



QAD Enterprise Applications
Enterprise Edition

Training Guide

QAD Warehousing Advanced

Concepts

Printing
Inspection (Work Orders)
Containerization
Container Move
Ship Truck
Inspection (Work Orders)
Kanban Scan
Replenishment
Cross-Docking
Engine Processing
Location Audit

70-3016-2013EE
QAD 2013 Enterprise Edition
March 2013

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WarehousingAdvCons_TG_v2013EE.pdf/crl/mdf

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Change Summary

The following table summarizes significant differences between this document and the last published version.

Date/Version	Description	Reference
March 2013/2013 EE	Rebranded for QAD 2013 EE	---
September 2012/2012.1 EE	Rebranded for QAD 2012.1 EE	---
March 2012/2012 EE	Rebranded for QAD 2012 EE	---
September 2011/2011.1 EE	Rebranded for QAD 2011.1 EE	---

About This Course

Course Description

This course provides advanced training for QAD Warehousing features and functions. Topics taught in this course are at a deeper level than topics introduced and discussed in the QAD Warehousing Fundamentals training course. This course assumes that features of QAD Warehousing have been enabled and set up.

Course Objectives

By the end of this class, students will:

- Setup and print labels that identify inventory coming into the warehouse; print transactions for tasks and exceptions, and print QA sampling inspection tags.
- Set up and complete the batch picking process.
- Set up and containerize items.
- Move containers through a warehouse onto a truck.
- Ship items on a truck.
- Conduct an inspection for work order items.
- Setup and complete a kanban scan.
- Set up and run a manual and an automatic replenishment.
- Set up, receive, then move stock from dock to dock using cross-docking.
- Set up and use engines to manually process in Warehousing.
- Conduct a location audit.

Audience

- Implementation consultants
- Members of implementation teams
- Advanced warehousing users, including warehouse staff and QAD Warehousing system administrators

Prerequisites

You should be familiar with basic order, pre-shipper, and shipper creation and processing through QAD Enterprise Edition programs. It is imperative that typical manufacturing data such as data for sites, items, customers/suppliers, orders, and so on be setup within QAD EE before you start exercises within this training guide.

You should be familiar with all features and functionality presented in the QAD Warehousing Fundamentals training book.

Basic QAD Warehousing features are taught through the QAD Warehousing Fundamentals Training Course. Basic features and functions are described in the QAD Warehousing user documentation that can be found in the following Website.

Course Credit and Scheduling

This course is valid for 30 hours. It is designed to be taught in 5 days.

QAD Web Resources

The QAD website provides product and company overviews. The Print Solution option on the opening page provides a means of compiling desired content into a document specialized to your industry, business implementation, and needs.

<http://www.qad.com/>

From QAD's main site, you can access QAD's Learning or Support sites.

Preliminary Setup (for Virtual Training Management System Only)

If you are using this training guide with the QAD Virtual Training Management System (VTMS) in a classroom, student lab environments are reserved for you by your instructor.

- 1 Select the Virtual Training Management System using the following url:

<http://training.success.qad.com/>

Note To test your browser once you access the site, you can click "See if your Browser is ready" and email the results to democenter@qad.com in the form provided before you log on.

- 2 Click on your local region in the regional map to access the login page.
- 3 Students login with the student ID and password assigned to them by the instructor.
- 4 Once you login, click on the Account Info tab and select your local time zone from the dropdown and click Save.

Transferring Files

You can transfer files to and from VTMS, using the following:

- Upload/download files using yousendit.com
- Upload files to Lotus Notes e-mail (5MB limit) and download from outside.qad.com e-mail.
- Upload/download files to and from web-mail account (for example, yahoo, hot mail)

Using the RF for Exercises

Many of the exercises in this training guide use the RF to select or confirm tasks and perform other steps. Your instructor can show you how to simulate QAD Warehousing software through a Unix session. Commands are provided to run the software just as if you were on the RF device.

