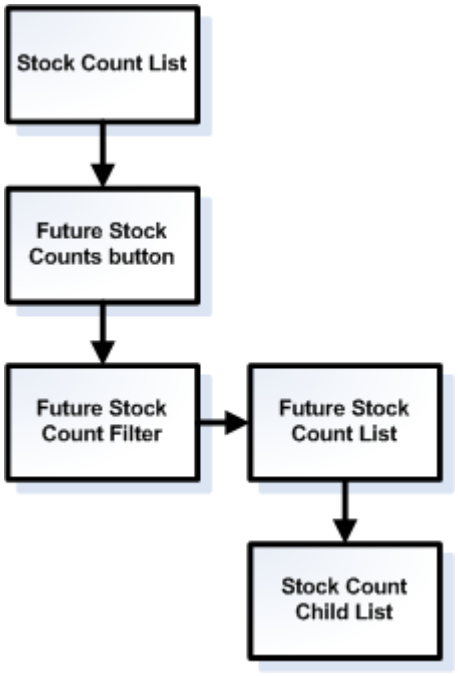


*Figure 4–13 Business Flow - Future Stock Count*




## Item Basket

Item Basket functionality allows the user on the handheld to scan a list of items. This list of items can be interfaced to other applications through a web service to aid them in specific tasks. These tasks can range from line busting (Oracle Retail Point-of-Service), using it for wedding list generation or simply identifying trouble items.

Specific features include:

- Identifying a specific type of basket
- Scanning or entering quantity for the item
- Entering or auto generating a unique ID for calling it up
- Edit, delete and add functionality
- Print ticket functionality for register scanning

The following is an example of a possible business flow for line busting:

Items are scanned into the Store Inventory Management handheld and the basket is created in Store Inventory Management. Optionally, the customer can be presented with a printed ticket containing a barcode, which can then be presented at checkout.

At an Oracle Retail Point-of-Service terminal, the operator must enter the unique Item Basket ID or scan the barcode from the ticket printed by the Store Inventory Management handheld, and the basket details are retrieved from Store Inventory Management and displayed on Oracle Retail Point-of-Service for item tender.

If a UIN needs to be captured for an item, Oracle Retail Point-of-Service will have this responsibility.

# Shipping and Receiving Functional Overview

SIM has four distinctive shipping and receiving dialogs:

- Transfers: Store-to-store transfer requests, dispatch, and receiving.
- Returns: Warehouse and supplier returns and return requests and dispatch.
- Direct store delivery (DSD): Supplier deliveries and Quick Order Creation
- Warehouse delivery

## Store-to-Store Transfer Functional Overview

Within SIM, the following areas of functionality are related to transfers and are discussed in this section:

- The creation of store to store transfers
- The receipt of store-to-store transfers
- E-mail alerts

### Store-to-Store Transfers

SIM allows for the lookup, creation, editing, and deletion of store-to-store transfers. A store-to-store transfer is the movement of stock from one store to another, within a given company.

This functionality can be performed on the PC deployment, on a handheld wireless device, or a combination of both. Users can create a transfer by selecting the receiving store and adding items by scanning and/or engaging in manual entry. The system verifies the receiving store is approved to receive the selected items and that the sending store has the available SOH inventory. A transfer can be immediately sent or saved to be dispatched at a later time. At the point the transfer is dispatched, SIM decrements the on hand inventory from the sending store and increments the in-transit inventory for the receiving store.

The following features of transfer-related functionality within SIM:

- Stock is differentiated by different buckets depending on stock status (for example, in-transit stock, reserved for transfer stock, and so on).
- The system automatically updates stock inventory on the basis of the status of the transfer.
- Buddy store functionality allows for the setup of a group of stores within a transfer zone in SIM to which the retailer often transfers items. This shortens the list of values that users select from when they create a transfer.

  **Note:** The retailer continues to have the option of creating a transfer to any store outside of the buddy store group, as long as it resides within the transfer zone.

- When saving a transfer before dispatch, SIM will communicate transfer positions to the external merchandise system and reserve internally the inventory. This allows for a more accurate replenishment.

**An Overview of Stock Movement after a Successful Dispatch** The stock moves from the transfer reserved and transfer expected buckets.

1. The transfer reserved quantity for the outbound location decreases as does the SOH for the outbound location.
2. The transfer expected for the receiving store results in a stock movement to the in transit bucket. The transfer quantity is removed from the in transit bucket to the SOH bucket when the receiving store receives the transfer.

***Figure 4–14 Store to Store Transfers Business Process Flow – PC***


## Transfer Requests

Transfer requests provide stores the ability to request products from other stores or allow corporate users to move inventory across stores using the central merchandising system. Transfer Requests are accessed from the Transfer dialog. SIM allows for the lookup, creation, editing, and deletion of store-to-store transfer requests.

A store user creates a transfer request by first selecting the store to request the merchandise from and then adding items to the request. Once the request has been sent to that store, the user can either accept or reject the request. Once this is done, an e-mail is sent out to the requesting store to notify of the response. If the transfer request is rejected, inventory does not get updated. If the transfer request is accepted, the user is directed to the transfer create dialog where all of the items and quantities have been defaulted. From here on, the dialog will act as a regular transfer.

Retailers are only allowed to accept or reject a transfer request awaiting response on the PC. The actual transfer request can be created on either the PC or the wireless device.

### Transfer Shipment

A Transfer Shipment can be created stand alone or based upon a transfer request. The transfer request may have been created within SIM or it may have come in from RMS.

After a request has been approved, or during the creation a new transfer, the user is able to identify which units should be shipped. Through the context field, the user can indicate the purpose of the transfer.

A new transfer can be created on the PC or the handheld. SIM allows the creation, deletion and cancellation of a transfer.

If UINs need to be tracked for an item, the user must enter them instead of a quantity.

When saving a transfer, SIM reserves the inventory and communicates this information to RMS. This ensures inventory is not incorrectly appropriated for other means.

Submitting a transfer is an interim process to save the transfer and potentially send off a pre-shipment message. Submitting and pre-shipment are configurable.

Dispatching will decrement the stock on hand at the sending store.

---

**Note:** Store to store transfers can be affiliated with a customer order.

---

### Transfers Receiving

The retailer is able to receive against transfers on both the handheld device and the PC.

On the PC, the store user can select the appropriate dispatched transfer coming into the users store to receive against.

On the handheld, the retailer can receive a store-to-store transfer by scanning an item on the transfer.

By scanning or manually entering, the user adds the items to be received at the transfer, item, or case level. The ability to receive unexpected items not originally on the delivery is configurable.

In the scenario where a transfer receipt being received is of substantial size and cannot be completed at one time, the user has the ability to save the delivery. This allows the user to save what has been received and return at a later time to continue receiving. Once the user has completed receipt of the entire transfer, the transfer would then be moved to a Received status. When the transfer is completed, SIM decrements the inventory from in-transit status and increments the on hand inventory appropriately. At this point, changes to the transfer receipt can no longer be made unless the system is configured to allow for receipt adjustments.

- During the receiving process, the store user has the opportunity to record any damaged or missing items on the transfer. An inventory adjustment record is written for damaged units (with a reason code of damaged-hold) to adjust the units from Available SOH to Unavailable SOH in the receiving store. This information is reported to the central merchandising system.

  ---

  **Note:** E-mails are also sent out to the sending store if a transfer received contained damaged items.

  ---

- When items are received for more than the dispatched quantity, the system adjusts the difference out of the sending store's SOH. No inventory adjustment record is sent to the merchandising system or displayed. An e-mail notification of the

adjustment is sent to the sending store. The e-mail includes the transfer number, item numbers, and the quantities adjusted out.

- Depending on the settings, when items are received for less than the dispatched quantity, the system can adjust the difference in the sending store's SOH (no loss) or ignore the missing units (sending or receiving loss). No inventory adjustment record is sent to the merchandising system or displayed. An e-mail notification of the adjustment is sent to the sending store. The e-mail includes the transfer number, item numbers, and the quantities adjusted in.
- The inventory is not recognized in SIM until the transfer has been received.
- When receiving UINs, the user is restricted to the UINs that were shipped, or be able to add unexpected UINs depending on configuration.

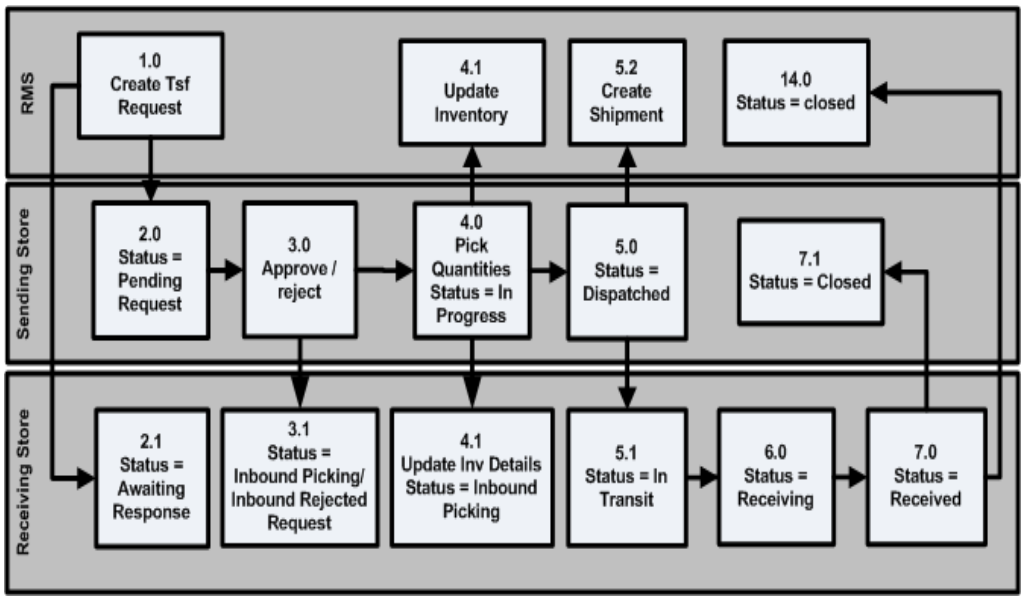
  An auto receipt option exists for shipped transfers. This dialog can be found under the administration section, SIM Stores, Auto-Receive stores.
- It is also possible to auto-receive in full the moment an ASN transaction arrives or to auto-receive based on *x* number of days after the transfer has shipped. This is configurable through a system administration parameter. This works in conjunction with the Auto Receive Stores admin settings, meaning that the store must be setup to be an auto receive store as well as the other admin settings.
- Transfer receipts which are associated to a customer order will prompt the user so that the items can be set aside for the customer. If configured as such, inventory will be reserved and auto picked.

---

**Note:** E-mail Alerts: An e-mail alerts batch program will look at all of the dispatched transfers that have not yet been received within a configurable number of days and send out an alert to both the sending and receiving store.

---

***Figure 4–15 Transfer Request to Transfer Receipt***




The following table represents the different states a request or transfer can be in, based on the sending store or the receiving store.

For example, a transfer in dispatched status from the sending locations can be in **In Transit** or **Receiving** status in the receiving store.

***Table 4–3 Different States of a Request or Transfer***

| Phase | Sending Store Status | Receiving Store Status |
|---|---|---|
| REQUEST | N/A | New Request |
| REQUEST | Pending Request | Awaiting Response |
| REQUEST | Outbound Rejected Requests | Inbound Rejected Requests |
| REQUEST | N/A | Cancelled Request |
| TRANSFER | In Progress | Inbound - Picking |
| TRANSFER | Dispatched | In Transit |
| TRANSFER | Dispatched | Receiving |
| TRANSFER | Closed | Received |
| TRANSFER | Cancelled Transfer | Inbound - Cancelled |

## Warehouse Delivery

Warehouse delivery functionality within SIM is utilized when goods are sent from a warehouse or external finisher to a receiving store. Warehouse delivery within the SIM system can be accomplished on a PC-based deployment, on a wireless handheld device, or on a combination of the two deployment methods.

SIM allows for receiving from any number of company-operated warehouses or external finishers. These entities must be approved shipping locations for the receiving store, and the items shipped must be approved for delivery to the receiving store.

When the transfer or allocation is created, SIM is able to display this information to the user with the estimated in store date.

The moment the warehouse or external finisher ships the transfer/allocation, SIM is notified over the RIB and moves inventory into an In-transit inventory bucket. When the user confirms the receipt of the ASN the inventory will be moved from In-transit to the Stock on hand (SOH). The merchandising system will be directly updated with the received information.

Receiving can be done at the following levels:

- Advanced Shipping Notice – This receiving level assumes a retailer's distribution center or warehouse system is very accurate and the store accepts the entire ASN without checking the content.
- Container - Store users can scan the barcode on the container (pallet/distribution unit/carton) within a receipt to find the quantities contained within and receive all contents.
- Case/Item - This is the lowest level of the receiving process where each item is received individually. Additionally, an initial receipt can be done at a high level and saved to allow for detailed item level receiving at a later time. The ability to receive unexpected items not originally on the delivery is configurable.
- Warehouse Quick Receiving - Warehouse quick receiving allows the user to scan each container as it comes off the truck. The user can confirm and reconcile after all the containers have been scanned. This function is only available on the Hand Held.

During the receiving process, the store user has the opportunity to record any damaged or missing items on the receipt. An inventory adjustment record is written for damaged units (with a reason code of damaged-hold) to adjust the units out of Available SOH and into the Unavailable SOH in the receiving store. This information is reported to the central merchandising system.

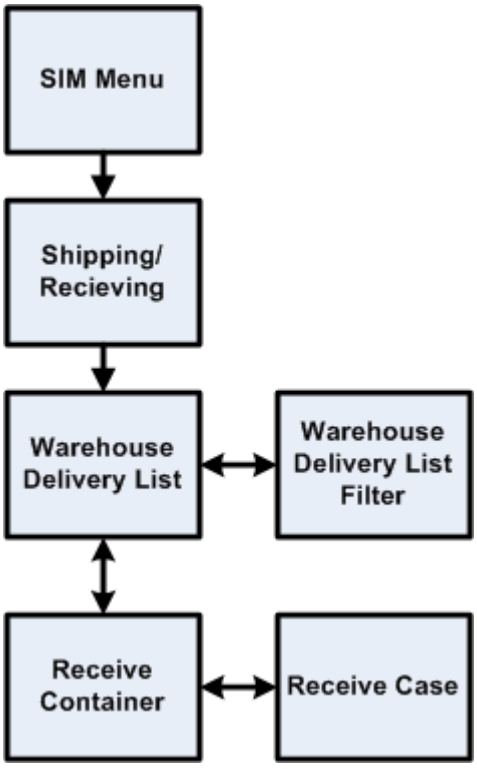
In the scenario where a delivery being received is of substantial size and cannot be completed at one time, the user has the ability to save the delivery as In Progress status. This allows the user to save what has been received and return at a later time to continue receiving. Once the user has completed receipt of the entire warehouse delivery it would then be moved to a Received status. At this point, changes to the delivery can no longer be made unless it is configured for Unit Receiver Adjustments.

When scanning a container that is listed as missing from a confirmed Advance Shipping Notice (ASN) in Quick Warehouse receiving on the handheld device, SIM receives the container instead of prompting the user with an error message. This receiving process follows the same logic as regular container receiving. The result of this operation is that the receipt is amended with the missing container now received. A message is sent to RMS to bring both systems in sync.

It is possible to auto-receive a warehouse delivery. External finishers and warehouse deliveries can be configured through a system administration parameter. The store user has the option to auto-receive in full the moment an ASN transaction arrives or auto-receive based on *x* number of days after the ETA date.

Warehouse receipts which are associated to a customer order will prompt the user so that the items can be set aside for the customer. If configured as such, inventory will be reserved and auto picked.

***Figure 4–16 Warehouse Receiving Business Process Flow – PC***



### Warehouse Quick Receiving

Warehouse quick receiving allows the user to scan each container as it comes off the truck. The user can confirm and reconcile after all the containers have been scanned. This acts as a follow up audit after the truck has been unloaded and has left.

### Quick Receiving with Missing Containers

When scanning a container that is listed as missing from a confirmed Advance Shipping Notice (ASN) in Quick Warehouse receiving on the handheld device, SIM receives the container instead of prompting the user with an error message. This receiving process follows the same logic as on the PC. The result of this operation is that the receipt is amended with the missing container now received. A message is sent to RMS to bring both systems in sync.

### Warehouse Delivery UIN Tracking

When receiving containers using either the handheld or the PC, SIM validates the container to see if it contains any items that have a Capture Time of Store Receiving. If any items do, SIM requires the user to scan the individual UIN numbers within the Container.

If a serial number is not scanned, the quantity on the delivery will not increase. At this time, the ASN message from the warehouse does not include any UIN information.

For AGSN receiving, the user enters the received quantity and damaged quantity. UINs are not scanned during the receiving process for items that require AGSNs. SIM generates UINs and prints a ticket for each damaged and received item upon receipt confirmation. A business process should be put in place to put the AGSN tickets on the correct items.

Warehouse Quick Receiving allows for a user to quickly receive at the container level, therefore, if the container has items that require UINs, the user will be given the option to receive the UINs now or set the container aside to be received later.

When the delivery is accessed after it has been received, the user can view the UINs that were created.

### External Finisher-Specific Logic

Through the returns dialogue, items can be shipped to an external finisher for repair. After the finisher has completed the repair work, a transaction is generated for SIM to receive against. The receipt is done in the warehouse delivery dialogue where the user can receive against the transaction, receive a single container or receive the individual item.

If the items were UIN items, the warehouse delivery dialogue will check to see if the UINs shipped to the finisher are being returned. If they are UINs that are new, the user can still receive them, but will be asked to confirm the delivery.

## Direct Store Delivery (DSD)

DSD occurs when the supplier drops off merchandise directly in the retailer's store. This process is common in convenience and grocery stores, where suppliers routinely come to restock merchandise. In these cases, the invoice may or may not be given to the store (as opposed to being sent to corporate), and the invoice may or may not be paid for out of the register.

The SIM system allows for the retailer to create new delivery records. The delivery records can be created for a new Purchase Order and the supplier will be required to

be identified by entering in the supplier or identifying the supplier for an item using the supplier lookup. Deliveries can also be created for existing purchase orders. This occurs by selecting a Purchase Order which can be viewed and a delivery can be created against that purchase order. DSD delivery functionality within the SIM system can be accomplished on a PC based deployment, on a wireless handheld device, or on a combination of the two deployment methods.

The retailer can enter invoice information and receive items by the case/pack or by the item. The retailer can also print a delivery receipt once all items have been received, and the delivery is finalized. Note that the system is also able to handle deliveries partially received, allowing for multiple receipts against a single PO.

Through security permissions, the retailer can prevent users from over-receiving on the delivery. Once the expected quantity is reached, the user is prevented from receiving any more units. Receiving for damages can also be restricted through security. A system parameter allows the user to receive above the expected quantity but the stock on hand does not get updated for any units that exceed the expected quantity. A second system parameter allows the user to receive damaged units but, as with over-receiving, the stock on hand will not be adjusted for these units. These over-received and damaged units are moved to a separate table upon confirmation of the delivery and can be published to an external system. In case both parameters are setup, the damaged units will be removed before the undamaged units.

Upon completing the order, the system validates whether the supplier allows for:

- any discrepancies
- only overages, not short receipts
- no discrepancies based upon a supplier attribute

A security setting dictating whether supplier discrepancies can be overridden is checked against the receipt. If the discrepancies cannot be overridden, the receipt is not completed. The user has an option to reject the entire delivery. If overridden, the receipt process continues on.

---

**Note:** In a standalone environment, the supplier level indicator can be manually set up on the supplier in the SIM DB.

---

Upon completing the delivery, the SOH for the store is updated with the received quantities. An inventory adjustment record is written for damaged units (with a reason code of **damaged**) to adjust the units out of SOH in the receiving store.

The receipt and purchase order information is published to the RIB for the purposes of the merchandise system.

Depending upon system configurations, users can re-open direct deliveries and adjust received quantities (within an established number of days). Corrected data is then processed and resent to the merchandising system. This unit receiving adjustment functionality is only available on the PC.

If the unit cost configuration is turned on, in certain conditions, the user will be able to enter a unit cost for DSDs created in SIM. These costs will be used by the merchandise system to generate a Purchase Order (PO). When receiving against existing Purchase Orders, SIM cannot update the cost since it is controlled by the merchandise system. If it is not filled in, then the merchandise system will default the cost.

Direct Store Delivery receipts which are associated to a customer order will prompt the user so that the items can be set aside for the customer. If configured as such, inventory will be reserved and auto picked.

### Receiving Against Advanced Shipment Notices (ASN)

Because of receiving-related processing within SIM, the retailer is able to receive against advanced shipment notices (ASN) on both the handheld device and the PC. ASNs that originate at the vendor are published to the RIB, and SIM subscribes to the data.

When a direct delivery is received, SIM checks for a corresponding open ASN against the PO.

Retailers are prompted as to whether they would like to apply the ASN to the delivery. If the ASN is applied, the shipped quantities from the ASN are applied to the quantity received for the direct delivery. Depending on configuration, if new items are included in the ASN but do not reside on the original PO, the items are added to the PO. Once the ASN is applied, the retailer can modify any of the received quantities.

A system option controls whether or not expected quantities are defaulted in for direct store deliveries with ASNs. This allows more detailed control by the retailer. If the quantities are not automatically defaulted, the user can scan each unit individually to ensure that the correct quantities are recorded. If the quantities are defaulted, only a visual inspection can be done since scanning the item will automatically increase the received quantity.

### Direct Delivery UIN Tracking

Before confirming a receipt for a direct delivery on the handheld or the PC, SIM validates to see if any items have a Capture Time of Store Receiving. Serial numbers must be entered or scanned when receiving items that require UINs. If a serial number is not scanned, the quantity on the delivery will not increase.

---

**Note:** If applying an ASN, the user is prompted if the defaulted quantity is not equal to the number of UINs scanned to be received.

---

The Receive All option will not be available if UINs are required for at least one of the items on the DSD.

At this time, the ASN message from the supplier does not include any UIN information.

For AGSN receiving, the user enters the received quantity and damaged quantity. UINs are not scanned during the receiving process. SIM generates UINs and prints a ticket for each damaged and received item. A business process should be put in place to put the AGSN tickets on the correct items.

When the delivery is accessed after is has been received, the user can view the UINs that were created.

### Direct Exchange (DEX) and Network Exchange (NEX) Receiving

Direct Exchange (DEX) and Network Exchange (NEX) are uniform communications standards. DEX is the means through which a supplier, using a handheld device, can exchange electronic invoicing information with a store's direct store delivery (DSD) system. NEX differs in its delivery system, using the web as opposed to a hand-held cradle.

SIM is designed to support the integration of a supplier's DEX/NEX information into direct delivery-related screens, thereby simplifying the receiving process. Data is transferred to a store's DSD system using the Electronic Data Interchange (EDI) transaction set 894 (delivery/return base record). With the uploaded data, the store user can view, edit, and confirm the information contained in the file before receiving the direct delivery.

A system option controls whether or not expected quantities are defaulted in for direct store deliveries with Dex/Nex. This allows more detailed control by the retailer. If the quantities are not automatically defaulted, the user can scan each unit individually to ensure that the correct quantities are recorded. If the quantities are defaulted, only a visual inspection can be done since scanning the item will automatically increase the received quantity.

### Existing POs vs. New PO

An existing PO is defined as a PO coming from an external system. SIM can receive against such POs with or without an ASN.

SIM also has the ability to create POs on the fly. These can be based on Dex/Nex transactions or be manually entered based on an invoice from the vendor.

***Figure 4–17 Direct Store Delivery (new created) Business Process Flow – PC***

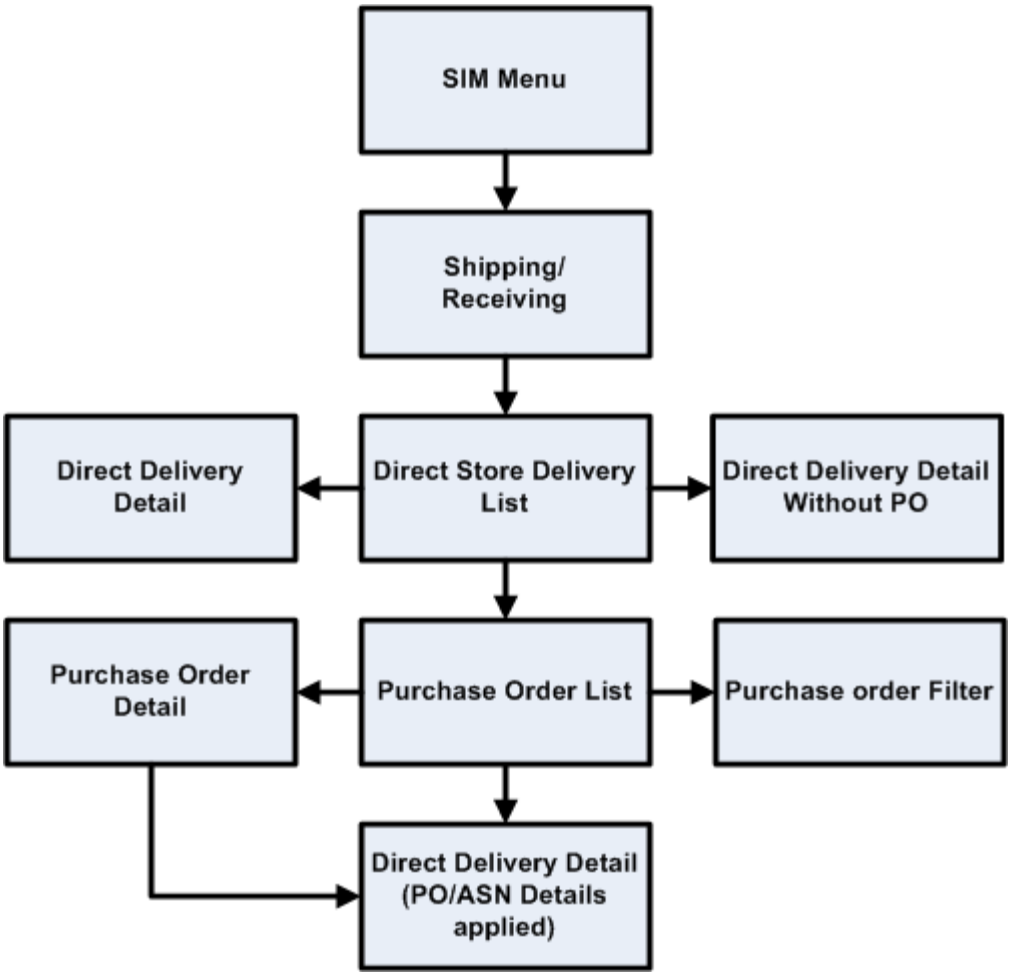


***Figure 4–18 DSD Multiple Available ASNs Business Process Flow – PC***

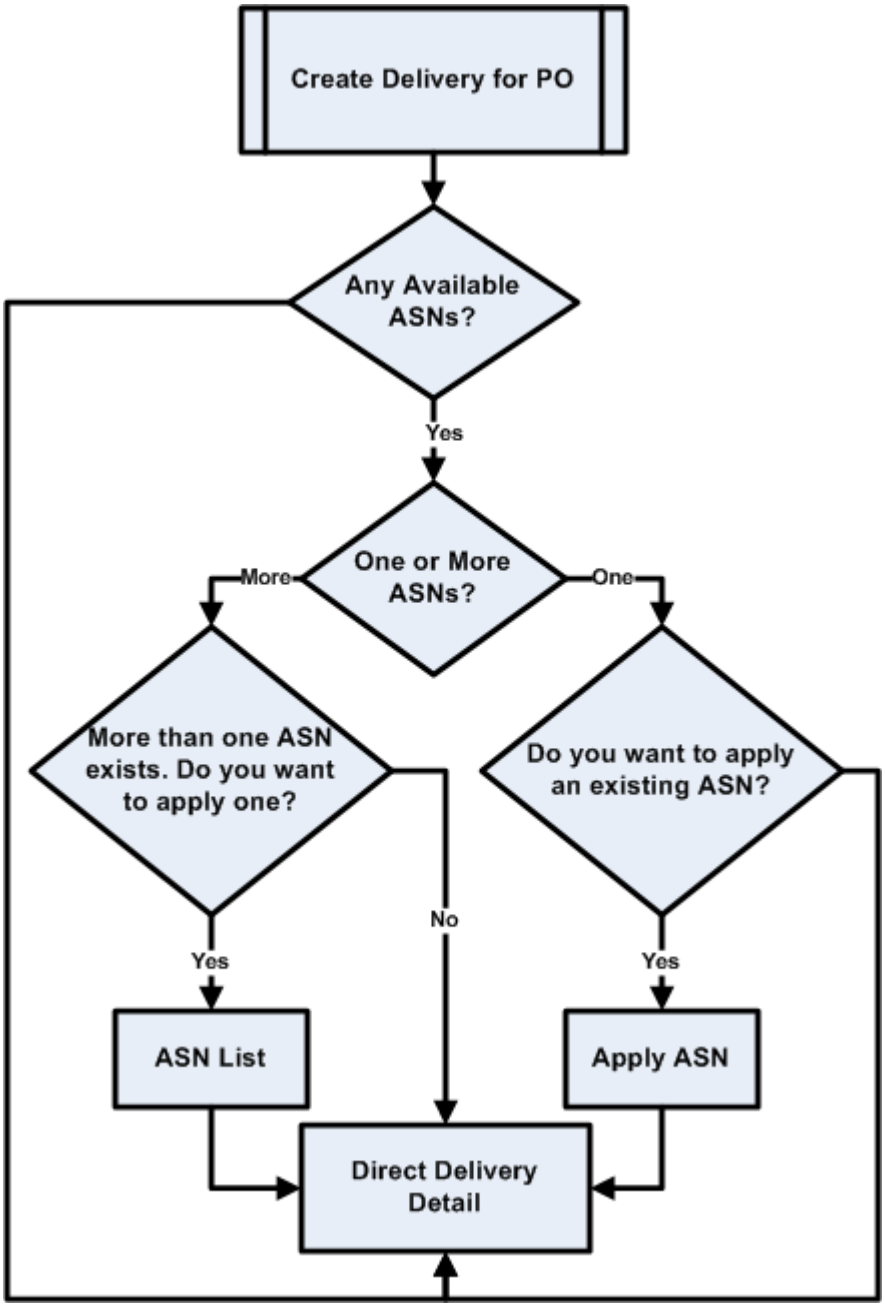
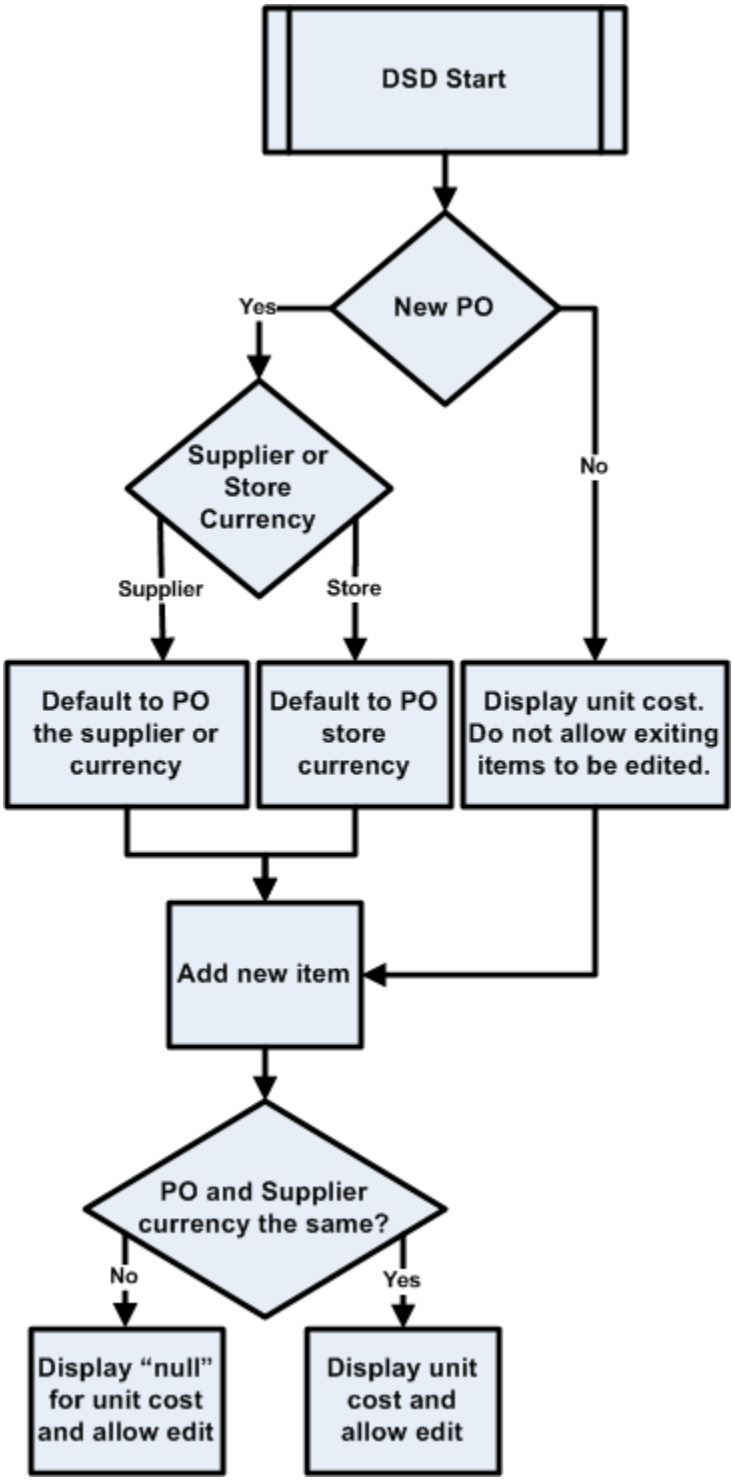


*Figure 4–19 DSD Updating and Defaulting Cost Business Process Flow – PC*




## Receiver Unit Adjustments

During the receiving process, there are situations where it becomes necessary to be able to amend a receipt once it has been completed and sent to the merchandising system for processing. SIM allows users to edit quantities on receipts from a warehouse, direct delivery, and transfer once those shipments have been received.

Unit Receiver Adjustments are available depending on system configurations. There are three separate system configurations corresponding to each receiving function. The configurations represent the number of days a receipt can be adjusted. For example, if the configuration is set to zero, this would disable the unit receiver adjustment functionality. Conversely, if a unit receiver adjustment were set to a value greater than zero, the receipt would be available for the specified amount of days. The users can re-open already received deliveries by clicking **Adjust Delivery** which is available on the receiving detail screen, and then modify the received quantities. Corrected data is then processed and resent to the merchandising system.

Unit Receiver Adjustments are only available on the PC and uses the existing receiving screens.

### Receiver Unit Adjustments UIN Tracking

When a receipt is adjusted for an item that requires a UIN, the UIN will need to be added or removed from the transaction. If UINs are added, the received quantity increases by the number of additional UINs added. If UINs are removed from the receipt, the received quantity decreases by the number of UINs removed.

If externally generated receipt adjustments are sent from RMS, an exception is captured. The SOH and receipt will still be updated for the receiver unit adjustment on the backend.

For example:

```
     RMS            SIM
     SOH    Rcpt    SOH    Rcpt
       3       3      3       3

     External receiver unit adjustment done in for -1.
     SOH and receipt updated in both external system and SIM.
     RMS            SIM
     SOH    Rcpt    SOH    Rcpt
RUA   -1      -1     -1      -1
       2       2      2       2
```

A business process should be put in place to resolve the discrepancy on the GUI. See "Resolving UIN Discrepancies" for more details.

When entering the DSD, Warehouse Delivery or Transfer dialogues, the user will be prevented from exiting the RUA transaction until the received quantity equals the number of UINs.

Receipt Adjustments for Transfers should not be allowed for any UIN unless the status of the UIN is in In Stock. The reason for this is that other states such as shipped out, reserved for shipping, unavailable, customer order reserved and so forth have other business transactions against them. The item should be removed from those transactions before the adjustment is allowed. The business workaround would be to add the item back in stock and then remove it through the adjust transfer dialog.

When adjusting receipts for AGSNs, an AGSN would be added or removed from the list. When adding units to the receipt of a Warehouse Delivery, DSD, or Transfer, SIM:

- Creates AGSNs for items that are added or items that increase in quantity
- Prints labels automatically for the newly created AGSNs
- Associates the AGSN to the item without prompting the user to add/scan them manually

In case of a RUA that is reducing inventory, the user will be required to select the AGSN that is being removed from the transaction.

# Returns and Return Requests Functional Overview

The section describes the returns and return requests.

## Returns

SIM allows a store user to look up, create, edit, delete, and complete returns from the store to an external finisher, a company-owned warehouse or directly to the vendor. Returns functionality within the SIM system can be accomplished on a PC based deployment, on a wireless handheld device, or on a combination of the two deployment methods.

If the return is to a warehouse (RTW), the user selects the appropriate warehouse from a list. If the return is direct to a vendor (RTV), the user enters the vendor number or uses the search option to identify the vendor for which the items should be shipped. Lastly for return to finisher, the user enters or searches for the finisher for which to return the goods.

For the RTV, the user is prompted to enter an authorization code for the return if the supplier requires a return authorization code.

Return to Finisher and Warehouse have also a context field. Through the context field, the user can specify the purpose of the return. For example, the user can indicate the item is being returned for repair. After the finisher has completed the repair work, a transaction is generated for SIM to receive against. The receipt is done in the warehouse delivery dialogue. The context field can only be assigned if the return is created in SIM.

Return to warehouse and finisher require the user to select an inventory status at the header level of the return to define whether all items are returned from available or unavailable inventory. The reason codes will be restricted to those reason codes that have an inventory status corresponding to the one selected on the header of the transaction. For return to supplier, the user may return available and unavailable items on the same return transaction, thus all return to vendor reason codes will be provided.

Once a return is dispatched, the available stock on hand is decremented. If the user decided during the return process to source the quantity from unavailable inventory, an additional inventory adjustment is generated with a reason code of returns that moves the stock from unavailable to available.

Item quantities can be entered in eaches or cases. Once the applicable quantities are entered, the user is prompted to enter a reason code for the return. The reason codes are retailer defined. After the reason code is selected, the user may either complete the return or save it to be completed at a later date. Submitting a return is an interim process to save the return and potentially send off a pre-shipment message. Submitting and pre-shipment are configurable.

Once a return is dispatched, inventory buckets, available or unavailable, will be updated based upon the inventory status associated to the reason code.

Once the return is completed, a return document can be printed to be used both as a report and/or a packing slip for the shipment.

**Note:** It is only possible to return merchandise directly to the vendor (RTV) from SIM if the vendor is allowed to receive returns. It may be a requirement that the vendor is also allowed to do Direct Store Deliveries, this is based on a configuration.

### Returns UIN Tracking

For Return to Warehouse and Return to Vendor transactions, the system will check if the capture time is store receiving for the item. If it is, the user will be required to enter UINs and the quantity field will be equal to the number of UINs entered/scanned for the item. Saving the transaction will move the UINs to Reserved for Shipping status.

If the UIN added to the return is in unavailable status, SIM assumes the user wants to use unavailable inventory for the return. A separate check for unavailable inventory is not needed for UINs.

If the UIN is not assigned to the current store, the UIN is not allowed to be added to the return.

Once dispatched, the UIN will move to Shipped to Warehouse for RTWs, Shipped to Finisher for Return to Finisher, and Shipped to Vendor for RTVs.

An audit record is captured for each status change.

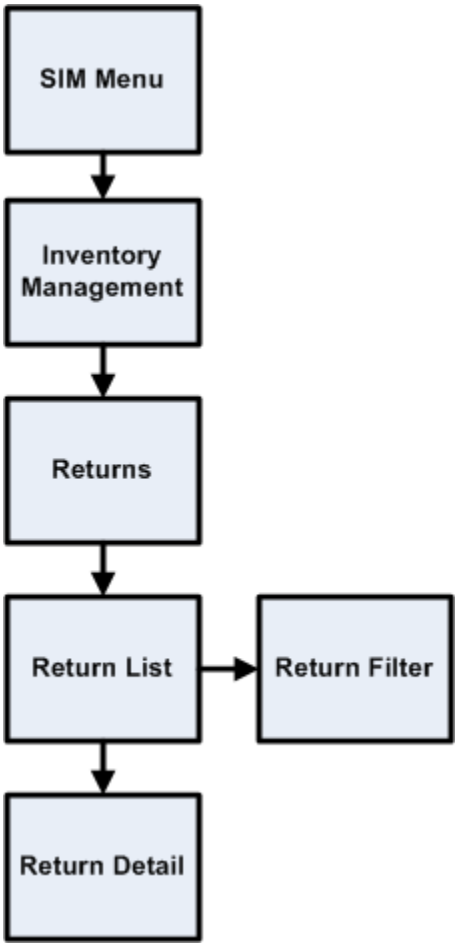
## Return Requests

Return requests functionality enables return requests to be fulfilled from a store to a warehouse (RTW), finisher, or to a vendor (RTV) that were generated using the merchandising system.

A return request might be generated by a safety concern (for example, glass shards are discovered in a product). The functionality can be summed up as a return generated by the merchandising system that can be edited and approved in SIM. Return requests functionality within the SIM system is accomplished only on the PC-based deployment.

Once SIM receives the return request data, it takes over the request and allows store users to add, edit, delete, save, and dispatch the return request. Once the request is deleted or dispatched, a message is sent back to the merchandising system.

*Figure 4–20 Return Requests Business Process Flow – PC*




## Updating Reason Codes

SIM provides a UI which allows the user to add new reason codes to synchronize with those setup in RMS. Each reason will have an inventory status of Available or Unavailable. System required reasons will indicated and defaulted per data seeding.

Those reasons that have an inventory status of unavailable may also have a sub-bucket assigned if system configured to use sub-buckets.

# Customer Order Management

Upon entering the Customer Order Management dialogue, the user will see all open transactions that are pertaining to customer orders for the user's store. Customer Order may be the POS pick up type of customer order, or they maybe the web order customer orders. The user can use the filter dialogue to filter the criteria further. From this screen the transactions can be accessed by double clicking on any of the records in the list.

Transactions will include:

- Customer Order
- Pick
- Delivery

- Reverse Pick
- Transfer
- Direct Delivery
- Warehouse Delivery

This screen also allows access to the Customer Order and Customer Order Picking dialogues.

## Customer Orders

Customer Orders can be viewed from either the Item Detail screen for a particular item, or from the Customer Order dialogue within Customer Order Management. Customer Orders are view only and provide information to the user about the customer order including:

- Customer Order ID
- Fulfillment Order ID
  - Can have multiple fulfillment orders per customer order. Only for web order reservation types.
- SIM Customer Order ID (internal unique ID)
- Order Status
- Reservation Type
- Order Create Date
- Order Release Date
- Order Delivery Date
- Delivery Type (pick up or shipment)
  - Pick Up for non “web order” reservation types
- Carrier
- Service
- Allow Partial Delivery
- Notes
  - Notes can be maintained on the customer order, delivery or reverse pick and be stored on the customer order.
- Item
- Item Description
- UOM
- Pack Size
- Remaining Quantity (quantity left to be shipped or picked up)
- Order Quantity
- Picked Quantity
- Delivered Quantity
- Canceled Quantity

- Last Update Date
- Comments
- Substitute
  - The original item that the current line item was substituted for.

Customer Orders that are “web orders” will have inventory reserved either upon getting the customer order into SIM from the OMS or it will happen when receiving a delivery that contains the customer order (transfer, warehouse delivery, or DSD). This is dependent upon a configuration. In both cases, the customer order must be in the system in order to reserve the inventory. When reservation occurs a message is published out from SIM.

## Customer Order Picking

Some retailers will want to have a formal customer order picking process in place to pick the customer orders and set them aside for the customer. Other retailers will find that this is not necessary and they will just go and get the items informally when the customer order comes into the system. Picking is a process that can be configured to be required or optional. Picking is only used for "web order" reservation type of customer orders.

In the manual picking process, a retailer may choose to pick by bin or by customer order. When picking by bin the retailer can pick multiple customer orders at a time. The retailer will tell the system how many bins to pick and the system will apply an algorithm to find the oldest customer orders where there are items with available stock and items left to be picked. The system will fetch one customer order per bin. When picking by customer order, the user will tell the system what customer order to be picked and that single order will be added to the pick.

Once the pick is created the user will walk the store picking the items prompted on the pick based upon a system suggested pick quantity. As the items get picked the user would set them aside. Upon completion of the pick, the pick quantity on the customer order would be incremented and SIM would publish out a pick message.

During the picking process, it may be necessary to substitute an item. In order for this to happen, the item on the customer order must first allow for substitute items. If substitutes are allowed, there are two options for choosing substitute items based upon configurations. One, the system does not allow for user discretion and only a list of substitute items provided from RMS can be used. Second, the system allows for user discretion and the user can choose from a list of RMS provided substitutes, or choose any substitute item at will.

There may also be items that are difficult to pick the suggested pick amount. These items are typically variable weight, each item, such as Lbs, KG, meters. It is possible to setup tolerances at a sub-class level for customer order picking, similar to those for Adhoc stock counts. The tolerances will allow the user to over pick within the defined tolerance. Example: Ordered 2 LBs Bananas. The Fruit sub-class has a tolerance of 10%. User picks 2.1 LBs which is within the 10% tolerance of 0.2 Lbs.

## Customer Order Deliveries

Customer Order Deliveries allows for the user to fulfill the customer order by creating a delivery for a customer order. A delivery may be a shipment to the customer or it can be a pick up for the customer order. For the POS pick up customer orders, deliveries cannot be created by the user, rather they will be created upon receiving a customer order fulfillment record from POS and they will be in a “completed” status and view

only. For “web order” customer orders, the user can create and edit customer order deliveries.

It is possible to create multiple deliveries per customer order so long as there is a remaining quantity left to be fulfilled. Each delivery will be listed for the customer order. If picking is configured to be required, it will be necessary to have everything picked prior to creating the delivery. When creating the delivery, the user will enter the quantity to be delivered that is less than what is remaining .The system will validate if a partial delivery is allowed per the customer order. If it is not the user will be prompted and the delivery must be delivered in full (unless user has special security permission to override).

The delivery can be saved, submitted or dispatched. Submitting a delivery is an interim process to save the transfer and potentially send off a pre-shipment message. Submitting and pre-shipment are configurable. Once a delivery is dispatched the stock on hand and reserved quantities will be decremented from the user's store. The deliveries which are shipments will publish and ASNOut message.

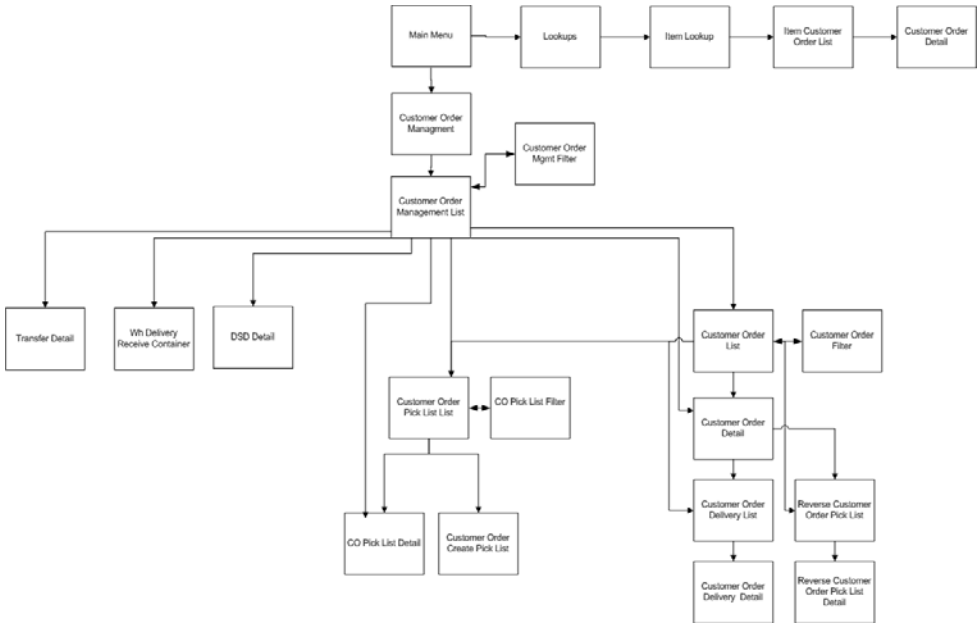
## Customer Order Reverse Picks

Canceling of “web order” customer orders might also come into SIM from an external OMS system. If all of the items being canceled have not been picked, then a completed status reverse pick will be generated and no action is needed from the user. The canceled quantity on the customer order will be incremented. When a cancelation comes into SIM, if there are items to be physically unpicked, then a reverse pick list will be generated. The reverse pick will require action. The system will suggest the quantity needed to reverse pick based upon the cancellation that came into SIM. Upon completion of the reverse pick, the pick quantity and reserved quantities will be decremented as well as incrementing the canceled quantity.

A manual reverse pick might also be necessary. This would happen, for example, when the user discovers that something was picked and has been damaged. A manual reverse pick may be created in SIM which would reduce the pick quantities. In this case the reserved quantity and canceled quantity does not get updated. This is because the items are not canceled, they are just un-picked.

Reverse picks can be saved to be completed later or completed now. Reverse Picks are an exception process and therefore they are only available on the PC application.

*Figure 4–21 Customer Order Management Business*




# Lookups

This section describes lookups.

## Item Lookup

SIM provides store users the ability to query basic item information and search for stock in other store locations. All of the lookup functions have filter status on which to search. For example, a user can search for items by item number, description, supplier, and/or merchandise hierarchy. The information that can be searched on and displayed to the user is as follows:

- Search Criteria will always allow for:
  - Item Number (for example, UPC, SKU, UIN, GS1)
  - Unique Identification Number (UIN)
  - Item Description
  - (Primary) Supplier Name
  - (Primary) Supplier Number
  - Warehouse
  - Finisher
  - Merchandise Hierarchy
  - Ranged indicator
  - User-Defined Attribute (UDA): UDA Text, Value, or Date
  - Inventory Status (Available or Unavailable inventory)
- Information Displayed
  - Item Number (SKU)

- Item Description
- Item Image
- Supplier Name
- Supplier Number
- Primary UPC/EAN Number
- Brand
- VPN
- Primary Supplier
- UIN Detail
- Item/Location ranging
- Primary Sequence Location
- Unit Of Measure
- Store Pack Inventory
- Concession/Consignment Item
- Inventory – defaults to the store the user is logged on to and displays the following categories in units:
  * Total Stock on Hand
  * Available Stock on Hand
  * Shop Floor
  * Backroom
  * Unavailable Stock
  * Transfer Reserved
  * RTV Reserved
  * Customer Order
  * Nonsellable
  * Ordered Quantity
  * Delivery Bay
  * In Transit
  * Received Today
- Stock on hand at other store locations (Stock Locator)
- Customer Orders
- Nonsellable (if sub-buckets are configured)
- Department, Class, and Subclass
- Item differentiators and their related items
- Primary Pack Size
- Pricing – Current and Regular Retail Price
- Price Status – Clearance, Promotional, Market

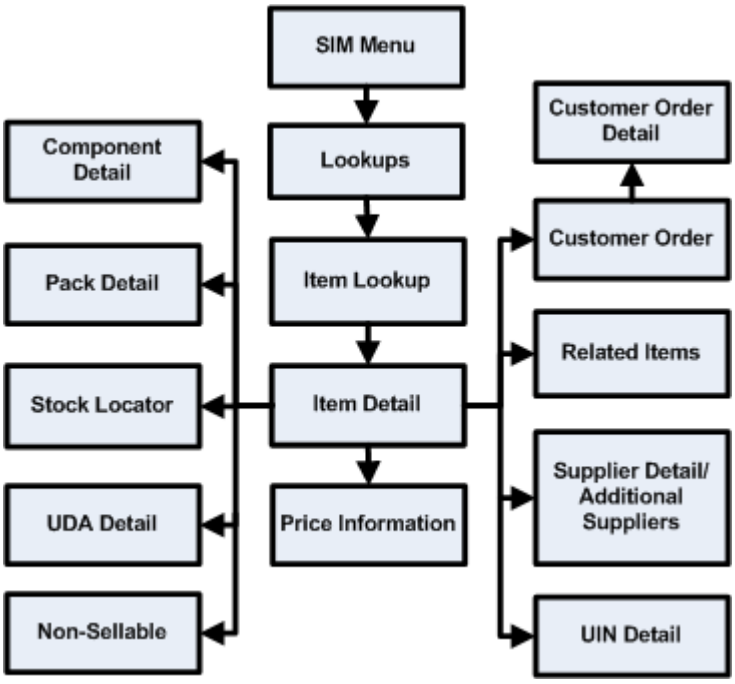
- Regular Multi Price information
- Price History
- Item Status – active/inactive
- Next allocations – Delivery Date, Warehouse, UOM, Quantity, Timeslots
- Replenishment Method
- Reject Store Orders – for store orders
- Next Delivery Date- for auto replenishment items
- UDA Detail

In an effort to reduce the number of keystrokes, if a lookup on an item is done during the processing of a separate function (that is, a transfer), the ability to use the item directly from the search is enabled. For example, the user can search for an item or supplier directly from the transfer screen, select Apply, and the information will default into the transfer currently being created.

The handheld will display the same information but also has a walk through lookup function. This feature allows the user to scan a specific item and walk through the different differentiators of the item. The user is then presented with the on hand positions and details of the found item. This is especially useful when a customer cannot find the item, but the store has a very similar item. For example, the user presents a black large T-shirt, but the item the customer actually wants is a red medium sized T-shirt.

The user will also find in this dialog some rudimentary information on customer orders.

***Figure 4–22 Item Lookup Business Process Flow – PC***



### Item Image URLs

SIM enables a customer to define a URL to an image for an item. When the application server is inside a firewall and the referenced images are outside the firewall, the managed server that runs within the application server might need to be started with JVM options defining the proxy server through which URL requests must pass to get outside the firewall, to access images.

The following is an example of these settings:

```
export JAVA_OPTIONS="-Dhttp.proxyHost=myproxy.mycompany.com -Dhttp.proxyPort=80
-Dhttp.nonProxyHosts=localhost|127.0.0.1|*mycompany.com|10.141.*
-Djava.net.preferIPv4Stack=true"
```

These settings must be passed to the managed server JVM during startup. This is usually done within the shell script that launches the managed server.

## Supplier Lookup

SIM provide users with the ability to query information on suppliers. Search criteria include: Supplier ID and Supplier Name.

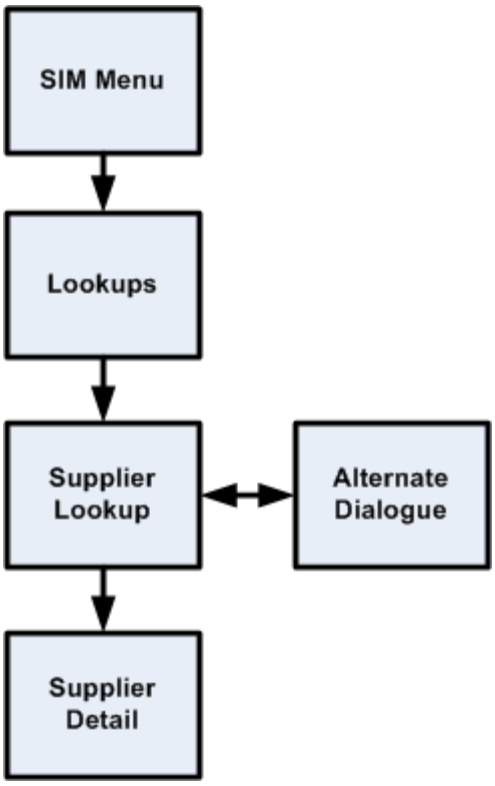
The following is displayed after a search is performed:

- Supplier Name
- Supplier Number
- Supplier HQ Address, Phone, Fax, Contact, E-mail Address
- Supplier Returns Address, Phone, Fax, Contact, E-mail Address
- Status of the supplier
- Returns Allowed indicator
- Return Authorization Required indicator

As with the item lookup functionality, if a lookup on a supplier is done during the processing of a separate function (that is, a transfer), the ability to use the supplier directly from the search is enabled. When accessed from other areas of the application, item will also be available as a search criteria.

Supplier Lookup functionality is available on both the handheld and the PC.

*Figure 4–23 Supplier Lookup Business Process Flow – PC*



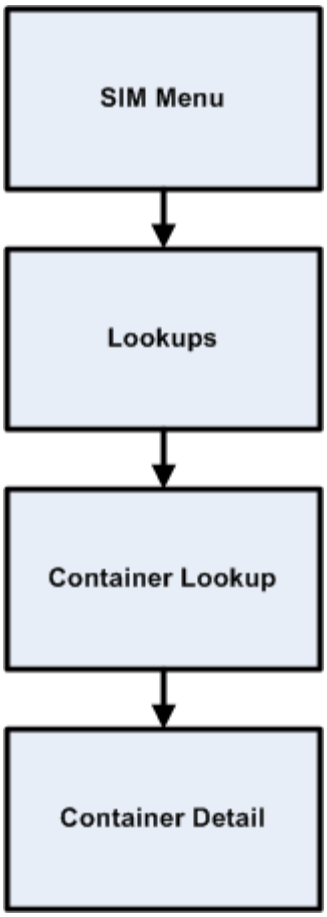

## Container Lookup

SIM provides users with the ability to query shipping container information and displays the following:

- Container ID
- ASN Number
- Container Status (Received, In Transit, and so on)
- Item information
- Receipt Date and Time
- From Location
- Number of Cases
- Damages

This functionality is available on both the handheld and the PC.

*Figure 4–24 Container Lookup Business Process Flow – PC*




## Transaction Lookup

SIM provides users with the ability to query the transaction history for a store. It will display all transactions that increase or decrease sock on hand.

Search criteria will include:

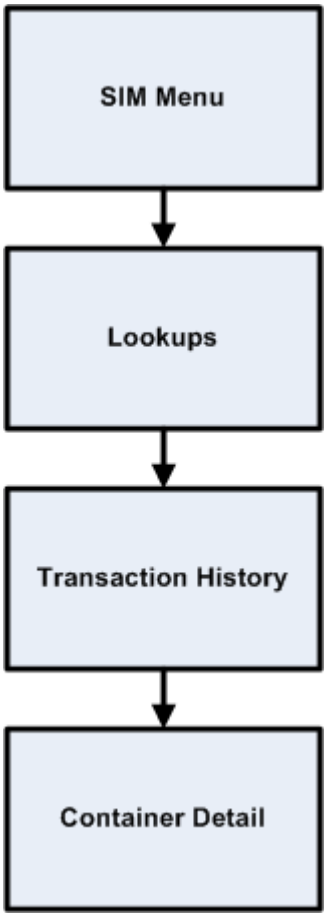
- From Date
- To Date
- Tran Type (for example, Direct Delivery, Return to Vendor)
- Reason
- User

The display will include the following:

- Date
- Transaction type
- Transaction ID
- Item
- Item Description
- Reason

- SOH
- Unavailable
- User

*Figure 4–25 Transaction HIstory Lookup Business Process Flow – PC*




# Unique Identification Number (UINs)

The section describes the UINs.

## Functional Overview

Retailers who sell items such as electronics, cell phones, weapons, medication, and fresh items often have to track unique numbers or attributes for a single item or a group of items. These numbers are often called serial numbers, batches, unique identification numbers, FCC ID, expiration ID, and so on.

SIM now supports unique identification number logic. The retailer can track the individual instance of an item in SIM from the moment it enters the store until the moment it leaves the store, resulting in better inventory control. UIN tracking is expected to reduce shrinkage, hold stores accountable for individual items, and increase customer satisfaction.

In SIM, UIN functionality allows the user to:

- Lookup a UIN

- View audit trail of UINs
- Resolve UIN discrepancies
- Update UIN status
- Receive UINs (Direct Delivery, Warehouse Delivery, Transfer)
- Count UINs (Stock Counts)
- Perform Inventory Adjustments on UINs
- Prints (Ticketing)

UINs can be captured at the time of sale (Oracle Retail Point-of-Service) or at the time of store receiving (SIM). If the UIN is captured at the time of the sale, Point-of-Service captures the UIN and the UIN is not tracked in SIM. If the UIN is captured at the time of receiving, SIM captures the serial number when it arrives in the store using a direct store delivery or warehouse delivery.

UINs are not allowed for type 2 items, non-inventory items, notional packs, non-sellable simple packs, concession items and consignment items.

## Auto Generated Serial Numbers (AGSNs)

SIM also has the ability to auto generate UINs and track the item with that UIN number. The UINs are created during the receiving process and a label is generated for each of these units.

Auto-generated serial numbers will be generated during the receiving process or while performing a stock count or inventory adjustment. If auto generation is being used during the receiving process, the UIN is captured and the UIN information is provided to the user after receipt confirmation.

An auto generation process generates UINs in a sequenced order and assigns to items as needed during DSD receiving, Warehouse Delivery, Transfer Receiving, Stock Counts and Inventory Adjustments.

The default process uses a sequence generated number and is configurable so the customer can enter a desired starting point or hook it into an external service (through customizations).

An audit record is captured for each UIN that has a status updated.

When an item is scanned during the receiving process, the system checks to see if a UIN is required to be captured for the item. If the UIN type is set to Auto Generation (AGSN), the Auto Generation routine will be called and the generated number is displayed on the UIN pop-up after the items have been confirmed for the warehouse delivery, DSD, or transfer.

SIM will automatically print an item ticket with the newly generated UIN number.

---

**Note:** The print option will only be available for generated UINs. The user will not be able to print UINs that are not auto generated by the system.

---

- UINs are auto-generated upon receipt confirmation of a warehouse delivery or direct store delivery and labels are printed for each UIN
- UINs are auto-generated for incoming transfers that are received from a store that does not capture UINs

- UINs are auto-generated for inventory adjustments with disposition movement of OUT -> ATS and a ticket prints automatically
- Ability to print/re-print AGSN from Item Ticket Detail screen and UIN Detail screen
- UINs are auto-generated for receiver unit adjustments where the quantity has increased

**Note:** For externally created adjustments, manual intervention is needed.

### AGSN Auto-Ticket Printing

When a new AGSN item is received, SIM automatically prints a ticket.

To improve performance while receiving serialized items, the generated UINs are stored in a print batch table, grouped by a batch ID. This batch ID is pushed to a staging queue. This ends the receiving operation.

A new polling timer is created, which picks the staged UIN print batch message and prints the UINs as a batch through a UIN print batch consumer.

Instead of printing AGSN item tickets directly upon the receipt, the printing now goes through the new polling timer. Printing is done asynchronously, depending on the frequency of the polling timer.

The AGSN report template prints multiple pages (batch UINs) or a single page (single UIN).

## UIN AutoNumber

To facilitate the application of serial numbers (UIN), SIM adds a new process that creates the UIN and tracks the item with that number.

During the receiving process, SIM registers how many units are received and generates a label for these units. The process will be identical to how a user receives without capturing UINs, but units are tracked.

The benefits for such a model is the speed of the receiving, which can be done at container level, and removes difficulties some users encounter, for example, trying to find the barcode on large items such as a refrigerator, or determining how to track an item such as a cell phone, which has three barcodes.

For auto-generated serial numbers, SIM bypasses entering individual specific serial numbers at the time of receiving and simply accepts a quantity. This operation is the opposite of normal serial number operations. The quantity entered is then used to generate serial numbers and assign them to the particular item.

AutoGenerateSerialNumberDao contains APIs to retrieve a number of new IDs (or serial numbers) based on the count parameter. This is handled by getting the next values from the AUTO_GENERATE_SN_SEQ sequence. SIM can be modified to generate any sort of serial number the user needs by changing dao.cfg. The user can plug in any class in the `AUTO_GENERATE_SERIAL_NUMBER_DAO=xxx` line and implement any process to generate serial numbers.

If a previously existing auto generated serial number is scanned, it is treated identical to regular serial numbers.

***Table 4–4 Enumerations***

| Enumeration | Description |
|---|---|
| FunctionalArea | Describes the business functional area and sometimes phase of the business process. |
| UINType | Describes the type of a UIN. Currently only SERIAL and AGSN are available. |
| UINStatus | Describes the status of the UIN. |
| UINCaptureTime | For the specific item and store, it defines the time when a new UIN may be captured and inserted into the data store. Either SALE or STORE_ RECEIVING. |
| UINAvailability | Used as a parameter when searching for records based on availability. |
| UINActionType | This represents action type that triggered a UIN update (namely from a web service.). |

***Table 4–5 UINStatus***

| Name | Code | Description | Comment |
|---|---|---|---|
| IN_STOCK | 0 | In Stock | This status can be sold, inventory adjusted, stock counted, shipped, reserved for shipping and reserved for sale. |
| SOLD | 1 | Sold | This status is considered a final status and can only be changed through a stock count, return or inventory adjustment. |
| SHIPPED_TO_ WAREHOUSE | 2 | Shipped To Warehouse | This status is considered a final status and can only be changed through another receipt or special inventory adjustment. |
| SHIPPED_TO_STORE | 3 | Shipped To Store | This status can be changed to in stock when the item is received, unavailable if the item is damaged during return or removed from inventory in case it is short received. |
| RESERVED_FOR_ SHIPPING | 4 | Reserved For Shipping | This status indicates UIN on return or transfer. |
| SHIPPED_TO_ VENDER | 5 | Ship To Vendor | This status is considered a final status and can only be changed through another receipt or special inventory adjustment. |
| REMOVED_TO_ INVENTORY | 6 | Remove From Inventory | Set when an item is removed from stock. Only can be changed if item is moved back into inventory. |
| UNAVAILABLE | 7 | Unavailable | Set when inventory adjustment is made to unavailable, damaged received quantities or when item is reserved for customer orders. |
| MISSING | 8 | Missing | Will be set when a stock count can not find the serial number or the item goes missing during a shipment. |
| IN_RECEIVING | 9 | In Receiving | This means that a receipt is In Process but has not yet been confirmed. This can occur during DSD Receiving, Warehouse Receive or Transfer Receiving. |
| CUSTOMER_ RESERVED | 10 | Customer Reserved | This status will be set when Oracle Retail Point-of-Service uses the customer order Web service to communicate a UIN that is reserved for a customer order. |

*Table 4–5 (Cont.) UINStatus*

| Name | Code | Description | Comment |
|---|---|---|---|
| CUSTOMER_ FULFILLED | 11 | Customer Fulfilled | This status will be set when Oracle Retail Point-of-Service uses the customer order web service to communicate a UIN that is fulfilled for a customer order. |
| SHIPPED_TO_ FINISHER | 12 | Shipped To Finisher | The state which an item should be in when receiving from a Finisher. |
| UNCONFIRMED | 99 | Unconfirmed | This means a UIN has been scanned or entered but has not yet been processed. The UIN is in a temporary state and can move from None to any other state during validation. Note: The functional identifier will not exist until the transaction has been completed. |

**Note:**

- UIN **Open** Status = IN_STOCK, RESERVED_FOR_SHIPPING, UNAVAILABLE, CUSTOMER_RESERVED and IN_RECEIVING.
- UIN **Closed** Status = SOLD, MISSING, SHIPPED_TO_STORE, SHIPPED_TO_WAREHOUSE, SHIPPED_TO_VENDOR, SHIPPED_TO_FINISHER, REMOVE_FROM_INVENTORY and CUSTOMER_FULFILLED.

*Table 4–6 UINAvailability*

| Name | Description |
|---|---|
| OPEN | Open |
| CLOSED | Closed |
| ALL | All |

Used as a parameter when searching for records based on availability.

*Table 4–7 UINActionType*

| Name |
|---|
| SALE |
| RETURN |
| VOID_SALE |
| VOID_RETURN |

This represents action type that triggered a UIN update (namely from a web service).

## Auditing

Any time a status change occurs for a UIN, an audit record is captured and is available for viewing on the UIN History screen.

## UIN Setup

A store parameter allows the user to turn on/off UIN functionality by store. Multiple system parameters control the purging of UIN information.

SIM provides a store/class level setup for UIN attributes. These attributes can be auto-defaulted in based on a system parameter. When attributes are added or modified at the class level, the attributes will be applied to each item/location level for all items that belong to the specified department/class.

The UIN attributes screen is required for standalone implementations of SIM. The UIN Attributes screen should not be used if the retailer plans to pull attributes from an external system.

UIN attributes include the following:

- Type of UIN (AGSN/Serial Number)
- Capture Time (Store Receiving/Sale)
- UIN Label
- Ticket Format (AGSNs)
- External system create UIN

## UIN Status

Each time an item with a UIN is scanned, SIM captures the status of that item. Depending on the functional area for which that item is scanned, a different status will be assigned. This feature allows SIM to ensure data integrity and provide an audit trail of the life of the item.

Before any transaction is completed (dispatched or confirmed), SIM validates that the status of the items on the transaction are still valid.

For example, a UIN on a transfer might be invalid if a stock count cannot find the item and move the **Reserved for Shipping** status to **missing**. The item will stay on the transaction, but the user must remove it before dispatching. SIM lets the user know the item is not in a valid status anymore.

### UIN Statuses

#### Unconfirmed

A UIN has been scanned or entered but has not yet been processed. The UIN is in a temporary state and can move from Unconfirmed to any other state during validation.

#### In Stock

The item is in stock and can be sold. This status is usually achieved after an item is received, returned or when it is fixed from a repair.

#### In Receiving

A receipt is In Process but has not yet been confirmed. This can occur during DSD Receiving, Warehouse Receive or Transfer Receiving.

#### Sold

The item has been sold to a customer. The UIN status can get set to Sold through the new Point-of-Service Web service.

#### Reserved For Shipping
Any time a transfer or a return is created and saved the UIN is marked as Reserved For Shipping. Only UINs in "In Stock" and "Unavailable status" will be allowed to be shipped.

#### Shipped To Store
When a store-to-store transfer is dispatched, the status of the UIN is set to Shipped To Store. In order to update the UIN to Shipped to Store a UIN must be In Stock or Reserved for Shipping.

#### Shipped To Warehouse
When a warehouse return is dispatched, the status of the UIN is set to Shipped to Warehouse. In order to update the UIN to Shipped to Warehouse a UIN must be In Stock, Reserved for Shipping, or Unavailable status.

#### Shipped To Vendor
When a vendor return is dispatched, the status of the UIN is set to Shipped to Vendor. In order to update the UIN to Shipped to Vendor a UIN must be In Stock, Reserved for Shipping, or Unavailable status.

#### Shipped To Finisher
When a finisher return is dispatched, the status of the UIN is set to Shipped to Finisher. In order to update the UIN to Shipped to Finisher a UIN must be In Stock, Reserved for Shipping, or Unavailable status.

#### Removed From Inventory
A UIN will be updated to Removed From Inventory using either an Inventory Adjustment or a Short Receipt. In order to update the UIN to Removed From Inventory a UIN must be In Stock, Shipped to Store or Unavailable status.

#### Missing
A UIN will be updated to Missing when performing a stock count. If an item is not found that is currently In Stock, Reserved for Shipping or Unavailable, the UIN will be updated to Missing.

#### Unavailable
A UIN will be updated to Unavailable either through an Inventory Adjustment or a Damaged Receipt. A UIN must be in either In Stock, Sold, Shipped to Store, Customer Fulfilled, Removed from Inventory, or Missing Status before it can be moved to this status.

#### Customer Reserved
This status will be set when the Oracle Retail Point-of-Service uses the customer order Web service to communicate a UIN that is reserved for a customer order:

- The selling service to validate the item is valid to be sold will be used to validate that the UIN is available to be reserved.
- A UIN must be in either In Stock, Customer Order Fulfilled before it can be moved to this status.

#### Customer Fulfilled
This status will be set when Oracle Retail Point-of-Service uses the customer order web service to communicate a UIN that is fulfilled for a customer order:

- The selling service to validate the item is valid to be sold will be used to validate that the UIN is available to be fulfilled.

- A UIN must be in either In Stock or Customer Order Reserved before it can be moved to this status.

## Resolving UIN Discrepancies

UINs can be resolved in multiple ways, depending on what the discrepancy is.

The user can view discrepancies on the Resolution List screen. The UIN Resolution screen will display all exception records that were created due to attempting a status change that is not allowed using one of the following:

- UIN Update Status Web Service
- Customer Order Web Service
- Externally generated Receipt Adjustments

When a UIN store mismatch occurs, an e-mail notification is sent to the store with which the UIN was originally associated. This applies to Transfers, Inventory Adjustments and Stock Counts. These discrepancies do not appear on the Resolution list screen, instead the notification will occur through an e-mail and can be resolved by adding the item to a Problem Line stock count or resolving it through an inventory adjustment.

Resolving the UIN record on the UIN Resolution screen does not resolve the discrepancy on the transaction. The recommendation is to resolve the discrepancy by fixing the issue on the transaction or by doing an inventory adjustment:

- The UIN discrepancy can be resolved directly through the transaction from where the discrepancy originated. This is the recommended business process.
- The user can check the **UIN Discrepancies** flag when creating a Problem Line count using Product Group setup. This will add discrepant UINs to the count and resolve the discrepancy through completion of the stock count.
- The status of the UIN can be updated directly from the UIN resolution screen. This automatically marks the record as **resolved**. This does not resolve the inventory discrepancy.
- The UIN record can be moved to **resolved** on the Resolution screen by clicking **Resolve** from the UIN (without updating the status or the inventory).

For Third Party stock counts, UIN discrepancies can be resolved through the Rejected Items screen. If the UIN is not present for an item that requires a UIN when the third party count is uploaded to SIM, the record will be written to the Rejected Items table for later resolution. The Rejected Items screen allows the user to assign a serial number for those items.

Whenever an invalid UIN is scanned on any type of stock count, the invalid UIN will appear on the Rejected Items screen. A user with the proper permissions can review the invalid scans and assign a valid UIN to bring the UIN back into the stock count if desired.

### Examples of Resolving Discrepancies

The following includes examples of resolving discrepancies.

#### Example 1 – Store Mismatch: Allow Unexpected UINs parameter is Set to Yes

1. Transfer sent from Store A to Store B.
2. Store B receives the transfer. Item 1 was not on the transaction, however it did get shipped on the truck so Store B receives the unexpected UIN.

3. The UIN is now associated with Store B and an e-mail will be sent to Store A to notify them of the discrepancy. The item/UIN was not on the transaction and therefore the item/UIN is still reflected in Store A's inventory.
4. The user can create a problem line stock count at Store A and check the UIN Discrepancies flag. This action will place Item 1 on the stock count and resolve the inventory discrepancy once the count is completed. The discrepancy could also instead be resolved using an inventory adjustment to move the UIN out of stock.

#### Example 2 – Store Mismatch: Allow Unexpected UINs Parameter is Set to No

1. Transfer sent from Store A to Store B.
2. Store B receives the transfer. Item 1 was not on the transaction, however it did get shipped on the truck so Store B attempts to receive the unexpected UIN but SIM does not allow it.
3. The UIN is still associated with Store A. Store B will have to call Store A and have them create a new transfer so Item 1 moves out of Store A and into Store B. An exception record is not created on the Resolution List screen for either store since SIM never allowed the UIN to change status from one store to another.

> **Note:** If the user chooses to update the status using the Resolution list screen, they still must create the transfer so that the inventory gets updated correctly.

4. Once the status has been updated by Store A, the Store B user can now receive the item.

#### Example 3 – Resolution List Screen RUA

Updating UIN Status at store you are logged in to.

1. RUA is done in RMS for Direct Delivery at Store A.
2. Exception record created for Store A due to the external adjustment and appears on Resolution List screen in Store A.
3. The user logs into store A and goes to Resolution List screen to find exception record.
4. The user should go to the Direct Delivery and click **Adjust Delivery** and manually add or remove UINs as necessary. Adjusting the delivery will update the UIN to the correct status.
5. Users can click **Resolve** from the UIN Resolution screen to indicate they have manually resolved the discrepancy. The **Update UIN Status** button is used as an additional check and allows user to update status in case it is ever needed. It is a place where the user can update the status or view an audit trail of the UIN. Ideally, the user will be adjusting the transaction itself which should update the UIN status to where it needs to be. For example, removing UIN from DSD moves UIN status to Removed from Inventory. Adding a UIN to DSD moves UIN status to In Stock.

#### Example 4 – Resolution List Screen: Customer Order Web Service

1. Customer Order Web service calls SIM to move item to Customer Order Reserved and the item/UIN is not in stock.
2. SIM records a discrepancy error on Resolution List screen.

3. The user creates an inventory adjustment to bring the UIN In Stock.
4. The user can log in to the store called by the web service and update the status to Customer Order Reserved using Resolution List screen.

#### Example 5 – Update UIN Status Web Service Processing ACTION = SALE or VOID-RETURN

1. UIN is found and is in one of the following statuses:
   - Unavailable
   - Sold
   - Reserved for Shipping
   - Shipped to Store
   - Shipped to Warehouse
   - Shipped to Vendor
   - Missing
   - Customer Order Reserved
   - In Receiving
   - Removed from inventory
2. UIN cannot be updated to Sold if it is in one of the statuses from Step 1, so an exception record is created and appears on the Resolution List screen for the store.
3. Depending on the integration, the user must update the status of the UIN manually from the UIN Resolution List screen and re-process the transaction, or just update the status of the UIN.

   The unified web service will not update the SOH if the status does not match. The UIN status update web service, on the other hand, will fail independently from the sales transaction web service or ReSA upload file. Fixing the problem for the UIN status update web service will only require a status update. The unified web service call might require a status update to In Stock and a re-process of the entire record.

   ---

   **Note:** User might need to remove the UIN from the physical transaction. Depends on what status it was in. For example, if it was in Shipped to Store, the user should, from a business perspective, go to the transfer and remove the item/UIN from the transfer.

   ---

#### Example 6 – Update UIN Status Web Service Processing ACTION = RETURN or VOID-SALE

1. UIN is found and is in a state other than Sold.
2. Status cannot be updated since it is not in sold status and exception is created and appears on Resolution List screen.
3. Access exception record from Resolution List screen and update the status.

# 5

# System and Store Administration

This chapter includes information on system and store administration.

## Overview

Under the administration section, the user can find all system setup tasks and often corporate executed tasks:

- Product Group and Product Group Scheduler

  This feature allows customers to set up recurring events with sets of items.

- UIN Resolution

  The UIN Resolution screen allows the user to view and resolve UIN status discrepancies. The user can also view an audit trail of the discrepant item's UIN history.

  **Note:** Resolving discrepancies from the UIN Resolution list screen does not resolve the inventory discrepancy. See "Resolving UIN Discrepancies" for more detail.

- Security

  The user can create and modify roles. When creating a new role, it is possible to add a variety of permissions for the handheld or PC. In addition to general restrictions for functional areas, the user is also able to secure the different types of product groups that exist and the reason codes a user has access to for creating inventory adjustments.

- Technical Maintenance

  Several technical functions can be controlled under this header:

  – UI Configuration

    This feature allows the user to configure font type and size, color scheme and icons by theme. In addition translated values can be modified through this dialog as well.

  – MPS Worker Types

    MPS Worker Types allow the user to identify how often the system will check the SIM integration layer for new messages generated by external systems.

  – MPS Staged Messages

The MPS staged messages UI allows a user to validate the content of message and if needed manually restarts the message for polling purposes.

- Printer Setup
  - Formats

    Tickets and labels can be setup here and a default printer can be assigned to them. In addition, it is possible to assign a default printer to print reports.

    **Note:** Tickets and labels need to be created in the printing tool used to print them. These screens are just for printer and type setup.

  - UDA Print Setup

    SIM can automatically generate tickets and labels for items when user-defined attribute (UDA) values change. The UDA Print Setup function allows you to define whether new tickets or labels, or both, should be printed automatically when particular UDA values change.

  - Printers

    Includes a list of printers, such as the network address for a printer, description by which you can identify the printer within your organization, and the type of printer.

  - Session Printer

    SIM can be setup to automatically print a manifest or pre-shipment ticket or label to a printer at another location.

- Setup
  - SIM Stores

    Management of SIM managed stores, setup of buddy stores, and auto receiving for store transfers.

    * SIM Managed Stores

      User can setup those stores that will use SIM. This prevents the store from publishing RIB Messages to the external system when auto-receiving.

    * Buddy Stores

      SIM allows for the concept of Buddy Stores. Buddy Stores can be set up to indicate groups of stores that can transfer merchandise from one store to another. The concept does enforce transfer zones if used in the Oracle Retail Merchandising System.

    * Auto Receive Stores

      SIM allows users to set up Stores at which transfers are automatically received when shipped.

    * Tolerances

      This section allows for tolerances for Adhoc Stock Counts as well as Customer Order Picking.

  - Administration Parameters

    SIM has many application parameters that allow clients to customize the product according to their business. The application parameters are split into

system and store options. System option parameters allow a user to change the parameter for the entire system and all stores. Store option parameters are only specific to the store the current user is logged in to.

– UIN Attributes

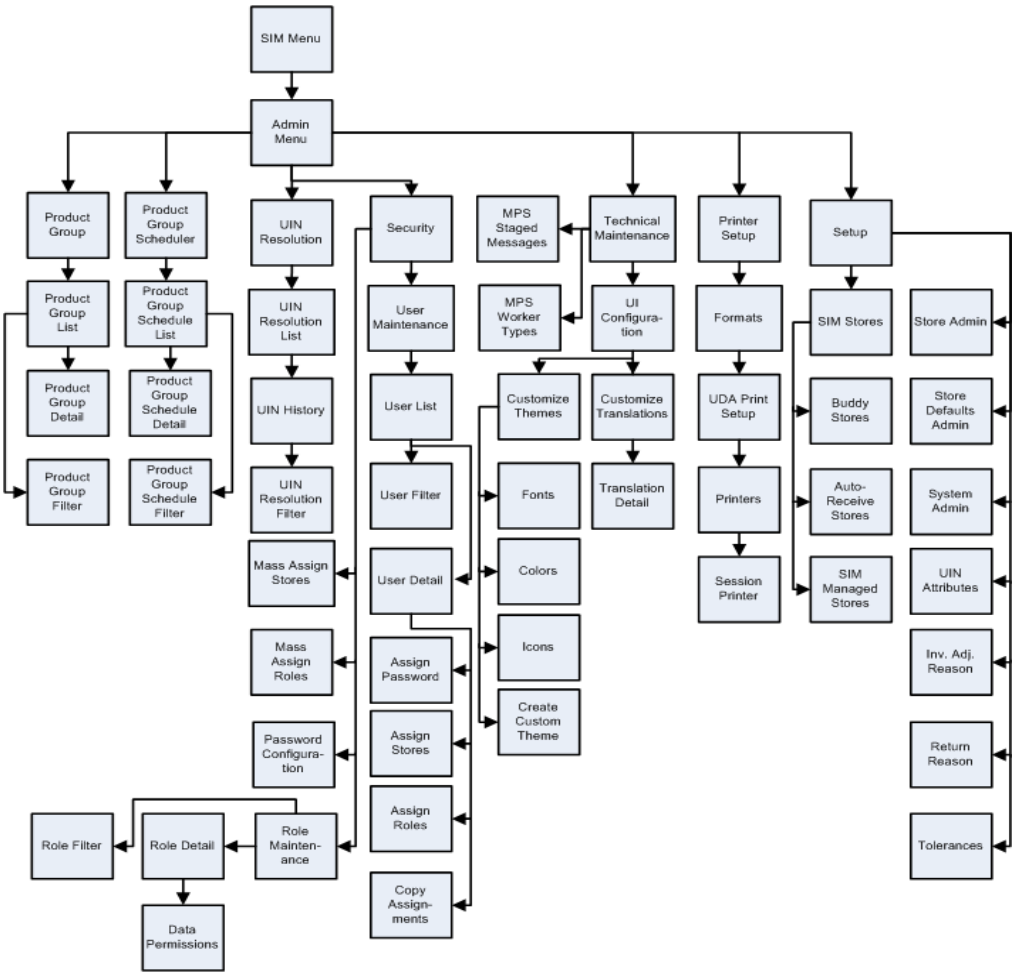
– Inventory Adjustment Reason

  Inventory adjustment reason codes help control the loss or unexpected gain of items for the general ledger and stock ledger. SIM has the ability for the user to set these up to match the external merchandising system. It is also possible to hide or modify the disposition of the existing reason codes.

– Return Reason Codes

  Users can add, change, and delete reason codes used for returns. In addition to showing the reasons for returns, reason codes also specify how returns affect stock on hand, unavailable inventory, or customer order reserve inventory. Users can also use sub-buckets, which allows users to segregate the unavailable inventory bucket into various slots for specific reasons.

***Figure 5–1 Store Administration Process Flow***



## Product Groups/Scheduler

Within the System Administration screens is the ability for a store user, with the proper security, to create any number of groups of items to be used within the SIM application. These groups can be comprised of entire areas of the merchandise hierarchy (for example, an entire subclass) or can be simply a group of individual and unrelated items. Depending on the product group, the user can setup additional details such as:

- Tolerances
- Counting Method (Guided/Unguided/Third Party)
- Hierarchy Breakdown
- Recounts
- Item Status
- Stock on Hand
- Expiration
- Delivery Dates
- Auto Authorize
- Problem Line Parameters

Product groups can be created for:

- Unit Stock Counts
- Unit and Amount Stock Counts
- Problem Line Stock Counts
- Shelf Replenishment
- Wastage
- Item Requests

Once the groups are created, the user has the ability to schedule how often each group is to be counted or ordered. Using a calendar wizard, the user selects the count group and whether it is to be counted daily, weekly, monthly, or yearly. One or more stores can be assigned to the schedule, depending on stores the user has access to. SIM maintains these schedules and automatically prompts users to complete the counts at their scheduled times. Product group schedules can be used for:

- Unit Stock Counts
- Unit and Amount Stock Counts
- Problem Line Stock Counts
- Wastage
- Item Requests

## Store Administration

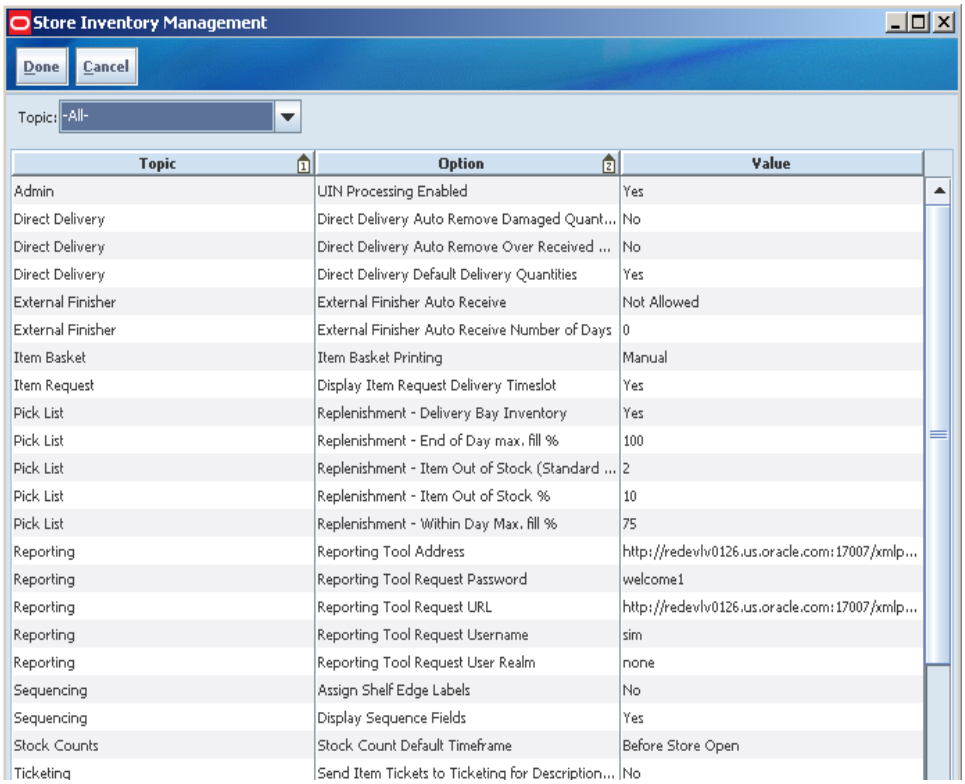
The store administration functionality allows you to set values for options that control a variety of system behaviors. The values of these system options apply only to your location.

## Set Store Options

Go to **Main Menu > Admin > Setup > Store Admin**.

The Store Admin window opens.

***Figure 5–2 The Store Admin Window***




1. Select the option that you want to modify.
2. Double-click the Value field and set the option value in either of these ways:
   - Select a value from the list.
   - Enter an appropriate value in the field.
3. Click **Done**. You return to the Setup menu. Click **Done** again to return to the Admin menu.

## Store Administration Options Table

The following table lists the store administration options in alphabetical order and describes each option.