Chapter 1

Printing

Chapter Overview



Advanced Printing Overview

- ✓ **Introduction**
- ✓ **Setup**
- ✓ **Process**
- ✓ **Example**

QAD Proprietary

Introduction



Printing Introduction

- ✓ Printing identification of inventory
- ✓ Printing task transactions
- ✓ Printing exceptions
- ✓ Printing inspection tags



QAD Proprietary

In the QAD Warehousing fundamentals training course, you learned how to set up printing for the various elements—warehouses, SLGs, WLGs, and so on—of a warehouse. In this course, you will learn how to print:

- Identification of inventory coming into the warehouse, such as a pallet label.
- Transactions for tasks when they are created or confirmed.
- Exceptions when changes have been made to the original transaction; for example, a change to the put-away location or quantity.
- QA sampling inspection tags.

The following topics include, setup, process, and examples for the various types of printing.

Identification Printing



Identification Printing

- ✓ Receive goods into the warehouse with Unplanned Receipts
- ✓ Print an identification of inventory coming into the warehouse (pallet label)

QAD Proprietary

Warehouse staff need to print identification of inventory as it arrives at the warehouse. This tidally occurs when there is an unplanned receipt transaction.

Note QAD Warehousing does not print barcode labels. A third-party product or a barcode printer are needed to print barcode labels.

Setup for Identification Printing



Identification Printing Setup

- ✓ Printer Setup Maintenance
- ✓ Transaction Type Maintenance
- ✓ Warehouse Control
- ✓ Warehouse Maintenance
- ✓ Work-Location Group Maintenance
- ✓ Internal Routing Maintenance
- ✓ Alternate Unit of Measure Maintenance
- ✓ Item-Warehouse Maintenance

QAD Proprietary

The following topics discuss both QAD EE and QAD Warehousing maintenance programs you use to setup printing for inventory identification.

Printer Setup Maintenance



Printer Setup Maintenance

Printer Set up Maintenance
 36.13.2
 mgmgmt05.p

Printer Setup Maintenance ✕

Go To
Actions
Copy
Print
Preview

Printer Definition

Output To: laser10

Description:

Max Pages: 0

Device Pathname: list_print

Destination Type: Default

Printer Type: HP LASER

Lines / page: 64

Scroll Output: ☐

Spooler: ☐

Printer Control

Initialize Command:

Initialize Ctr: /027[5i

80 Column Start: /027E/027%I00/027(8U/027(sOp10h12v0s0b3T/027%I66P/027%I66F/027%k2G

132 Column Start: /027E/027%I00/027(0U/027(sOp16.66h8.5v0s0b0T/027%I66P/027%I2E/027%I7.8689C/027%I66F/027%k2G

Reset Ctr: /012/018/027[4i

Reset Command: cat list_print

Back
Next

QAD Menu option. Define printer in the same way as other QAD functionality

QAD Proprietary

Specify the printer in the Output To field.

Transaction Type Maintenance

Transaction Type Maintenance

Go To Actions Copy Print Preview

Transaction Type: RCT-UNP
Description: Unplanned Receipt

Engine and Printing Details

Mode: Auto
Consolidate: ☐

Print Procedure Code: R18

Code to define the printing procedures to be carried out for this transaction type

Delete Back Next

QAD Proprietary

Use Transaction Type Maintenance (4.7.1 is using Warehousing for QAD EE and 80.7.6 is using AIM.) to set up the code to define printing procedures for a receipt transaction.

Warehouse Control

Use Warehouse Control (4.1.24 if using Warehousing for QAD EE and 80.1.24 if using AIM) to set up generic defaults for the warehouse.

Fields

Print ID. Enter Yes to print an identification of inventory coming into the warehouse; otherwise, enter No. If you enter No, you can ignore the other fields in this group.

ID Printer. Enter the name of the printer on which the IDs are to be printed.

Number Across. Enter the number of identifications that are to be printed across each page.

Lines of Each. Enter the number of printed lines in each identification.

Width of Each. Enter the width in character positions of the lines of the identification.

132 Mode. Enter Yes if the identifications are to be printed in 132 character position mode; otherwise, enter No.

Print Mode. Select a print mode to determine when output should be printed. The options are as follows:

AUTO: The system prints identifications automatically as soon as they are created

MANUAL: The system holds identification print requests until an online or batch process activates printing.