***Table 5–1 Store Administration Options***

| Topic | Store Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|---|
| Admin | Auto Apply Advanced Item Entry | Yes, No | No | If Yes, auto application to the transaction occurs. Items are added and UINs are captured, if necessary.<br>If No, when the item is entered, the item will not be added to the transaction. |
| Admin | Enable Item Disposition in Transaction Updates | Yes, No | Yes | If Yes, the system reads the reason code in the web service message and performs the inventory adjustment. If the reason code is not present, the system processes the return/void and increments the SOH.<br>If No, the system does not look for the reason code in the web service message. |
| Admin | Manifesting Weight UOM | List of weight UOMs from the weight table in DB | | The UOM selected for this configuration will be used as the Weight UOM for the weight on the BOL in store to store transfers, customer order deliveries and returns. |
| Admin | UIN Processing Enabled | Yes, No | No | Dictates whether any of the UIN functionality is available within SIM for each store.<br>If the parameter is **No**, then none of the UIN buttons or fields will be present in the application. |
| Admin | Use Advanced Item Entry | Yes, No | Yes | If Yes, the Advanced Item Entry popup window will automatically be open when entering the functional areas that use the popup.<br>If No, the Advanced Item Entry popup window will not automatically be open. The user can still use the 'Scanner' button to open it. |
| Customer Order | Auto Pick Mixed Containers | Yes, No | No | If Yes, SIM will auto pick if the containers mixed with customer orders and non customer orders.<br>If No, SIM will not do auto pick if the containers mixed with customer orders and without customer orders. |
| Customer Order | Auto Pick On Receive - Direct Delivery | Yes, No | No | If Yes, SIM will automatically fill in the pick quantities on the customer order when receiving the DSD.<br>If No, SIM will not do anything related to picking at the time of receiving. |

*Table 5–1 (Cont.) Store Administration Options*

| Topic | Store Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|---|
| Customer Order | Auto Pick On Receive - Transfer | Yes, No | No | If Yes, SIM will automatically fill in the pick quantities on the customer order when receiving. This can only happen if the customer order record has already come into the system. If there is no customer order, the auto picking will not happen at the time of receiving, rather it will occur when the customer order comes in.<br>If No, SIM will not pick when receiving goods in transfer receiving. |
| Customer Order | Default Customer Order Picking Method | Bin, SIM Customer Order | SIM Customer Order | Determines the default picking method displayed when Creating a Customer Order Pick transaction. |
| Customer Order | Default Number of Bins | 1-999 | 1 | Determines the number of bins to default into the Bin Qty field if the user selects Bin as the pick type when creating the pick. |
| Customer Order | Dispatch Validate | Ship Submit, Ship Direct | Ship Direct | If Ship Direct, SIM will control all processes. The user will be able to go from create/edit directly to dispatch.<br>If Ship Submit, this option will require the user to press the Submit button, and require a specific press of the dispatch button. An additional option is that an external system will generate a dispatch message through a standard web service. |
| Customer Order | Generate Bins | Manual, System | System | If System, SIM will automatically generate the bin/order numbers when the pick is created.<br>If Manual, SIM will need to prompt the user to capture the bin/order numbers that are being used for the labels on the bins |
| Customer Order | Handheld Picking Mode | Scan Every Item, Enter Pick Quantity | Enter Pick Quantity | If Enter Pick Qty, the user will need to manually enter the pick quantity and then scan the item to validate it is the correct item.<br>If Scan Every Item, on the HH the user will be required to scan each instance of the item on the pick and then scan the bin, if required, instead of manually entering a pick quantity for all items picked. This method ensures every item is validated as the correct item to pick. |
| Customer Order | Item Substitution - Store Discretion | Yes, No | No | If Yes, the user will be allowed to choose any item to substitute. An item lookup feature on the PC will allow the user to search for an item to select.<br>If No, the user will be restricted to scanning/entering an item that exists on the list of approved substitute items defined by RMS. |

***Table 5–1 (Cont.) Store Administration Options***

| Topic | Store Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|---|
| Customer Order | Override Bin Quantity | Yes, No | No | Determines whether or not the user will be allowed to override the number of bins displayed in the 'Bin Qty' field as defined in the 'Default Number of Bins' parameter. |
| Customer Order | Picking Required for Customer Orders | Yes, No | Yes | If Yes, it defines if the customer order must be picked first in order for it to be delivered.<br>If No, picking is not required in order to create a delivery. |
| Customer Order | Pre-shipment Notification | Yes, No | No | If Yes, SIM will publish a pre-shipment message.<br>If No, SIM will not publish a pre-shipment message. |
| Customer Order | Reserve Customer Order Inventory Upon Receiving | Yes, No | No | If Yes, then the customer order reserved will be incremented upon receiving a delivery (warehouse delivery, store transfer, or DSD) for a customer order. This is assuming the customer order already exists in the system.<br>If No, the customer order reserved is incremented upon the customer order entering the system. |
| Direct Delivery | Direct Delivery Auto Remove Damaged Quantity | Yes, No | No | **Yes**: When confirming the transaction, all damaged items are removed and put on the audit trail.<br>**No**: Any damaged quantities recorded for the delivery stay on the transaction. |
| Direct Delivery | Direct Delivery Auto Remove Over Received Quantity | Yes, No | No | **Yes**: The user is allowed to add any quantity for the DSD ASN, but any quantity above the expected quantity is removed from the transaction. After the user confirms the transaction, the user is prompted that any over-received quantities are removed.<br>**No**: Follows standard DSD receiving process. |
| Direct Delivery | Direct Delivery Default Delivery Quantities | Yes, No | No | **Yes**: SIM defaults the quantities from the Dex/Nex or ASN.<br>**No**: Does not default the quantities. The user can use the scan-scan feature. |
| Direct Delivery | Direct Delivery Invoice Entry | Unique | Enabled, Disabled, Unique | If Enabled, entry of invoice numbers is allowed.<br>If Disabled, invoice numbers will not be allowed to be entered and will not be displayed on the screen.<br>If Unique, entry of invoices is allowed, but not duplicates. Duplicates are checked by supplier. |

*Table 5–1 (Cont.) Store Administration Options*

| Topic | Store Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|---|
| External Finisher | External Finisher Auto Receive | Not allowed, External Message, Date Driven | Not allowed | This parameter drives the following functionality:<br>■ **Not allowed** follows standard receiving process.<br>■ **External message** receives the full finisher delivery the moment an ASN transaction arrives which indicates that the delivery needs to be auto-received.<br>■ **Date Driven** looks at a secondary store option (External Finisher Auto Receive number of Days) to determine how many days the transaction stays open before the transaction is fully received. If the parameter is set to **0**, the transaction auto-receives on the ETA date. |
| External Finisher | External Finisher Auto Receive Number of Days | 0-99<br>■ **0** means immediate receiving<br>■ **1** means today (EOD)<br>■ **2** means EOD tomorrow<br>■ **x** means EOD *x* days starting from today | 0 | SIM auto-receives any external finisher delivery ASN that has not been closed *x* days after the ETA date or the create date, depending on whether the ETA date is set or whether the auto-receive External Finisher delivery parameter is set. |
| Item Basket | Item Basket Printing | Manual, Automatic | Manual | If the value of this option is **Automatic**, Item Basket ticket is printed when the transaction is complete. If the value is **Manual**, SIM does not automatically print the ticket. |
| Item Request | Display Item Request Delivery Timeslot | Yes, No | No | If the value of this option is **Yes**, SIM displays the timeslot information in Item Request and Item Lookup. |
| Returns | Dispatch validate | Ship Submit, Ship Direct | Ship Direct | If Ship Direct, SIM will control all processes. The user will be able to go from create/edit directly to dispatch.<br>If Ship Submit, This option will require the user to press the Submit button, and require a specific press of the dispatch button. An additional option is that an external system will generate a dispatch message through a standard web service. |
| Returns | Pre-shipment notification | Yes, No | No | If Yes, SIM will publish a pre-shipment message.<br>If No, SIM will not publish a pre-shipment message. |

***Table 5–1 (Cont.) Store Administration Options***

| Topic | Store Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|---|
| Returns | Return carrier default | Third Party, Sender, Receiver | Third Party | If Sender, sender will be selected for Carrier Type on BOL.<br>If Receiver, receiver will be selected for the Carrier type on BOL.<br>If Third Party, third party will be selected for the Carrier type on the BOL. The type (drop down) will be defaulted to Other. |
| Sequencing | Assign Shelf Edge Labels | Yes, No | No | If the value of this option is **Yes**, users are required to assign shelf edge labels for sequencing. |
| Sequencing | Display Sequence Fields | Yes, No | No | Indicates whether or not sequencing fields is displayed in the Item Lookup screen. |
| Shelf Replenishment | Replenishment – Delivery Bay Inventory | Yes, No | Yes | This option allows you to turn on or off the delivery bay functionality. |
| Shelf Replenishment | Replenishment – End of Day max. fill % | Numeric 0 to 100 | 100 | This configurable percentage allows each store to set its own fill percentage for creating end-of-day shelf replenishment lists. |
| Shelf Replenishment | Replenishment – Item Out of Stock (Standard UOM) | Numeric | 2 (standard unit of measure) | Use this option to set a variance for out-of-stock items on the shelf. The out-of-stock field is used when receiving warehouse deliveries. If the quantity on the shelf is less than the amount in this field, the item appears as an out-of-stock item. |
| Shelf Replenishment | Replenishment – Item Out of Stock % | Numeric | 10 | Stores can set a variance for out-of-stock items on the shelf. The out-of-stock field is used when receiving warehouse deliveries. If the percentage on the shelf (shopfloor divided by capacity) is less than the percentage specified by this option, the item appears as an out-of-stock item. |
| Shelf Replenishment | Replenishment – Within Day Max. fill % | Numeric 0 to 100 | 75 | This configurable percentage allows each store to set its own fill percentage for creating within-day shelf replenishment lists. |
| Stock Counts | Display Late Inventory Adjustment Message | Yes, No | Yes | If the value is Yes, when the user is confirming a Stock Count in the Authorization phase and In Progress Inventory Adjustments exist with items on the Stock count, a message is displayed alerting the user. Additionally, if a user is confirming or approving an inventory adjustment with items on an open stock count, a message is also displayed to the user. If the value is No, the user is not prompted and the system will ignore any In Progress inventory adjustments. |

*Table 5–1 (Cont.) Store Administration Options*

| Topic | Store Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|---|
| Stock Counts | Stock Count Default Timeframe | Before Store Open, After Store Close | Before Store Open | The setting of this option determines when the stock count is performed in relation to store opening hours for daily sales processing. It defines the default value for the Stock Count screen.<br>If RMS is implemented with SIM, this setting must be set to After Store Close because of the way transactions are processed during a Unit and Amount Stock Count. |
| Ticketing | Send Item Tickets to Ticketing for Description Change | Yes, No | No | If the value of this option is **Yes**, a ticket is generated to be printed when the description of an item changes. |
| Ticketing | Send Item Tickets to Ticketing for Price Change | Yes, No | Yes | If the value of this option is **Yes**, when a new approved price change enters SIM, SIM automatically creates an item ticket record that is displayed on the Item Ticket List screen. |
| Ticketing | Send Item Tickets to Ticketing for QR Code Change | Yes, No | No | Indicates SIM generates a new ticket if the QR code changes based on the optional time/date. If no time/date is defined, it is generated immediately; if a time/date exists, it will be generated by a batch program. |
| Ticketing | Send Shelf Edge Labels to Ticketing for Description Change | Yes, No | No | If the value of this option is **Yes**, a label is generated to be printed when the description of an item changes. |
| Ticketing | Send Shelf Edge Labels to Ticketing for Price Change | Yes, No | Yes | If the setting of this option is **Yes**, when a new approved price change enters SIM, SIM automatically creates a shelf edge label record that is displayed on the Item Ticket List screen. |
| Ticketing | Send Shelf Edge Labels to Ticketing for QR Code Change | Yes, No | No | Indicates SIM generates a new label if the QR code changes based on the optional time/date. If no time/date is defined, it is generated immediately; if a time/date exists, it will be generated by a batch program. |
| Transfers | Dispatch Validate | Ship Submit, Ship Direct | Ship Direct | If Ship Direct, SIM will control all processes. The user will be able to go from create/edit directly to dispatch.<br>If Ship Submit, this option will require the user to press the Submit button, and require a specific press of the dispatch button. An additional option is that an external system will generate a dispatch message through a standard web service. |
| Transfers | Pre-shipment Notification | Yes, No | No | If Yes, SIM will publish a pre-shipment message.<br>If No, SIM will not publish a pre-shipment message. |

***Table 5–1 (Cont.) Store Administration Options***

| Topic | Store Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|---|
| Transfers | Store Auto Receive | Not Allowed, External Message, Date Driven | Not Allowed | This parameter drives the following functionality:<br>■ **Not allowed** follows standard Transfer receive process.<br>■ **External message** receives the full store delivery the moment a transaction arrives which indicates that the delivery needs to be auto-received. This feature works in correlation with the store auto-receive screen information configured under Admin > SIM Store > Auto-Receive Stores.<br>■ **Date Driven** uses a secondary store option (Store Auto Receive Number of Days) to determine how many days the transaction stays open before the transaction is fully received. |
| Transfers | Store Auto Receive Number of Days | 0-99<br>■ **0** means immediate receiving<br>■ **1** means today (EOD)<br>■ **2** means EOD tomorrow<br>■ **x** means EOD *x* days starting from today | 0 | A batch program auto-receives any store transfers that have not been closed *x* days after they have been shipped, if the store auto-receive parameters are set. |
| Transfers | Store To Store Carrier Default | Third Party, Sender, Receiver | Third Party | If Sender, sender will be selected for Carrier Type on BOL.<br>If Receiver, receiver will be selected for the Carrier type on BOL.<br>If Third Party, Third Party will be selected for the Carrier type on the BOL. The type (drop down) will be defaulted to Other. |

*Table 5–1 (Cont.) Store Administration Options*

| Topic | Store Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|---|
| Warehouse Delivery | Warehouse Auto Receive | Not Allowed, External Message, Date Driven | Not Allowed | This parameter drives the following functionality:<br>■ **Not allowed** follows standard Warehouse receiving process.<br>■ **External message** receives the full warehouse delivery the moment an ASN transaction arrives. The external message indicates that the delivery needs to be auto-received.<br>■ **Date Driven** looks at a secondary store option (Warehouse Auto Receive number of Days) to determine how many days the transaction stays open before the transaction is fully received. If the parameter is set to **0**, the transaction will auto-receive on the ETA date. |
| Warehouse Delivery | Warehouse Auto Receive Number of Days | 0-99<br>■ **0** means immediate receiving<br>■ **1** means today (EOD)<br>■ **2** means EOD tomorrow<br>■ **x** means EOD *x* days starting from today | 0 | A batch program auto-receives any warehouse deliveries that have not been closed *x* days after the ETA date or the create date, depending on whether the ETA date is set and whether the auto-receive warehouse delivery parameter is set. |
| Web Service Enablement | Manifest Customer Order Deliveries | Yes, No | No | If Yes, the Manifesting system will be called.<br>If No, the Manifesting system will not be called. |
| Web Service Enablement | Manifest Returns - Finisher | Yes, No | No | If Yes, the Manifesting system will be called for Return to Finisher.<br>If No, the Manifesting system will not be called. |
| Web Service Enablement | Manifest Returns - Supplier | Yes, No | No | If Yes, the Manifesting system will be called for Return to Supplier.<br>If No, the Manifesting system will not be called. |
| Web Service Enablement | Manifest Returns - Warehouse | Yes, No | No | If Yes, the Manifesting system will be called for Return to Warehouse.<br>If No, the Manifesting system will not be called. |
| Web Service Enablement | Manifest Store to Store Transfer | Yes, No | No | If Yes, the Manifesting system will be called for Store to Store Transfers.<br>If No, the Manifesting system will not be called. |

# System Administration

The system administration functionality allows you to set values for options that control a variety of system behaviors. The values of these system options are applied to all locations.

The system options are in these general categories:

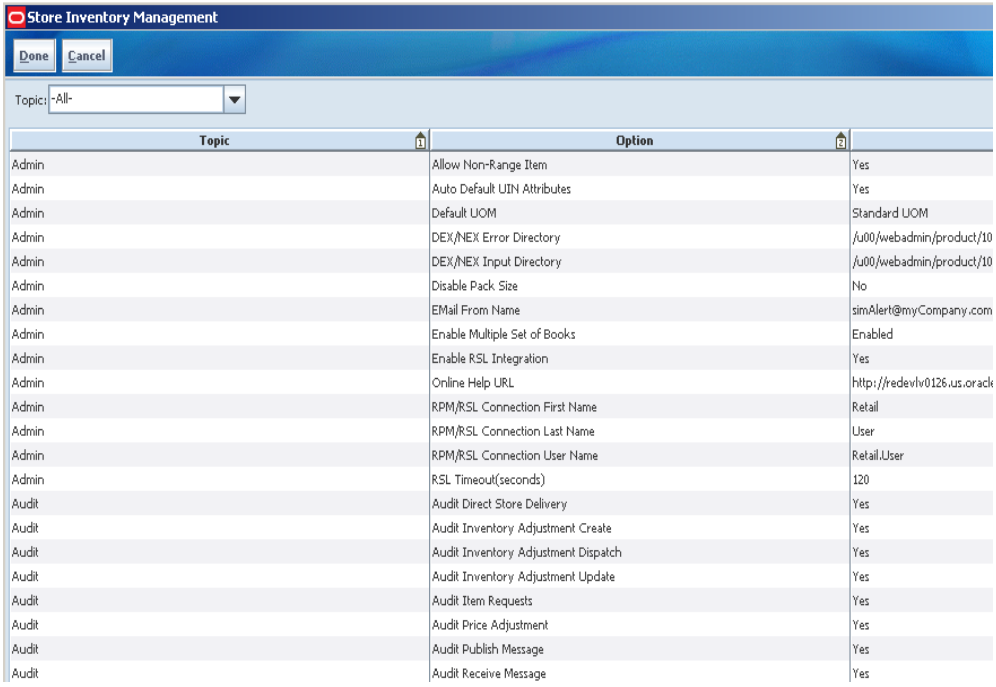
- Receiving and shipping options
- Audit options
- Transaction adjustment options
- Days-to-hold options
- System usability options
- Customer order
- E-mail options
- Stock count options
- Warehouse receiving options
- Transfer options
- Time Zone options
- Miscellaneous options

## Set System Options

Go to **Main Menu > Admin > Setup > System Admin**.

The System Admin window opens.

***Figure 5–3 The System Admin Window***



1. Select the option that you want to modify.
2. Double-click the Value field and set the option value in either of these ways:
   - Select a value from the list.
   - Enter an appropriate value in the field.
3. Click **Done**. You return to the Setup menu. Click **Done** again to return to the Admin menu.

## System Administration Options Tables

The following tables list the system administration options in each general category and describe each option.

***Table 5–2 Topic: Admin Options***

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Allow Non-Range Item | Yes, No | Yes | This option gives stores the ability to add non-ranged items to functional areas in the application. |
| Auto Default UIN Attributes | Yes/No | No | Dictates whether SIM auto-defaults in the UIN attributes.<br>If the parameter is **Yes**, then when a new item is created using the RIB, SIM auto-defaults UIN attributes that were set up at the department class from the SIM UIN Attributes screen.<br>If the parameter is **No**, then the UIN attributes are not defaulted in. Instead, the UIN attributes are defaulted from the external system. The parameter should be set to **No** if an external system controls the setup of item UIN attributes. In this case, SIM must not auto-default the UIN values as this action can override the intent of the external system. |
| Default for date field in external files | yyyyMMddHHmmss | Date (14) | Indicates date/time item was physically counted by the third party. |
| Default UOM | Cases, Standard UOM | Cases | This option allows the store to select the default unit of measure that the store will normally use. This system option is ignored in the stock counts functional area. |
| DexNex Error Directory | Editable text field | NA | Dictates where the error directory is located for Direct Delivery DexNex files. For example:<br>`/u00/webadmin/product/10.1.3_9/OAS/user_projects/domains/java_domain/error n` |
| DexNex Input Directory | Editable text field | NA | Dictates where the input directory is located for Direct Delivery DexNex files. For example:<br>`/u00/webadmin/product/10.1.3_9/OAS/user_projects/domains/java_domain/input`<br>See the *Oracle Retail Store Inventory Management Operations Guide* for details on DexNex batch file processing. |
| Disable Pack Size | Yes, No | No | This option allows the user to edit the pack size in the application. |
| EMail From Name | Editable text field | simAlert@myCompany.com | When the system sends e-mail alerts, the specified e-mail address is displayed in the from name. |

***Table 5–2 (Cont.) Topic: Admin Options***

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Enable Multiple Set of Books | Enabled, Disabled, SIM Only | Disabled | If the option is **Enabled**, SIM is expected to be in sync with RMS for the purpose of MSOB. If **Disabled**, MSOB functionality is disabled. If **SIM Only**, SIM uses the organization unit to limit the suppliers available to the store. |
| Enable RSL Integration | Yes, No | Yes | If **No** SIM does not attempt to make an RSL connection for both store orders and price change requests. |
| Enable sub buckets | Yes, No | Yes | If Yes, Sub-buckets will be used throughout the application. The Adjust Unavailable Qty bucket will be divided into sub-buckets and the sub-buckets will be updated appropriately when inventory updates are made.<br>If No, Sub-buckets will not be used in the system, and they will not be displayed. The adjust unavailable qty will be used. |
| Online Help URL | Editable text field | NA | @online.help.url@ |

***Table 5–3 Topic: Audit Options***

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Audit Direct Store Delivery | Yes, No | Yes | Direct store deliveries are tracked with process ID 8 (Direct_ Delivery) |
| Audit Inventory Adjustment Create | Yes, No | Yes | The creation of inventory adjustments is tracked with process ID 12 (Inventory_Adjustment_Create). |
| Audit Inventory Adjustment Dispatch | Yes, No | Yes | The dispatch of an inventory adjustment is tracked with process ID 14 (Inventory_Adjustment_Complete). |
| Audit Inventory Adjustment Update | Yes, No | Yes | The updating of an inventory adjustment is tracked with process ID 13 (Inventory_Adjustment_Update). |
| Audit Item Requests | Yes, No | Yes | Completed item requests are tracked with process ID 201 (Store_ Order_request). |
| Audit Price Adjustment | Yes, No | Yes | Price adjustments in the store are tracked by tracking printing of the tickets. Process ID 15 is used (Price_label_printed). |
| Audit Publish Message | Yes, No | Yes | The publishing of Retail Integration Bus (RIB) messages is tracked using process ID 16 (Publish_Message). |
| Audit Receive Message | Yes, No | Yes | The subscription to RIB messages is tracked using process ID 17 (Receive_Message). |
| Audit Return Stock Update | Yes, No | Yes | A return that updates inventory is tracked using process ID 10 (Return_Stock_Dispatch). |
| Audit Security | Yes, No | Yes | Indicates if security information that is created and changed within SIM should be audited. If **Yes**, create/edit roles and failed/successful login attempts are audited. |
| Audit Session Timeout | Yes, No | Yes | A session time-out is tracked with process ID 4 (Session_Timeout). |

*Table 5–3 (Cont.) Topic: Audit Options*

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Audit Stock Count Completed | Yes, No | Yes | Completed stock counts are tracked using Process ID 18 (Stock_ Count_Completed). |
| Audit Stock Count Processed | Yes, No | Yes | The completion of a recount is tracked using process ID 101 (Stock_ Recount_Completed). |
| Audit Transfer Dispatch | Yes, No | Yes | When a transfer is dispatched, it is logged using process ID 5 (Transfer_Dispatch). |
| Audit Transfer Receiving | Yes, No | Yes | When a transfer is received, it is logged using process ID 6 (Transfer_receive). |
| Audit Transfer Update | Yes, No | Yes | When a transfer is updated, it is logged using process ID 7 (Transfer_update). |
| Record an audit record for adjust delivery request | Yes, No | Yes | If this option is set to Yes, the system writes an audit record to the database when an adjust delivery request is made. |

*Table 5–4 Topic: Customer Order Options*

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Customer Order Receipt Email Alert | Yes, No | No | If Yes, generate notification for customer order receipts. |
| Minutes to Hold New Customer Order Before Sending Email Alert | 0-99 | 5 | Dictates the time interval in minutes to send a follow-up message to a store associated after a customer order has arrived, but no-one has accessed the customer order. |
| Minutes to Hold Open Customer Order Pick Before Sending Email Alert | 0-99 | 15 | Dictate the time interval in minutes to send a follow-up message to a store associated after a pick list has been created but no-one has started the pick list. |
| New Customer Order Email Alert | Yes, No | No | If Yes, generates notification for new cross channel customer orders. |

*Table 5–5 Topic: Direct Delivery Options*

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Add Item to Direct Delivery on Receive | Yes, No | Yes | This option gives the user a notification when a Customer Order comes into the system. |
| Direct Delivery Default Identify by PO | Yes, No | Yes | When starting to identify a direct delivery on the PC, the user can choose to start with the purchase order number. |
| Direct Delivery Preferred Currency | Store Currency, Supplier Currency | Store Currency | This option defaults the store or supplier currency to newly created POs depending on preference. |

*Table 5–5 (Cont.) Topic: Direct Delivery Options*

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Direct Delivery Send Null Unit Cost | Yes, No | No | If Yes, SIM sends a null unit cost to the merchandising system, if the Delivery unit cost equals the Supplier Country unit cost.<br>If No, SIM always sends unit cost to the merchandising system. |
| Disable Supplier Indicator for Purchase Order Creation | Yes, No | Yes | This option allows the system to ignore the **create new purchase order for supplier** flag. If the option is set to **Yes**, the system does not check the flag and always allows stores to create purchase orders. If the option is set to **No**, the system verifies when creating a direct delivery that it is allowed by the supplier. |
| Display Unit Cost for Direct Deliveries | Yes, No | Yes | This option allows the user to view and edit the unit cost on a direct delivery. Regardless of the display option, the system populates the unit cost for unexpected items or newly created purchase orders in SIM, if a unit cost is available. |
| Enable DSD Pack Receiving | Yes, No | Yes | This option allows packs to be received in direct store deliveries. |
| Number of days received direct deliveries can be adjusted | Numeric | 0 | This option specifies the number of days received direct deliveries can be reopened and adjusted. If a direct delivery falls within the number of days, an **Adjust Delivery** button is displayed on the received delivery. The user can edit values and confirm the delivery. |

*Table 5–6 Topic: External Finisher Options*

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| External Finisher Enable/Disable | Enable, Disable | Disabled | When this parameter is enabled, the following dialog box displays the finisher details on the PC:<br>■ Return Filter<br>■ Return Details<br>■ Finisher Lookup<br>■ Warehouse Delivery Filter<br>■ Finisher Details<br>If enabled, the handheld workflow will display finisher details. |

*Table 5–7 Topic: Purge Options*

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Days to Hold Audit Records | Numeric | 30 | Records are deleted in which the create date is less than or equal to the current date minus the number of days to hold. |
| Days to hold cancelled templates | Numeric | 30 | Indicates the number of days that Canceled Templates will be held in the system before being purged. |
| Days to Hold Completed Customer Orders | Numeric | 4 | Indicates the number of days that Canceled and Fulfilled Customer Orders will be held in the system before being purged. |
| Days to Hold Completed Inventory Adjustments | Numeric | 30 | Records in **Complete** status are deleted, where the inventory complete date is less than or equal to the current date minus the number of days to hold. |
| Days to Hold Completed Purchase Orders | Numeric | 30 | All records in **Closed** status are purged after this number of days, where the complete date (the date of when all items were received on the order) is less than or equal to the current date minus the number of days to hold. |
| Days to Hold Completed Staging Records | Numeric | 5 | All successfully processed or deleted records will be purged where the update date is less than or equal to the current date minus the days to hold. |
| Days to Hold Completed Stock Counts | Numeric | 30 | Purge any records this number of days after the last stock count event has occurred. In other words, when the schedule date is less than or equal to the current date, SIM subtracts the number of days to hold completed stock counts from the date and deletes when this date is reached. A record is purged if the stock count has a status of **Complete**, except in the case of Unit and Amount stock counts. Unit and Amount stock counts are deleted only when the status is Authorize Completed. |
| Days to Hold Completed UINs | Numeric | 120 | Indicates how long completed UINs are kept in the system. Completed UINs are defined as any UIN that is in one of the following statuses:<br>■ Sold<br>■ Shipped to Warehouse<br>■ Shipped to Vendor<br>■ Shipped to Finisher<br>■ Removed from Inventory<br>■ Customer Fulfilled |
| Days to Hold Customer Orders | Numeric | 180 | Indicates the number of days to hold a customer order in the system. |
| Days to Hold Deleted Users | Numeric | 30 | This will determine the number of days users with a Deleted status will be held in the system. When the status of the user is updated to Deleted, the system should capture the date in GMT and use that as a basis for determining when the user should be purged from the system. All role, store, password history, and so forth should be purged as well. |
| Days to hold expired item price | Numeric | 30 | Indicates the number of days to hold an expired item price in the system. |
| Days to Hold Expired User Roles | Numeric | 30 | Store managers have the ability to assign temporary roles to users in the store. For roles that require an expiration date, after the number of days as defined by this new parameter, the temporary roles should be purged from the user. |

*Table 5–7 (Cont.) Topic: Purge Options*

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Days to Hold In Progress Ad Hoc Stock Counts | Numeric | 1 | Any ad hoc count with a creation date/time stamp older than this number of days is deleted. |
| Days to Hold Item Requests | Numeric | 30 | Records are deleted in which the process date is less than or equal to the current date minus the number of days to hold, for item requests in **Completed** or **Cancelled** status. Any requests in **Pending** status are not purged. |
| Days to Hold Item Tickets | Numeric | 15 | After this number of days, all records in **Printed** or **Cancelled** status are purged from the database, where the status date is less than or equal to the current date minus the number of days to hold. |
| Days to Hold Locking Records | Numeric | 3 | Locking records are sometimes left behind because of system crashes or incorrect logout functionality. After this number of days, these records are deleted. |
| Days to Hold Price Change worksheet records | Numeric | 30 | All price change worksheet records in **Completed**, **Approved**, and **Rejected** status are purged after this number of days, where the price change effective date is less than or equal to the current date minus the number of days to hold. |
| Days to Hold Price History | Numeric | 90 | The LE_HST_ITM_SLS_PRC table is purged so that it contains at least four historical prices for the item/store. This is consistent with the four historical prices the user is able to view in Price History within Item Lookup on the handheld. The Price History table could potentially contain more than four records, because a minimum of one regular price record is required to be held in the database. The purge program needs to restrict these records from being deleted. The Days to Hold Price History parameter allows the user to keep records beyond the four most recent historical prices for this number of days, if desired. Prices in the future are not deleted and are not included in the four historical prices that remain in the database. |
| Days to Hold Received Shipment Records | Numeric | 30 | All records in **Complete** and **Canceled** status are purged after this number of days, where the inventory completed date is less than the current date minus the number of days to hold. |
| Days to Hold Received Transfer Records | Numeric | 10 | All records in **Received**, **Auto Received**, or **Canceled** status are purged after this number of days, where completed date is less than or equal to the current business date minus the number of days to hold. Transfer requests must also be included in this purge process when the transfer request record is in Cancelled Request, **Completed Approved**, or **Completed Rejected** status |
| Days to Hold Related Items | Numeric | 60 | Indicates how long related items are kept in the system. |
| Days to Hold Resolved UIN Exceptions | 0 - 999 | 120 | Indicates how long resolved UIN exceptions are kept in the system.<br>The date the exception was resolved is the date the system uses to determine if the exception is ready to be purged. |
| Days to Hold Returns | Numeric | 30 | All records in **Dispatched** or **Cancelled** status for Return to Warehouse and Return to Vendor/Supplier are purged after this number of days, where the inventory completed date is less than or equal to the current date minus the number of days to hold. |
| Days to Hold Sales Posting | 0 - 999 | 120 | Indicates how long Point-of-Service transactions uploaded from either Oracle Retail Point-of-Service (ORPOS) or Oracle Retail Sales Audit (ReSA) are kept in the system. |
| Days to Hold Shelf Replenishments | Numeric | 30 | Indicates how long shelf replenishments should be kept in the system. |

*Table 5–7 (Cont.) Topic: Purge Options*

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Days to Hold Temporary UINs | 0 - 999 | 120 | Indicates how long a temporary UIN will be kept in the system. A temporary UIN is any UIN with a status of **None**. |
| Days to Hold Transaction History | Numeric | 10 | Indicates how long transaction history should be kept in the system. |
| Days to Hold UIN Audit Information | 0 - 999 | 120 | Indicates how long UIN audit information is kept in the system.<br>Audit information can be purged for a UIN within the system. The date the audit transaction was captured is used to determine if the record needs to be purged. |
| Purge Received Transfers | Yes, No | Yes | This option allows received transfers to be purged. This option works in conjunction with the Days to Hold Received Transfers system option. |

*Table 5–8 Topic: Receiving Options*

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Disable Damages | Yes, No | No | This option allows the user to receive damages on transfers, direct deliveries, and warehouse deliveries. |
| Disable Discrepancy Checks in all Receiving | Yes, No | No | When this option is set to **Yes**, the user does not have to go through the discrepancies at the end of receiving on the handheld. This configuration applies to transfer receiving, direct deliveries, and to the item level only on warehouse receiving. |

*Table 5–9 Topic: Reporting Options*

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Reporting Tool URL | | | http://<bip_host>:<bip_port>/<bip_deployment>. This URL is used as the reference to the BIP deployment for printing reports and viewing reports from the SIM PC client in a browser. |

***Table 5–10 Topic: Returns Options***

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Add Item to Return Requests | Yes, No | Yes | This option gives the user the ability to add items to a return request (a return generated by an external system). |
| Days to send Email alert before not after date for return requests | Numeric | 2 | Return requests generated in an external system sometimes require the return to be dispatched to the warehouse before a certain date. This option prompts the recipient of the e-mail the specified number of days before the not after date is reached, if the return was not dispatched. |
| DSD delivery supplier for RTV | If the **DSD delivery supplier for RTV** system option is set to **Yes**, then the system needs to check both the DSD indicator and the return-allowed indicator.<br><br>If the **DSD delivery supplier for RTV** system option is set to **No**, then only the return-allowed indicator needs to be validated for supplier returns. | Yes | This new indicator will check to see if the DSD-allowed indicator needs to be set in addition to the return allowed values when creating a supplier return in SIM.<br><br>**Note:** Regardless of the indicator, SIM should always be able to dispatch the RTV if it was created in an external system. |

*Table 5–11 Topic: Security Options*

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Authentication Method | External Authentication/ Authorization, Internal Authentication/ Authorization, External/ Internal Authentication/ Authorization, External/Internal Authentication and Internal Authorization | External Authentication/ Authorization | External Authentication/Authorization: An external LDAP system has full control of Authentication and store/role assignments.<br>Internal Authentication/Authorization: SIM has full control of Authentication, user creation and store/role assignments.<br>External/Internal Authentication/Authorization: Indicates that a hybrid approach will be used for authentication that allows users to be managed in external and internal systems. For each time a user is successfully authenticated in an external system, the user information in SIM will be updated, including password. Then if the external security system is unavailable for authentication, SIM will try to authenticate the user internally with the password that was used during the last successful authentication.<br>External/Internal Authentication and Internal Authorization: All users and roles are kept in SIM only, but the password can be handled externally. The external password can be cached in case of connection failure, but LDAP retains the master password configuration. SIM will check the password externally. If it cannot be found, SIM will look internally. If LDAP rejects the password, then the assumption that the password is externally controlled. |
| Duration Before Failed Login Attempts are Reset (in hours) | 0 -999 | 24 | If a successful login is not achieved and the duration as defined by this new parameter is reached, the previous failure logins will not be counted toward the maximum number of allowed failure login attempts. |
| Maximum Days for Temporary Users End Date | 0 -999 | 5 | For users that are defined as temporary, this will limit the time before Deactivating a temporary user.<br>If the value is set to **0**, then the temporary user account can have any end date. |
| Maximum Number of Allowed Failure Login Attempts | 0 -999 | 5 | This is the number of failed login attempts a user can have before the user account within SIM will be locked. This parameter has no bearing on the external security system. If the external security system also provides this functionality, whichever value is lower will lock the user out first.<br>If the value is set to **0**, then the user account within SIM will be set to a status of Locked. |

*Table 5–11 (Cont.) Topic: Security Options*

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| User Security Mode | Internal Authentication/ Authorization | Internal Authentication/ Authorization | Internal Authentication/Authorization: SIM has full control of Authentication, user creation and store/role assignments.<br>Internal Authentication/Authorization: Indicates that a hybrid approach will be used for authentication that allows users to be managed in an internal systems. SIM will try to authenticate the user internally with the password that was used during the last successful authentication. |
| Valid Cached User Authentication Duration (in hours) | 0 -999 | 5 | When external authentication occurs and the user is successfully authenticated by the external security system the password will be cached in SIM. If the external security system is down and the number of days defined for this parameter have not passed, the password cached in the system will still be valid for the user and can be used to authenticate the user if the Authentication Method is set to External/Internal Authentication.<br>If the value is set to **0**, then the cached authentication information will not be considered valid and will not be used during the authentication process. |
| Valid Cached User Authorization Duration (in hours) | 0 -999 | 48 | When external authentication occurs and roles and stores are passed back to SIM, these values will be cached in SIM. If the external security system is down and the number of hours defined for this parameter have not passed, the roles/stores cached in the system will still be valid for the user and can be applied when the user logs in when the Authentication Method parameter is set to External/Internal Authorization.<br>If the value is set to **0**, then the cached authorization information will not be considered valid and will not be used during the authorization process. |

*Table 5–12 Topic: Stock Count Options*

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Stock Count Display Default Timeframe | Yes, No | No | This option determines whether the Stock Count Default Time Frame value is a selectable option on the stock count screens on both the handheld and the PC. |
| Stock Count Lockout Days | Numeric | If RMS is not installed, 1<br>If RMS is installed, set to agree with the RMS value for lockout days | This option specifies the lead time required by RMS to create a unit and value stock count schedule. |
| Stock Count Null Count Quantity = 0 | Yes/No | No | This option determines whether or not items with a null count quantity will be interpreted as a zero quantity for Unit, Problem Line and Ad Hoc stock counts. |

*Table 5–12 (Cont.) Topic: Stock Count Options*

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Unguided Stock Count Allow Multiple Users | Yes, No | No | If unguided stock counts are used, this option allows more then one user to scan simultaneously against the same stock count. |
| Unguided Stock Counts -- Automatic Save | Yes, No | No | If the parameter is set to Yes, the physical timestamp is taken as soon as the item is scanned for the first time, and is saved to the database along with the count value once the user scans the next item on the count.<br>If the parameter is set to No, SIM records the physical timestamp in memory once a user begins counting. The timestamp and count value are posted to the database when the user manually saves the count. With this option, it is assumed the user manually saves the count on a frequent basis, particularly when moving from one area in the store to another. |
| Unit & Amount Stock Count Sales Processing | Timestamp Processing, Daily Sales Processing | Timestamp Processing | This parameter will determine what kind of sales processing will be used for sales that are uploaded during a unit and amount stock count process.<br>If Timestamp Processing, the user will not have to select a time period for the stock count. Sales data will have a timestamp on when the sale or return happened. This sales data timestamp will be compared against the timestamps taken during the stock count.<br>If Daily Sales Processing, a timestamp will not be used and the user will need to select whether the stock count will occur before or after business hours so that SIM will know how to handle late sales.<br>If RMS is implemented with SIM, the setting must be set to Daily Sales Processing to correspond with the way RMS processes the transactions occurring during a Unit and Amount Stock Count. |
| Unit Stock Count Sales Processing | Timestamp Processing, Daily Sales Processing | Timestamp Processing | This parameter will determine what kind of sales processing will be used for sales that are uploaded during a unit stock count process.<br>If Timestamp Processing, the user will not have to select a time period for the stock count. Sales data will have a timestamp on when the sale or return happened. This sales data timestamp will be compared against the timestamps taken during the stock count.<br>If Daily Sales Processing, a timestamp will not be used and the user will need to select whether the stock count will occur before or after business hours so that SIM will know how to handle late sales. |
| Updating Stock On Hand | Discrepant Items Only, All Items | Discrepant Items Only | This option determines whether the stock on hand will be updated for all items, both discrepant and non-discrepant items, or for discrepant items only when authorizing a Unit, Problem Line or Ad Hoc stock count. |

***Table 5–13 Topic:Store Orders Options***

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Restrict Store Purchase Orders to Store-Orderable Items | Yes, No | Yes | This option prevents items that are not store-orderable from being on regular store purchase orders. |

***Table 5–14 Topic: Time Zone Options***

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Daily GMT Batch Run | Yes, No | Yes | Indicates if the batch programs can be run multiple times a day. |
| Enable GMT for Customer Orders | Yes, No | Yes | Dictates whether the Customer Order data being loaded into the system is in GMT. |
| Enable GMT for Dex/Nex | Yes, No | No | Dictates whether or not the Dex/Nex data being loaded into the system is in GMT. |
| Enable GMT for Direct Deliveries | Yes, No | No | Indicates whether or not the Direct Delivery messages published by an external system should have dates in GMT or not. |
| Enable GMT for Foundation Data | Yes, No | No | Indicates whether or not any foundation data messages is being loaded into the system are in GMT. |
| Enable GMT for Inventory Adjustments | Yes, No | No | Indicates which date/time stamp is used in the inventory adjustment message when it is being published. |
| Enable GMT for Item Requests | Yes, No | No | Indicates whether or not the Item Request message being published should contain date/time stamps in GMT or not. |
| Enable GMT for POS Sale Import process | Yes, No | No | Indicates whether or not the POS Sales data is being loaded into the system are in GMT. |
| Enable GMT for Price Changes | Yes, No | No | Indicates whether price change messages being loaded into the system are in GMT or not. This also determines if the pricing date fields need to be converted when pushing data to a price management application using RSL. |
| Enable GMT for Receiving | Yes, No | No | Indicates whether or not receiving messages need to be published in GMT or not. |
| Enable GMT for ReSA sale import process | Yes, No | No | Indicates whether or not ReSA sales data is being loaded into the system in GMT. |
| Enable GMT for RTVs | Yes, No | No | Indicates whether or not the RTV message being loaded into the system is in GMT. Likewise, if SIM publishes any RTV message this will determine which date/time stamp is used on the message as well. |
| Enable GMT for Stock Counts | Yes, No | No | Indicates which date/time stamp is used in the stock count message when it is being published. |
| Enable GMT for Store Orders | Yes, No | No | Indicates whether or not the purchase order messages being loaded into the system has dates in GMT or not. Likewise, if SIM publishes any purchase order message this will determine which date/time stamp is used on the message as well. |

*Table 5–14 (Cont.) Topic: Time Zone Options*

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Enable GMT for Store Transfers | Yes, No | No | Indicates whether or not the Transfer messages being loaded into the system from an external system has dates in GMT or not. Likewise, if SIM publishes any Transfer messages to an external system this will determine which date/time stamp is used on the message as well. |
| Enable GMT for Third Party Stock Counts | Yes, No | No | Indicates whether the date/time stamp in the Third party stock count file (DSLDAT) is in GMT or not. |
| Enable GMT for Vendor ASN | Yes, No | No | Indicates whether or not the Vendor ASN messages being loaded into the system have dates in GMT or not. |
| Enable GMT for Warehouse Transfers | Yes, No | No | Indicates whether or not the transfer messages being loaded into the system have GMT dates or not. Likewise, if SIM publishes any transfer message to an external system this will determine which date/time stamp is used on the message as well. |

*Table 5–15 Topic: Transfers Options*

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Add Item to Transfer on Receive | Yes, No | Yes | This option gives the user the ability to add unexpected items when receiving a transfer. |
| Days to hold Dispatched Transfer before sending e-mail alert | Numeric | 7 | After this number of days, an e-mail alert goes to the sending and receiving stores. |
| Number of days received transfers can be adjusted | Numeric | 100 | This option specifies the number of days received transfers can be reopened and adjusted. If a transfer falls within the number of days, an **Adjust Delivery** button is displayed on the received transfer. The user can edit values and confirm the transfer. |
| Receive Entire Transfer | Yes, No | No | If this option is set to **Yes**, the user can only receive the entire transfer exactly as it was sent. |
| Transfer Damaged EMail Alert | Yes, No | No | If this option is set to **Yes**, an e-mail alert is sent when the receiving store receives goods as damaged. |
| Transfer Dispatch EMail Alert | Yes, No | No | If this option is set to **Yes**, an e-mail alert is sent when the sending store dispatches a transfer. |

***Table 5–15 (Cont.) Topic: Transfers Options***

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Transfer Force Close Indicator | No Loss, Sending Loss, Receiving Loss | No Loss | This option determines how SIM handles a short receipt between stores. RMS has a similar system option that needs to be set the same as in SIM.<br>■ **No Loss.** In this case, the quantity that is short-received on the transfer between stores is added back into the SOH of the sending location.<br>■ **Sending Loss.** SIM empties the remaining quantity in the transit bucket for the quantity that was not received. This difference is adjusted in the stock ledger by RMS for the sending location.<br>■ **Receiving Loss.** SIM empties the remaining quantity in the transit bucket for the quantity that was not received. This difference is adjusted in the stock ledger by RMS for the receiving location.<br>There is no real difference between SL and RL from a SIM perspective; in both cases, the missing quantities are written off, but from a financial perspective in RMS, there is a large implication. |
| Transfer Over/Under EMail Alert | Yes, No | Yes | If this option is set to **Yes**, an e-mail alert is sent when the receiving store receives under/over goods. |
| Transfer Request Approve EMail Alert | Yes, No | Yes | If this option is set to **Yes**, an e-mail alert is sent when a transfer request has been approved. |
| Transfer Request Email Alert | Yes, No | Yes | If this option is set to **Yes**, an e-mail alert is sent when a transfer request has been made. |
| Transfer Request Reject E-mail Alert | Yes, No | Yes | If this option is set to **Yes**, an e-mail alert is sent when a transfer request has been rejected. |

***Table 5–16 Topic: User Interface Options***

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Display HH Length: Diff 1 | Numeric | 6 | This option sets the display of the first differentiator on the handheld to the specified number of characters. Because of space restrictions, no more than 21 total characters can be displayed on a single line on the handheld. The priority of display is Diff 1, Diff 2, Diff 3, and Diff 4. If Diff 1 takes up 20 characters, only one character of Diff 2 can be displayed. |
| Display HH Length: Diff 2 | Numeric | 6 | This option sets the display of the second differentiator on the handheld to the specified number of characters. Because of space restrictions, no more than 21 total characters can be displayed on a single line on the handheld. The priority of display is Diff 1, Diff 2, Diff 3, and Diff 4. If Diff 1 takes up 20 characters, only one character of Diff 2 can be displayed. |
| Display HH Length: Diff 3 | Numeric | 6 | This option sets the display of the third differentiator on the handheld to the specified number of characters. Because of space restrictions, no more than 21 total characters can be displayed on a single line on the handheld. The priority of display is Diff 1, Diff 2, Diff 3, and Diff 4. If Diff 1 takes up 20 characters, only one character of Diff 2 can be displayed. |
| Display HH Length: Diff 4 | Numeric | 6 | This option sets the display of the fourth differentiator on the handheld to the specified number of characters. Because of space restrictions, no more than 21 total characters can be displayed on a single line on the handheld. The priority of display is Diff 1, Diff 2, Diff 3, and Diff 4. If Diff 1 takes up 20 characters, only one character of Diff 2 can be displayed. |
| Display Item Description | Long Description, Short Description | Short Description | This option specifies whether the long or short item description is displayed in SIM. This option applies to both the handheld and the PC. |
| Display Item Image Button | Yes, No | No | If **Yes**, an Image button is displayed on the Item Lookup Detail screen.<br>If **No**, the button is not displayed. This allows the retailer to hide the button if the retailer does not support displaying images. |
| Item Request UI Limit | Not to exceed the value of the UI performance limitation configuration setting. | 2890 | This option will determine the maximum number of items allowed on an Item Request. |
| Problem Line UI Limit | Not to exceed the value of the UI performance limitation configuration setting. | 1500 | This option will determine the maximum number of line items allowed on a Problem Line stock count. |
| Search Limit Default for Container Lookup | 1 - 999 | 500 | This parameter indicates the default search limit for Container Lookup. |
| Search Limit Default for Customer Order Management | 0-999 | 500 | This parameter indicates the default search limit for Customer Order Management. |

***Table 5–16 (Cont.) Topic: User Interface Options***

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Search Limit Default for Inventory Adjustments | 1 - 999 | 500 | This parameter indicates the default search limit for the Inventory Adjustment List screen and Filter. |
| Search Limit Default for Item Lookup | 1 - 999 | 500 | This parameter indicates the default search limit for Item Lookup. |
| Search Limit Default for Price Changes | 1 - 999 | 500 | This parameter indicates the default search limit for the Price Change Filter. |
| Search Limit Default for Sequencing | 1 - 999 | 500 | This parameter indicates the default search limit for the No Location List screen filter. |
| Search Limit Default for Staged Message Lookup | 1 - 999 | 500 | This parameter indicates the default search limit on the Filter screen for Staged Messages. |
| Search Limit Default for Supplier Lookup | 1 - 999 | 500 | This parameter indicates the default search limit for Supplier Lookup. |
| Search Limit Default for Transaction History | 1-999 | 500 | This parameter indicates the default search limit for Transaction History. |
| Search Limit Default for UIN Resolution | 1 - 999 | 500 | This parameter indicates the default search limit on the UIN Resolution List Screen and Filter. |
| Shelf Replenishment UI Limit | Not to exceed the value of the UI performance limitation configuration setting. | 1500 | This option will determine the maximum number of line items allowed on a Shelf Replenishment List. This check will occur in addition to and after the application limits the transaction based on the pick list system parameters. |
| Unit and Amount Count UI Limit | Not to exceed the value of the UI performance limitation configuration setting. | 10 | This option will determine the maximum number of line items allowed on a Unit and Amount stock count. This check will occur in addition to the Product Group variances values. |
| Unit Count UI Limit | Not to exceed the value of the UI performance limitation configuration setting. | 10000 | This option will determine the maximum number of line items allowed on a Unit stock count. |

*Table 5–17 Topic: UIN Options*

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Allow Unexpected UINs | Yes, No | Yes | If **No**, SIM rejects the UIN in the following situations by prompting the user with an error message (EM14r):<br>■ Unexpected UIN for a Transfer<br>■ Inventory adjustment when UIN was not assigned to the current store<br>■ Stock Counts, when the item was not originally assigned to the current store<br>If **Yes**, SIM allows the unexpected UIN for the previous situations and sends an e-mail alert and adds the item to problem line stock count.<br>Completing the transaction updates the UIN Status and updates the store the UIN is assigned to. |

*Table 5–18 Topic: Warehouse Delivery Options*

| System Administration Option | Valid Values | Default Value | Description |
|---|---|---|---|
| Add Item to Container on Receive | Yes, No | Yes | This option gives the user the ability to add unexpected items when receiving a warehouse delivery. |
| Number of days received warehouse deliveries can be adjusted | Numeric | 100 | This option specifies the number of days received warehouse deliveries can be reopened and adjusted. If a delivery falls within the number of days, an **Adjust Delivery** button is displayed on the received warehouse delivery. The user can edit values and confirm the delivery. |
| Warehouse Quick Receiving – Automatically confirm ASNs | Yes, No | No | **Yes** for this option specifies that the ASN number is confirmed when all containers have been received automatically, if the ASN is not already confirmed. **No** for this option allows a quick QA check, if required, on the handheld; a value of **Yes** makes this impossible, because the ASN is completed. |
| Warehouse Quick Receiving Enabled | Yes, No | Yes | This option allows the handheld to receive containers directly, without confirming the ASN number. Each container scanned will be fully received. The ASN number may still need to be confirmed as well. |
| Warehouse Quick Receiving – Prompt for received containers | Yes, No | Yes | **Yes** for this option means that the user is prompted with an error message if the container is already received. This slows down processing. For either **Yes** or **No**, the container scan does not affect the previously received units. |
| Warehouse Quick Receiving – Receive missing containers | Yes, No | Yes | This option allows Warehouse Quick Receiving to receive containers after the ASN number is confirmed. |

# 6

# Reporting

SIM has the ability to produce reports that retailers can customize to reflect the unique requirements of their business.

In SIM 14 reports will be accessed through BI Publisher 11g.

## Operational Reports

Operational reports are generated from within the functional areas of SIM and include information about pick lists, stock count reports, shipping documentation, and so on. SIM uses a reporting tool when generating these reports in order to provide the user with a report formatting/layout mechanism.

The reporting tool allows the end user to specify the exact data fields to be displayed on the report (although this data is limited to the SIM data that is available for the specific operational report). Modifications to the formatting and data displayed on the report are made using the reporting tool.

SIM provides the user with a way to identify a single default report template to use for each of the different operational reports. When the user generates an operational report from within SIM, the application requests the report template that matches the default specified for that report.

## Analytical (and Ad Hoc) Reports

Analytical reports leverage data in SIM for historical analysis. Retailers can develop their own and use these reports to make decisions on key business processes within the store (such as previous days deliveries, number of items replenished on a given day, and so on).

The reporting tool provides the retailer with a report formatting/layout mechanism and allows the user to specify the exact data fields to be displayed on the report. All report metrics and parameters are defined using the reporting tool (although this data is limited to the SIM data that is available for the specific report).

## Assumptions

- SIM does not reference any other external security to enforce privileges for the reporting tool. If a user is given the ability to generate a report or to launch the reporting tool within SIM, it is assumed that the user is given the necessary level of access for the reporting tool as well.
- SIM does not manage any scheduling requirements for analytic (and ad hoc) reports. Such scheduling should be handled by the reporting tool itself.

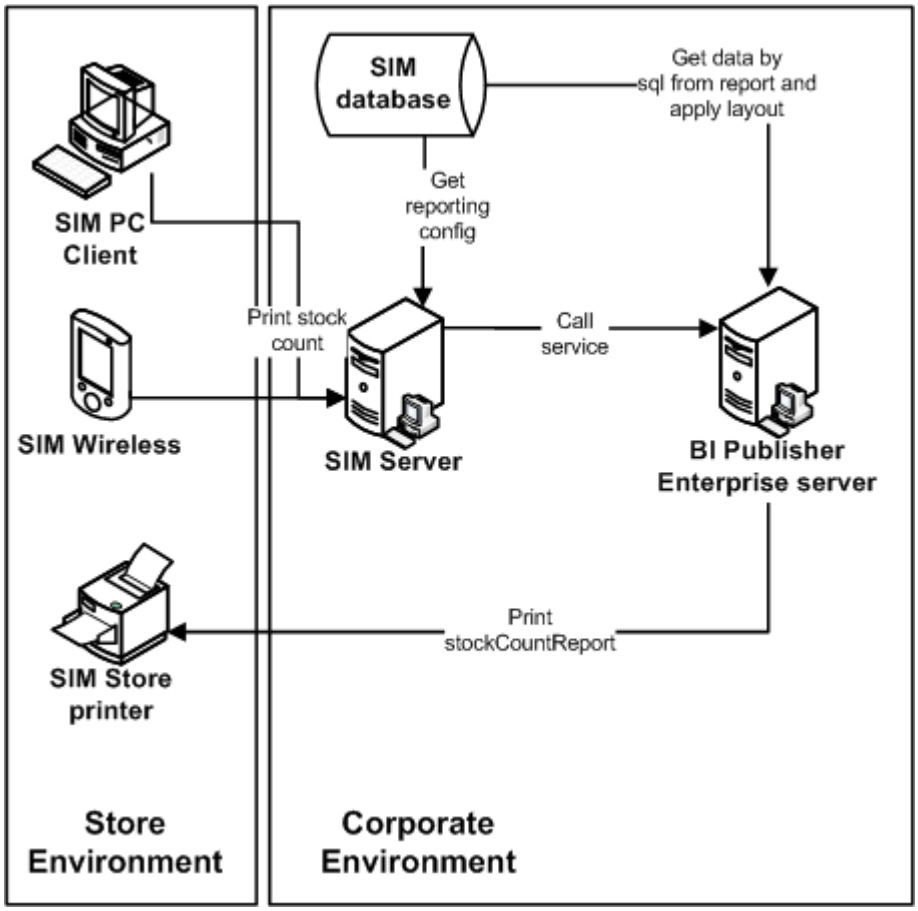
# SIM Reporting Framework

The following section describes the SIM reporting framework.

## Printing to Local Printers in a Store

SIM is able to print to local printers in a store using BIPublisher, as long as the printers are network-enabled printers that support internet protocol printing (IPP). SIM uses BIPublisher as the printing engine. The printers must be network-enabled in order to communicate with BIPublisher.

***Figure 6–1 Local Printing in a Store***




The following is the workflow for the process of printing locally in a store:

1. A retailer makes a request on the HH or PC to print an item.
2. That request goes to the centrally installed BIPublisher server.
3. The BIPublisher server receives URLs or parameters, runs a query to retrieve data to be printed, and formats the data.
4. That data is then sent back to the store's network-enabled printers.

SIM tables (STORE_PRINTER) refer only to the logical name of the printer. That logical name is setup using BIP-admin, for example, **myPrinter1**. Use BIPublisher to configure **myPrinter1** with specifics.

## SIM Operational Reports

The following are the SIM Operational Reports.

***Table 6–1 Operational Reports***

| Report Name | Report Parameters | Primary Views or Tables |
|---|---|---|
| AGSNDefaultReport | ITEM_ID, UIN_ID, STORE_ID, COPIES | Store_item |
| BolReturnReport | Return_ID, COPIES | rprt_return_bol_v |
| BolTransferReport | Transfer_ID, COPIES | rprt_transfer_bol_v |
| CustomerOrderBinLabelReport | BIN_ID, SIM_CUSTOMER_ORDER_ID, COPIES | FUL_ORD, FUL_ORD_BIN |
| CustomerOrderDeliveryBOLReport | Delivery_Id, Store_Timezone, COPIES | RPRT_FUL_ORD_DLV_BOL_V |
| CustomerOrderDeliveryReport | Delivery_Id, Store_Timezone, COPIES | RPRT_FUL_ORD_DLV_V |
| CustomerOrderPickDiscrepancyReport | Store_Timezone, Pick_Id, COPIES | RPRT_FUL_ORD_PICK_DISC_V |
| CustomerOrderPickReport | Store_Timezone, Pick_Id, COPIES | RPRT_FUL_ORD_PICK_V |
| CustomerOrderReport | Order_Id, Store_Timezone, COPIES | RPRT_FUL_ORD_V |
| CustomerOrderReversePickReport | Reverse_Pick_Id, Store_Timezone, COPIES | RPRT_FUL_ORD_RV_PICK_V |
| DirectDeliveryDiscrepantItemsReport | RECEIPT_ID, COPIES | rprt_dsd_discrepant_itm_v |
| DirectDeliveryReport | Receipt_ID, Store_Timezone, COPIES | rprt_dsd_v |
| InventoryAdjustmentReport | Inv_Adj_ID, Store_Timezone, COPIES | RPRT_INV_ADJUST_V, CONFIG_SYSTEM |
| ItemBasketDefaultReport | ITEM_BASKET_ID, CUST_REF, COPIES | No view, report is rendered using pass through parameters |
| ItemDetailReport | ITEMID, STOREID, Store_Timezone, COPIES | STORE_SEQUENCE_ITEM, STORE_SEQUENCE_AREA, REPORT_FORMAT, ALLOCATION, ITEM, WAREHOUSE, RPRT_ITEM_DETAIL_V |
| ItemRequestReport | Item_Request_ID, Store_Timezone, COPIES | rprt_item_request_v |
| ItemTicketDefaultReport | ITEM_ID, ITEM_ID, PRICE, CTRY_OF_MFR, COPIES | No view, report is rendered using pass through parameters |
| ItemTicketQRCodeReport | ITEM_ID, ITEM_ID, PRICE, CTRY_OF_MFR, STORE_ID, COPIES | No view, report is rendered using pass through parameters |
| ItemTicketReport1 | ITEM_ID, DESCRIPTION, PRICE, CTRY_OF_MFR, COPIES | No view, report is rendered using pass through parameters |
| ItemTicketReport2 | ITEM_ID, DESCRIPTION, PRICE, CTRY_OF_MFR, COPIES | No view, report is rendered using pass through parameters |

*Table 6–1 (Cont.) Operational Reports*

| Report Name | Report Parameters | Primary Views or Tables |
|---|---|---|
| ItemUDATicketDefaultReport | ITEM_ID, DESCRIPTION, PRICE, CTRY_OF_MFR, COPIES | No view, report is rendered using pass through parameters |
| ReturnReport | Return_ID, Store_Timezone, COPIES | RPRT_RETURN_V |
| ShelfLabelDefaultReport | ITEM_ID, DESCRIPTION, PRICE, CTRY_OF_MFR, PRICE_PER_UOM, COPIES | No view, report is rendered using pass through parameters |
| ShelfLabelQRCodeReport | ITEM_ID, DESCRIPTION, PRICE, CTRY_OF_MFR, PRICE_PER_UOM, PRICE, COPIES | No view, report is rendered using pass through parameters |
| ShelfLabelReport1 | ITEM_ID, DESCRIPTION, PRICE, CTRY_OF_MFR, PRICE_PER_UOM, COPIES | No view, report is rendered using pass through parameters |
| ShelfLabelReport2 | ITEM_ID, DESCRIPTION, PRICE, CTRY_OF_MFR, PRICE_PER_UOM, COPIES | No view, report is rendered using pass through parameters |
| ShelfReplenishmentReport | SHELF_REPLENISH_ID, Store_Timezone, COPIES | RPRT_SHELF_REPLENISH_V |
| StockCountAllLocReport | STORE_ID, STOCK_COUNT_ID, COPIES | RPRT_STOCK_COUNT_V |
| StockCountExportReport | STOCK_COUNT_ID, COPIES | stock_count_line_item |
| StockCountRejectedItemReport | STORE_ID, COPIES | RPRT_STOCK_COUNT_NOF_V |
| StockCountReport | STOCK_COUNT_ID, LOCATION_ID, Store_Timezone, PHASE, COPIES | RPRT_STOCK_COUNT_V |
| StoreOrderReport | STORE_ORDER_ID, COPIES | print_store_order, print_store_order_item, store |
| TransferReport | Transfer_ID, Store_Timezone, COPIES | RPRT_TRANSFER_V |
| WarehouseDeliveryReport | Document_ID, Store_Timezone, COPIES | RPRT_WAREHOUSE_SHIPMENT_V |

## Report Formats

The following section describes the report formats.

*Figure 6–2 AGSNDefaultReport*

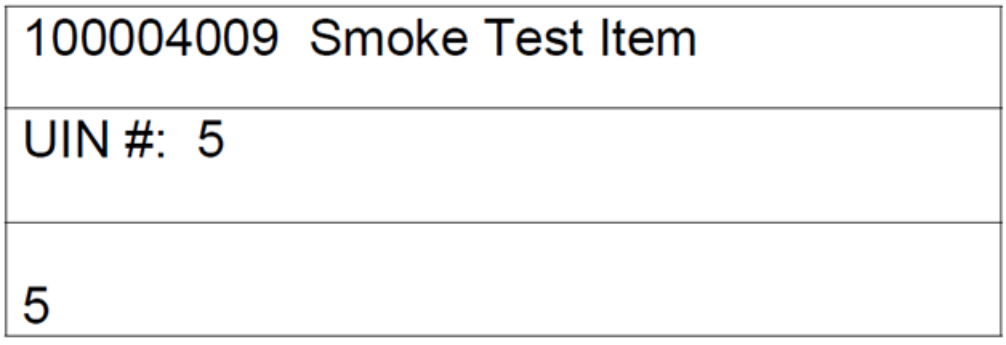
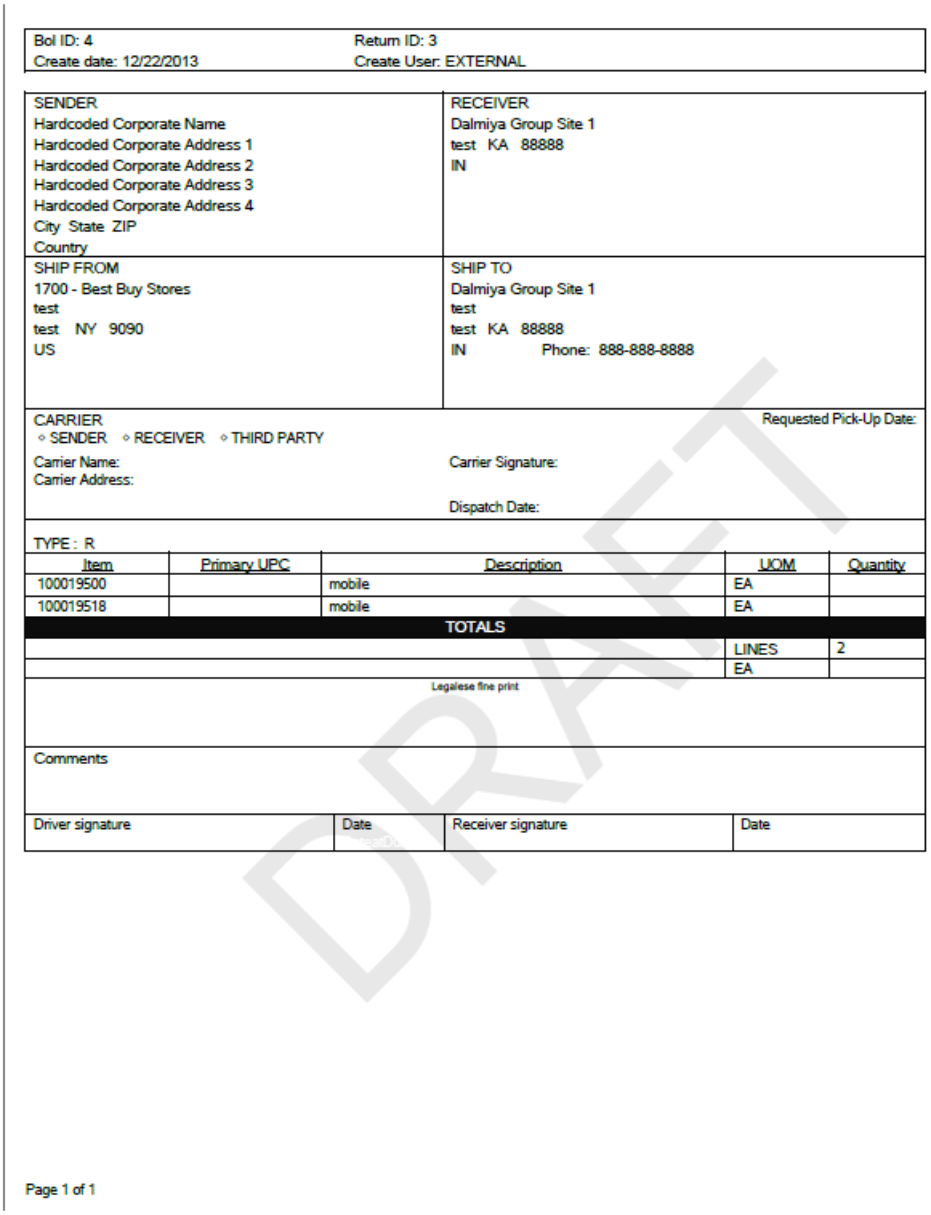


***Figure 6–3 BolReturnReport***



Bol ID: 4 | Return ID: 3
Create date: 12/22/2013 | Create User: EXTERNAL

| SENDER | RECEIVER |
|---|---|
| Hardcoded Corporate Name<br>Hardcoded Corporate Address 1<br>Hardcoded Corporate Address 2<br>Hardcoded Corporate Address 3<br>Hardcoded Corporate Address 4<br>City State ZIP<br>Country | Dalmiya Group Site 1<br>test KA 88888<br>IN |
| SHIP FROM<br>1700 - Best Buy Stores<br>test<br>test NY 9090<br>US | SHIP TO<br>Dalmiya Group Site 1<br>test<br>test KA 88888<br>IN Phone: 888-888-8888 |

CARRIER
◇ SENDER ◇ RECEIVER ◇ THIRD PARTY

Requested Pick-Up Date:

Carrier Name:
Carrier Address:

Carrier Signature:

Dispatch Date:

TYPE : R

| Item | Primary UPC | Description | UOM | Quantity |
|---|---|---|---|---|
| 100019500 | | mobile | EA | |
| 100019518 | | mobile | EA | |
| TOTALS | | | | |
| | | | LINES | 2 |
| | | | EA | |

Legalese fine print

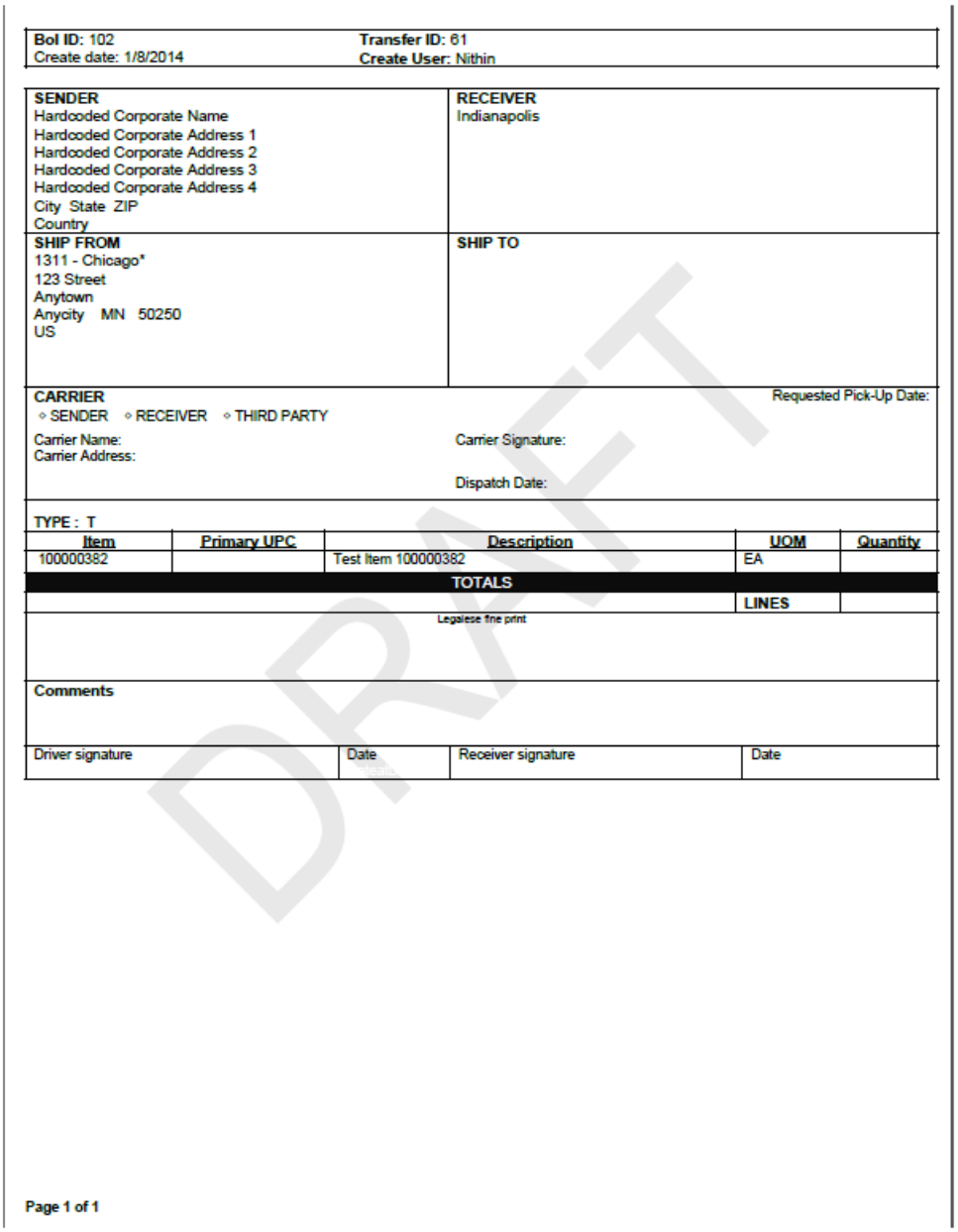
Comments

| Driver signature | Date | Receiver signature | Date |
|---|---|---|---|

DRAFT

Page 1 of 1

***Figure 6–4 BolTransferReport***



**Bol ID:** 102
Create date: 1/8/2014

**Transfer ID:** 61
**Create User:** Nithin

**SENDER**
Hardcoded Corporate Name
Hardcoded Corporate Address 1
Hardcoded Corporate Address 2
Hardcoded Corporate Address 3
Hardcoded Corporate Address 4
City State ZIP
Country

**RECEIVER**
Indianapolis

**SHIP FROM**
1311 - Chicago*
123 Street
Anytown
Anycity MN 50250
US

**SHIP TO**

**CARRIER**
◦ SENDER ◦ RECEIVER ◦ THIRD PARTY

Requested Pick-Up Date:

Carrier Name:
Carrier Address:

Carrier Signature:

Dispatch Date:

TYPE : T

| Item | Primary UPC | Description | UOM | Quantity |
|---|---|---|---|---|
| 100000382 | | Test Item 100000382 | EA | |
| TOTALS | | | | |
| | | | LINES | |

Legalese fine print

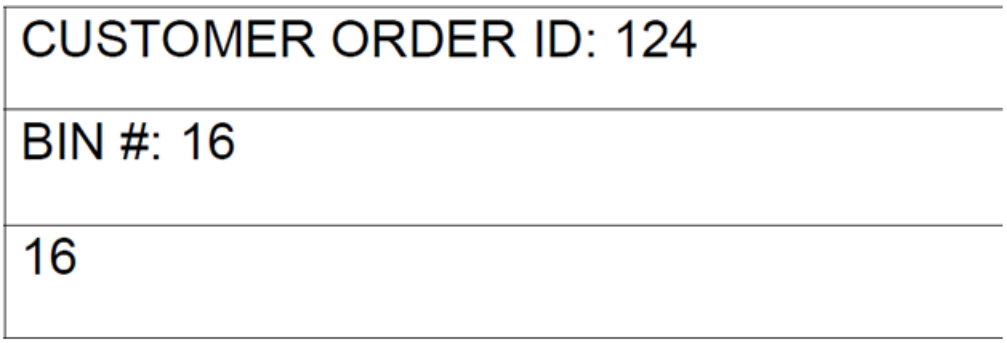
**Comments**

| Driver signature | Date | Receiver signature | Date |
|---|---|---|---|

DRAFT

Page 1 of 1

***Figure 6–5 CustomerOrderBinLabelReport***

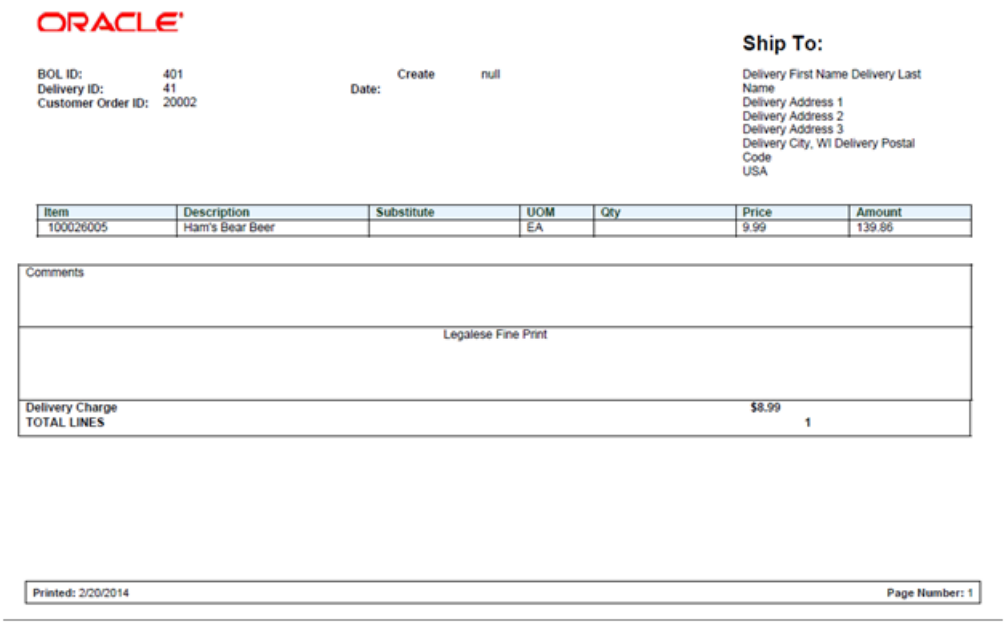


CUSTOMER ORDER ID: 124

BIN #: 16

16

*Figure 6–6 CustomerOrderDeliveryBOLReport*



ORACLE

BOL ID: 401
Delivery ID: 41
Customer Order ID: 20002

Create Date: null

**Ship To:**

Delivery First Name Delivery Last Name
Delivery Address 1
Delivery Address 2
Delivery Address 3
Delivery City, WI Delivery Postal Code
USA

| Item | Description | Substitute | UOM | Qty | Price | Amount |
|---|---|---|---|---|---|---|
| 100026005 | Ham's Bear Beer | | EA | | 9.99 | 139.86 |

Comments

Legalese Fine Print

Delivery Charge $8.99
TOTAL LINES 1

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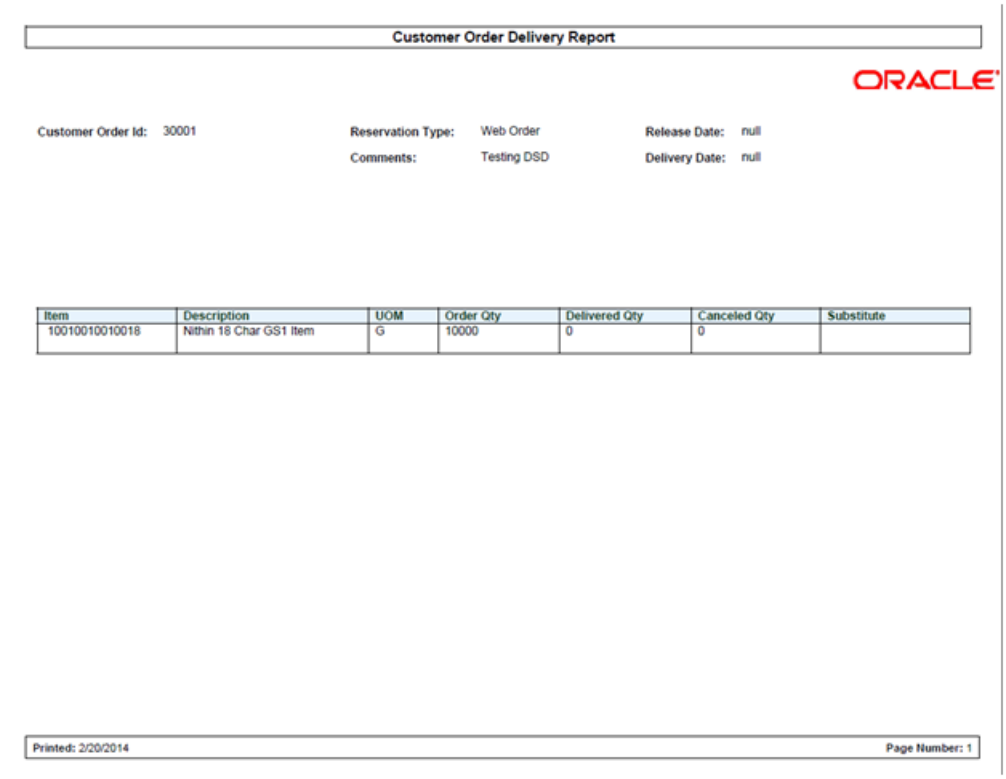
*Figure 6–7 CustomerOrderDeliveryReport*



**Customer Order Delivery Report**

ORACLE

Customer Order Id: 30001
Reservation Type: Web Order
Comments: Testing DSD
Release Date: null
Delivery Date: null

| Item | Description | UOM | Order Qty | Delivered Qty | Canceled Qty | Substitute |
|---|---|---|---|---|---|---|
| 10010010010018 | Nithin 18 Char GS1 Item | G | 10000 | 0 | 0 | |

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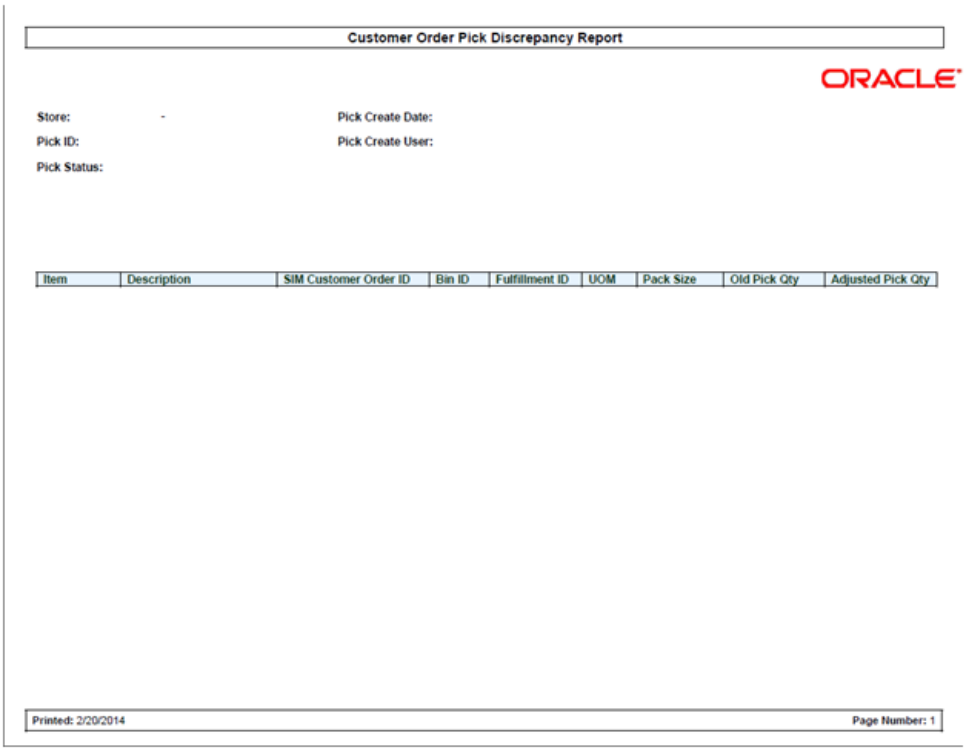
*Figure 6–8 CustomerOrderPickDiscrepancyReport*


Customer Order Pick Discrepancy Report

ORACLE

Store: -
Pick Create Date:
Pick ID:
Pick Create User:
Pick Status:

| Item | Description | SIM Customer Order ID | Bin ID | Fulfillment ID | UOM | Pack Size | Old Pick Qty | Adjusted Pick Qty |
|---|---|---|---|---|---|---|---|---|

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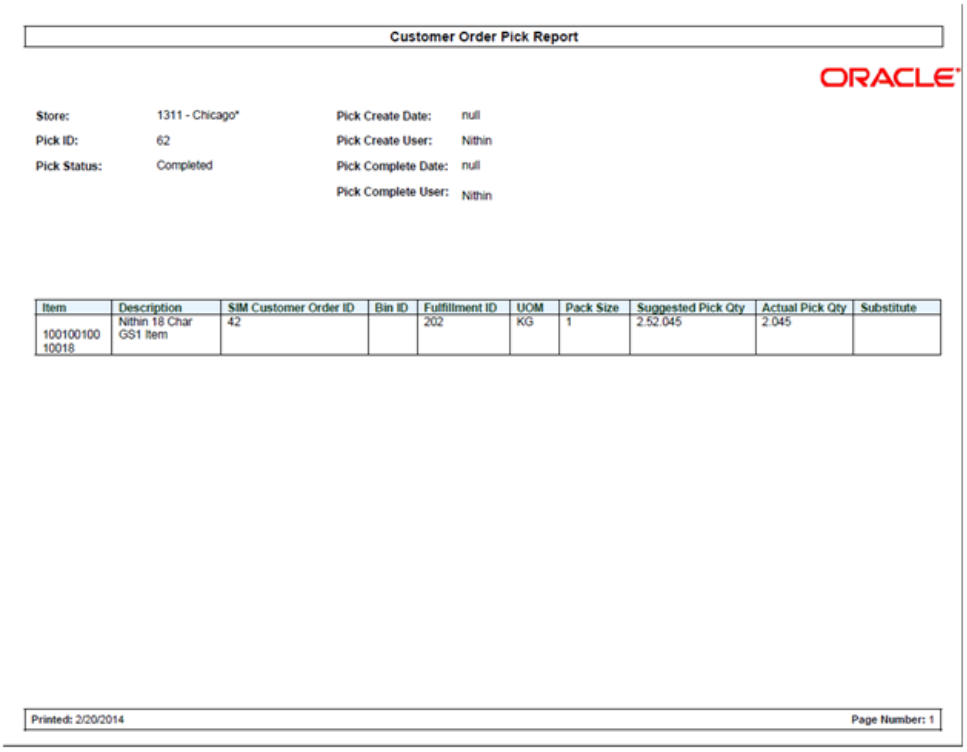
*Figure 6–9 CustomerOrderPickReport*


Customer Order Pick Report

ORACLE

Store: 1311 - Chicago*
Pick Create Date: null
Pick ID: 62
Pick Create User: Nithin
Pick Status: Completed
Pick Complete Date: null
Pick Complete User: Nithin

| Item | Description | SIM Customer Order ID | Bin ID | Fulfillment ID | UOM | Pack Size | Suggested Pick Qty | Actual Pick Qty | Substitute |
|---|---|---|---|---|---|---|---|---|---|
| 100100100 10018 | Nithin 18 Char GS1 Item | 42 | | 202 | KG | 1 | 2.52.045 | 2.045 | |

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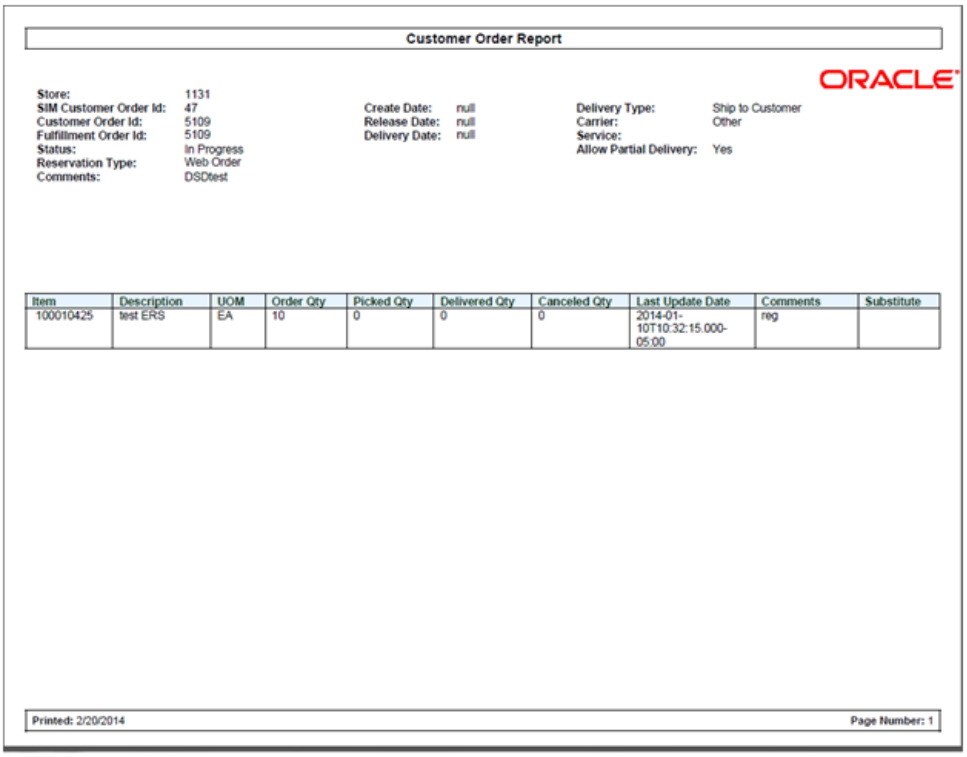
*Figure 6–10 CustomerOrderReport*



Customer Order Report

ORACLE

Store: 1131
SIM Customer Order Id: 47
Customer Order Id: 5109
Fulfillment Order Id: 5109
Status: In Progress
Reservation Type: Web Order
Comments: DSDtest

Create Date: null
Release Date: null
Delivery Date: null

Delivery Type: Ship to Customer
Carrier: Other
Service:
Allow Partial Delivery: Yes

| Item | Description | UOM | Order Qty | Picked Qty | Delivered Qty | Canceled Qty | Last Update Date | Comments | Substitute |
|---|---|---|---|---|---|---|---|---|---|
| 100010425 | test ERS | EA | 10 | 0 | 0 | 0 | 2014-01-10T10:32:15.000-05:00 | reg | |

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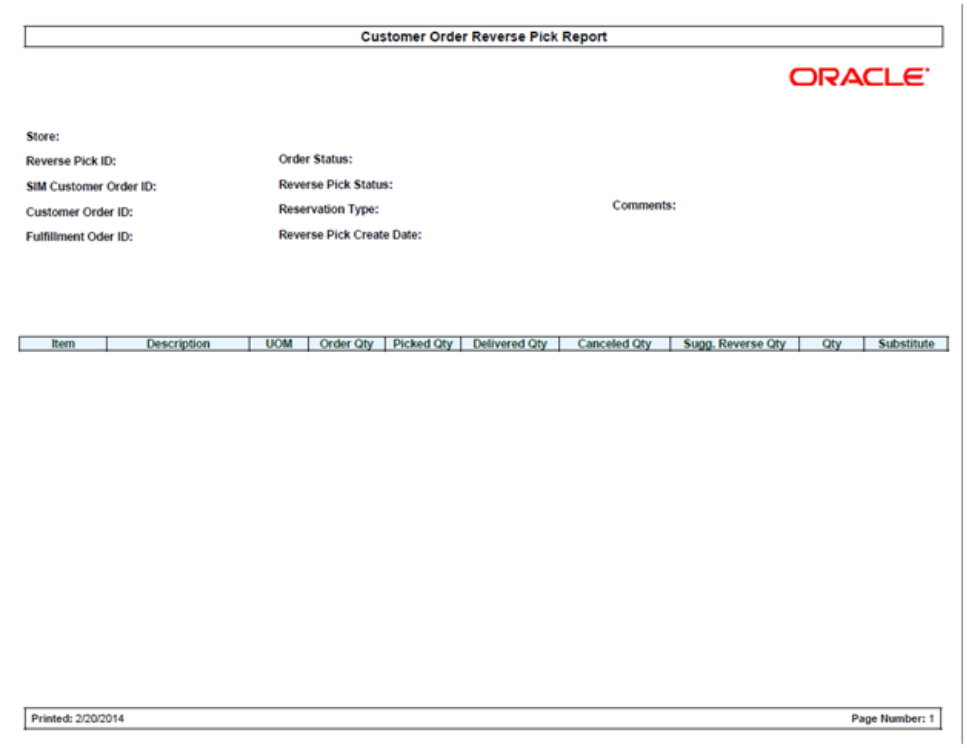
*Figure 6–11 CustomerOrderReversePickReport*



Customer Order Reverse Pick Report

ORACLE

Store:
Reverse Pick ID:
SIM Customer Order ID:
Customer Order ID:
Fulfillment Oder ID:

Order Status:
Reverse Pick Status:
Reservation Type:
Reverse Pick Create Date:

Comments:

| Item | Description | UOM | Order Qty | Picked Qty | Delivered Qty | Canceled Qty | Sugg. Reverse Qty | Qty | Substitute |
|---|---|---|---|---|---|---|---|---|---|

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***Figure 6–12 DirectDeliveryDiscrepantItemsReport***

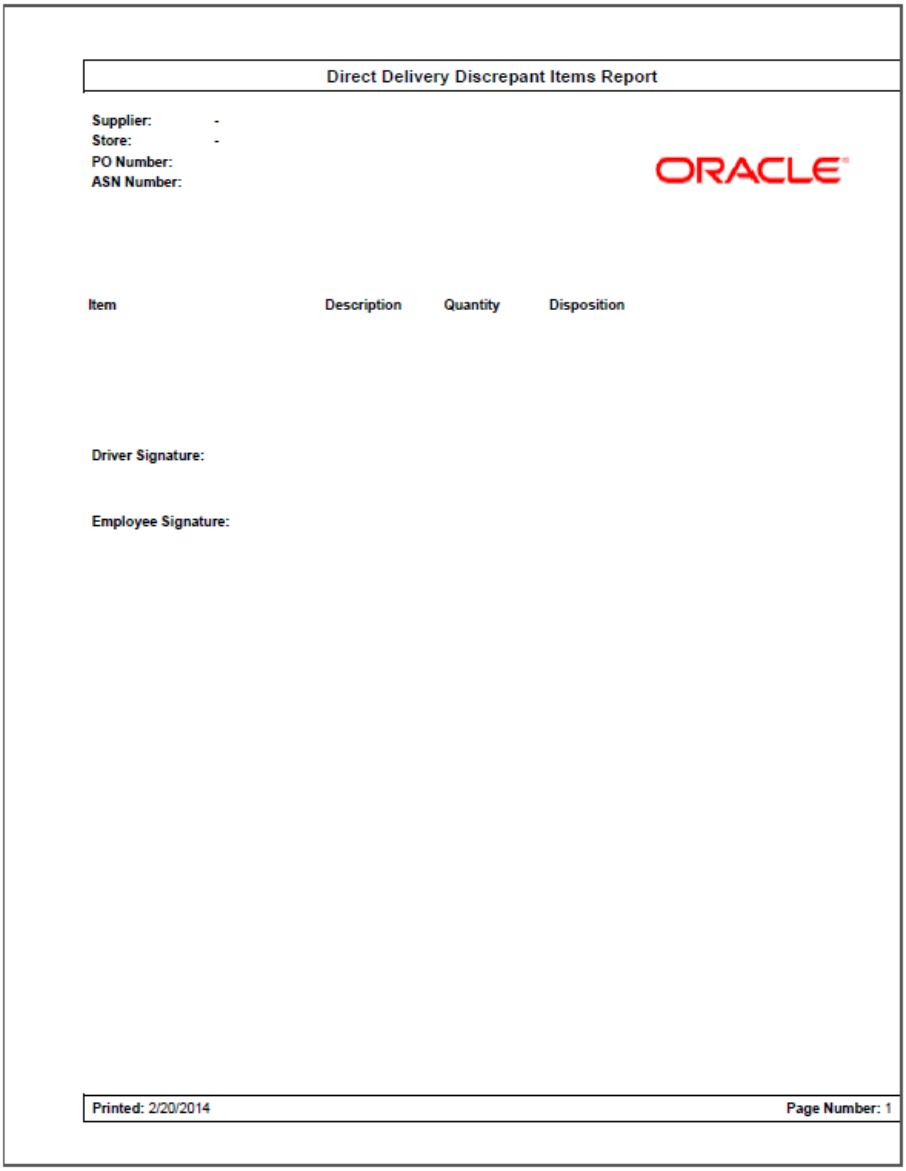
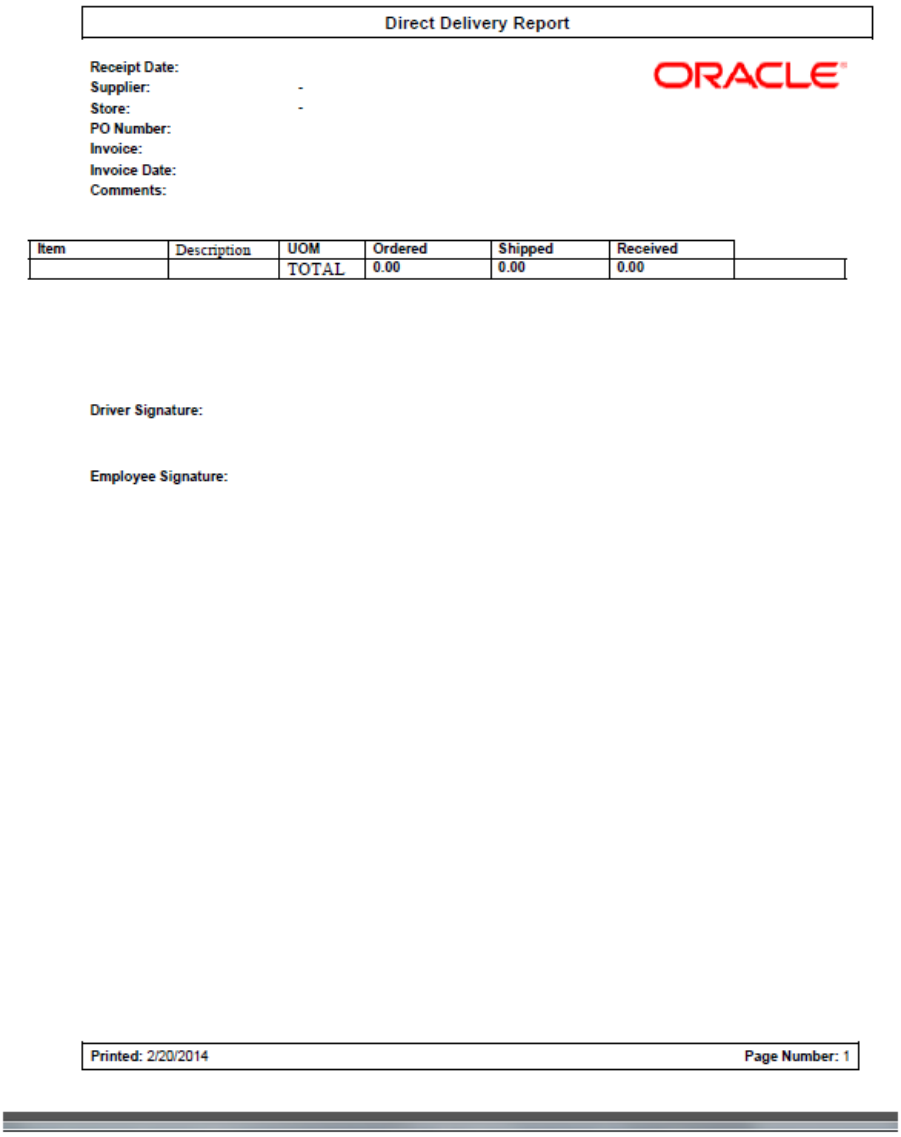