AUTO SIG: The system prints IDs automatically but holds them until a signal is received. The signal to trigger AUTOSIG printing is normally a sign that the process creating print requests is complete and that all requested prints can be output at one time. This is particularly relevant when, for example, printing multiple transactions on the same task sheet.

Use External. Enter Yes if you want RDT users to be able to print the identifications on an external printer such as the local printer in a fork-lift truck. Enter No if the identifications must be printed on the ID printer.

Warehouse Maintenance

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Warehouse Maintenance

Warehouse Maintenance

Go To Actions Copy Print Preview

Site: US-D4
Warehouse: US-D-4

Identification Printing

Print ID: Lines of Each: Print Mode (ID):

ID Printer: Width of Each: Use External: ☐

Number Across: 132 Mode (ID): ☐

Task Printing

Print Create: ☐ Number Across: Create Print Mode: ☐

Print Confirm: ☐ Lines of Each: Confirmed Print Mode: ☐

Print Except: ☐ Width of Each: Exception Print Mode: ☐

Task Printer: ☐ 132 Mode (Task): ☐ Use External: ☐

Inspection Printing

Insp Printer: Width of Each:

Number Across: 132 Mode (Insp): ☐ Print Mode:

Lines of Each:

Use Warehouse Maintenance to set up generic defaults to Work Location Groups
This set up will not affect your process.
This step is optional.

Back Next

QAD Proprietary

Use the Identification Printing frame in Warehouse Maintenance (4.1.1 is using Warehousing for QAD EE and 80.1.1 is using AIM.) to set up generic defaults for work location groups.

These fields default from Warehouse Control; see “Fields” on page 14.

Work Location Group Maintenance

The screenshot shows the 'Work Location Group Maintenance' window in QAD. The window has a blue header with the QAD logo and the tagline 'Our Passion. Your Advantage.' Below the header, the title 'Work Location Group Maintenance' is displayed in large blue letters. The window contains several sections for configuration:

- Site:** US-D4
- Warehouse:** US-D-4
- Work Location Group:** velka
- Cycle Counts:**
 - Cycle Count Task: COUNT
 - Count System Code: RF
 - Cycle Count Priority: 100
- Recount Task:** RECOUNT
- Recount System Code:** RF
- Recount Priority:** 100
- Recount Location:** 10
- Identification Printing:**
 - Print ID:** ☐ (Callout: Indicate if you want the system to print IDs for inventory)
 - ID Printer:** laser10 (Callout: Specify the name of the printer to be used for printing inventory IDs)
 - Number Across:** 1 (Callout: Number of IDs that are to be printed across each page)
 - Lines of Each:** 10 (Callout: Specify the number of lines in each item to be printed)
 - Width of Each:** 0
 - 132 Mode (E4):** ☐
 - Print Mode (E4):** Auto
 - Use External:** ☐
- Buttons:** Delete, Back, Next

Below the main window, there is a smaller window titled 'Maintenance' showing the same configuration for the 'velka' group. It includes fields for 'Print Flavor' (set to 'a') and 'Manufacture Code'. A callout points to the 'Print Flavor' field with the text: 'Select the Print Flavor code to determine the format of the printed output'. The 'Maintenance' window also has 'Back' and 'Next' buttons.

QAD Proprietary

Use Work Location Group Maintenance (4.3.9 is using Warehousing for QAD EE and 80.3.9 if using AIM.) to set up identification. These fields default from Warehouse Maintenance; see “Warehouse Maintenance” on page 16.

In addition, you should set the Print Flavor in the Miscellaneous Printing Frame.

Print Flavor. This field defaults to each work location group you set up within the warehouse. Select the Print Flavor code to determine the format of the printed output. Print Flavor codes are set up in Generalized Code Maintenance (36.2.13).

Internal Routing Maintenance

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Internal Routing Maintenance

Internal Routing Maintenance X

Go To Actions Copy Print Preview

Site: US-D4 Warehouse: US-D-4 Internal Routing: receipt

Description:

Sequence: 20 Internal Routing Group: bulk

Print Options

Print ID: ☒ Print Mode (ID): Auto

Print Created Tasks: ☐ Create Print Mode: Auto

Print Confirmed Tasks: ☐ Confirmed Print Mode: Auto

Print Exceptions: ☐ Exception Print Mode: Auto

Miscellaneous Options

Mode: ☐ New Unit of Measure: ☐ Check Inspection: ☐ Check Shipment: ☐

Indicate if you want the system to print IDs for Inventory

Back Next

QAD Proprietary

Use Internal Routing Maintenance (4.2.5 is using Warehousing for QAD EE and 80.2.5 if using AIM) to set up identification. These fields default from Warehouse Maintenance; see “Warehouse Maintenance” on page 16.

Fields

Print Create. Indicate if you want the system to print transactions for tasks when they are created. If you specify Yes, enter values for the other fields related to task printing. If you enter No to both task settings, you can ignore the other printing parameters in the group.

Print Confirm. Indicate if you want the system to print transactions for tasks when they are confirmed. If you specify Yes, enter values for the other fields related to task printing. If you enter No to both task settings, you can ignore the other printing parameters in the group.

Print Except. Indicate if you want the system to print information about errors. If you specify Yes, enter values for the other fields related to error printing. If you enter No, you can ignore the other printing parameters in the group.

Create Print Mode. When Print on Create is Yes, select a Print Mode to determine when output should be printed. The setting you enter in Warehouse Maintenance defaults to internal routings set up within the warehouse. The options are as follows:

AUTO. The system prints transactions automatically as soon as they are created.

MANUAL. The system holds print requests until an on-line or batch process activates printing.

AUTOSIG. The system prints transactions automatically but holds them until a signal to print is received.

The signal to trigger AUTOSIG printing is normally a sign that the process creating print requests is complete and that all requested prints can be output at one time. This is particularly relevant when printing multiple transactions on the same task sheet.

Confirmed Print Mode. When Print on Confirm is Yes, select a Print Mode to determine when output should be printed. The setting you enter in Warehouse Maintenance defaults to internal routings set up within the warehouse. The options are as follows:

AUTO. The system prints transactions automatically as soon as they are created.

MANUAL. The system holds print requests until an on-line or batch process activates printing.

AUTOSIG. The system prints transactions automatically but holds them until a signal to print is received.

The signal to trigger AUTOSIG printing is normally a sign that the process creating print requests is complete and that all requested prints can be output at one time. This is particularly relevant when printing multiple transactions on the same task sheet.

Exception Print Mode . For exceptions, select a Print Mode to determine when output should be printed. The setting you enter in Warehouse Maintenance defaults to internal routings set up within the warehouse. The options are as follows:

AUTO. The system prints transactions automatically as soon as they are created.

MANUAL. The system holds print requests until an on-line or batch process activates printing.

AUTOSIG. The system prints transactions automatically but holds them until a signal to print is received.

The signal to trigger AUTOSIG printing is normally a sign that the process creating print requests is complete and that all requested prints can be output at one time. This is particularly relevant when printing multiple transactions on the same task sheet.

Alternate Routing Maintenance

Alternate Unit of Measure Maint

Unit of Measure: pl
Description: pallet

Properties

Sizing Type: R Sizing by Reference

Print ID: ☒ **Print identification labels for this item**

ID Quantity: 1 **Number of identification labels to be printed**

Allow Split: ☒

Item Number: pallet1

Ship Type:

Round Inspected Qty: ☐

Conversion Rules

New Unit of Measure:

Change Action:

Back Next

QAD Proprietary

Use Alternate Routing Maintenance (4.5.1 is using Warehousing for QAD EE and 80.5.1 if using AIM.) to set up printing. This step is optional.