*Figure 6–13 DirectDeliveryReport*



Direct Delivery Report

ORACLE

Receipt Date:
Supplier: -
Store: -
PO Number:
Invoice:
Invoice Date:
Comments:

| Item | Description | UOM | Ordered | Shipped | Received | |
|---|---|---|---|---|---|---|
| | | TOTAL | 0.00 | 0.00 | 0.00 | |

Driver Signature:

Employee Signature:

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*Figure 6–14 InventoryAdjustmentReport*

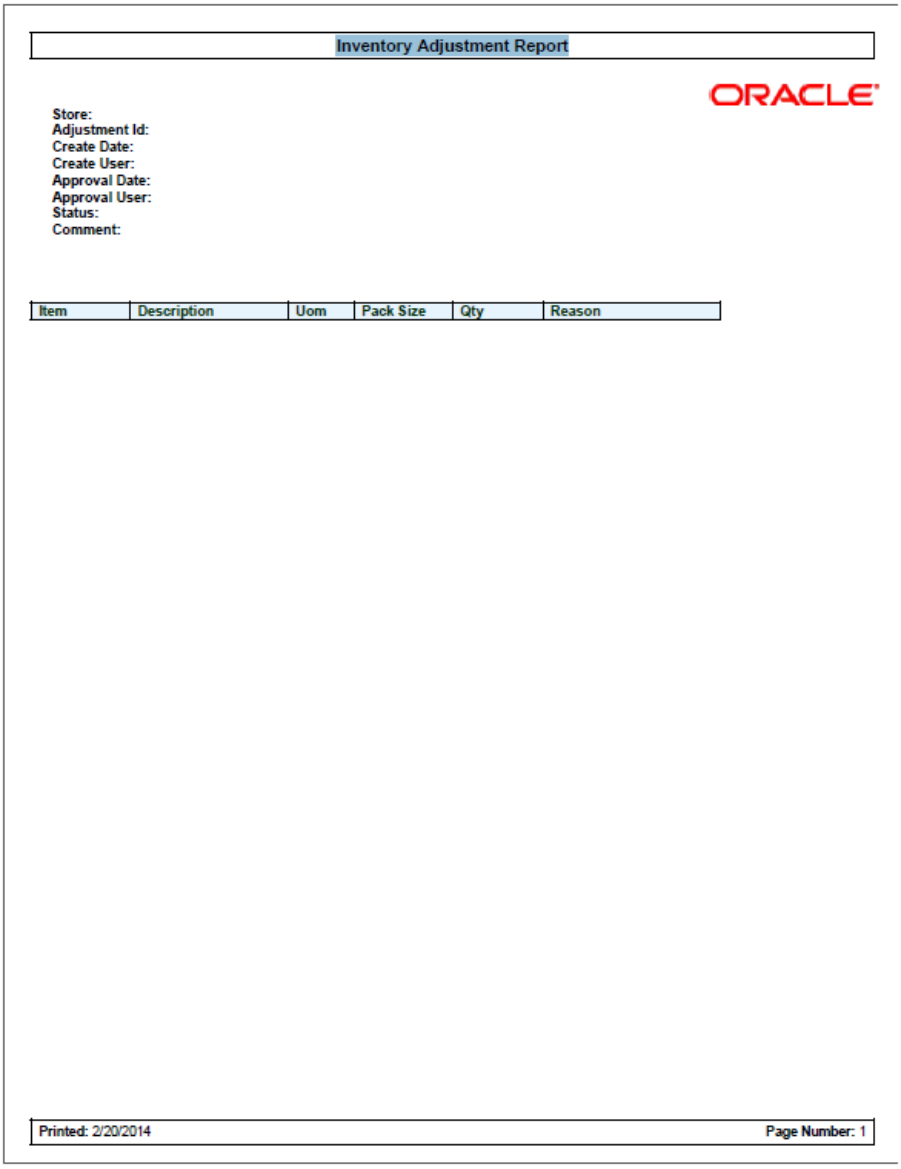



*Figure 6–15 ItemBasketDefaultReport*

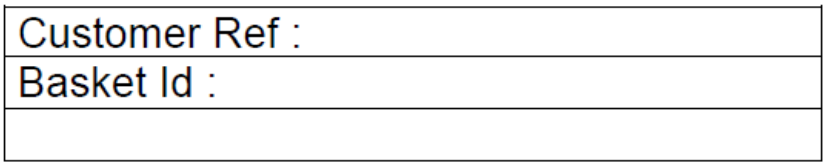
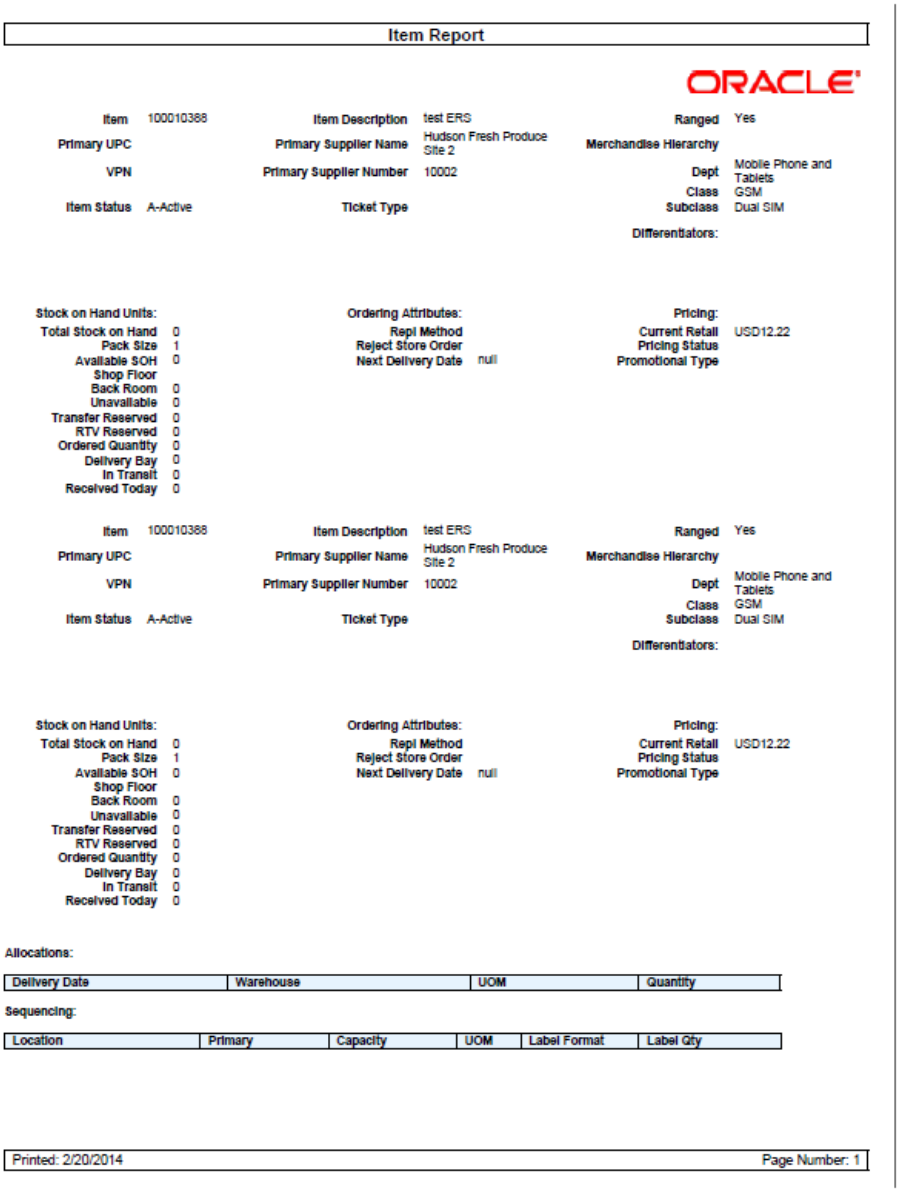


***Figure 6–16 ItemDetailReport***



Item Report

ORACLE

| | | | | | |
|---|---|---|---|---|---|
| Item | 100010388 | Item Description | test ERS | Ranged | Yes |
| Primary UPC | | Primary Supplier Name | Hudson Fresh Produce Site 2 | Merchandise Hierarchy | |
| VPN | | Primary Supplier Number | 10002 | Dept | Mobile Phone and Tablets |
| | | | | Class | GSM |
| Item Status | A-Active | Ticket Type | | Subclass | Dual SIM |
| | | | | Differentiators: | |

| Stock on Hand Units: | | Ordering Attributes: | | Pricing: | |
|---|---|---|---|---|---|
| Total Stock on Hand | 0 | Repl Method | | Current Retail | USD12.22 |
| Pack Size | 1 | Reject Store Order | | Pricing Status | |
| Available SOH | 0 | Next Delivery Date | null | Promotional Type | |
| Shop Floor | | | | | |
| Back Room | 0 | | | | |
| Unavailable | 0 | | | | |
| Transfer Reserved | 0 | | | | |
| RTV Reserved | 0 | | | | |
| Ordered Quantity | 0 | | | | |
| Delivery Bay | 0 | | | | |
| In Transit | 0 | | | | |
| Received Today | 0 | | | | |



| | | | | | |
|---|---|---|---|---|---|
| Item | 100010388 | Item Description | test ERS | Ranged | Yes |
| Primary UPC | | Primary Supplier Name | Hudson Fresh Produce Site 2 | Merchandise Hierarchy | |
| VPN | | Primary Supplier Number | 10002 | Dept | Mobile Phone and Tablets |
| | | | | Class | GSM |
| Item Status | A-Active | Ticket Type | | Subclass | Dual SIM |
| | | | | Differentiators: | |

| Stock on Hand Units: | | Ordering Attributes: | | Pricing: | |
|---|---|---|---|---|---|
| Total Stock on Hand | 0 | Repl Method | | Current Retail | USD12.22 |
| Pack Size | 1 | Reject Store Order | | Pricing Status | |
| Available SOH | 0 | Next Delivery Date | null | Promotional Type | |
| Shop Floor | | | | | |
| Back Room | 0 | | | | |
| Unavailable | 0 | | | | |
| Transfer Reserved | 0 | | | | |
| RTV Reserved | 0 | | | | |
| Ordered Quantity | 0 | | | | |
| Delivery Bay | 0 | | | | |
| In Transit | 0 | | | | |
| Received Today | 0 | | | | |



Allocations:

| Delivery Date | Warehouse | UOM | Quantity |
|---|---|---|---|

Sequencing:

| Location | Primary | Capacity | UOM | Label Format | Label Qty |
|---|---|---|---|---|---|

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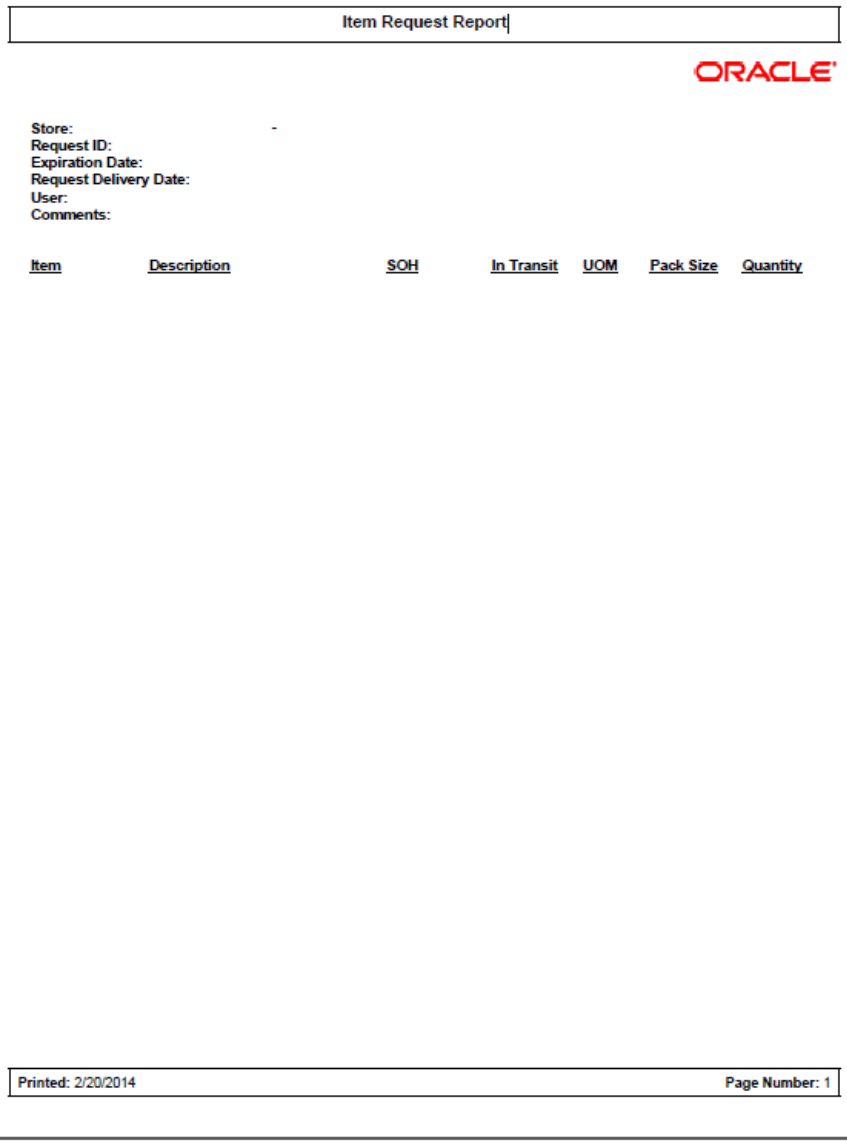
***Figure 6–17 ItemRequestReport***


Item Request Report

ORACLE

Store: -
Request ID:
Expiration Date:
Request Delivery Date:
User:
Comments:

| Item | Description | SOH | In Transit | UOM | Pack Size | Quantity |
|---|---|---|---|---|---|---|

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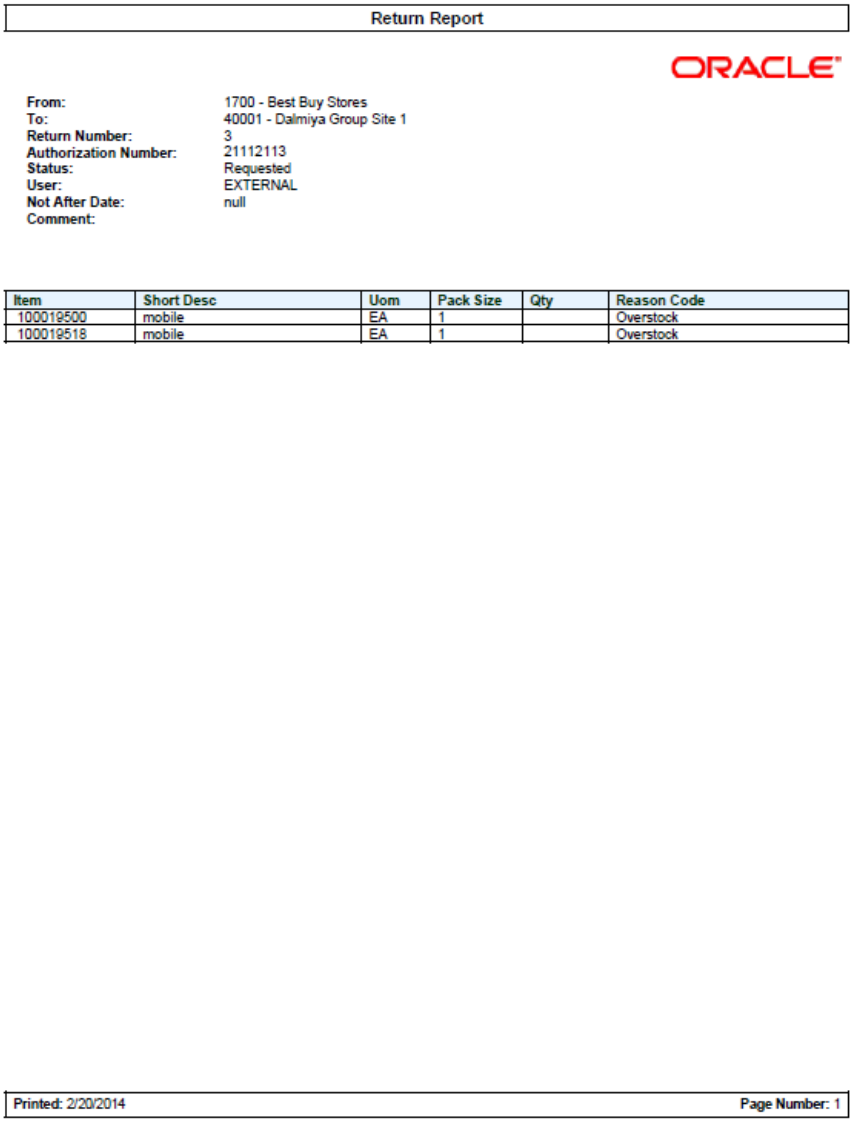
***Figure 6–18 ReturnReport***



Return Report

ORACLE

**From:** 1700 - Best Buy Stores
**To:** 40001 - Dalmiya Group Site 1
**Return Number:** 3
**Authorization Number:** 21112113
**Status:** Requested
**User:** EXTERNAL
**Not After Date:** null
**Comment:**

| Item | Short Desc | Uom | Pack Size | Qty | Reason Code |
|---|---|---|---|---|---|
| 100019500 | mobile | EA | 1 | | Overstock |
| 100019518 | mobile | EA | 1 | | Overstock |

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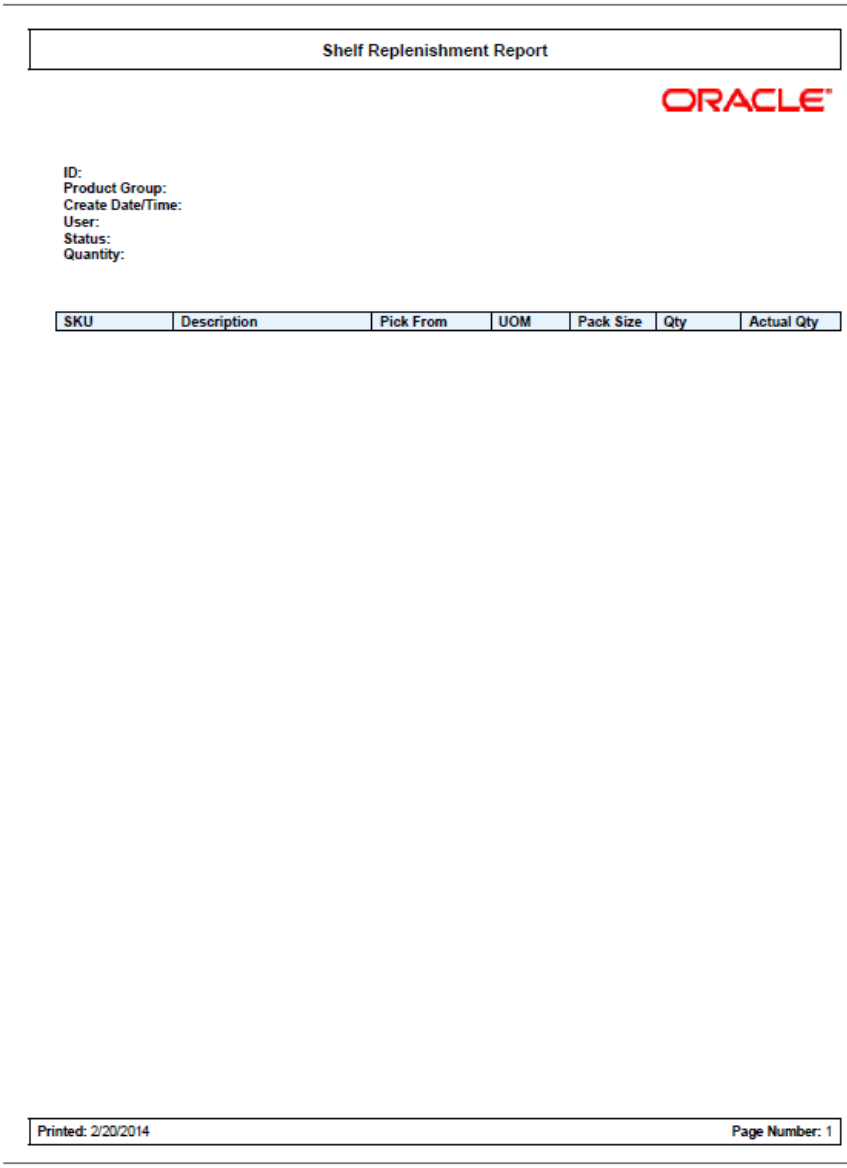
***Figure 6–19 ShelfReplenishmentReport***


Shelf Replenishment Report

ORACLE

ID:
Product Group:
Create Date/Time:
User:
Status:
Quantity:

| SKU | Description | Pick From | UOM | Pack Size | Qty | Actual Qty |
|---|---|---|---|---|---|---|

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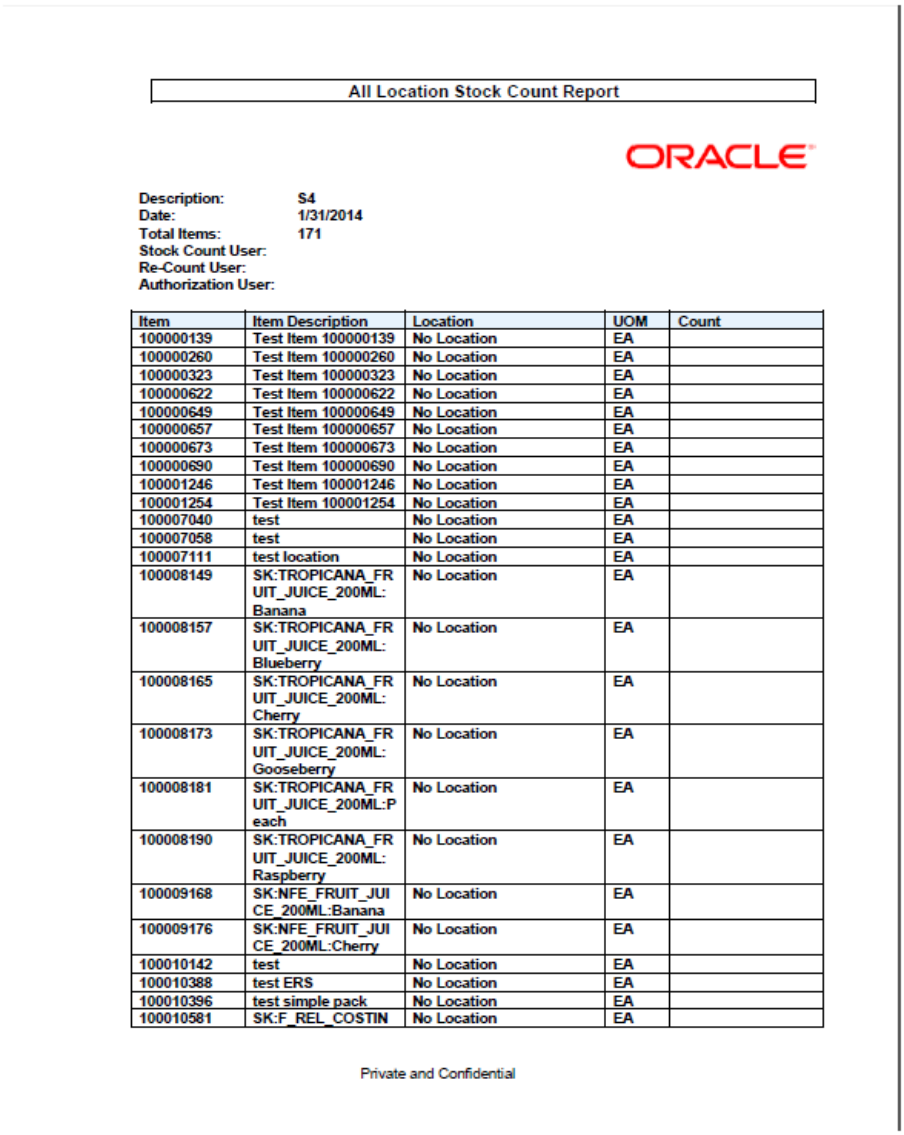
*Figure 6–20 StockCountAllLocReport*



All Location Stock Count Report

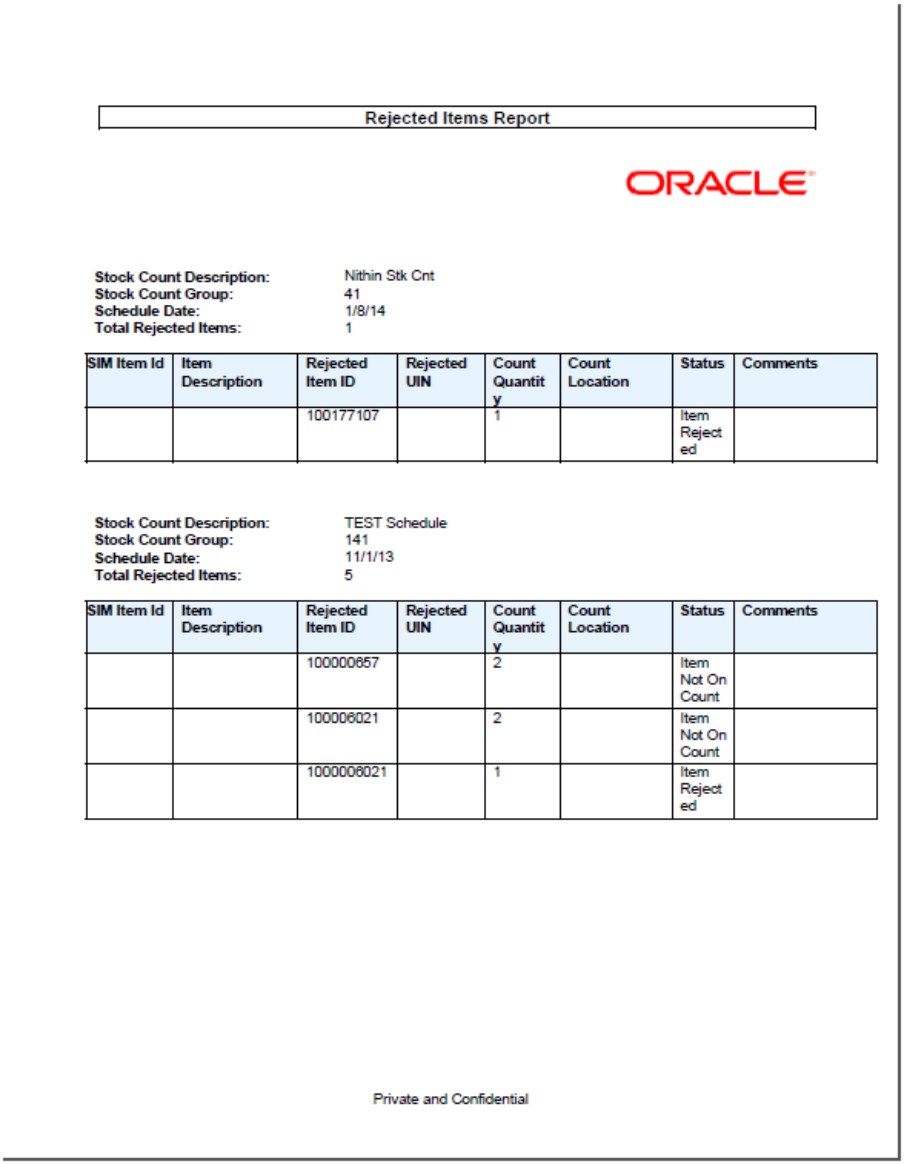
ORACLE

Description: S4
Date: 1/31/2014
Total Items: 171
Stock Count User:
Re-Count User:
Authorization User:

| Item | Item Description | Location | UOM | Count |
|---|---|---|---|---|
| 100000139 | Test Item 100000139 | No Location | EA | |
| 100000260 | Test Item 100000260 | No Location | EA | |
| 100000323 | Test Item 100000323 | No Location | EA | |
| 100000622 | Test Item 100000622 | No Location | EA | |
| 100000649 | Test Item 100000649 | No Location | EA | |
| 100000657 | Test Item 100000657 | No Location | EA | |
| 100000673 | Test Item 100000673 | No Location | EA | |
| 100000690 | Test Item 100000690 | No Location | EA | |
| 100001246 | Test Item 100001246 | No Location | EA | |
| 100001254 | Test Item 100001254 | No Location | EA | |
| 100007040 | test | No Location | EA | |
| 100007058 | test | No Location | EA | |
| 100007111 | test location | No Location | EA | |
| 100008149 | SK:TROPICANA_FRUIT_JUICE_200ML:Banana | No Location | EA | |
| 100008157 | SK:TROPICANA_FRUIT_JUICE_200ML:Blueberry | No Location | EA | |
| 100008165 | SK:TROPICANA_FRUIT_JUICE_200ML:Cherry | No Location | EA | |
| 100008173 | SK:TROPICANA_FRUIT_JUICE_200ML:Gooseberry | No Location | EA | |
| 100008181 | SK:TROPICANA_FRUIT_JUICE_200ML:Peach | No Location | EA | |
| 100008190 | SK:TROPICANA_FRUIT_JUICE_200ML:Raspberry | No Location | EA | |
| 100009168 | SK:NFE_FRUIT_JUICE_200ML:Banana | No Location | EA | |
| 100009176 | SK:NFE_FRUIT_JUICE_200ML:Cherry | No Location | EA | |
| 100010142 | test | No Location | EA | |
| 100010388 | test ERS | No Location | EA | |
| 100010396 | test simple pack | No Location | EA | |
| 100010581 | SK:F_REL_COSTIN | No Location | EA | |

Private and Confidential

***Figure 6–21 StockCountRejectedItemReport***



Rejected Items Report

ORACLE

**Stock Count Description:** Nithin Stk Cnt
**Stock Count Group:** 41
**Schedule Date:** 1/8/14
**Total Rejected Items:** 1

| SIM Item Id | Item Description | Rejected Item ID | Rejected UIN | Count Quantity | Count Location | Status | Comments |
|---|---|---|---|---|---|---|---|
| | | 100177107 | | 1 | | Item Rejected | |

**Stock Count Description:** TEST Schedule
**Stock Count Group:** 141
**Schedule Date:** 11/1/13
**Total Rejected Items:** 5

| SIM Item Id | Item Description | Rejected Item ID | Rejected UIN | Count Quantity | Count Location | Status | Comments |
|---|---|---|---|---|---|---|---|
| | | 100000857 | | 2 | | Item Not On Count | |
| | | 100006021 | | 2 | | Item Not On Count | |
| | | 1000006021 | | 1 | | Item Rejected | |

Private and Confidential

*Figure 6–22 StockCountReport*

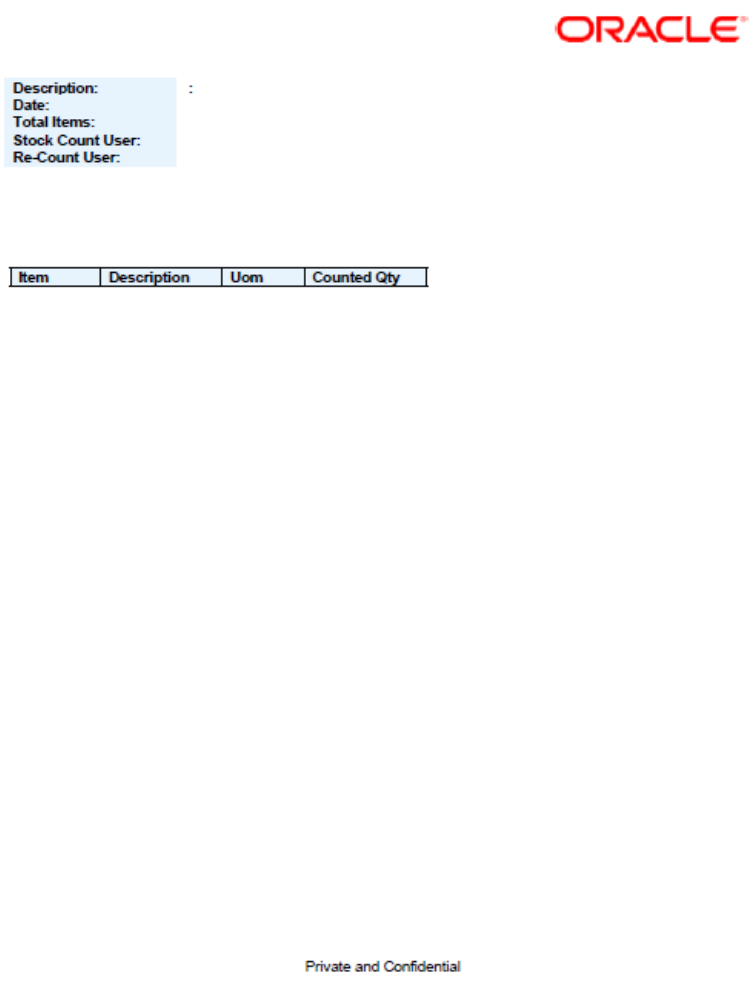


***Figure 6–23 StoreOrderReport***

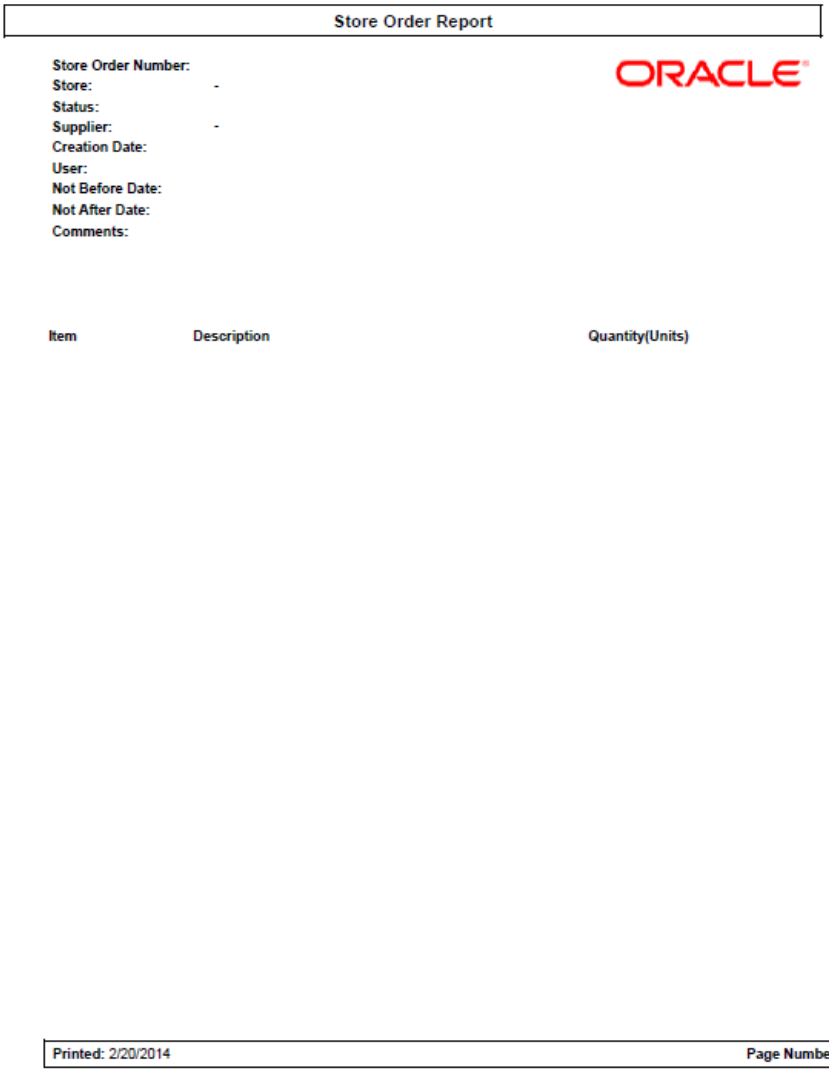
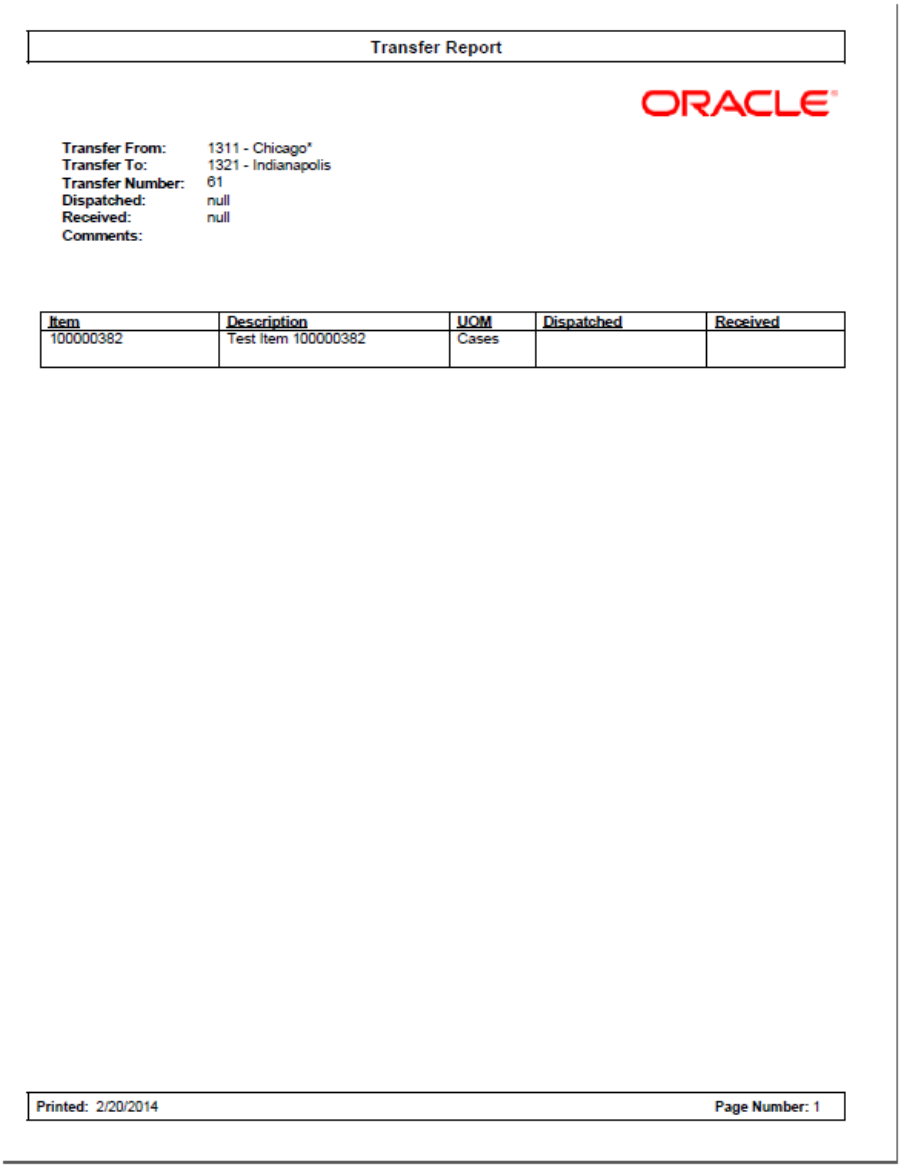


***Figure 6–24 TransferReport***



Transfer Report

ORACLE

**Transfer From:** 1311 - Chicago*
**Transfer To:** 1321 - Indianapolis
**Transfer Number:** 61
**Dispatched:** null
**Received:** null
**Comments:**

| Item | Description | UOM | Dispatched | Received |
|---|---|---|---|---|
| 100000382 | Test Item 100000382 | Cases | | |

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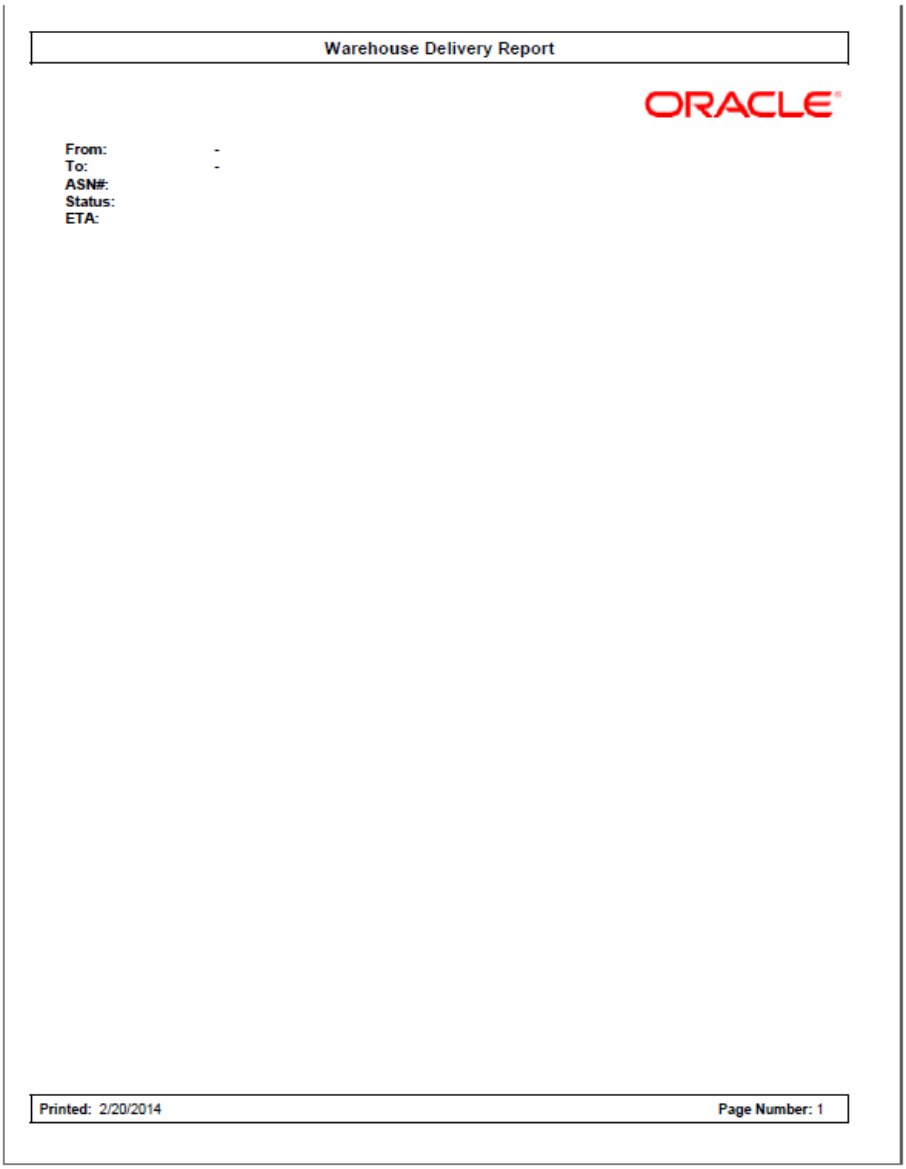
*Figure 6–25 WarehouseDeliveryReport*




## Configuring a Report Printer in SIM

To configure a report printer in SIM, go to Admin > Printer Setup > Printers. A screen opens, displaying a list of retail store printers. Users can add, delete, and edit printers for the user's store.