Item-Warehouse Maintenance

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Item-Warehouse Maintenance

Item-Warehouse Maintenance X

Go To Actions Copy Print Preview

Attachments

Item Number: D-Pr001
UM: EA
Site: US-D4
Warehouse: US-D-4

Warehouse US-D-4

Warehouse Data

Location:

Storage Location Group:

SLG List:

Warehouse Item Type:

Popularity:

Logistics UM Tolerance:

Auto Replenish: ☐

Single PA Trans: ☐

Issue Method:

Print ID: ☒

ID Quantity:

OPC Threshold:

Logistics UM:

Pallet Max Height:

Auto Replenishment:

Print Unplanned Iss: ☐

Print identification labels for this item

Number of identification labels to be printed

Logistics unit of measure to be used as the receipt UM when the receipt is made in base UM

Modifying existing record

Delete Back Next

QAD Proprietary

Use Item-Warehouse Maintenance (4.4.11 is using Warehousing for QAD EE and 80.4.11 if using AIM.) to set up printing. This step is optional.

Print Identification Process



icunrc.p 3+
3.9 Receipts - Unplanned
12/21/09

Item Number: D-Pr001 Lot/Serial Control: UM: EA

Description:

Quantity: 200.0 Site: us-d4

Unit of Measure: EA Location: ddock01

Receipt Detail - Quantity: 200 EA

Site	Location	Lot/Serial	Reference	Quantity
us-d4	ddock01		PL014484	100.0
us-d4	ddock01		PL014485	100.0

E

C	Site	Location	Lot/Serial	Reference	Quantity
	us-d4	ddock01		PL014484	100.0

Total lot/serial quantity entered: 200

Run Receipt Unplanned in character mode as printer is defined for Unix

QAD Proprietary

Use Receipts—Unplanned (3.9) to record inventory receipts not associated with open sales, purchasing or manufacturing orders. A receipt increases inventory quantity for an item at the designated site and locations.

The receipt creates pallets that you define (such as 1 PL = 100 EA) in Unit of Measure Maintenance (1.13).

Task Printing



Task Printing

- ▲ Receive goods into the warehouse with Unplanned Receipts menu option.
- ▲ Print labels for each task of inventory coming into the warehouse

QAD Proprietary

For printing tags, the system uses the Print Mode fields in the Print Options frame of Internal Routing Maintenance (4.2.5) to determine the mode for printing for created, confirmed, and exception tasks.

When an internal routing for the movement does not exist, the system determines the print mode for specific movements, such as transfers, from the work location group using the values you specify in the Print Mode fields of the Task Printing frame of Work Location Group Maintenance (4.3.9):

Task Printing Setup



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Task Printing Setup

- ✓ **Internal Routing Maintenance**
- ✓ **Work Location Group Maintenance**

QAD Proprietary

The following topics discuss the QAD Warehousing maintenance programs that you need to set up for task printing.

Internal Routing Maintenance

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Internal Routing Maintenance

Internal Routing Maintenance X

Go To Actions Copy Print Preview

Site: US-D4 Warehouse: US-D-4 Internal Routing: receipt

Description:

Sequence: 20 Internal Routing Group: bulk

Print Options

Print ID: ☒ Print Mode (ID): Auto

Print Created Tasks: ☐ Create Print Mode: Auto

Print Confirmed Tasks: ☐ Confirmed Print Mode: Auto

Print Exceptions: ☐ Exception Print Mode: Auto

Miscellaneous Options

Mode: ☐ Check Shipping: ☐

New Unit of Measure: ☐ Check Inspection: ☐

Indicate if you want the system to print IDs for Inventory

Back Next

QAD Proprietary

Use the fields in the Task Printing Frame of Internal Routing Maintenance (4.2.5 if using QAD Warehousing or 80.2.5 if using AIM).

Fields

Print IDs. Indicate if you want the system to print IDs for inventory. If you specify Yes, enter values for the other fields related to ID printing. If you enter No, you can ignore the other printing parameters in the group.

The setting you enter in Warehouse Maintenance defaults to internal routings set up in the warehouse.

You can also specify in Item Maintenance whether you want identifications to be printed for each item by entering Yes in the Print ID field.

Also, in Alternate Unit of Measure Maint, you can set this parameter to control the printing of ID labels for inventory measured in this UM. This is the main level of printing control.

However, it is not mandatory to define an alternative unit of measure. If no alternative UM is defined, the printing control comes from the item-warehouse definition.