## Uploading Reports

The directory sim/bip_reports holds all SIM reports. For every report, there would be two folders<report_name>Report.xdm and <report_name>Report.xdo. These folders can be readily imported to the BI publisher (BIP) server. All the reports are pre-configured with datasource name BIP-SIM-DATASOURCE. A datasource with this exact name and appropriate jdbc connection string will have to be set up on the BIP server. In addition, all SIM operational reports need to be uploaded to the specific user's folder that is accessing SIM reports. They may also be placed in the Guest folder to provide shared access.

The .rtf templates may be modified or customized as needed using the BI Publisher Template builder plug-in for Word.

### Setting up the BI Publisher Server

1. Create a user and assign the BI Publisher Scheduler role, in addition to other reporting roles.
2. Create a new jdbc connection with datasource name BIP-SIM-DATASOURCE.
3. If you will print directly to a printer, create the printer in BIP. This printer server name will be used in STORE_PRINTER.NETWORK_ADDRESS in SIM. If a CUPS server is used, this will be set as *<cups_server_name>/<printer_name>* in STORE_PRINTER.NETWORK_ADDRESS.
4. When STORE_PRINTER.NETWORK_ADDRESS is set to **browser** (case insensitive), for any report in SIM, press **Print** to launch the report in a browser instead of printing to a physical printer. This is only possible when using the SIM PC client. This feature is useful in initial stages of implementation, or if it is preferred to view the report in a browser.
5. If STORE_PRINTER.STORE_PRINTER_TYPE_CODE is set to **1** (for postscript printing), the BI Publisher server will output the report in PDF format. If the STORE_PRINTER_TYPE_CODE is set to **2** (for ticket printing), the BI Publisher server will output the report in raw XML format (also known as DATA format in BI Publisher). This is to enable printing to a label printer, like Zebra printer, using a Custom Filter in BI Publisher.

**Printing Labels and Tickets on a Label Printer** This release of SIM was tested for printing labels and tickets on a Zebra label and ticket printer. This is achieved by using ZebraLink Enterprise Connector (ZEC) for Oracle BI Publisher. ZEC intercepts raw XML data coming from Oracle BI Publisher and applies a ZPL (Zebra Programming Language) template to create a ZPL stream understood by Zebra printers.

For testing, BI Publisher was configured to output reports in raw XML format, which was redirected to ZEC to print to Zebra printer. ZEC works with a wide range of Zebra printers.

### Setting up SIM

Select the Reporting topic on the SIM System Admin Config screen. The following options need to be set up:

***Table 6–2 Setting Up SIM Reports***

| Option | Value |
|---|---|
| Reporting Tool URL | *http://<bip_host>:<bip_port>/<bip_deployment>*. This URL is used as the reference to the BIP deployment for printing reports and viewing reports from the SIM PC client in a browser. |

**Notes:** *<BIP_REPORTS_USER>* is the reports user that has been created in BI Publisher server to access SIM reports.

### UDA Print Setup

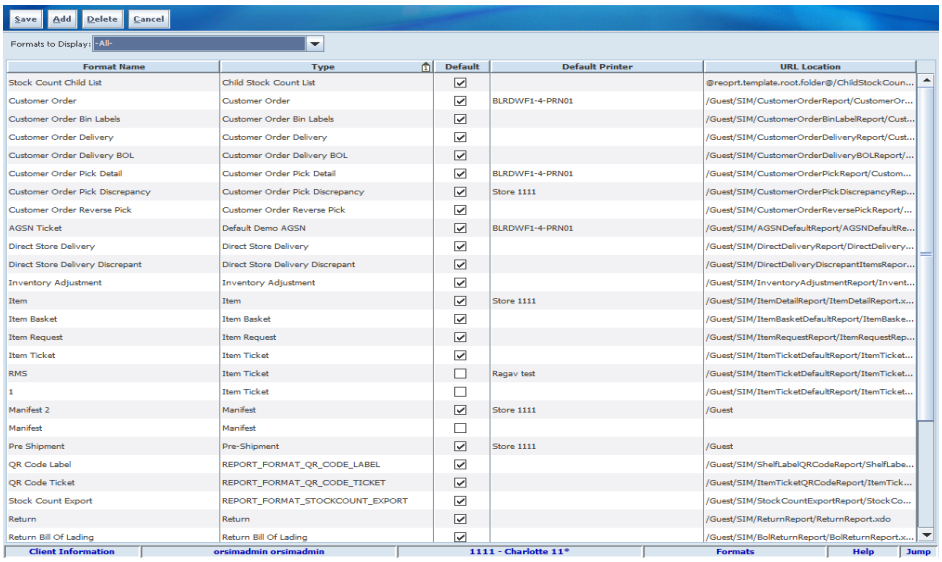
Go to Admin > Printer Setup > UDA Print Setup.

If the UDA is defined on this screen, then when an item UDA is changed, the item UDA is sent to ticketing for a label, ticket or both, based upon definition on this screen.

## Setting up Report Formats in SIM

Report Formats are configured in SIM through **Admin> Printer Setup > Formats** screen. See the *Oracle Retail Store Inventory Management User Guide* to add/modify/delete report formats. Multiple formats can be defined for each report type. For a report type, the formats screen enables the user to assign at least one format as the default format.

***Figure 6–26 Report Formats Screen***




After the SIM reports are uploaded to BI Publisher, the URL location for each report type must be set as follows:

***Table 6–3 Report URL Locations***

| Type | URL Location |
|---|---|
| Child Stock Count List | @reoprt.template.root.folder@/ChildStockCountList All Loc |
| Customer Order Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/CustomerOrderReport/CustomerOrderReport.xdo |
| Customer Order Bin Label Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/CustomerOrderBinLabelReport/CustomerOrderBinLabel Report.xdo |
| Customer Order Delivery Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/CustomerOrderDeliveryReport/CustomerOrderDelivery Report.xdo |
| Customer Order Delivery BOL Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/CustomerOrderDeliveryBOLReport/CustomerOrderDeli veryBOLReport.xdo |
| Customer Order Pick Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/CustomerOrderPickReport/CustomerOrderPickReport.x do |
| Customer Order Pick Discrepancy Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/CustomerOrderPickDiscrepancyReport/CustomerOrder PickDiscrepancyReport.xdo |

***Table 6–3 (Cont.) Report URL Locations***

| Type | URL Location |
|---|---|
| Customer Order Reverse Pick Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/CustomerOrderReversePickReport/CustomerOrderReversePickReport.xdo |
| AGSN Default Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/AGSNDefaultReport/AGSNDefaultReport.xdo |
| Direct Delivery Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/DirectDeliveryReport/DirectDeliveryReport.xdo |
| Direct Delivery Discrepant Items Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/DirectDeliveryDiscrepantItemsReport/DirectDeliveryDiscrepantItemsReport.xdo |
| Inventory Adjustment Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/InventoryAdjustmentReport/InventoryAdjustmentReport.xdo |
| Item Detail Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/ItemDetailReport/ItemDetailReport.xdo |
| Item Basket Default Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/ItemBasketDefaultReport/ItemBasketDefaultReport.xdo |
| Item Request Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/ItemRequestReport/ItemRequestReport.xdo |
| Item Ticket Default Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/ItemTicketDefaultReport/ItemTicketDefaultReport.xdo |
| Shelf Label QR Code Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/ShelfLabelQRCodeReport/ShelfLabelQRCodeReport.xdo |
| Item Ticket QR Code Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/ItemTicketQRCodeReport/ItemTicketQRCodeReport.xdo |
| Stock Count Export Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/StockCountExportReport/StockCountExportReport.xdo |
| Return Report | <BIP_SIM_REPORTS_FOLDER>/SIM/ReturnReport/ReturnReport.xdo |
| Bol Return Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/BolReturnReport/BolReturnReport.xdo |
| Shelf Label Default Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/ShelfLabelDefaultReport/ShelfLabelDefaultReport.xdo |
| Shelf Replenishment Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/ShelfReplenishmentReport/ShelfReplenishmentReport.xdo |
| Stock Count Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/StockCountReport/StockCountReport.xdo |
| Stock Count Rejected Item Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/StockCountRejectedItemReport/StockCountRejectedItemReport.xdo |
| Store Order Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/StoreOrderReport/StoreOrderReport.xdo |
| Transfer Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/TransferReport/TransferReport.xdo |
| Bol Transfer Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/BolTransferReport/BolTransferReport.xdo |
| Warehouse Delivery Report | <BIP_SIM_REPORTS_ FOLDER>/SIM/WarehouseDeliveryReport/WarehouseDeliveryReport.xdo |

**Note:** *<BIP_SIM_REPORTS_FOLDER>* is the folder where SIM reports have been uploaded on the BI Publisher server. For example, if SIM reports have been uploaded to the Guest folder, the folder is **/Guest**.

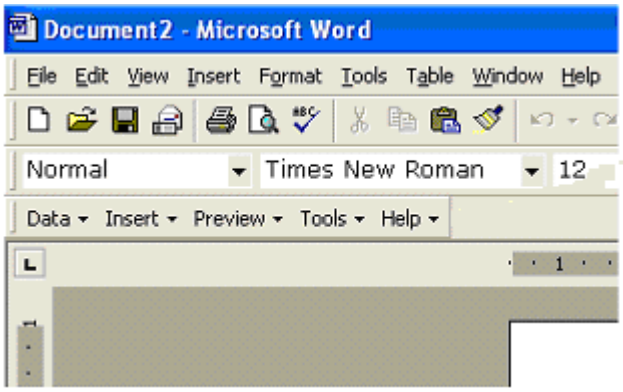
## SIM Reports Internationalization

Create a translation (XLIFF) file. For different supported locales, a separate XLIFF file is provided to the BI Publisher. During run time, BI Publisher picks up the default template (RTF) file and the corresponding XLIFF (xlf) file.

Do the following to create an XLIFF file:

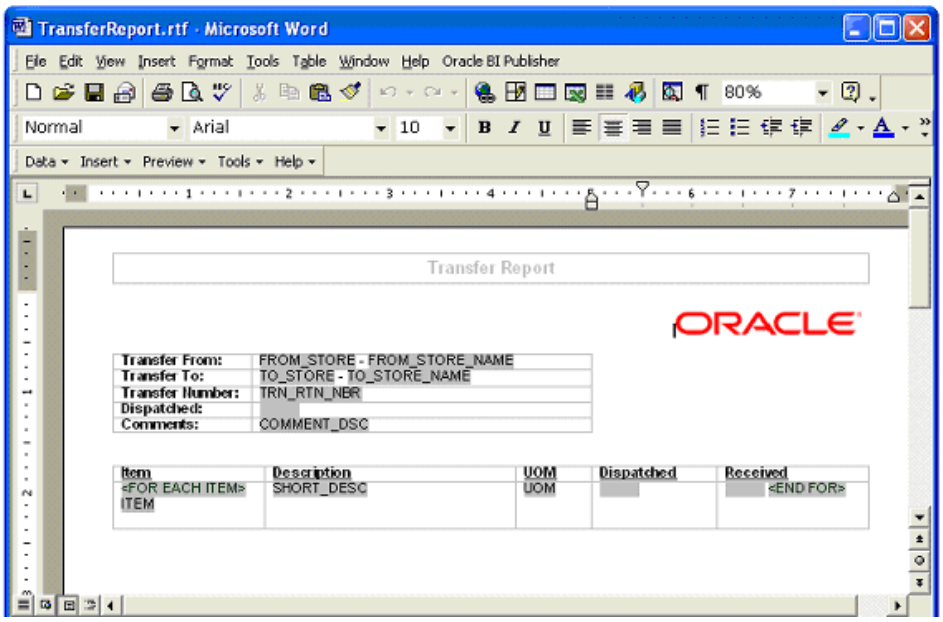
1. Install Oracle BI Publisher Desktop. You will see the following options in Microsoft Word:
   - Data
   - Insert
   - Preview
   - Tools
   - Help

***Figure 6–27 Oracle BI Publisher Desktop Options in Word***



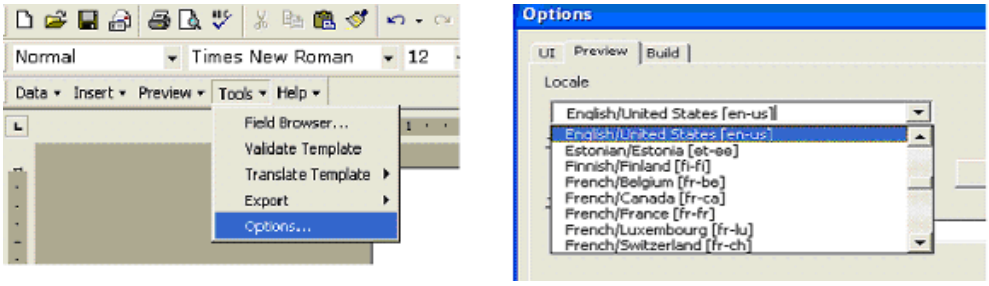

2. Open any existing template in Word, for example, TransferReport.rtf.

*Figure 6–28 TransferReport.rtf*




3. Localize the template by selecting **Tools> Option> Preview>Locale**.

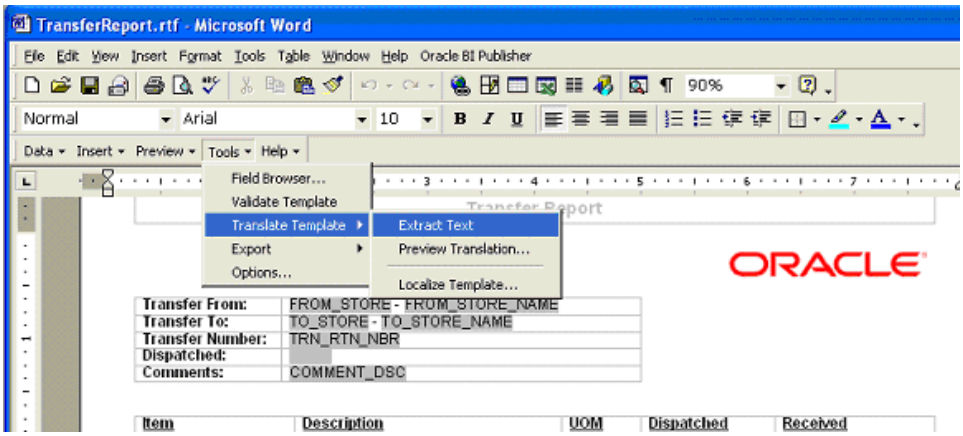
*Figure 6–29 Localize the Template*




This locale name will appear in the **source-language** attribute of the XLIFF file.

4. From the Template Builder menu, select **Tool>Translate Template>Extract Text**.

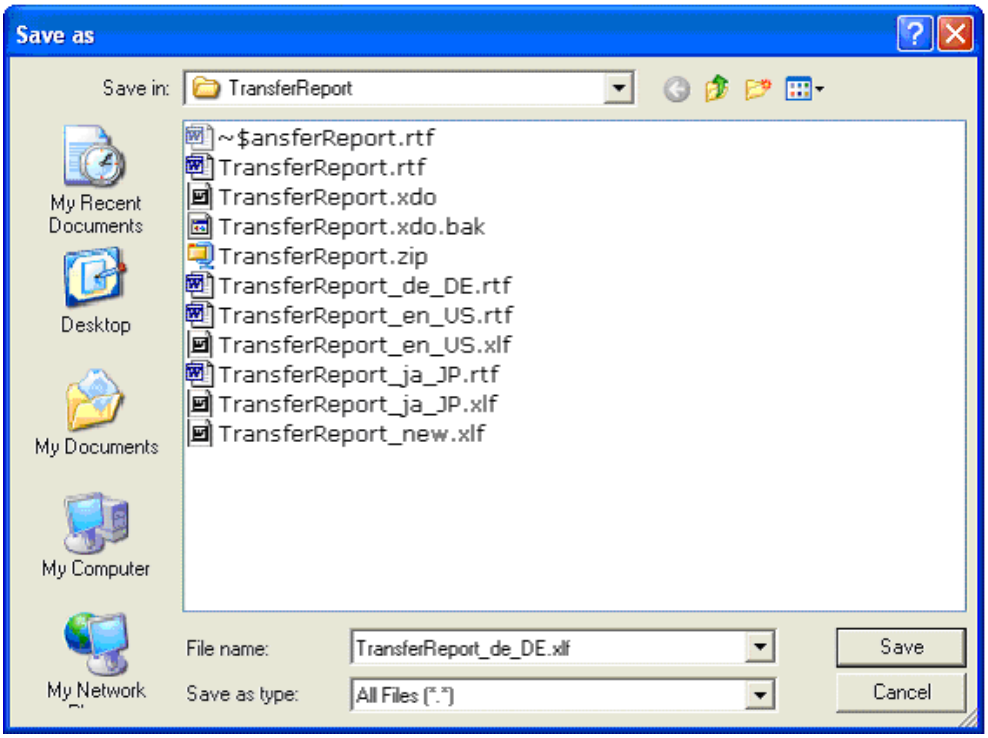
*Figure 6–30 Extract Text for Export to XLIFF File*



Template Builder extracts the translatable strings from the template and exports them to an XLIFF (.xlf) file.

5. Save the XLIFF file.

***Figure 6–31 Save the XLIFF File***




6. The XLIFF file generated by XML Publisher has the following structure:

```
<?xml version = '1.0' encoding = 'utf-8'?>
<xliff version='1.0'>
  <file source-language="en_US" target-language="en_US" datatype="XDO"
     original="orphan.xlf" product-version="orphan.xlf" product-name="">
    <header/>
    <body>
     <trans-unit id="e67afb09" maxbytes="4000" maxwidth="23" size-unit="char"
translate="yes">
       <source>Transfer Report</source>
       <target>Transfer Report IN ENGLISH LANGUAGE</target>
       <note>Text located: header/table</note>
     </trans-unit>
     <trans-unit id="7f65664e" maxbytes="4000" maxwidth="23" size-unit="char"
translate="yes">
       <source xml:space="preserve">Printed: </source>
       <target xml:space="preserve">Printed: </target>
       <note>Text located: footer/table</note>
     </trans-unit>
     <trans-unit id="b230538" maxbytes="4000" maxwidth="26" size-unit="char"
translate="yes">
       <source xml:space="preserve">Page Number: [&amp;0] </source>
       <target xml:space="preserve">Page Number: [&amp;0] </target>
       <note>Text located: footer/table</note>
     </trans-unit>
```

The **<file>** element includes the attributes **source-language** and **target-language**.

The valid value for source-language and target-language is a combination of the language code and country code:

- Language Code: the two-letter ISO language code (in lowercase).
- Territory Code: the two-letter ISO country code (in uppercase).

The **<source>** element contains a translatable string from the template in the source language of the template.

The **<target>** element contains the translated string as per locale.

Different XLIFF (xlf) files can be created by providing translated strings to each <target> element and by specifying a target-language value as per naming convention.

### Template/XLIFF(xlf) File Locale Selection Logic

At run time, BI Publisher picks up the default template provided in *<ReportName>*.xdo, then applies a translation based on the user's selected Report Locale. First, BI Publisher tries to match an XLIFF file named for the locale, and if an exact match on language-territory is not found, then BI Publisher tries to match on language only.

For example, if you have a report for which the base template is TransferReport.rtf, and the locale is Japanese (ja_JP), then the order of preference in descending order is:

- TransferReport_ja_JP.rtf
- TransferReport_ja_JP.xlf
- TransferReport_ja.rtf
- TransferReport_ja.xlf
- TransferReport.rtf

As soon as BI Publisher finds a matched template (RTF)/XLIFF file, it applies the translation and layout for the report.

## Number, Date & Currency Format Support

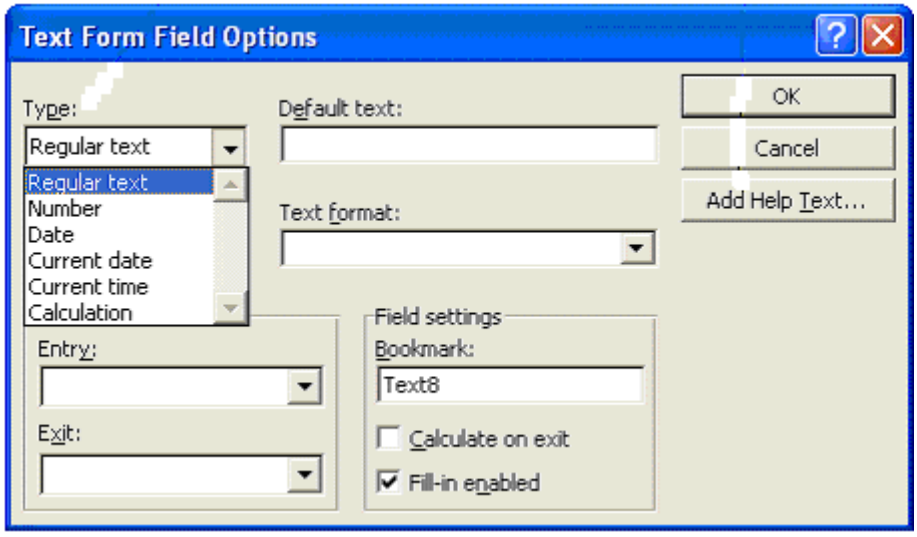
BI Publisher supports number, date and currency formats by specifying BI Publisher format tasks.

1. Open any existing template in Word, for example, TransferReport.rtf.

***Figure 6–32 Template and Placeholder of the XML Tag***

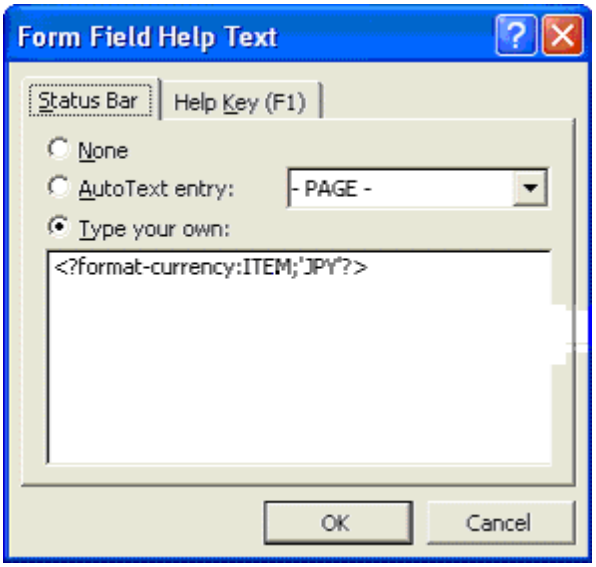
2. Click the **<ITEM>** tag.
3. In the Text Form Field Options window, select **Regular Text** in the Type list.

***Figure 6–33 Text Form Field Options Window***




4. Click **Add Help Text**.
5. In the Form Field Help Text window, enter the formats for number, currency or date.

***Figure 6–34 Form Field Help Text Window***




The following are example formats for number, currency and date:

***Example 6–1 Number Format***

```
<?format-number; 'NUMBER';'999g999D99'?>
```

Where *NUMBER* is the <XML> tag.

***Example 6–2 Currency Format***

```
<?format-currency;CURRENCY;'CurrencyCode'?>
```

Where *CURRENCY* is the <XML> tag, and *Currency Code* should be ISO specific ('JPY','USD').

***Example 6–3 Date Formats***

```
<?format-date:date_string; 'ABSTRACT_FORMAT_MASK';'TIMEZONE'?>
```

or

```
<?format-date-and-calendar:date_string; 'ABSTRACT_FORMAT_MASK';'CALENDAR_
NAME';'TIMEZONE'?>
```

Where:

- TimeZone is optional.
- If no format mask is specified, the abstract format mask "MEDIUM" is used as default.

### Additional Setting for Currency Format

The following format should be specified in the xdo.cfg file.

***Example 6–4 Currency Format in xdo.cfg File***

```
<config version="1.0.0" xmlns="http://xmlns.oracle.com/oxp/config/">
    /*********************************************************************/
   <currency-formats>
      <currency code="USD" mask="999D99L"/>
      <currency code="JPY" mask="999D9999X"/>
    </currency-formats>
   /*********************************************************************/
</config>
```

The xdo.cfg file should be uploaded to BI Publisher Server in zipped format along with the xdo, RTF and XLIFF files. See Uploading Reports for more information.

# Report Engine Functional Specification

It is possible on the PC to print multiple reports at the same time to different individual printers or browser sessions.

The handheld will print the report that has been setup as the default option. If no default printer has been set up, the user is prompted to select the printer to print to.

The reporting functionality incorporates error handling when reports are printed. Error handling allows the user to continue in the event that the printing effort fails.

## Functional Requirements

The following describes the functional requirements.

### SIM Report List

The following reports can be printed:

- Direct Delivery
- Item Request

- Shelf Replenishment
- Customer Order
- Warehouse Delivery
- Returns
- Stock Count/Stock Recount
- Store Order
- Transfers
- Item Report
- Inventory Adjustment
- Item Ticket QR Code Report
- Bill of Lading Report–Returns and Transfers

## Detailed Report Information

The following includes detailed report information.

### Direct Delivery Report

Direct Delivery occurs when the supplier drops off merchandise directly to the retailer's store. This report allows the retailer to print a delivery receipt once all items have been received and the delivery has been finalized.

It consists of the following information broken into three sections:

#### Header

- Receipt Date–Date on which the receipt was created
- Supplier–Supplier for the PO/ASN received
- Store–Store at which goods were received
- PO Number–PO against which goods were received
- Invoice–Invoice number for the receipt
- Invoice Date–Invoice date for the receipt
- Comments

#### Detail

- Item ID–Item number for each line item received
- Item Description–Description of item
- Unit of Measure–Unit of measure for quantity (Cases or Eaches)
- Quantity Ordered–Quantity ordered according to the PO
- Quantity Shipped–Quantity shipped according to the shipment record
- Quantity Received–Quantity actually received
- Unit Cost–Unit cost of the direct delivered item–this column is displayed based on the system parameter (DISPLAY_UNIT_COST_FOR_DIRECT_DELIVERIES) being set

#### Totals

Totals are provided for the Ordered/Shipped and Received quantities.

A section is also provided as a space holder to collect the signatures of the persons involved in the transaction.

### Item Request Report

The item request functionality allows users to request inventory for individual items to manage stock shortages and increased demand. The requests are processed by the RMS using the replenishment parameters and sourcing information setup in RMS. The report allows the store users to print the details of item requests that have been generated.

The report consists of two sections with the following information:

#### Header

- Store–Store ID and name
- Request ID–Request ID referencing the request in the SIM system
- Expiration Date–Date setup to automatically close item requests that have been automatically generated by the product group scheduler, if no action has been taken
- Request Delivery date–Date on which requested product is wanted at the store
- User–User who generated the item request
- Comments–Additional information

#### Detail

- Item–Item number for each line item requested
- Short Description–Description of item
- SOH–Current available on hand inventory for the item
- In Transit–Current inventory in transit to the store
- UOM–Unit of measure for the request
- Pack Size–Pack size for the item
- Quantity–Quantity requested

### Shelf Replenishment Report

The shelf replenishment report is related to the shelf replenishment functionality supported by SIM. Shelf replenishment in SIM facilitates movement of product between the back room and the shop floor. The shelf replenishment lists generated replenishment items and quantities that need to be replenished to the shop floor. The shelf replenishment list report allows the users to print the generated shelf replenishment list for operational purposes (for example, to use as a reference for the actual replenishing of product by the store associate).

The report consists of two sections with the following information:

#### Header

- ID–Shelf replenishment list identifier used to uniquely identify a shelf replenishment list

- Product Group–Description for the shelf replenishment list, based on the product group used to generate the shelf replenishment list
- Create Date/Time–Date/Time when the shelf replenishment list was generated
- User–User who generated the shelf replenishment list
- Status–Current status of the shelf replenishment list
- Quantity–Total quantity to be replenished for the items in the shelf replenishment list. In case of within day shelf replenishment lists, the system only adds items until the quantity to be replenished is equal to the total quantity entered

#### Detail

- SKU–Item number for each line item to be replenished
- Description–Description of item
- Replenish From–Identifies where the product is to be replenished from, could be either the back room or the delivery bay
- UOM–Unit of measure for the item to be replenished
- Pack Size–Pack size for the item to be replenished
- Qty–Quantity of the product to be replenished
- Actual Qty–Actual quantity which was replenished for the product

### Customer Order Report

The Customer Order Report in SIM displays all created picks and will allow the user to print a report, create a new pick, filter pick records and delete a pick.

#### Header

The report header consists of information for the pick and contains the following information:

Pick ID–Unique identifier for the pick record

Status–The status of the customer order

Create Date–The date the customer order was created

Complete Date–The date the customer order was complete

Create User–Name of the user who created the customer order

Complete User–Name of the user who completed the customer order

#### Detail

Item–Unique identifier for the item

Description–Description of item

Primary Loc–The macro sequence location for the item

SIM Customer–The customer order ID number

Bind ID–identifier number for the bind

Fulfillment–ID number that does not need to be unique, the same ID can exist for more than one customer order ID

UOM–The transaction unit of measure for the item on the customer order

Pack Size–The size of the pack

Substitute–Y indicates the line item has substitutes and N indicates the item does not have any substitutes

Adjusted Pick Qty–If cancellations/deliveries have occurred while the user picked, this field will populate with the adjusted pick quantity based on those order updates

Pick Qty–Suggested pick quantity generated by the system

Quantity–Actual amount being picked by the user

Type–Displays the type of pick

Pick Qty–Quantity of the product to be picked

Actual Qty–Actual quantity which was picked for the product

### Warehouse Delivery Report

Warehouse deliveries in SIM refer to products that are sent from a warehouse to the receiving store. Receiving for warehouse deliveries can be either at the shipment, container, or item level. The warehouse delivery report provides the ability to print details of the warehouse delivery shipments.

The report consists of two sections:

#### Header

The report header consists of information for the shipment and contains the following information:

- From–Originating Warehouse location details
- To–Destination store location details
- ASN # - Identifier for the shipment being received
- Status–Status of the warehouse delivery
- ETA–Expected arrival date of the warehouse delivery

#### Detail

The report detail is broken down by containers included in the shipment and contains the following information:

- Container–References the container label for the items that were shipped. A shipment could consist of multiple containers, in which case the report is grouped by containers
- Item–Item number for each line item requested
- Description–Description of item
- UOM–Unit of measure for the item
- Pack size–Pack size for the item
- Expected–Quantity expected in the container
- Received–Quantity actually received
- Damaged–Quantity marked as damaged
- Out of Stock–Indicates weather the product is currently out of stock at the store

## Return Report

The returns functionality allows the store to ship returns either to the warehouse or directly to the vendor. The returns report can be printed as used either as a packing slip for the shipment or as a report for operational records of the store.

The report consists of two sections with the following information:

#### Header

- From–Origin store location and description
- To–Destination location (could be either warehouse or supplier)
- Return Number–Reference number that uniquely identifies the return
- Authorization Number–An authorization number from the vendor referencing the document authorizing the return
- Status/Date–The current status of the return and the date on which the status was changed.
- User–User who created the return
- Not after date–Date after which the return cannot be dispatched (relevant in case of return requests received from the merchandising system)
- Comment–Additional information

#### Detail

- Item–Item number for each line item on the returned
- Description–Description of item
- UOM–Unit of measure for the item
- Pack Size–Pack size for the item
- Qty–Quantity returned
- Reason Code–Reason code for the return

## Stock Count Report

SIM provides the functionality to schedule, perform and authorize stock counts. The stock counts report provides the store users with the ability to print out scheduled stock counts and use the printed list of record results of the counting on the printed list before entering them into the system.

The report consists of two sections with the following information:

#### Header

- Description–Master stock count description
- Date–Scheduled date for the master stock count
- Total Items–Total number of items in the master stock count
- Stock count user–User who last saved/completed the stock count
- Recount user–User who last saved/completed the recount

#### Detail

- Child Count Description–description of the child count appears as a header to the detail section (separate header for each child count). For guided counts, this will be the macro location name along with shopfloor/backroom if sequencing is being used.
- Item–Item number for each line item in the stock count
- Description–Description of item
- UOM–Unit of measure for the item
- Count–Physical count results entered for the stock count

### Stock Count Re-Count Report

SIM allows the store users to create and schedule stock counts that will trigger an automatic recount when the counts fall outside a pre-defined variance. In case a recount is triggered the stock count recount report provides store users the ability to print out the stock counts that need to be recounted and record the results of the recounts.

The report consists of two sections with the following information:

#### Header

- Description–Master stock count description
- Date–Scheduled date for the master stock count
- Total Items–Total number of items in the master stock count
- Stock count user–User who last saved/completed the stock count
- Recount user–User who last saved/completed the recount

#### Detail

- Child Count Description–description of the child count appears as a header to the detail section (separate header for each child count). For guided counts, this will be the macro location name along with shopfloor/backroom if sequencing is being used.
- Item–Item number for each line item in the stock count
- Description–Description of item
- UOM–Unit of measure for the item
- Count–Physical count results entered for the initial stock count
- Recount–Count results for the recount of the stock count

### Store Order Report

Store orders provide the store users the ability to create and approve orders to a supplier or transfer requests to the warehouse directly in the merchandising system. The store orders report allows the users to print out the report of the order that had been created from the store.

The report consists of two sections with the following information:

#### Header

- Store–Store requesting the order
- Store Order Number–Unique reference ID in SIM for the store order

- Status–Current status of the store order. Valid values are **Pending**, **Approved** and **Cancelled**
- Supplier/Warehouse–Source location for the store order
- Creation Date–Date on which the store order was created
- Not before date–Earliest date on which the order can be delivered at the store
- Not after date–Expiration date for the order
- User–User who created the store order
- Comments–Additional information

#### Details

- Item–Item number for each line item in the store order
- Description–Description of item
- UOM–Unit of measure for the item (part of the quantity heading)
- Qty–Requested quantity for the item
- Unit cost–Unit cost of the requested item

### Transfer Report

Transfer functionality allows stores to transfer stock from one store to another within a company. The transfer report allows the store users to print out the details of either a transfer or a transfer request. The printed report can be used either as a dispatch slip for the transfer shipment or for the store records.

The report consists of two sections with the following information:

#### Header

- Transfer from–Origin store location for the transfer
- Transfer to–Destination store location for the transfer
- Transfer number–Unique reference number for the transfer
- Status/Date–Status of the transfer and the date on which the status changed
- Comment–Additional information
- Dispatched–Date on which the transfer was dispatched

#### Details

- Item–Item number for each line item in the transfer
- Description–Description of item
- UOM–Unit of measure for the item
- Dispatched–Quantity of product dispatched
- Received–Quantity of product received

### Item Report

This is an Items report that is printed from the item detail screen and the handheld. The report is based on the view Itemlocstock. This report displays the following information:

- SKU number/UPC
- Description (long or short depending on parameter setting)
- Diffs (if any)
- Merchandise Hierarchy
- Inventory Position (Available, unavailable, SOH, reserved)
- Current price
- Forward looking Delivery information (In transit, on order)

### Inventory Adjustment Report

The inventory adjustment report allows the user to select an item that has been adjusted, and print information out for this. The report could be used to help as reference why inventory is unavailable (for example, loaning out for a demo or photoshoot), and confirmation that someone has ownership of that item.

The report consists of two sections with the following information:

#### Header

- Store–The store ID
- Adjustment Number–Unique inventory adjustment number in SIM
- Create Date–Date of creation
- Complete Date–Date of completion
- User–User requesting inventory adjustment
- Status–Status **Pending** or **Completed**
- Comments–Comments, if any

#### Details

- Item–Item number
- Item Description–Item description
- UOM–Unit of measure
- Pack Size–Pack size
- Quantity–Quantity adjusted
- Reason–Inventory adjustment reason

### Item Ticket QR Code Report

Item Ticket QR Code Report allows the users to create Item Ticket containing the QR code image. BI publisher connects to the Image Server and loads the image at the run time.

The report consists of the following information:

#### Detail

- Item Description–Description of the item.
- Item_ID–Item number for which Item Ticket is generated.
- Price–The Label price for the item.

- Country of Manufacture–Country of manufacture of the item.

# Bill of Lading Report

SIM users can print the Bill of Lading. The printed Bill of Lading displays the status of the Bill of Lading through the appearance or absence of watermarks on the Bill of Lading. A generic template for the Bill of Lading is created and inserted into the format table.

The Bill of Lading report process is designed to allow retailers to create a Bill of Lading report during a Returns or a Transfer dialogue and print it.

The Bill of Lading consists of information that identifies the sender, the receiver and the carrier of the goods. It also lists the goods and their quantities that are being shipped. It identifies if the shipment is a result of a return or a transfer.

The process consists of two parts, creating the Bill of Lading and printing the Bill of Lading.

The Bill of Lading creation occurs in two stages. During the first stage, the Bill of Lading is automatically created when a shipment is created and saved. During the second stage, the Bill of Lading is updated when the retailer adds additional information to the transaction for the purpose of the Bill of Lading report such as requested pickup date, change of destination address, carrier name and address and change of motive for the shipment. Detailed information for a Return or Transfer such as the quantity being shipped or the items being shipped can be modified at any time prior to the dispatching of a shipment. The Bill of Lading is updated to reflect these changes.

The second part of the process occurs when the retailer prints the Bill of Lading. The Bill of Lading can be printed at anytime during the creation of a transfer or return. It is printed from the Return List screen or the Transfer List screen. It can be printed after the Return or Transfer is canceled (status = **canceled**) or after the transfer is dispatched. Each of these scenarios results in a variation of the Bill of Lading report. For example, if a Bill of Lading is printed prior to dispatching, the Bill of Lading will have a watermark across the page that reads **DRAFT**.

If the Bill of Lading is printed after dispatching it will have no watermark on it. If the Bill of Lading is printed after the Transfer or Return has been deleted (status = **canceled**), the Bill of Lading will have a watermark across the page that reads **Canceled**.

## Printing the Return Bill of Lading

Print the Bill of Lading from the Return List screen.

The default filter for the Return List screen will be changed to include displaying dispatched returns with the current session.

1. If the return is in the In Progress state, the Bill of Lading prints with the watermark **DRAFT** on each page of the Bill of Lading
2. If the return has been dispatched and it no longer appears on the List screen. use the filter to display the dispatched return.

   The Bill of Lading prints without any watermarks.
3. If the return has been cancelled, use the filter to display the cancelled return.

   The Bill of Lading will print with the watermark **CANCELED** on each page of the Bill of Lading.

## Printing the Transfer Bill of Lading

The Bill of Lading can be printed from the Transfer List screen. If the Transfer does not appear on the List Screen, the filter must be used to display the Transfer.

1. If the transfer is in the In Progress state, the Bill of Lading prints with the watermark **DRAFT** on each page of the Bill of Lading.
2. If the transfer is in the Dispatched state, the Bill of Lading prints without any watermarks.
3. If the transfer has been cancelled, the Bill of Lading prints with the watermark **CANCELED** on each page of the Bill of Lading.

# 7

# Internationalization

Internationalization is the process of creating software that can be translated easily. Changes to the code are not specific to any particular market. SIM has been internationalized to support multiple languages.

This section describes configuration settings and features of the software that ensure that the base application can handle multiple languages.

## Translation

Translation is the process of interpreting and adapting text from one language into another. Although the code itself is not translated, components of the application that are translated may include the following, among others:

- Graphical user interface (GUI)
- Error messages

The following components are not usually translated:

- Documentation (Online Help, Release Notes, Installation Guide, User Guide, Operations Guide)
- Batch programs and messages
- Log files
- Configuration Tools
- Reports
- Demonstration data
- Training Materials

The user interface for SIM has been translated into:

- Chinese (Simplified)
- Chinese (Traditional)
- Croatian
- Dutch
- French
- German
- Greek
- Hungarian

- Italian
- Japanese
- Korean
- Polish
- Portuguese (Brazilian)
- Russian
- Spanish
- Swedish
- Turkish

# DAO Layer

The following section describes the DAO layer.

## Tables

Three tables exist in the database to support internationalization: TRANSLATION_LOCALE, TRANSLATION_KEY and TRANSLATION_DETAIL. Details about these tables can be found in the SIM Data Model documentation. The last remaining table used in the process is the SECURITY_USER table. The LANGUAGE and COUNTRY columns are used to determine the country and language of the employee that logs in. Alternatively, the locale information for an employee can be filled in from an LDAP connection. The employee's locale is matched with the TRANSLATION_LOCALE table to retrieve translation information.

## Loading Data

Data load scripts populate the TRANSLATION_LOCALE table on installation. Upon data load, one record is created in the TRANSLATION_DETAIL table for each key in the TRANSLATION_KEY table paired with each locale id in the TRANSLATION_LOCALE table.

## Retrieving Translations

When retrieving translations, the displayable text is first retrieved from the TRANSLATION_DETAIL table for the locale and key involved. If this value is missing or the DETAIL_VALUE column is empty, then the KEY value is returned from the TRANSLATION_KEY table as both the key and the value.

When retrieving translations for a locale, the detail value is read from the TRANSLATION_DETAIL table for the language (with country and variant set to null). If a country exists in the locale, the country information is read from the DETAIL table and its values replace those read for the language. If a variant exists, the variant information is read from the DETAIL table and its values replace those of the language and country. Of course, this only occurs if an actual translation is found at the country and variant level (it will not suddenly null out the language value).

# Types of Internationalization

The following section describes the types of internationalization.

## Logging

Service layer error message logging does not attempt to translate the information at this time.

## Rules

The MessageText parameter passed into the RulesInfo constructor within a Rule class is the language key used for translation. Messages from failed rule execution are translated.

***Example 7–1 ItemMustBeSellableRule***

```
public final class ItemMustBeSellableRule extends SimRule {
private static final RulesInfo RULE_FAILED
= new RulesInfo(ItemMessageText.ITEM_NOT_SELLABLE);
```

## PC UI Labels and Titles

Everywhere within the entire SIM Swing framework that a label or title is used, the translation takes place automatically within the component. All title and label strings are the keys into the translation functionality. Failure to find a translation for the label or title simply returns the label or title itself.

***Example 7–2 ItemLookupPanel***

```
private RTextFieldEditor itemDescriptionEditor = new RTextFieldEditor("Item
Description");
private RIntegerFieldEditor searchLimitEditor = new RIntegerFieldEditor("Item
Description");
```

## Error Messages and Exception

Error messages are long explanations of some validation or event failure that occurred in the system. The text message within the exception is the key into the translation functionality.

When dealing with error messages on the server, there should be no attempt at formatting or translation. Formatting and translation are strictly a client display responsibility. Simply create a business exception assigning the correct message and parameters and throw the error message to the client.

## Dynamic Value Messages in Exceptions

BusinessExceptions are capable of handling dynamic values internally. The constructor that takes parameters uses these parameters to complete the dynamic message string. A very good example is found in the DecimalMask class which is assigned to any editor that edits decimals. It takes the entered value, minimum allowed, and maximum allowed and formats a message. The following example shows how those numbers are placed into a parameter array and passed in the construction of a business exception.

***Example 7–3 Invalid Range Exception***

```
Object[] params = new String[3];
params[0] = LocaleManager.getNumberFormatter().format(amount);
params[1] = LocaleManager.getNumberFormatter().format(minimumValue);
params[2] = LocaleManager.getNumberFormatter().format(maximumValue);
return new BusinessException(CommonMessageText.VALUE_NOT_IN_RANGE, params);
```

## Dates

No work needs to be done by the developer to internationalize dates within the application. Both RDateField and RDateFieldEditor handle all of the logic, the developer simply needs to use a java.util.Date object. All conversion from text to Date and Date to text is handled by these editors. Example 7–4 shows how setDate() and getDate() are called on the editor. The date and calendar are displayed in the language and style of the locale set for the user who has logged on.

***Example 7–4 InventoryAdjustmentFilterDialog***

```
private RDateFieldEditor fromDateEditor = new RDateFieldEditor("From Date");
private RDateFieldEditor toDateEditor = new RDateFieldEditor("To Date");

    public void setFilter(InventoryAdjustmentQueryFilter filter) throws Exception
{
        model.setFilter(filter);

        fromDateEditor.setDate(filter.getFromDate());
        toDateEditor.setDate(filter.getToDate());
// Additional Code
  }

    private void doSearch() throws Exception {
        InventoryAdjustmentQueryFilter filter = model.getFilter();

filter.setDateRange(fromDateEditor.getDateAtStartOfDay(),
toDateEditor.getDateAtEndOfDay());
       filter.setInventoryAdjustmentId(adjustmentEditor.getLongOrNull());
// Additional Code
}
    }
```

When formatting your own dates on PC Client (not through an editor), use the LocaleManager object, which has several methods for formatting dates. This automatically uses the currently assigned locale.

Another way to format dates is by using the DateMask, which allows the developer to assign a format type before formatting the date. DateMask can be used on any visual component that takes a mask. DateDisplayer formats a Date only in the SHORT format, but can used on any visual component that takes a displayer.

There are four dates allowed within the system following a standard java convention: SHORT, MEDIUM, LONG and FULL. All RDateFieldEditors within the application are assigned the SHORT format. In addition, the format values for each of the date formats will be standard JAVA format sequences by default. These default values can be overridden in the Date.cfg file by defining the JAVA format sequence to use for the date format type.

The Date.cfg file keys begin with the 2-character language and country code for the locale to be formatted. This is followed by the .dateType to be formatted. The format value must be in standard java convention. firstDayOfWeek determines the first day of week to be displayed on calendars. wirelessInput is the entry parser of handheld date entry fields. wirelessOutput is the date formatting of handheld date entry fields. wirelessDisplay is for handheld date display only.

***Example 7–5 Date.cfg***

```
# ENGLISH - AUSTRALIAN
#enAU.firstDayOfWeek=1
```

```
#enAU.entryDate=d/MM/yy
#enAU.shortDate=d/MM/yy
#enAU.mediumDate=d/MM/yyyy
#enAU.longDate=d MMMM yyyy
#enAU.fullDate=EEEE, d MMMM yyyy
enAU.monthPattern=MM-dd
enAU.wirelessInput=dd-MM-yy,ddMMyy
enAU.wirelessOutput=dd-MM-yy
enAU.wirelessDisplay=dd-mm-yy
enAU
```

## Money

SimMoney is the data object that represents money within the system. Currency is a standard JAVA object that represents the type of money being represented. A Money object consists of a BigDecimal amount and a String currencyCode (though only Currency can set in the constructor). This is because once a money object is created, changing its currency would invalidate any amounts it represented. SIM does not handle currency conversion.

SimMoney is very similar to Date in that the RMoneyFieldEditor handles all of the internationalization for the user. RMoneyFieldEditor edits a Locale, Currency and BigDecimal in a generic fashion. The SimMoneyFieldEditor is a subclass that edits the SimMoney field directly. The following example demonstrates using the SimMoneyFieldEditor.

> **Note:** Currency is handled separately from Locale by the editor. Currency describes the type of money being displayed while Locale indicates the desired language display format for the currency.

***Example 7–6 ItemTicketDetailPanel***

```
    private SimMoneyFieldEditor overridePriceEditor = new
SimMoneyFieldEditor("Override Ticket Price");
   private void loadEditorInformation(ItemTicket itemTicket) throws Exception {

            overridePriceEditor.setMoney(itemTicket.getOverridePrice());

// Code To load rest of information
}

    private void doPriceModified() {
        try {

model.getItemTicket().setOverridePrice(overridePriceEditor.getMoney());
        } catch (BusinessException buException) {
            // Deal With Exceptions
        }
    }
```

# Wireless Internationalization

Internationalization is handled by different approaches based on where in the Wireless code the translation is needed.

## Forms

In the xml files that define the handheld forms, the display of labels is usually surrounded with a $[ ] indicator. In the Form<name>.java classes, the text within the brackets is wrapped by an AppGlobal.getString() call which translates the text.

***Example 7–7 Screen_ContainerLookupScreen.xml***

```
<Screen name="ContainerLookupDetail">
  <LogicalScreen>
    <field name="containerId" type="string" length="21"/>
    // More Field Names…
    <field name="asnNumber" type="string" length="21"/>
  </LogicalScreen>

  <PhysicalScreens deviceclass="dnw">
    <PhysicalScreen seq="0">
    <label y="0" x="0" width="21" height="1" style=".heading1">
         $[Lookup Results]</label>
    <label y="2" x="0" width="11" height="1" >
         $[Container]$[wireless.delimiter]</label>
 <label y="2" x="11" width="21" height="1" name="containerId"
         field="containerId"/>
 <label y="3" x="0" width="8" height="1" >
         $[Status]$[wireless.delimiter]</label>
     // More labels…
     <label y="12" x="13" width="21" height="1" name="totalCases"
         field="totalCases" />

     <cmdkey key="&exit;" y="16" x="0" height = "0" width="0"
         name="return" action="callMethod" target="doExit"/>
  </PhysicalScreen>
  </PhysicalScreens>
</Screen>
```

***Example 7–8 Form_dnw_ContainerLookupDetail_0.java***

```
 public Form_dnw_ContainerLookupDetail_0(String id, EventHandler_
ContainerLookupDetail handler)
   throws WaveLinkError {
  super(id, false, handler);

  add(new RFPrintLabel(wlio, AppGlobal.getString("Container") +
      AppGlobal.getString("wireless.delimiter"), 0, 2, 11, 1, termWidth));
  add(new RFPrintLabel(wlio, AppGlobal.getString("Status") +
      AppGlobal.getString("wireless.delimiter"), 0, 3, 8, 1, termWidth));
```

## EventHandlers

Every event handler extends from SimEventHandler, which contains numerous methods to assist in formatting and retrieving information in an internationalized manner. These helper methods in the superclass should always be used to perform these types of tasks when coding event handlers.

Key methods include:

**SetFormDate()**
Formats a date for the locale and country and places it in the form.

**SetFormInteger()**
Formats an integer for the locale and places it in the form.

**SetFormDecimal()**
Formats a decimal for the locale and places it in the form.

**SetFormQuantity()**
Formats a quantity for the locale and places it in the form.

**GetText()**
Retrieves the translation of the text.

**GetLabel()**
Retrieves the translation of the text followed by the label delimiter

**GetMessage()**
Retrieves the translation of the message

**GetFormInteger()**
Retrieves entered text as an integer

**GetFormDecimal()**
Retrieves entered text as a decimal

**GetFormQuantity()**
Retrieves entered text as a quantity

**HandleException()**
Handles displaying an exception (translating the message)

Here are some examples of standard eventhandler code using these internationalization methods. In the first example, we are translating the label **Select PO From**.

***Example 7–9 EventHandler_DirectDeliverySelectPO***

```
protected void onFormOpen() {
  try {
    setFormData(FIELD_INSTRUCTIONS, getLabel("Select PO From"));
    setFormData(FIELD_SUPPLIER,
        DirectDeliveryWirelessUtility.getContext().getSource().getName());
    // Some Code
  } catch (Exception e) {
    handleException(e);
  }
}
```

***Example 7–10 EventHandler_ContainerLookupDetail***

```
EventHandler_ContainerLookupDetail
    protected void onFormOpen() {
        try {
            LogService.debug(this, this.getClass().getSimpleName() +
".onFormOpen()");
            ShipmentCartonVO cartonVO = (ShipmentCartonVO)
SimWirelessRepository.getValue(ContainerWirelessKeys.USER_CONTEXT_CONTAINER);
            SourceVO fromLocation = cartonVO.getFromLocation();

            setFormText("containerId", cartonVO.getCartonId());
            setFormText("status", getText(cartonVO.getStatus().toString()));
```

```
            setFormText("fromLocation", fromLocation.getId() + " " +
fromLocation.getName());
            setFormText("asnNumber", cartonVO.getAsnId());
            setFormDate("eta", cartonVO.getEta());
            setFormDate("receiptDate", cartonVO.getReceiveDate());
            setFormText("receiptTime",
LocaleWirelessUtility.formatTime(cartonVO.getReceiveDate()));
            setFormInteger("totalCases", cartonVO.getNumberOfCasesExpected());
        } catch (Exception e) {
            handleException(e);
        }
    }
```

## <name>WirelessUtility

Every wireless utility class extends from WirelessUtility, which like SimEventHandler, contains numerous methods to assist in formatting and retrieving information in an internationalized manner. These helper methods in the superclass should always be used to perform these types of tasks when coding utility methods. Read the javadoc on WirelessUtility for complete descriptions.

Key methods include:

**GetText()**
Retrieves the translation of the text.

**Alert()**
Handles displaying an alert message (translating the message)

**GetLabel()**
Retrieves the translation of the text followed by the label delimiter

**GetMessage()**
Retrieves the translation of the message

**HandleException()**
Handles displaying an exception (translating the message)

Here is an example of standard utility code using these internationalization methods.

***Example 7–11 StockCountWirelessUtility***

```
    public static String getDescription(StockCount stockCount) {
        StringBuilder buffer = new StringBuilder();
        try {
            if (stockCount.getType() == StockCountType.PROBLEM_LINE) {
                buffer.append(getLabel("wireless.problemLineABBV"));
            }
            String text = stockCount.getCountDescription().trim();
            int index = text.lastIndexOf("(");
            if (index < 0) {
                buffer.append(text);
            } else {
                buffer.append(text.substring(index));
                buffer.append(StringConstants.SPACE);
                buffer.append(text.substring(0, index).trim());
            }
            return buffer.toString();
        } catch (Exception e) {
            return getText("wireless.noDescABBV");
```

```
        }
    }
```

In Example 7–11, business logic is required to create a stock count description. The utility uses the getLabel() and getText() helper methods to guarantee that the text is translated as the description is being built.

## LocaleWirelessUtility

If there are no superclass helper methods available for what you want to accomplish, you can directly use the LocaleWirelessUtility to perform internationalized functions.

### Wireless Labels

Wireless labels have an additional consideration that is not needed on the PC. The width of a wireless form, which is displayed on a handheld device, is very narrow. That means only a small amount of space is allocated to a label. The English labels used as translation keys are defined by the space they take up. Oracle Retail suggests that instead of using a standard English label such as **status** for the key, use **wireless.status** instead, so that it is clear in the GUI administrative screen that the translation being supplied is for the wireless device.

## Handheld Device Configuration for Japanese Display

This white paper explains how to configure the Wavelink Client to display Japanese text.

The following document is available through My Oracle Support (formerly MetaLink). Access My Oracle Support at the following URL:

`https://support.oracle.com`

*Oracle Retail White Paper: Oracle Retail Store Inventory Management Handheld Device Configuration for Japanese Display* **(Doc ID: 601817.1)**

# Brazil-Specific Setup

The business process selected to support SIM in Brazil is based on the logic that no receipt can take place until a Nota Fiscal (NF) has been confirmed at the receiving store. A Nota Fiscal document is similar to an invoice or bill of lading (BOL), but specific to Brazil. It contains quantities, cost, taxes, to and from location information.

SIM does not have specific Brazil indicators, but rather many specialized system options and security permissions allowing for a more flexible deployment. These indicators need to be set in the suggested configuration or ORFM might not function correctly.

## Direct Store Delivery

DSDs in Brazil are not allowed to be started until a Nota Fiscal has been entered. Also, a Nota Fiscal cannot be entered until a PO is created. As such, users should be set up to not allow DSD PO creation nor should they be able to create ASNs in SIM.

If any quantities are added above the expected receipt, the user should remove the physical extra quantities or unexpected items when confirming. The user must scan the extra quantities, and SIM will prompt the user that they should be removed. The unexpected items or overage quantities will be published separately from the expected quantities so ORFM can generate the necessary return documentation.

The following store/system parameters should be set:

- Auto Remove DSD over-receiving – **True**
- Auto remove DSD damaged items – **True**

The following security options for both PC and HH should not be granted:

- Create Direct Delivery
- Review Direct Delivery
- Create new Purchase Order
- Create new ASN

## Internal Deliveries

Warehouse Deliveries and Store to Store Transfer are not allowed to have any discrepancies from the Nota Fiscal. To enforce this process SIM will auto receive the warehouse and transfer deliveries coming from ORFM. This means that no detailed receiving is allowed.

After SIM receives the ASN from the warehouse, or the other store, SIM will get a second ASN notice that will trigger the auto receiving process. This means that users should be prevented from adjusting the transfer of warehouse delivery.

The following store parameters should be set:

- Warehouse Auto Receive – External message
- Store Auto Receive – External message

In addition, all stores should be set up for auto-receiving.

Since no receiving is allowed for warehouse deliveries, only the following security privileges should be granted:

- Access Warehouse Delivery – This enables the user to view the warehouse deliveries, but not make any changes. No other Warehouse delivery privileges should be granted.

Since no receiving is allowed for store deliveries, the following transfer security privileges should not be granted:

- Receive all items on transfer
- Receive all on transfer
- Receive item on transfer
- Complete transfer Receipt
- Receive transfer
- Add item to transfer receipt
- Complete transfer receipt

## Receiver Unit Adjustments

Receiver unit adjustments are not allowed in Brazil, so the following system options need to be set:

- Number of days Received Transfers can be adjusted – **0**
- Number of days received warehouse deliveries can be adjusted – **0**

- Number of days Direct Deliveries can be adjusted – **0**

## Unsupported Processes

### Vendor ASNs

Vendor-created ASNs are not supported, since the only valid receipts that can be made are against the NF.

### Serialization

Because detailed receiving is not supported in Brazil, it is not possible to register or use UINs.

# A

# Appendix: SIM Permissions

Table A–1 describes the permissions supported by SIM.

***Table A–1 SIM Permissions***

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Access Admin | PC | Admin | With this permission, the **Admin** button on the SIM Login screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Auto-Receive Stores | PC | Admin | With this permission, the **Auto-Receive Stores** button on the Store Admin screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Buddy Stores | PC | Admin | With this permission, the **Buddy Store** button on the Store Admin screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Container Lookups | Handheld | Admin | With this permission the Container Lookup menu option on the Lookups menu is displayed.<br>Without this permission the menu option is not displayed. |
| Access Container Lookups | PC | Admin | With this permission, the **Container Lookup** button on the Lookups screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Customize Translations | PC | Admin | With this permission the **Customize Translations** button on the UI Config screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Finisher Lookups | PC | Admin | With this permission, the Finisher Lookup button on the Lookups screen is displayed and enabled.<br>Without this permission the button is not displayed. |
| Access Formats | PC | Admin | With this permission, the **Formats** button on the Setup screen is displayed and enabled.<br>Without this permission, the button is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Access Inventory Adjustment Reason | PC | Admin | With this permission the **Inv. Adj. Reason** button on the Setup screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Inventory Management | Handheld | Admin | With this permission the Inv. Management menu option on the Main menu is displayed.<br>Without this permission the menu option is not displayed. |
| Access Inventory Management | PC | Admin | With this permission, the **Inventory Mgmt** button on the SIM Login screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Item Lookups | Handheld | Admin | With this permission the Item Lookups menu option on the Lookups menu is displayed.<br>Without this permission the menu option is not displayed. |
| Access Item Lookup | PC | Admin | With this permission, the **Item Lookup** button on the Lookups screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Lookups | Handheld | Admin | With this permission the Lookups menu option on the Main menu is displayed.<br>Without this permission the menu option is not displayed. |
| Access Lookup | PC | Admin | With this permission, the **Lookups** button on the SIM Login screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access MPS Staged Messages | PC | Admin | With this permission, the **MPS Staged Messages** button on the Technical Maintenance screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access MPS Worker Types | PC | Admin | With this permission, the **MPS Worker Types** button on the Technical Maintenance screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Printers | PC | Admin | With this permission, the **Printers** button on the Admin > Printer Setup screen is displayed and enabled.<br>Without this permission, the tab is not displayed. |
| Access Product Groups | PC | Admin | With this permission, the **Product Group** button on the Admin screen is displayed and enabled.<br>Without this permission, the button is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Access Product Group Schedules | PC | Admin | With this permission, the **Product Group Schedule** button on the Admin screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Report | PC | Admin | With this permission, the **Reports** button on the SIM Login screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Setup | PC | Admin | With this permission the **Setup** button on the Admin screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Shipping and Receiving | Handheld | Admin | With this permission the Shipping/Receiving menu option on the Main menu is displayed.<br>Without this permission the menu option is not displayed. |
| Access Shipping Receiving | PC | Admin | With this permission, the **Shipping/Receiving** button on the SIM Login screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access SIM Managed Store | PC | Admin | With this permission, the **SIM Managed Stores** button on the SIM Stores screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access SIM Store | PC | Admin | With this permission, the **SIM Stores** button on the Setup screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Store Admin | PC | Admin | With this permission, the **Store Admin** button on the Setup screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Store Defaults Admin | PC | Admin | With this permission, the **Store Defaults Admin** button on the Setup screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Supplier Lookup | Handheld | Admin | With this permission the Supplier Lookup menu option on the Lookups menu is displayed.<br>Without this permission the menu option is not displayed. |
| Access Supplier Lookup | PC | Admin | With this permission, the **Supplier Lookup** button on the Lookups screen is displayed and enabled.It also is required to display the Primary Supplier button on the Item Detail screen.<br>Without this permission, the button is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Access System Admin | PC | Admin | With this permission, the **System Admin** button on the Setup screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Technical Maintenance | PC | Admin | With this permission the **Technical Maintenance** button on the Admin screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Tolerances | PC | Admin | With this permission the **Tolerances** button on the Setup screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Transaction History | PC | Admin | With this permission the **Tran History** button on the Lookups screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access UDAs | Handheld | Admin | With this permission the View UDAs menu option is enabled on the Item Lookup menu.<br>Without this permission, the menu option is not displayed. |
| Access UDAs | PC | Admin | With this permission, the UDA option button on the Item Lookup screen is displayed and enabled.<br>Without this permission, the option button is not displayed.<br>With this permission, the UDA printer/label screen is displayed and enabled.<br>Without this permission the screen is not displayed.<br>With this permission, the UDA Detail button on the Item Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access UI Configuration | PC | Admin | With this permission the **UI Configuration** button on the Technical Maintenance screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Activate Debugging in Client Log | PC | Admin | With this permission, the Repository tab on the Client Status dialog is displayed, and the debug-activated check box on the Stats tab will be enabled.<br>Without this permission, the repository tab is not displayed and the debug-activated check box will be disabled. |
| Add Inventory Adjustment Reason | PC | Admin | With this permission, the **Add** button on the Inventory Adjustment Reason Maintenance screen is displayed and enabled.<br>Without this permission, the button is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Add Return Reasons | PC | Admin | With this permission, the **Add** button on the Return Reason Maintenance screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Create Product Groups | PC | Admin | With this permission, the **Create** button on the Product Group List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Create Product Group Schedules | PC | Admin | With this permission, the **Create** button on the Product Group Schedule List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Create Translations | PC | Admin | With this permission the **Create** button on the Translation Details screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Delete Inventory Adjustment Reason | PC | Admin | With this permission the **Delete** button on the Inventory Adjustment Reason Maintenance screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Delete Product Groups | PC | Admin | With this permission, the **Delete** button on the Product Group List screen with be displayed and enabled.<br>Without this permission, the button is not displayed. If the button is displayed, the user must also have the necessary data permission for the product group the user is attempting to delete. If the user is not authorized for the product group type, **User is not authorized to delete this type of Product Group.** |
| Delete Product Group Schedules | PC | Admin | With this permission, the **Delete** button on the Product Group Schedule List screen is displayed and enabled.<br>Without this permission, the button is not displayed. If the button is displayed, the user must also have the necessary data permission for the product group that is associated to the product group schedule that is attempted to be deleted. If the user is not authorized for the product group type, **User is not authorized to delete this type of Product Group Schedule.** |
| Delete Return Reasons | PC | Admin | With this permission, the **Delete** button on the Return Reason Maintenance screen is displayed and enabled.<br>Without this permission, the button is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Delete Staged Messages | PC | Admin | With this permission the **Delete** button on the MPS Staged Message Lookup screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Display Stock Locator | Handheld | Admin | With this permission the Stock Locator option on the Item Lookup menu is displayed and enabled.<br>Without this permission, the menu option is not displayed. |
| Display Stock Locator | PC | Admin | With this permission, the **Stock Locator** button on the Item Lookup screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Edit Product Groups | PC | Admin | With this permission, when a user double-clicks on an existing Product Group, the Product Group Detail screen will open. If the user also has the correct data permission for the product group type, the screen will open in Edit mode.<br>Without the necessary data permission for the type, the screen will open in View-only mode. The user must also have this permission for each store that is included on the product group. If the user does, then the user can edit the product group; if the user does not, then the screen will open in View-only mode. |
| Edit Product Group Schedules | PC | Admin | With this permission, when a user double-clicks on an existing Product Group Schedule, the Product Group Schedule Detail screen will open. If the user also has the correct data permission for the product group type, the screen will open in Edit mode.<br>Without the necessary data permission for the type, the screen will open in View only mode. The user must also have this permission for each store that is included on the schedule. If the user does, then the user can edit the schedule; if the user does not then the screen will open in View-only mode. |
| Access Customer Details | PC | Customer Order | With this permission, the **Customer** button on the Customer Order Detail screen. This permission is needed to access the customer details such as name, address for a customer order.<br>Without this permission, the button is not displayed. |
| Access Customer Order | PC | Customer Order | With this permission, the Customer Orders menu option on the Cust Ord Mgmt menu is displayed. Without this permission the option is not displayed.<br>With this permission, the Customer Orders menu option on the Item Lookup menu is displayed. Without this permission, the button is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Access Customer Order | PC | Customer Order | With this permission the **Customer Order** button on the Customer Order Management List screen is displayed and enabled. Without this permission, the button is not displayed.<br><br>With this permission, when a user double-clicks on an existing customer order on the Customer Order Management List screen, the Customer Order Detail screen will open.<br><br>Without this permission, when a user double clicks on an existing customer order on the Customer Order Management List screen, the user is not allowed to access the transaction.<br><br>With this permission the **Customer Orders** button on the Item Lookup pop-up search screen is displayed and enabled. Without this permission the tab will be disabled.<br><br>With this permission the **Customer Orders** button on the Item Detail screen is displayed and enabled. Without this permission, the button is not displayed. |
| Access Customer Order Delivery | Handheld | Customer Order | With this permission, the Deliver Cust Order menu option on the Cust Ord Mgmt menu is displayed.<br><br>Without this permission the option is not displayed. |
| Access Customer Order Delivery | PC | Customer Order | With this permission, the **Delivery** button on the Customer Order List screen is displayed and enabled. Without this permission, the button is not displayed.<br><br>With this permission, the **Delivery** button on the Customer Order Detail screen is displayed and enabled. Without this permission, the button is not displayed.<br><br>With this permission, when a user double-clicks on an existing customer order delivery on the Customer Order Management List screen, the Customer Order Detail screen will open.<br><br>Without this permission, when a user double clicks on an existing customer order on the Customer Order Management List screen, the user is not allowed to access the transaction. |
| Access Customer Order Management | Handheld | Customer Order | With this permission, the Customer Order Mgmt menu option on the Main menu is displayed.<br><br>Without this permission the option is not displayed. |
| Access Customer Order Management | PC | Customer Order | With this permission, the **Customer Order Mgmt** button on the SIM Login screen is displayed and enabled.<br><br>Without this permission, the button is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Access Customer Order Pick | Handheld | Customer Order | With this permission, the Customer Order Pick menu option on the Cust Ord Mgmt menu is displayed.<br>Without this permission the option is not displayed. |
| Access Customer Order Pick | PC | Customer Order | With this permission, the **Pick** button on the Customer Order Management List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Customer Order Reverse Pick | PC | Customer Order | With this permission, the **Reverse Pick** button on the Customer Order Detail screen is displayed and enabled. Without this permission, the button is not displayed.<br>With this permission, the **Reverse Pick** button on the Customer Order List screen is displayed and enabled. Without this permission, the button is not displayed.<br>With this permission, when a user double-clicks on an existing customer order reverse pick record on the Customer Order Management List screen, the Customer Order Detail screen will open.<br>Without this permission, when a user double clicks on an existing customer order reverse pick record on the Customer Order Management List screen, the user is not allowed to access the transaction. |
| Cancel Submit Customer Order Delivery | Handheld | Customer Order | With this permission, the Cancel Submit menu option on the Delivery Summary menu is displayed.<br>Without this permission the option is not displayed. |
| Cancel Submit Customer Order Delivery | PC | Customer Order | With this permission, the **Cancel Submit** button on the Customer Order Delivery Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Confirm Customer Order Pick | Handheld | Customer Order | With this permission, the Confirm Now menu option on the Pick Summary menu is displayed.<br>Without this permission the option is not displayed. |
| Confirm Customer Order Pick | PC | Customer Order | With this permission, the **Confirm** button on the Customer Order Pick List Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Confirm Customer Order Reverse Pick | PC | Customer Order | With this permission, the **Confirm** button on the Customer Order Reverse Pick Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Create Customer Order Delivery For Pickup | Handheld | Customer Order | With this permission, the Create Delivery menu option on the Deliver Cust Order menu is displayed. In addition, the option will only be available for orders with a Reservation Type 'Web Orders' and Delivery Type 'Pickup'.<br>Without this permission the option is not displayed. |
| Create Customer Order Delivery For Pickup | PC | Customer Order | With this permission, the **Create** button on the Customer Order Delivery List screen is displayed and enabled. In addition, the button will only be available for orders with a Reservation Type 'Web Orders' and Delivery Type 'Pickup'.<br>Without this permission, the button is not displayed. |
| Create Customer Order Delivery for Shipment | Handheld | Customer Order | With this permission, the Create Delivery menu option on the Deliver Cust Order menu is displayed. In addition, the option will only be available for orders with a Reservation Type 'Web Orders' and Delivery Type 'Shipment'.<br>Without this permission the option is not displayed. |
| Create Customer Order Delivery for Shipment | PC | Customer Order | With this permission, the **Create** button on the Customer Order Delivery List screen is displayed and enabled. In addition, the button will only be available for orders with a Reservation Type 'Web Orders' and Delivery Type 'Shipment'.<br>Without this permission, the button is not displayed. |
| Create Customer Order Pick | Handheld | Customer Order | With this permission, the Create Pick menu option on the Customer Order Pick menu is displayed.<br>Without this permission the option is not displayed. |
| Create Customer Order Pick | PC | Customer Order | With this permission, the **Create** button on the Customer Order Pick List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Create Customer Order Reverse Pick | PC | Customer Order | With this permission, the **Create** button on the Customer Order Reverse Pick List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Delete Customer Order Delivery | Handheld | Customer Order | With this permission, the Delete Delivery menu option on the Delivery Summary screen is displayed.<br>Without this permission the option is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Delete Customer Order Delivery | PC | Customer Order | With this permission, the **Delete** button on the Customer Order Delivery List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Delete Customer Order Pick | Handheld | Customer Order | With this permission, the Delete Pick menu option on the Pick Summary screen is displayed.<br>Without this permission, the option is not displayed. |
| Delete Customer Order Pick | PC | Customer Order | With this permission, the **Delete** button on the Customer Order Pick List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Delete Customer Order Reverse Pick | PC | Customer Order | With this permission, the **Delete** button on the Customer Order Reverse Pick List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Dispatch Customer Order Delivery | Handheld | Customer Order | With this permission, the Dispatch Now menu option on the Delivery Summary screen is displayed.<br>Without this permission, the option is not displayed. |
| Dispatch Customer Order Delivery | PC | Customer Order | With this permission, the **Dispatch** button on the Customer Order Delivery Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Dispatch Incomplete Customer Order Delivery | Handheld | Customer Order | With this permission, when the Dispatch Now has been selected on the Delivery Summary screen and the customer order is incomplete a warning message is displayed to the user and allowed to cancel or continue.<br>Without this permission, when the Dispatch Now has been selected on the Delivery Summary screen when the customer order is incomplete, an error message is displayed to the user and the user cannot continue. |
| Dispatch Incomplete Customer Order Delivery | PC | Customer Order | With this permission, when the **Dispatch** button on the Customer Order Delivery Detail screen has been selected and the customer order is incomplete, a warning message is displayed to the user and allowed to cancel or continue.<br>Without this permission, when the **Dispatch** button has been selected on the Delivery Summary screen when the customer order is incomplete, an error message is displayed to the user and the user cannot continue. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Edit Customer Order BOL | PC | Customer Order | With this permission, the BOL Detail screen will open in Edit mode. In addition, the View Customer Order BOL permission is required to gain access to the screen.<br>Without this permission, the BOL Detail screen is View-only. |
| Edit Customer Order Delivery For Pickup | Handheld | Customer Order | With this permission, the Edit Delivery menu option on the Deliver Cust Order menu is displayed. In addition, the option will only be available for orders with a Reservation Type 'Web Orders' and Delivery Type 'Pickup'.<br>Without this permission, the option is not displayed. |
| Edit Customer Order Delivery For Pickup | PC | Customer Order | With this permission, when a user double-clicks on an existing Customer Order Delivery record, the Customer Order Delivery Detail screen will open. In addition, only the orders with a Reservation Type 'Web Orders' and Delivery Type 'Pickup' will be editable.<br>Without this permission, the screen will open in View-only mode. |
| Edit Customer Order Delivery For Shipment | Handheld | Customer Order | With this permission, the Edit Delivery menu option on the Deliver Cust Order menu is displayed. In addition, the option will only be available for orders with a Reservation Type 'Web Orders' and Delivery Type 'Shipment'.<br>Without this permission, the option is not displayed. |
| Edit Customer Order Delivery For Shipment | PC | Customer Order | With this permission, when a user double-clicks on an existing Customer Order Delivery record, the Customer Order Delivery Detail screen will open. In addition, only the orders with a Reservation Type 'Web Orders' and Delivery Type 'Shipment' will be editable.<br>Without this permission, the screen will open in View-only mode. |
| Edit Customer Order Pick | Handheld | Customer Order | With this permission, the Review Pick menu option on the Pick Summary screen is displayed.<br>Without this permission, the option is not displayed. |
| Edit Customer Order Pick | PC | Customer Order | With this permission, when a user double-clicks on an existing Customer Order Pick record, the Customer Order Pick Detail screen will open in an edit mode.<br>Without this permission, the screen will open in View-only mode. |
| Edit Customer Order Reverse Pick | PC | Customer Order | With this permission, when a user double-clicks on an existing Customer Order Reverse Pick record, the Customer Order Reverse Pick Detail screen will open in edit mode.<br>Without this permission, the screen will open in View-only mode. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Item Substitution For Picking | Handheld | Customer Order | With this permission, the Item Substitution option on the Pick Detail screen is enabled.<br>Without this permission, the option is not displayed. |
| Item Substitution for Picking | PC | Customer Order | With this permission, the **Item Substitution** button on the Customer Order Pick Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Submit Customer Order Delivery | Handheld | Customer Order | With this permission, the Submit menu option on the Delivery Summary screen is displayed.<br>Without this permission, the option is not displayed. |
| Submit Customer Order Delivery | PC | Customer Order | With this permission, the **Submit** button on the Customer Order Delivery Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| View Customer Order BOL | PC | Customer Order | With this permission, the **BOL** button on the Customer Order Delivery Detail screen is displayed and enabled. The BOL Detail screen will open in View-only mode.<br>Without this permission, the button is not displayed. |
| Access Direct Delivery | Handheld | Direct Delivery | With this permission the Direct Delivery menu option on the Shipping/Receiving screen is displayed.<br>Without this permission the menu option is not displayed. |
| Access Direct Delivery | PC | Direct Delivery | With this permission, the **Direct Delivery** button on the Shipping/Receiving screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Purchase Order | PC | Direct Delivery | With this permission, the **Purchase Order** button on the Direct Delivery List screen is displayed and enabled.<br>Without this permission, the button is not dis-played. |
| Access Reject Delivery | Handheld | Direct Delivery | With this permission the Reject Delivery menu option on the Direct Delivery Detail screen is displayed. The menu option is only displayed when applying an ASN to a delivery.<br>Without this permission the menu option is not displayed. |
| Access Reject Delivery | PC | Direct Delivery | With this permission, the **Reject Delivery** button on the Direct Delivery Detail screen is displayed and enable. The button is only displayed when applying an ASN to a delivery.<br>Without this permission, the button is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Add/Edit Items for Direct Delivery | Handheld | Direct Delivery | With this permission, the Add/Edit menu option on the Direct Delivery screen is displayed.<br>Without this permission, the menu option is not displayed. |
| Add Item Direct Delivery | PC | Direct Delivery | With this permission and the Edit Direct Delivery permission, the **Add Item** button on the Direct Delivery Detail screen is displayed and enabled when editing an existing Direct Delivery.<br>Without this permission, the button is not displayed when editing an existing Direct Delivery. This permission does not apply when creating a new direct delivery. The **Add Item** button will always be available when creating a direct delivery. |
| Allow Over Receiving for Direct Delivery | Handheld | Direct Delivery | With this permission, the user is allowed to over-receive quantities for a direct delivery.<br>Without this permission, the user is not allowed to over-receive quantities and the message "Quantity received is larger than expected, reduce the quantity received" is displayed. |
| Allow Over Receiving for Direct Delivery | PC | Direct Delivery | With this permission, the user is allowed to over-receive quantities.<br>Without this permission, the user is not allowed to over-receive quantities and will be prompted when damaged and received quantity is larger than the expected quantity. |
| Allow Receiving Damages for Direct Delivery | Handheld | Direct Delivery | With this permission, the Record Damages menu option on the Direct Delivery screen is displayed.<br>Without this permission, the damaged menu option on the Handheld is not displayed. |
| Allow Receiving Damages for Direct Delivery | PC | Direct DeliveryPrimary Loc | With this permission, the damaged column on the Direct Delivery Detail screen is displayed and enabled. This allows the user to add but not edit damaged items.<br>Without this permission, the damaged column is not displayed. |
| Complete Direct Delivery | Handheld | Direct Delivery | With this permission the Complete Delivery menu option on the Direct Delivery screen is displayed.<br>Without this permission the menu option is not displayed. |
| Confirm Direct Delivery | PC | Direct Delivery | With this permission, the **Confirm** button on the Direct Delivery Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Create Direct Delivery For PO With ASN | Handheld | Direct Delivery | With this permission, the Yes menu option on the screen with the message An open ASN exits for the purchase order. "Would you like to apply the ASN?" is displayed<br>Without this permission, the message "No open ASNs exist" is displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Create Direct Delivery For PO With ASN | PC | Direct Delivery | With this permission, the use **ASN** button on the ASN List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Create Direct Delivery Without ASN | Handheld | Direct Delivery | With this permission, the Yes menu option on the screen with the message "No open purchase orders exist for the item supplier. Would you like to create a new one?" is displayed.<br>Without this permission, the message "No open ASNs exist" is displayed. |
| Create Direct Delivery Without ASN | PC | Direct Delivery | With this permission, the **Create Delivery** button on the Purchase Order Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Create Direct Delivery Without PO | Handheld | Direct Delivery | With this permission, the Yes menu option on the screen with the message "No open purchase orders exist for the item supplier. Would you like to create a new one?" is displayed.<br>Without this permission, the message "No POs can be created for this supplier is displayed." |
| Create Direct Delivery Without PO | PC | Direct Delivery | With this permission, the **Create Without PO** button on the Direct Delivery List screen is displayed and enabled. In addition, the Create PO flag must be enabled for the selected Supplier or system configured to ignore the flag.<br>Without this permission, the button is not displayed. |
| Delete Direct Delivery | Handheld | Direct Delivery | With this permission the Delete Delivery menu option on the Direct Delivery screen is displayed.<br>Without this permission the menu option is not displayed. |
| Delete Item Direct Delivery | PC | Direct Delivery | With this permission, the **Delete** button on the Direct Delivery Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Edit Direct Delivery | PC | Direct Delivery | With this permission, when the user double-clicks on an existing Direct Delivery in the Direct Delivery List screen, the Direct Delivery Detail screen will open in edit mode.<br>Without this permission, the screen will open in view-only mode. |
| Override Supplier Discrepancies | Handheld | Direct Delivery | With this permission, the user can override the supplier discrepancies check during the direct delivery receipt.<br>Without this permission, the message "Quantity received is larger than expected, reduce the quantity received" is displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Override Supplier Discrepancies | PC | Direct Delivery | With this permission, the user can override the supplier discrepancies check during the direct delivery receipt.<br>With this permission, the user can override the supplier discrepancies check during the direct delivery receipt.<br>Without this permission, the message "Quantity received is larger than expected, reduce the quantity received" is displayed. |
| Receive All Direct Delivery | PC | Direct Delivery | With this permission, the **Receive All** button on the Direct Delivery Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Review Direct Delivery | Handheld | Direct Delivery | With this permission, the Review Items menu option on the Direct Delivery screen is displayed.<br>Without this permission the menu option is not displayed. |
| Email Alert - Customer Order Pick Reminder | Server | Email | With this permission, the user will be notified if the pick list has been created but not actioned.<br>Without this permission, the user will not be notified. |
| Email Alert - Customer Order Receipt | Server | Email | With this permission, the user will be notified when customer orders are received.<br>Without this permission, the user will not be notified. |
| Email Alert - Customer Order Reminder | Server | Email | With this permission, the user will be notified when the customer order has not been fulfilled.<br>Without this permission, the user will not be notified. |
| Email Alert - New Customer Order | Server | Email | With this permission, the user will be notified when customer orders are created.<br>Without this permission, the user will not be notified. |
| Email Alert –Return Expiration Approaching | Server | Email | With this permission, the user will be notified if the return expiration date is approaching.<br>Without this permission, the user will not be notified. |
| Email Alert – Transfer Damaged | Server | Email | With this permission, the user will be notified when damaged items are received for a transfer.<br>Without this permission, the user will not be notified. |
| Email Alert – Transfer Dispatched | Server | Email | With this permission, the user will be notified when a transfer is dispatched.<br>Without this permission, the user will not be notified. |
| Email Alert - Transfer Dispatched Overdue | Server | Email | With this permission, the user will be notified when a transfer dispatch is overdue.<br>Without this permission, the user will not be notified. |

***Table A–1 (Cont.) SIM Permissions***

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Email Alert – Transfer Over/Under Received | Server | Email | With this permission, the user will be notified when a transfer has over/under received quantities.<br>Without this permission, the user will not be notified. |
| Email Alert - Transfer Request | Server | Email | With this permission, the user will be notified when a transfer request is created.<br>Without this permission, the user will not be notified. |
| Email Alert – Transfer Request Approved | Server | Email | With this permission, the user will be notified when a transfer request is approved.<br>Without this permission, the user will not be notified. |
| Email Alert – Transfer Request Rejected | Server | Email | With this permission, the user will be notified when a transfer request is rejected.<br>Without this permission, the user will not be notified. |
| Email Alert for Unexpected UIN (Store Changed) | Server | Email | With this permission, the user will be notified when UINs are discovered at a store where they should not be.<br>Without this permission, the user will not be notified. |
| Access Inventory Adjustments | Handheld | Inventory Adjustments | With this permission the Inventory Adjustments menu option on the Inv. Management menu is displayed.<br>Without this permission the menu option is not displayed. |
| Access Inventory Adjustment | PC | Inventory Adjustments | With this permission, the **Inventory Adjustment** button on the Inventory Management screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Complete Inventory Adjustment | Handheld | Inventory Adjustments | With this permission, the Confirm Now menu option on the Inventory Adjustment Summary screen is displayed.<br>Without this permission the menu option is not displayed. The Confirm Later menu option will be available to save the transaction. |
| Complete Inventory Adjustment | PC | Inventory Adjustments | With this permission, the **Confirm** button on the Inventory Adjustment Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. The **Save** button will be enabled to save the transaction. |
| Create Inventory Adjustment | PC | Inventory Adjustments | With this permission, the **Create** button on the Inventory Adjustment List screen is displayed and enabled. The **Copy** button is also enabled with this permission when the user is copying completed adjustments.<br>Without this permission, the button is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Delete Inventory Adjustment | Handheld | Inventory Adjustments | With this permission, the Delete Inv. Adj. menu option on the Inventory Adj. Summary screen is displayed.<br>Without this permission, the menu option is not displayed. |
| Delete Inventory Adjustment | PC | Inventory Adjustments | With this permission, the **Delete** button on the Inventory Adjustment List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Edit Inventory Adjustment | Handheld | Inventory Adjustments | With this permission, the Edit Inv. Adj. menu option in the Inventory Adj. menu is displayed.<br>Without this permission, the menu option is not displayed. |
| Edit Inventory Adjustment | PC | Inventory Adjustments | With this permission, when the user double-clicks on an existing Inventory Adjustment in the Inventory Adjustment List screen, the Inventory Adjustment Detail screen will open in edit mode The **Add Item** button is also displayed and enabled.<br>Without this permission, the screen will open in View-only mode. |
| Access Item Basket | Handheld | Item Basket | With this permission the Item Basket menu option on the Inv. Management menu is displayed.<br>Without this permission the menu option is not displayed. |
| Add Item to Item Basket | Handheld | Item Basket | With this permission the Add Item option on the Item Basket summary menu is displayed.<br>Without this permission the menu option is not displayed. |
| Create Item Basket | Handheld | Item Basket | With this permission the Create Item Basket menu option on the Item Basket menu is displayed.<br>Without this permission the menu option is not displayed. |
| Delete Item Basket | Handheld | Item Basket | With this permission the Delete Item Basket option on the Item Basket summary menu is displayed.<br>Without this permission the menu option is not displayed. |
| Delete Item from Item Basket | Handheld | Item Basket | With this permission the Delete Item option on the Item Basket summary menu is displayed.<br>Without this permission the menu option is not displayed. |
| Print Item Basket | Handheld | Item Basket | With this permission the Print Ticket option on the Item Basket summary is displayed.<br>Without this permission the menu option is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Save Item Basket | Handheld | Item Basket | With this permission the Save Basket option on the Item Basket summary is displayed.<br>Without this permission the menu option is not displayed. |
| View Item Basket | Handheld | Item Basket | With this permission the View Details option on the Item Basket summary is displayed.<br>Without this permission the menu option is not displayed. |
| Access Item Requests | Handheld | Item Requests | With this permission the Item Requests menu option on the Inv. Management menu is displayed.<br>Without this permission the menu option is not displayed. |
| Access Item Requests | PC | Item Requests | With this permission, the **Item Request** button on the Inventory Management screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Add Items to Item Request | PC | Item Requests | With this permission and the Edit Item Requests permission, the **Add Item** button on the Item Request Detail screen is displayed and enabled when editing an existing Item Request.<br>Without this permission, the button is not displayed. This permission does not apply when creating an Item Request. **Add Item** button will always be available when creating. |
| Add or Edit Item For Item Request | Handheld | Item Requests | With this permission, the Edit Item Request menu option on the Item Request menu is displayed. Without this permission, the menu option is not displayed.<br>With this permission, the Add/Edit Item menu option on the Item Requests Summary screen is displayed. Without this permission the menu option is not displayed when editing an Item Request.<br>With this permission, the message "Item is not on the request. Would you like to add it?" and the Yes and No menu options are displayed.<br>Without this permission the message screen is not displayed. This permission does not apply when creating an item request. Users will always be able to add and edit items when creating an item request. |
| Create Item Request | Handheld | Item Requests | With this permission the Create Item Request menu option on the Item Requests menu is displayed.<br>Without this permission the menu option is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Create Item Request | PC | Item Requests | With this permission, the **Create** button on the Item Request List screen is displayed and enabled. The **Add Items** button will also be enabled on the Item Request Detail screen.<br>Without this permission, the button is not displayed. |
| Delete Item Request | Handheld | Item Requests | With this permission the Delete Item Request menu option on the Item Requests menu is displayed.<br>Without this permission the menu option is not displayed. |
| Delete Item Request | PC | Item Requests | With this permission, the **Delete** button on the Item Request List screen is displayed and enabled. Without this permission, the button is not displayed.<br>With this permission, the **Item Remove** button on the Item Request Detail screen is displayed and enabled. Without this permission, the button is not displayed. |
| Edit Item Request | Handheld | Item Requests | With this permission the Edit Item Request menu option on the Item Requests menu is displayed.<br>Without this permission the menu option is not displayed. |
| Edit Item Request | PC | Item Requests | With this permission, when the user double clicks on an existing Item Request in the Item Request List screen, the Item Request Detail screen will open in edit mode.<br>Without this permission, the screen will open in View-only mode. |
| Request Item Request | Handheld | Item Requests | With this permission the Request Item Request menu option on the Item Requests menu is displayed. Without this permission the menu option is not displayed.<br>With this permission the Request Now menu option on the Item Requests Summary screen is displayed. Without this permission the menu option is not displayed. |
| Request Items | PC | Item Requests | With this permission, the **Request** button on the Item Request Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Item Tickets | Handheld | Item Tickets | With this permission the Item Tickets menu option on the Inv. Management menu is displayed.<br>Without this permission the menu option is not displayed. |
| Access Item Ticket | PC | Item Tickets | With this permission, the **Item Tickets** button on the Inventory Management screen is displayed and enabled.<br>Without this permission, the button is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Apply PO to Item Tickets | PC | Item Tickets | With this permission, the **Add PO** button on the Item Tickets List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Create Item Ticket | PC | Item Tickets | With this permission, the **Create** button on the Item Tickets List is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Delete Item Ticket | PC | Item Tickets | With this permission, the **Delete** button on the Item Tickets List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Edit Item Ticket | PC | Item Tickets | With this permission, when the user double clicks on an existing Item Ticket in the Item Ticket List screen, the Item Ticket Detail screen will open in edit mode.<br>Without this permission, the screen will open in View-only mode. |
| Print Item Ticket | PC | Item Tickets | With this permission, the **Print Tickets** button on the Item Tickets List screen is displayed and enabled. Without this permission, the button is not displayed.<br>With this permission, the **Print Tickets** button on the Item Tickets Detail screen is displayed and enabled. Without this permission, the button is not displayed. |
| Update SOH Item Ticket | PC | Item Tickets | With this permission, the **Update SOH** button on the Item Tickets List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Price Changes | PC | Price Changes | With this permission, the **Price Change** button on the Inventory Management screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Create Price Changes | PC | Price Changes | With this permission, the **Create** button on the Price Change List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Print Item Tickets For Price Changes | PC | Price Changes | With this permission, the **Item Tickets** button on the Price Change List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Print Shelf Labels For Price Changes | PC | Price Changes | With this permission, the **Shelf Labels** button on the Price Change List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Access Returns | Handheld | Returns | With this permission the Returns menu option on the Shipping/Receiving menu is displayed.<br>Without this permission the menu option is not displayed. |
| Access Returns | PC | Returns | With this permission, the **Returns** button on the Shipping/Receiving screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Add Items To Returns | PC | Returns | With this permission, the Edit Returns permission and with the corresponding data permission for the source of the return, the **Add Item** button on the Return Detail screen is displayed and enabled.<br>Without this permission, the button will not display. If the user is creating a return, the **Add Item** button will always be available. |
| Add or Edit Items for Return | Handheld | Returns | With this permission and the Edit Returns permission, the Add/Edit Item menu option on the Return Summary screen is displayed.<br>Without this permission the menu option is not displayed. This permission does not apply when creating a return. Users will always be able to add and edit items when creating a return. |
| Cancel Submit Return | Handheld | Returns | With this permission and the return is in Submitted status, the Cancel Submit menu option on the Returns Summary screen is displayed. Without this permission, the menu option is not displayed.<br>With this permission, the message "Are you sure you want to set the return back to pending?" and the Yes and No menu options are displayed. Without this permission, the message is not displayed. |
| Cancel Submit Return | Handheld | Returns | With this permission and the return is in Submitted status, the **Cancel Submit** button on the Returns Detail screen is displayed and enabled. Without this permission, the button is not displayed.<br>With this permission, the message "Are you sure you want to go back to Pending status?" is displayed. Without this permission the message is not displayed. |
| Create or edit return Context field | Handheld | Returns | With this permission and the return is to Warehouse or Finisher the Context type menu options on the Context Type menu are displayed and enabled. Without this permission, the menu is not displayed.<br>With this permission and the Context Type selected is PROM, the user is prompted for the Context Value. Without this permission, the user is not prompted. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Create or edit return Context field | PC | Returns | With this permission, the Context Type dropdown on the Return Detail screen is displayed and enabled. Without this permission, the dropdown is not enabled.<br>With this permission and the Context Type selected is PROM, the Context Value field on the Return Detail screen is displayed and enabled. Without this permission, the field is not enabled. |
| Create Returns | Handheld | Returns | With this permission the Create Return menu option on the Returns menu is displayed.<br>Without this permission the menu option is not displayed. |
| Create Returns | PC | Returns | With this permission, the **Create** button on the Return List Screen is displayed and enabled.<br>Without this permission, the button is not displayed.<br>With this permission, the **Add Item** button on the Return Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Delete Items from Returns | PC | Returns | With this permission, (and the corresponding Edit Returns permission) the **Remove Item** button on the Return Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Delete Returns | Handheld | Returns | With this permission the Delete Return menu option on the Returns menu is displayed.<br>Without this permission the menu option is not displayed. |
| Delete Returns | PC | Returns | With this permission, the **Delete** button on the Return List Screen is displayed and enabled. If the user has the permission, but is not authorized for the source on the return, the message "User is not authorized to delete this Return" is displayed. Without this permission, the button is not displayed. |
| Dispatch Returns | Handheld | Returns | With this permission the Dispatch Return menu option on the Returns menu is displayed. Without this permission the menu option is not displayed.<br>With this permission and dispatch validate store parameter set to 'Ship Direct', the Dispatch Now menu option on the Return Summary screen is displayed, when coming from either Create Return or Edit Return. Without this permission the menu option is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Dispatch Returns | PC | Returns | With this permission, the **Dispatch** button on the Return List Screen is displayed and enabled. If the user is not authorized for the source on the return, the message "User is not authorized to dispatch this Return" is displayed. Without this permission, the button is not displayed.<br>With this permission and the corresponding data permission for the source of the return, the Dispatch button on the Return Detail screen is displayed and enabled. Without this permission, the button is not displayed. |
| Edit Return BOL | PC | Returns | With this permission, the **BOL** button on the Return Detail screen is displayed and enabled.This permission allows the SIM user access to edit a bill of lading associated with a return.<br>Without this permission, the button is not displayed. |
| Edit Returns | Handheld | Returns | With this permission, the Edit Return menu option on the Returns menu is displayed.<br>Without this permission the menu option is not displayed. |
| Edit Return | PC | Returns | With this permission and the corresponding data permission for the source of the return, when the user double-clicks on an existing return in the Return List screen, the Return Detail screen will open in edit mode.<br>Without this permission, the Return Detail screen will open in view-only mode. |
| Submit Return | Handheld | Returns | With this permission and dispatch validate store parameter set to 'Ship Submit', the Submit menu option on the Returns Summary screen is displayed.<br>Without this permission, the menu option is not displayed. |
| Submit Return | PC | Returns | With this permission and dispatch validate store parameter set to 'Ship Submit', the **Submit** button on the Return Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| View Return BOL | PC | Returns | With this permission, the **BOL** button is displayed and enabled. The BOL Detail screen will be view-only.<br>Without this permission, the **BOL** button is not displayed. |
| View Return Details | Handheld | Returns | With this permission the View Details menu option on the Return Summary screen is displayed, when coming from either Create Return or Edit Return. The Return Details will be view-only.<br>Without this permission the menu option is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Access Password Configuration | PC | Security | With this permission, the **Password Configuration** button on the Security menu is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Role Maintenance | PC | Security | With this permission, the **Role Maintenance** button on the Security menu is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Security | PC | Security | With this permission, the **Security** button on the Admin menu is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access User Maintenance | PC | Security | With this permission, the **User Maintenance** button on the Security menu is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Assign Password | PC | Security | With this permission, the **Assign Password** button on the User Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Assign User Role | PC | Security | With this permission, the **Assign Roles** button on the User Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Assign User Store | PC | Security | With this permission, the Assign Stores button on the User Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Create User | PC | Security | With this permission, the Create button on the User List is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Delete Role | PC | Security | With this permission, the **Delete** button on the Role List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Delete User | PC | Security | With this permission, the Delete button on the User List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Edit User | PC | Security | With this permission, when the user double-clicks on an existing user in the User List screen, the User Detail screen will open in edit mode.<br>Without this permission, the User Detail screen will open in view-only mode. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Mass Assign User Role | PC | Security | With this permission, the **Mass Assign Roles** button on the Security menu is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Mass Assign User Store | PC | Security | With this permission, the Mass Assign Stores button on the Security menu is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Sequencing | Handheld | Sequencing | With this permission the Sequencing menu option on the Inv. Management menu is displayed.<br>Without this permission the menu option is not displayed. |
| Access Sequencing | PC | Sequencing | With this permission, the **Sequencing** button on the Inventory Management menu is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Add Item to Location | PC | Sequencing | With this permission, the **Add Item** button on the Micro Sequence Edit screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Add Locations for an Item | PC | Sequencing | With this permission, the **Add Location** button on the Item Locations List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Add Sequencing Locations | PC | Sequencing | With this permission, the **Add Location** button on the Macro Sequence Edit screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Apply Class List to Location | PC | Sequencing | With this permission, the **Apply Class List** button on the Macro Sequence Edit screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Apply Item List to Location | PC | Sequencing | With this permission, the **Apply Item List** button on the Micro Sequence Edit screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Arrange Items Within Location | PC | Sequencing | With this permission, the **Move Up** and **Move Down** buttons on the Micro Sequence Edit screen is displayed and enabled.<br>Without this permission, the button is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Arrange Sequencing Locations | PC | Sequencing | With this permission, the **Move Up** and **Move Down** buttons on the Macro Sequence Edit screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Delete Items from a Location | PC | Sequencing | With this permission, the **Remove Item** button on the Micro Sequence Edit screen is displayed and enabled.<br>Without this permission, this button is not displayed. |
| Delete Locations for an Item | PC | Sequencing | With this permission, the **Remove Item** button on the Item Location List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Delete Sequencing Locations | PC | Sequencing | With this permission, the **Remove Item** button on the Macro Sequence Edit screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Edit Items Within A Location | PC | Sequencing | With this permission, when the user double-clicks on an existing Sequencing Location in the Macro Sequence List screen, the Micro Sequence List screen will open in edit mode. Without this permission, the Micro Sequence List screen will open in view-only mode.<br>With this permission, when the user double-clicks on an existing Item in the Micro Sequence List screen, the Item Location List screen will open in edit mode. Without this permission, the Micro Sequence List screen will open in view-only mode.<br>With this permission, the **Edit Items** button on the Micro Sequence List screen is displayed and enabled. Without this permission, the button is not displayed. |
| Edit Sequencing Locations | PC | Sequencing | With this permission, the **Edit Locations** button on the Macro Sequence List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Sequence Items | Handheld | Sequencing | With this permission the Sequence Item menu option on the Sequencing menu is displayed.<br>Without this permission the menu option is not displayed. |
| Sequence Items Within A Location | Handheld | Sequencing | With this permission the Sequence all items in a location menu option on the Sequencing menu is displayed.<br>Without this permission the menu option is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Access Shelf Replenishment | Handheld | Shelf Replenishment | With this permission the Shelf Replenishment menu option on the Inv. Management menu is displayed.<br>Without this permission the menu option is not displayed. |
| Access Shelf Replenishment | PC | Shelf Replenishment | With this permission, the **Shelf Replenishment** button on the Inventory Management menu is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Action Shelf Replenishment | Handheld | Shelf Replenishment | With this permission the Action Shelf Replen menu option on the Shelf Replenishment menu is displayed.<br>Without this permission the menu option is not displayed. |
| Create Shelf Replenishment | Handheld | Shelf Replenishment | With this permission the Within Day and the End Of Day menu options on the Shelf Replenishment menu is displayed.<br>Without this permission the menu options is not displayed. |
| Create Shelf Replenishment | PC | Shelf Replenishment | With this permission, the **Create** button on the Shelf Replenishment List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Delete Shelf Replenishment | PC | Shelf Replenishment | With this permission, the Delete button on the Shelf Replenishment screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Ad-Hoc Stock Counts | Handheld | Stock Counts | With this permission the Ad Hoc Stock Count menu option on the Stock Counting menu is displayed.<br>Without this permission the menu option is not displayed. |
| Access Stock Counts | Handheld | Stock Counts | With this permission the Stock Counts menu option on the Inv. Management menu is displayed.<br>Without this permission the menu option is not displayed. |
| Access Stock Count | PC | Stock Counts | With this permission, the **Stock Counts** button on the Inventory Management menu is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Amend Stock Count | Handheld | Stock Counts | With this permission, the <amend> option (or Shift-5 function) on the Stock Counting screen is displayed and enabled.<br>Without this permission, the option is not displayed and the Shift-5 function is not available. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Amend Stock Re-Count | Handheld | Stock Counts | With this permission the <amend> option (or Shift-5 function) for stock re-counts is displayed and enabled.<br>Without this permission, the option is not displayed and the Shift-5 function is not available. |
| Authorize Stock Count | PC | Stock Counts | With this permission, the **Authorize** button on the Child Stock Count List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Complete Stock Count | Handheld | Stock Counts | With this permission the Complete Count menu option on the Stock Counting menu is displayed.<br>Without this permission the menu option is not displayed. |
| Complete Stock Count | PC | Stock Counts | With this permission, the **Complete** button on the Child Stock Count List, the Stock Count Detail and the Stock Re-Count Detail Screens is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Confirm Authorization Stock Count | PC | Stock Counts | With this permission, the **Confirm Authorization** button on the Child Stock Count List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Confirm Child Stock Count | PC | Stock Counts | With this permission, the **Confirm Child** button on the Stock Count Authorization screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Count Stock Count | Handheld | Stock Counts | With this permission the Stock Count menu option on the Stock Counting menu is displayed.<br>Without this permission the menu option is not displayed. |
| Create Ad-Hoc Stock Count | Handheld | Stock Counts | With this permission the Create New Count menu option on the Ad-Hoc Stock Count menu is displayed.<br>Without this permission the menu option is not displayed. |
| Delete Stock Count | PC | Stock Counts | With this permission, the **Delete** button on the Stock Count List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Edit Adhoc Stock Count | PC | Stock Counts | With this permission, when the user double-clicks on an existing Ad Hoc Stock Count in the Stock Count List screen, the Child Stock Count List screen will open in edit mode.<br>Without this permission, the Child Stock Count List screen will open in view-only mode. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Edit Unit Amount Stock Count | PC | Stock Counts | With this permission, when the user double clicks on an existing Unit and Amount Stock Count in the Stock Count List screen, the Child Stock Count List screen will open in edit mode.<br>Without this permission, the Child Stock Count List screen will open in view-only mode. |
| Edit Unit Stock Count | PC | Stock Counts | With this permission, when the user double clicks on an existing Unit Stock Count in the Stock Count List screen, the Child Stock Count List screen will open in edit mode.<br>Without this permission, the Child Stock Count List screen will open in view-only mode. |
| Recount Stock Count | Handheld | Stock Counts | With this permission the Stock Re-Count menu option on the Stock Counting menu is displayed.<br>Without this permission the menu option is not displayed. |
| Rejected Item Stock Count | PC | Stock Counts | With this permission the **Rejected Items** button on the Child Stock Count List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Save Child Stock Count | PC | Stock Counts | With this permission, the **Save Child** button on the Stock Count Authorization screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Snapshot Stock Count | PC | Stock Counts | With this permission, the **Take Snapshot** button on the Child Stock Count List screen, the Stock Count Detail and the Stock Re-Count Detail screens is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Update Authorization QuantityStock Count | PC | Stock Counts | With this permission the **Update Auth Qty** button on the Child Stock Count List and the Stock Count Authorization Screens is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Store Order | PC | Store Orders | With this permission, the **Store Orders** button on the Inventory Management screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Add Item Store Order | PC | Store Orders | With this permission and the Edit Store Orders permission, the **Add Item** button on the Store Order Detail screen is displayed and enabled when editing an existing Store Order.<br>Without this permission, the button is not displayed. The **Add Item** button will always be available when creating a Store Order. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Approve Store Order | PC | Store Orders | With this permission, the **Approve** button on the Store Order Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Cancel Item Store Order | PC | Store Orders | With this permission, the **Remove Item** button on the Store Order Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Cancel Store Order | PC | Store Orders | With this permission, the **Delete** button on the Store Orders screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Create Store Order | PC | Store Orders | With this permission, the **Create** button on the Store Orders screen is displayed and enabled. The **Add Item** button the Store Order Detail screen will also be enabled.<br>Without this permission, the button is not displayed. |
| Edit Store Order | PC | Store Orders | With this permission, when the user double-clicks on an existing Store Order in the Store Orders screen, the Store Detail screen will open in edit mode.<br>Without this permission, the Store Order Detail screen will open in view-only mode. |
| Access Templates | PC | Templates | With this permission, the Template button on the Inventory Adjustment List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Apply Templates | Handheld | Templates | With this permission, the Apply Template menu option on the Inventory Adj. menu is displayed.<br>Without this permission, the menu option is not displayed. |
| Apply Templates | PC | Templates | With this permission, the Apply Template button on the Inventory Adjustment Detail screen is displayed and enabled. The template dropdown and multiplier is also enabled.<br>Without this permission, the button is not displayed. |
| Delete Templates | PC | Templates | With this permission, the Delete button on the Template List screen is displayed and enabled.<br>Without this permission, the button is not displayed |
| Access Transfer | PC | Templates | With this permission, the Transfers button on the Shipping/Receiving screen is displayed and enabled.<br>Without this permission, the button is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Access Transfer Context Field | PC | Templates | With this permission, the Context Type dropdown on the Transfer Detail screen is displayed and enabled. Without this permission, the dropdown is not enabled.<br>With this permission and the Context Type selected is PROM, the Context Value field on the Transfer Detail screen is displayed and enabled.<br>Without this permission, the field is not enabled. |
| Access Transfer Request | Handheld | Transfers | With this permission the Create Tsf Request menu option on the Transfer menu is displayed.<br>Without this permission the menu option is not displayed. |
| Access Transfers | Handheld | Transfers | With this permission the Transfers menu option on the Shipping/Receiving screen is displayed.<br>Without this permission the menu option is not displayed. |
| Add Item to Transfer | PC | Transfers | With this permission and the Edit Transfer permission, the **Add Item** button on the Transfer Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. The Add Item button will always be available when creating a transfer. |
| Add Item to Transfer Receipt | PC | Transfers | With this permission and the Receive Transfer permission, the **Add Item** button on the Transfer Detail Screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Add Item to Transfer Request | PC | Transfers | With this permission and the Edit Transfer Request permission, the **Add Item** button on the Transfer Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. The **Add Item** button will always be available when creating a transfer request. |
| Add or Edit Items On Transfer | Handheld | Transfers | With this permission and the Edit Transfer Permission (handheld), the Add/Edit Item menu option on the Transfer Summary screen is displayed.<br>Without this permission the menu option is not displayed. The Add/Edit Item menu option will always be available when creating a transfer. |
| Amend Transfer Receipt | Handheld | Transfers | With this permission, the <Amend> option on the Transfer Summary screen is displayed.<br>Without this permission the option is not displayed. |
| Authorize Transfer Requests | PC | Transfers | With this permission, the **Accept** and **Reject** buttons on the Transfer Detail screen is displayed and enabled.<br>Without this permission, the buttons is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Cancel Submit Transfer | Handheld | Transfers | With this permission, the Cancel Submit menu option on the Transfer Summary screen is displayed.<br>Without this permission, the menu option is not displayed. |
| Cancel Submit Transfer | PC | Transfers | With this permission, the **Cancel Submit** button on the Transfer Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Complete Transfer Receipt | Handheld | Transfers | With this permission, the Confirm Receipt menu option on the Receipt Summary screen is displayed.<br>Without this permission the menu option is not displayed. |
| Confirm Transfer | PC | Transfers | With this permission, the **Confirm** button on the Receive Transfer screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Create Transfer | Handheld | Transfers | With this permission the Create Transfer menu option on the Transfer Menu is displayed.<br>Without this permission the menu option is not displayed. |
| Create Transfer | PC | Transfers | With this permission, the **Create** button on the Transfer List screen is displayed and enabled. The **Add Item** button on the Create Transfer screen will also be enabled.<br>Without this permission, the button is not displayed. |
| Create Transfer Request | Handheld | Transfers | With this permission the Create Tsf Request menu option on the Transfer menu is displayed.<br>Without this permission the menu option is not displayed. |
| Create Transfer Request | PC | Transfers | With this permission, the **Create Request** button on the Transfer List screen is displayed and enabled. The **Add Item** button on the Transfer Detail screen will also be enabled.<br>Without this permission, the button is not displayed. |
| Delete Item From Transfer | PC | Transfers | With this permission, the **Remove Item** button on the Transfer Detail screen is displayed and enabled when Transfer is selected.<br>Without this permission, the button is not displayed. |
| Delete Item From Transfer Request | PC | Transfers | With this permission, the Remove Item button in the Transfer Detail screen is displayed and enabled when Transfer Request is selected.<br>Without this permission, the button is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Delete Items from Transfer | Handheld | Transfers | With this permission the Delete Item menu option on the Transfer Summary screen is displayed.<br>Without this permission the menu option is not displayed. |
| Delete Transfer | Handheld | Transfers | With this permission the Delete Transfer menu option on the Transfer menu is displayed.<br>With this permission the Delete Transfer menu option on the Delete Transfer screen is displayed.<br>Without this permission the menu option is not displayed. |
| Delete Transfer | PC | Transfers | With this permission, the **Delete** button on the Transfer List screen is displayed and enabled. Without this permission the menu option is not displayed.<br>Without this permission, the button is not displayed. |
| Delete Transfer Request | Handheld | Transfers | With this permission the Delete Request menu option on the Request Summary screen is displayed.<br>Without this permission the menu option is not displayed. |
| Dispatch Transfer | Handheld | Transfers | With this permission, the Dispatch Now menu option on the Transfer Summary menu is displayed.<br>Without this permission, the menu option is not displayed. |
| Dispatch Transfer | PC | Transfers | With this permission, the **Dispatch** button on the Transfer Detail screen and the Transfer List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Edit Transfer | Handheld | Transfers | With this permission, the Edit Transfer menu option on the Transfer menu is displayed.<br>Without this permission the menu option is not displayed. |
| Edit Transfer | PC | Transfers | With this permission, when the user double-clicks on an existing Transfer in the Transfer List screen, the Transfer Detail screen will open in edit mode.<br>Without this permission, the Transfer Detail screen will open in view-only mode. |
| Edit Transfer BOL | PC | Transfers | With this permission, when the user clicks the **BOL** button on the Transfer Detail screen, the BOL Detail screen will open in edit mode.<br>Without this permission, the BOL Detail screen will open in view-only mode. |
| Edit Transfer Request | Handheld | Transfers | With this permission the Edit Tsf Request menu option on the Transfer menu is displayed.<br>Without this permission the menu option is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Edit Transfer Requests | PC | Transfers | With this permission, when the user double-clicks on an existing Transfer Request in the Transfer List screen, the Transfer Detail screen will open in edit mode.<br>Without this permission, the Transfer Detail screen will open in view-only mode. |
| Is Context Field Editable | Handheld | Transfers | With this permission, the Context Field menu options on the Request Summary menu are displayed and enabled. Without this permission, the menu is not displayed.<br>With this permission and the Context Type selected is PROM, the user is prompted for the Context Value. Without this permission, the user is not prompted. |
| Receive All Items On Transfer | Handheld | Transfers | With this permission, the Receive All menu option on the Transfer Receiving screen is displayed.<br>Without this permission the menu option is not displayed. |
| Receive All On Transfer | PC | Transfers | With this permission, the **Receive All** button on the Transfer Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Receive Item On Transfer | Handheld | Transfers | With this permission the Receive Item menu option on the Transfer Receiving screen is displayed.<br>Without this permission the menu option is not displayed. |
| Receive Transfer | Handheld | Transfers | With this permission the Receive Transfer menu option on the Transfer menu is displayed.<br>Without this permission the menu option is not displayed. |
| Receive Transfer | PC | Transfers | With this permission, when the user double-clicks on an existing Dispatched Transfer in the Transfer List screen, the Transfer Detail screen will open in edit mode.<br>Without this permission, the Transfer Detail screen will open in view-only mode. |
| Record Transfer Damages | Handheld | Transfers | With this permission the Record Damages menu option on the Receipt Summary screen is displayed.<br>Without this permission the menu option is not displayed. |
| Request A Transfer Request | Handheld | Transfers | With this permission the Request Now menu option on the Transfer Request screen is displayed.<br>Without this permission the menu option is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Request Transfer Request | PC | Transfers | With this permission, the **Request** button on the Transfer Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Submit Transfer | Handheld | Transfers | With this permission, the Submit menu option on the Transfer Summary screen is displayed.<br>Without this permission, the menu option is not displayed. |
| Submit Transfer | PC | Transfers | With this permission, the Submit button on the Transfer Detail screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Transfer Item Review | Handheld | Transfers | With this permission, the Review Item menu option on the Request Summary screen is displayed. Without this permission, the menu option is not displayed.<br>With this permission, the Review Item menu option on the Transfer Summary screen is displayed. Without this permission, the menu option is not displayed. |
| View Details For Transfer | Handheld | Transfers | With this permission the View Details menu option on the Transfer Summary screen is displayed. Without this permission the menu option is not displayed.<br>With this permission the View Details menu option on the Delete Transfer screen is displayed. Without this permission the menu option is not displayed. |
| View Transfer BOL | PC | Transfer | With this permission, when the **BOL** button is clicked, the BOL Detail screen will open in View-only mode.<br>Without this permission, the **BOL** button is not displayed. |
| Access UIN Attributes | PC | UIN | With this permission, the **UIN Attributes** button on the Setup screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access UIN Resolution | PC | UIN | With this permission the **UIN Resolution** button on the Admin screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Create UIN on the Fly | Handheld | UIN | With this permission, when the item scanned is a UIN item, the message "<UIN label> <UIN> does not exist. Do you want to create it?" and the Yes and No menu options are displayed.<br>Without this permission, the message is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Create UIN on the Fly | PC | UIN | With this permission, when the user double-clicks on a UIN quantity field for an UIN item on the Inventory Adjustment Detail screen, the UIN popup capture screen will open in edit mode.<br>Without this permission, the UIN popup capture screen is not displayed. |
| Print UIN Auto Generate Serial Number | Handheld | UIN | With this permission and the UIN type is AGSN, the Print Ticket menu option on the UIN Detail screen is displayed and enabled. Without this permission, the menu option is not displayed.<br>With this permission and the UIN type is AGSN, the Print Ticket menu option on the Item Ticket screen is displayed and enabled. Without this permission, the menu option is not displayed. |
| Print UIN Auto Generated Serial Number | PC | UIN | With this permission and the UIN type is AGSN, the **Print Ticket** button on the UIN Detail screen is displayed and enabled. Without this permission, the button is not displayed.<br>With this permission and the Label type is Auto Generate SN, the **Print Tickets** button on the Item Ticket List/Detail screen is displayed and enabled. Without this permission and the Label type is Auto Generate SN, the button is not displayed. |
| Resolve UIN Exceptions | PC | UIN | With this permission the **Resolve** button on the UIN Resolution List screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Update UIN Status | PC | UIN | With this permission, the Update Status dropdown on the UIN History screen is displayed and enabled.<br>Without this permission, the dropdown is not enabled. |
| View UIN Detail | Handheld | UIN | With this permission, the Serial Number menu option on the Item Lookup screen is displayed.<br>Without this permission, the menu option is not displayed. |
| View UIN Detail | PC | UIN | With this permission the **UIN Detail** button on the Item Lookup screen is displayed and enabled. Without this permission, the button is not displayed.<br>With this permission the UIN Detail tab on the Item Lookup pop-up search screen is displayed and enabled. Without this permission the tab will be disabled. |
| View UIN History | PC | UIN | With this permission, the **View History** button on the UIN Resolution List screen is displayed and enabled. Without this permission, the button is not displayed.<br>With this permission, the **View History** button on the UIN Detail screen is displayed and enabled. Without this permission, the button is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Access Warehouse Delivery | Handheld | Warehouse Delivery | With this permission the Warehouse Delivery menu option on the Shipping/Receiving screen is displayed.<br>Without this permission the menu option is not displayed. |
| Access Warehouse Delivery | PC | Warehouse Delivery | With this permission, the **Warehouse Delivery** button on the Shipping/Receiving screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Access Warehouse Quick Receiving | Handheld | Warehouse Delivery | With this permission the WH Quick Receiving menu option on the Shipping/Receiving menu is displayed.<br>Without this permission the menu option is not displayed. |
| Add Item Warehouse Delivery | PC | Warehouse Delivery | With this permission, the **Add Item** button on the Receive Case screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Allow Receiving Damages for Warehouse Delivery | Handheld | Warehouse Delivery | With this permission, the Record Damages menu option on the Container Summary screen is displayed.<br>Without this permission, the menu option is not displayed. |
| Amend Container | Handheld | Warehouse Delivery | With this permission the Amend menu option on the Identify Container screen is displayed.<br>Without this permission the menu option is not displayed. |
| Amend Warehouse Delivery | Handheld | Warehouse Delivery | With this permission the Amend Delivery menu option on the Delivery Summary screen is displayed.<br>Without this permission the menu option is not displayed. |
| Cancel Warehouse Delivery | Handheld | Warehouse Delivery | With this permission the Cancel Delivery menu option on the Warehouse Delivery screen is displayed.<br>Without this permission the menu option is not displayed. |
| Confirm Warehouse Delivery | Handheld | Warehouse Delivery | With this permission the Confirm Delivery menu option on the Delivery Summary screen is displayed.<br>Without this permission the menu option is not displayed. |
| Confirm Warehouse Delivery | PC | Warehouse Delivery | With this permission, the **Confirm** button on the Receive Container screen is displayed and enabled.<br>Without this permission, the button is not displayed. |

*Table A–1 (Cont.) SIM Permissions*

| Permission | Type | Topic | Usage |
|---|---|---|---|
| Delete Item Warehouse Delivery | PC | Warehouse Delivery | With this permission, the **Remove Item** button on the Receive Case screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Edit Warehouse Delivery | PC | Warehouse Delivery | With this permission, when the user double-clicks on an existing Warehouse Delivery on the Warehouse Delivery List screen, the Warehouse Delivery Detail screen will open in edit mode.<br>Without this permission, the Warehouse Delivery Detail screen will open in view-only mode. |
| Receive All Containers for Warehouse Delivery | Handheld | Warehouse Delivery | With this permission, the Receive All menu option on the Delivery Information screen is displayed.<br>Without this permission the menu option is not displayed. |
| Receive Container Level for Warehouse Delivery | Handheld | Warehouse Delivery | With this permission the Receive Container menu option on the Container Summary screen is displayed. Without this permission the menu option is not displayed.<br>With this permission, the Receive Container menu option on the Delivery Information screen is displayed. Without this permission, the menu option is not displayed. |
| Receive Item Level for Warehouse Delivery | Handheld | Warehouse Delivery | With this permission the Receive Case Level menu option on the Container Summary screen is displayed.<br>Without this permission the menu option is not displayed. |
| Receive Warehouse Delivery | PC | Warehouse Delivery | With this permission, the **Receive** button on the Receive Container screen is displayed and enabled.<br>Without this permission, the button is not displayed. |
| Record Missing Container | Handheld | Warehouse Delivery | With this permission the Record Missing menu option on the Discrepancy Alert screen is displayed.<br>Without this permission the menu option is not displayed. |
| Unreceive Container | Handheld | Warehouse Delivery | With this permission the Un-Receive menu option on the Identify Container screen is displayed.<br>Without this permission the menu option is not displayed. |
| Unreceive Warehouse Delivery | PC | Warehouse Delivery | With this permission, the **Un-Receive** button on the Receive Container screen is displayed and enabled.<br>Without this permission, the button is not displayed. |

# B

# Appendix: LDAP Schema

This appendix discusses the object classes specified for the SIM application security model. The LDIF file used to create the object classes can be found in sim_objectclasses.ldif.

For more information, see "Setting up LDAP Data for SIM".

## Object Classes

There are four SIM-defined Object Classes:

- simRole
- simStore
- simUser
- simUserRole

They are described in the following tables:

***Table B–1 simRole Object Class***

| Attribute Name | Mandatory | Description |
|---|---|---|
| roleName | Yes | Role Name.<br>Syntax: String. |
| Type | No | Type of a Role – Store or Corporate.<br>Syntax: String. |
| Description | No | Description of a Role.<br>Syntax: String. |

***Table B–2 simStore Object Class***

| Attribute Name | Mandatory | Description |
|---|---|---|
| storeID | Yes | Store ID.<br>Syntax: String. |

***Table B–3 simUser Object Class***

| Attribute Name | Mandatory | Description |
|---|---|---|
| superUser | Yes | Is user a superuser?<br>Syntax: Boolean (TRUE or FALSE) |
| empStatus | Yes | Employee's status (0 = active, 1 = inactive, 2 = deleted, 3 = locked)<br>Syntax: Integer |
| preferredCountry | No | Preferred country code<br>Syntax: String |
| preferredLanguage | No | Preferred language code<br>Syntax: String |
| Mail | No | E-mail address.<br>Syntax: String |
| telephoneNumber | No | Telephone number.<br>Syntax: String |
| externalID | No | External system ID.<br>Syntax: String |
| Supervisor | No | Supervisor<br>Syntax: String |
| description | No | Descriptions or comments.<br>Syntax: String |
| startTimestamp | No | Start date<br>Syntax: Generalized Time |
| endTimestamp | No | End date<br>Syntax: Generalized Time |
| defaultStore | No | DN of the default store<br>Syntax: String |
| userStores | No | DN of User's stores, multiple values.<br>Syntax: String<br>This attribute is only used if the user is not a super-user. Super-users do not use store assignments. |

***Table B–4 simUserRole Object Class***

| Attribute Name | Mandatory | Description |
|---|---|---|
| roleName | Yes | Role assignment name.<br>Syntax: String |
| userRole | Yes | DN of role<br>Syntax: String |

*Table B–4 (Cont.) simUserRole Object Class*

| Attribute Name | Mandatory | Description |
|---|---|---|
| userRoleStores | Yes | DN of stores that user role is assigned, multiple values.<br>Syntax: String |
| StartTimestamp | No | Start time<br>Syntax: Generalized Time |
| EndTimestamp | No | End time<br>Syntax: Generalized Time |

# Directory Entry Structure

For this example, the name of the retail company is **MyCompany** and the parent directory of the SIM entries is **cn=SIM,dc=mycompany,dc=com**.

There are two subtrees for Roles and Stores:

```
cn=SIMRoles,cn=SIM,dc=mycompany,dc=com
cn=SIMStores,cn=SIM,dc=mycompany,dc=com
```

Users are stored in the following directory:

```
cn=Users,dc=mycompany,dc=com
```

# Configuration File ldap.cfg

A configuration file called ladp.cfg is located in the SIM Server

<managed_server_home>/tmp/_WL_
user/sim-server/exsx6p/lib/sim-server-resources.jar {conf/ldap.cfg}{log4j.xml}

See Chapter 2, "Backend System Configuration" in *Oracle Retail Store Inventory Management Operations Guide* for more information.

The keys SIM_DN and BASE_DN are defined in ldap.cfg. The BASE_DN is the directory where the User container is located; and the SIM_DN directory contains the parent directories for the Role and Store. For example:

```
BASE_DN= dc=mycompany,dc=com
SIM_DN= cn=SIM,dc=mycompany,dc=com
```

# Sample LDIF Data Files

Sample data entries are described in this section.

For this example, the name of the retail company is **MyCompany** and the parent directory of the SIM entries is **cn=SIM,dc=mycompany,dc=com**.

## Store

DN of Store:

```
storeId=xxxx,cn=SIMStores,cn=SIM,dc=mycompany,dc=com
```

Where *xxxx* is a store ID. The following is a sample LDIF file that adds the entry for Store 7000:

```
dn: storeId=7000,cn=SIMStores,cn=SIM,dc=mycompany,dc=com
```

```
changetype: addobject
Class: simStore
storeId: 7000
```

## Role

DN of Role:

```
roleName=xxxx,cn=SIMRoles,cn=SIM,dc=mycompany,dc=com
```

Where *xxxx* is a roleName defined in the SIM database (SECURITY_ROLE.name). The following is a sample LDIF file that adds the entries for ADMINISTRATOR and MANAGER:

```
dn: roleName=ADMINISTRATOR,cn=SIMRoles,cn=SIM,dc=mycompany,dc=com
changetype: addobject
Class: simRole
roleName: ADMINISTRATOR
type: Corporate
description: Corporate Administrator

dn: roleName=MANAGER,cn=SIMRoles,cn=SIM,dc=mycompany,dc=com
changetype: addobject
Class: simRole
roleName: MANAGER
type: Store
description: Store Manager
```

## User

DN of User:

```
cn=xxxx,cn=Users,dc=mycompany,dc=com
```

Where *xxxx* is the username of an user. The following is a sample LDIF file that adds a User Entry. The username is **superuser1** and the default store is **7000**, and has access to stores 7000, 7010 and 7011.

> **Note:** The attributes **cn** and **uid** should be the same, and are the login ID of the user.

```
dn: cn=superuser1,cn=Users,dc=mycompany,dc=com
changetype: addobject
class: top
objectclass: organizationalpers
onobjectclass: orcluser
objectclass: person
objectclass: orcluserv2
objectclass: inetorgperson
objectclass: simUser
cn: superuser1
uid: superuser1
superUser: TRUE
empStatus: 0
preferredCountry: US
preferredLanguage: en
givenname: superuser1
middleName: M1
sn: Superuser1
```

```
mail: superuser1@mycompany.com
telephoneNumber: 800-111-2222
externalId: superuser1
supervisor: X
description: SIM Store ID 7000 Super User.
startTimestamp: 20071026000000Z#
endTimestamp:
defaultStore: storeId=7000,cn=SIMStores,cn=SIM,dc=mycompany,dc=com
userStores: storeId=7000,cn=SIMStores,cn=SIM,dc=mycompany,dc=com
userStores: storeId=7010,cn=SIMStores,cn=SIM,dc=mycompany,dc=com
userStores: storeId=7011,cn=SIMStores,cn=SIM,dc=mycompany,dc=com
userpassword: welcome1
```

## User's Role

DN of user role:

```
roleNa
me=xxxx,cn=user1,cn=Users,dc=mycompany,dc=com
```

Where xxxx is the role assigned to an user with username user1. The following is a sample LDIF file that will add an entry for MANAGER role for user User1:

```
dn: roleName=MANAGER,cn=user1,cn=Users,dc=mycompany,dc=com
changetype: add
objectclass: simUserRole
roleName: MANAGER
userRole: roleName=MANAGER,cn=SIMRoles,cn=SIM,dc=mycompany,dc=com
userRoleStores: storeId=7000,cn=SIMStores,cn=SIM,dc=mycompany,dc=com
userRoleStores: storeId=7010,cn=SIMStores,cn=SIM,dc=mycompany,dc=com
userRoleStores: storeId=7011,cn=SIMStores,cn=SIM,dc=mycompany,dc=com
```

# C

# Appendix: Transfer Localization

Transfers allow a retailer to send inventory from one location to another. Transfer requests provide stores the ability to ask for products from other stores or allow corporate users to move inventory across stores using RMS. SIM allows stores to add, edit, delete or send a request to another store on the PC and Handheld.

Users will only be allowed to accept or reject a transfer request awaiting response on the PC.

Transfer localization offers the following:

- Ability to differentiate stock into different buckets depending on stock status (for example, concept of in-transit stock, reserved for transfer).
- Ability to have a system that automatically updates stock inventory on the basis of the status of the transfer.
- Ability for the sending store to save the transfer and then later return to the transfer and cancel, edit or dispatch the transfer.
- System can be used to transfer stock between stores on the same site (for example, Main Store to PFS). This would include the ability to auto-accept stock without scanning items at the moment the transfer is received.
- Ability to differentiate stock into different buckets depending on stock status (for example, Unavailable stock, Stock in transit).
- Ability to have a system that automatically updates stock inventory based on the status of the transfer.
- Ability to alert when the transfer has not been received within a specific time constraint (report or alert).
- Automatically create corrective transfers of stock to rectify the scenarios where the physically shipped stock does not match the stock recorded on the initial transfer.

## Process Requirements

The following are process requirements for transfer localization.

### Transfer Zones

SIM enforces transfer zones. Only stores within the same transfer zone can send inventory to each other or create requests for each other.

If a store has a transfer zone of NULL, then SIM allows any store to request from or ship to such a store. That means a NULL transfer zone is a universal store.

This information is populated by RMS.

## Auto Receiving

SIM allows certain stores to be setup for auto receiving.

## Buddy Stores

SIM allows a partial group of stores to be selected that are preferential entities to ship to.

## Transfer Force Close Indicator

This indicator is used only for store-to-store transfers.

- System Admin: Transfer Force Close Indicator for Short Receiving.
  - NL – No Loss
  - SL – Sending Loss
  - RL – Receiving Loss

RMS needs to set up their system to match what SIM has for this system admin setting.

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**Note:** In SIM, the SL and RL attributes appear to function the same. However, once they reach RMS they operate differently.

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### No Loss

Sending store is incremented or decremented by the overage/shortage.

***Table C–1 No Loss Shortage: Shortage is Added Back to the Sending Store***

| Sending Store | | Receiving Store |
|---|---|---|
| Beginning SOH | 1000 SOH | 1000 SOH, 0 In Transit |
| Sent quantity 50 | 950 SOH | 1000 SOH, 50 In Transit |
| Received quantity 30 (shortage) | 970 SOH | 1030 SOH, 0 In Transit |

***Table C–2 Overage: Overage is Always Deducted from the Sending Store***

| Sending Store | | Receiving Store |
|---|---|---|
| Beginning SOH | 1000 SOH | 1000 SOH, 0 In Transit |
| Sent quantity 50 | 950 SOH | 1000 SOH, 50 In Transit |
| Received quantity 70 (overage) | 930 SOH | 1070 SOH, 0 In Transit |

### Sending Loss

For shortages, no perpetual inventory is sent back to the sending store. Sending store is financially responsible.

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**Note:** This is handled on the RMS side.

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*Table C–3 Sending Loss Shortage: Shortage is not Added Back*

| Sending Store | | Receiving Store |
|---|---|---|
| Beginning SOH | 1000 SOH | 1000 SOH, 0 In Transit |
| Sent quantity 50 | 950 SOH | 1000 SOH, 50 In Transit |
| Received quantity 30 (shortage) | 950 SOH | 1030 SOH, 0 In Transit |

*Table C–4 Sending Loss Overage: Overage is Deducted from the Sending Store*

| Sending Store | | Receiving Store |
|---|---|---|
| Beginning SOH | 1000 SOH | 1000 SOH, 0 In Transit |
| Sent quantity 50 | 950 SOH | 1000 SOH, 50 In Transit |
| Received quantity 70 (overage) | 930 SOH | 1070 SOH, 0 In Transit |

### Receiving Loss

For shortages, no perpetual inventory is sent back to the sending store. Receiving store is financially responsible.

**Note:** This is handled on the RMS side.

*Table C–5 Receiving Loss Shortage: Shortage is not Added Back*

| Sending Store | | Receiving Store |
|---|---|---|
| Beginning SOH | 1000 SOH | 1000 SOH, 0 In Transit |
| Sent quantity 50 | 950 SOH | 1000 SOH, 50 In Transit |
| Received quantity 30 (shortage) | 950 SOH | 1030 SOH, 0 In Transit |

*Table C–6 Overage: Overage is Deducted from the Sending Store*

| Sending Store | | Receiving Store |
|---|---|---|
| Beginning SOH | 1000 SOH | 1000 SOH, 0 In Transit |
| Sent quantity 50 | 950 SOH | 1000 SOH, 50 In Transit |
| Received quantity 70 (overage) | 930 SOH | 1070 SOH, 0 In Transit |

## Receive Entire Transfer Parameter

When this parameter is set to **No**, then the Transfer detail dialog allows the user to receive more or less. If the parameter is set to **Yes**, then the dialog is modified to only allow the user to receive the entire transfer.

## Store Receiving

The receiving store in SIM will see the shipped quantities immediately on dispatch by the sending store. This process will update the in transit quantities and reduce outstanding transfer values.

**Note:** SIM can be configured to not allow some users to start receiving these transactions, but this is handled through security.

## Dispatching a Transfer

The transfer reserved quantity for the outbound location will decrease as will the stock on hand for the outbound location.

The receiving location will have its in-transit bucket updated with the ship quantity. The transfer quantity is removed from the in-transit bucket to the stock-on-hand bucket when the receiving store receives the transfer.

The transaction must be recorded in the staging table. A record is written for the sending store when the transfer is dispatched and a record is written when the transfer is received by the receiving store.

If the transfer contains packs then the stock movement should follow additional rules:

- Non-sellable simple packs – adjust the quantity at the component level. The pack number will not hold inventory. For example: If a transfer contains Pack A with a transfer quantity of two, and Pack A is made up of Item B (quantity of three), then when the transfer is dispatched, the stock-on-hand for Item B at the sending store is decremented by six (two units of Pack A multiplied by three units of Item B). The in-transit bucket at the receiving store, for Item B, is incremented by six.
- Non-sellable complex packs - adjust the quantity at the component level. The pack number will not hold inventory. For example: If a transfer contains Pack A with a transfer quantity of two, and Pack A is made up of Item B and Item C, then when the transfer is dispatched, the stock-on-hand for Item B at the sending store is decremented by two (two units of Pack A multiplied by one unit of Item B), and Item C is decremented by two. The in-transit bucket at the receiving store is incremented for each item by the respective amount.
- Sellable simple packs – adjust the quantity at the pack level. For example: If Pack A is a sellable pack and a transfer is dispatched with a transfer quantity of five, then the stock-on-hand at the sending store for Pack A is decremented by five, and the in-transit quantity for the receiving store is incremented by five.
- Sellable complex pack – adjust the quantity at the pack level. Has the same stock movement as the sellable simple pack.
- If the transfer's receiving location is an auto close location, then the transfer is considered received when it is dispatched from the sending store:
  - The status of the transfer is **Received**.
  - The received quantity is equal to the transfer quantity.
  - The delivery date and close date equal the dispatch date.
  - A record for the receiving store is inserted into the staging table.
  - Stock-on-hand will be incremented at the receiving location and decremented at the sending location. The in-transit bucket is not affected.

# D

# Appendix: UPC Barcode

UPC-E items compress a normal 12-digit UPC-A item into six digits. SIM has the ability to decompress UPC-E barcodes to UPC-A. A seventh digit acts as a check digit for the UPC-E number. When the user scans the UPC-E barcode, SIM finds the UPC-A barcode and displays the item ID associated with it.

## Differences Between UPC-A and UPC-E

UPC-E is also called zero suppressed UPC because UPC-E compresses a normal twelve-digit UPC-A number into a six-digit code by suppressing the number system digit, trailing zeros in the manufacturers code and leading zeros in the product identification part of the bar code message. A seventh check digit is encoded into a parity pattern for the six main digits. UPC-E can thus be uncompressed back into a standard UPC-A twelve-digit number.

> **Note:** Most bar code readers can be configured to automatically convert six-digit UPC-E numbers to twelve-digit UPC-A numbers before they are transmitted to a host computer.

The main difference between a UPC-A symbol and a UPC-E symbol is the size. The following image presents a UPC-A bar code (left) and the same data encoded as a UPC-E bar code (right):

***Figure D–1 UPC-A and UPC-E Differences***

To convert between UPC-A and UPC-E bar code numbers, you can use the following table or try online UPC-E converter program. In the following, the number **0** and each of the letters (**a**, **b**, **c**, **d** and **e**) represent individual digits in the bar code message. The letter **X** represents the UPC check digit.

***Table D–1 UPC Conversion Table***

| UPC-A Number | Equivalent UPC-E | Notes |
|---|---|---|
| 0ab00000cdeX | abcde0X | Manufacturer code must have two leading digits with three trailing zeros and the item number is limited to three digits (000 to 999). |
| 0ab10000cdeX | abcde1X | Manufacturer code must have three leading digits ending with **1** and two trailing zeros. The item number is limited to three digits. |
| 0ab20000cdeX | abcde2X | Manufacturer code must have three leading digits ending with **2** and two trailing zeros. The item number is limited to three digits. |
| 0abc00000deX | abcde3X | Manufacturer code must have three leading digits and two trailing zeros. The item number is limited to two digits (00 to 99). |
| 0abcd00000eX | abcde4X | Manufacturer code must have four leading digits with one trailing zero and the item number is limited to one digit (0 to 9). |
| 0abcde00005X | abcde5X | Manufacturer code has all five digits. The item number is limited to a single digit consisting of either **5**, **6**, **7**, **8** or **9**. |
| 0abcde00006X | abcde6X | |
| 0abcde00007X | abcde7X | |
| 0abcde00008X | abcde8X | |
| 0abcde00009X | abcde9X | |

## Conversion Between UPC-A and UPC-E

Not all UPC-A numbers can be compressed to UPC-E. These codes with a corresponding UPC-E code must have at least four zeros. The requirements are:

1. If the manufacturer code ends with 000, 100, or 200, the UPC-E code consists of the first two characters of the manufacturer code, the last three characters of the product code, followed by the third character of the manufacturer code. In this case, the product code must be 00000 and 00999.
2. If the manufacturer code ends with 00 but does not meet the first requirement, the UPC-E code consists of the first three characters of the manufacturer code, the last two characters of the product code, followed by digit **3**. The product code can only contain two digits (00000 to 00099).
3. If the manufacturer code ends in **0** but none of the previous qualifies, the UPC-E consists of the first four digits of the manufacturer code and the last digit of the product code, followed by the digit **4**. The product code in this case can only contain one digit (00000 to 00009).
4. If the manufacturer code ends with non-zero digit, the UPC-E code consists of the manufacturer code and the last digit of the product code. In this case the product case can only be one from 00005 to 00009 because 0 through 4 has been used for the previous four cases.

   For a free web-based utility for converting between UPC-A and UPC-E, go to the following URL:

http://www.morovia.com/education/utility/upc-ean.asp

## Quick Response Codes

Quick Response (QR) Codes are two dimensional bar codes that can be generated to represent any text, most often a custom URL. They can be read by a number of mobile applications through a phone's camera, and provide a way to hyperlink to the physical world. QR Codes can be placed next to products to provide further information or digital coupons, even if the QR Code is on a billboard or store signage. QR Codes and the associated web sites are controlled by the retailer, thus allowing them to recapture control of product research in their store, as well as provide value added information and digital coupons.

QR code functionality in SIM allows the user to:

- Track the image reference to QR Codes at the item/location/image type/time level
- Generate tickets/labels by location when QR codes change based on time/entry using the existing ticket/label dialogues
- Configure the generation of tickets and/or labels automatically
- Print tickets and labels with QR codes
- Allow external systems to integrate QR references within SIM

By running the batch, SIM creates a ticket or label entry in the ticketing screen following the standard pattern of ticketing and labeling. This is configurable.