The other fields are discussed earlier in this chapter; see “Print Create” on page 18.

Work Location Group Maintenance

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Printing

Work Location Group Maintenance

Go To Actions Copy Print Preview

Site: US-D4
Warehouse: US-D-4
Work Location Group: wrka

Task Printing

Print Create: ☒ Number Across: 1 Create Print Mode: Auto

Print Confirm: ☐ Lines of Each: 10 Confirmed Print Mode: Auto

Print Except: ☐ Width of Each: 0 Exception Print Mode: Auto

Task Printer: laser10 132 Mode (Task): ☐ Use External: ☐

Inspection Printing

Insp Printer: Width of Each: Use External: ☐

Number Across: 132 Mode (Insp): ☐

Lines of Each: Print Mode:

Form Printing

Form Printer: 132 Mode (Form): ☐ Use External: ☐

Delete Back Next

QAD Proprietary

Use Work Location Group Maintenance (4.3.9 if using QAD Warehousing and 80.3.9 if using AIM) to set task printing fields for the WLG.

Fields

The fields default from Warehouse Control (see “Warehouse Control” on page 14) or Warehouse Maintenance (“Warehouse Maintenance” on page 16).

Print Task Process

icunrc.p 3+
3.9 Receipts - Unplanned
12/21/09

Item Number: D-Pr001

Description:

Lot/Serial Control:

UM: EA

Quantity: 200.0

Unit of Measure: EA

Site: us-d4

Location: ddock01

Receipt Detail - Quantity: 200 EA

Site	Location	Lot/Serial	Reference	Quantity
us-d4	ddock01		PL014471	100.0
us-d4	ddock01		PL014472	100.0

E

C	Site	Location	Lot/Serial	Reference	Quantity
	us-d4	ddock01		PL014471	100.0

Total lot/serial quantity entered: 200

QAD Proprietary

Use Receipts—Unplanned (3.9) to record inventory receipts not associated with open sales, purchasing or manufacturing orders. Click on the Receipt Detail frame and check the quantity received for the site, location, and pallet (reference). You can print the IDs for the received inventory.

Print Task



Warehouse Task

Warehouse Task - 8981

Site: us-d4
 Warehouse: us-d-4
 From Storage Location Group: receipt
 From Work Location Group: wrka
 From Location: ddock01

To: bulk
 To: wrka
 To: dblk01

Item Number: D-Pr001 -
 Lot/Serial:
 Reference: PL014471

Warehouse Task - 8982

Site: us-d4
 Warehouse: us-d-4
 From Storage Location Group: receipt
 From Work Location Group: wrka
 From Location: ddock01

To: bulk
 To: wrka
 To: dblk01

Item Number: D-Pr001 -
 Lot/Serial:
 Reference: PL014472

QAD Proprietary

The system prints labels for the pallets. You cannot print barcodes, though, without third-party software.

Study Questions

The answers can be found in the Answers chapter of this advanced training guide.

- 1 What is an example of identification printing for a warehouse?
- 2 True or False. QAD Warehousing prints barcode labels when you purchase additional barcode software from QAD.
- 3 True or False. You set up identification printing only within QAD Warehousing.
- 4 In which program do you specify a system printer?
- 5 What are you setting up in Transaction Type Maintenance?
- 6 In Warehouse Control when setting up print fields, what is the difference between AUTO mode and AUTO SIG mode?
- 7 True or False. You set up print requirements only for a warehouse in Warehouse Maintenance.
- 8 Describe the term, print flavor, within warehousing and identify in which program you set up flavor codes.

- 9 True or False. You must set up printing in alternate routing if you intend to print in all routes of a warehouse.
- 10 For printing tags, which fields does the system use in Internal Routing Maintenance (4.2.5) to determine the mode for printing for created, confirmed, and exception tasks?

Chapter 2

Inspection (Work Orders)

Chapter Overview



Inspection WO Chapter Overview

- ✓ Introduction to Inspection with WO
- ✓ Set up Inspection with WO
- ✓ Exercise

QAD Proprietary

Introduction



Inspection WO Introduction

- ▲ Inspect finish goods after manufacturing process.



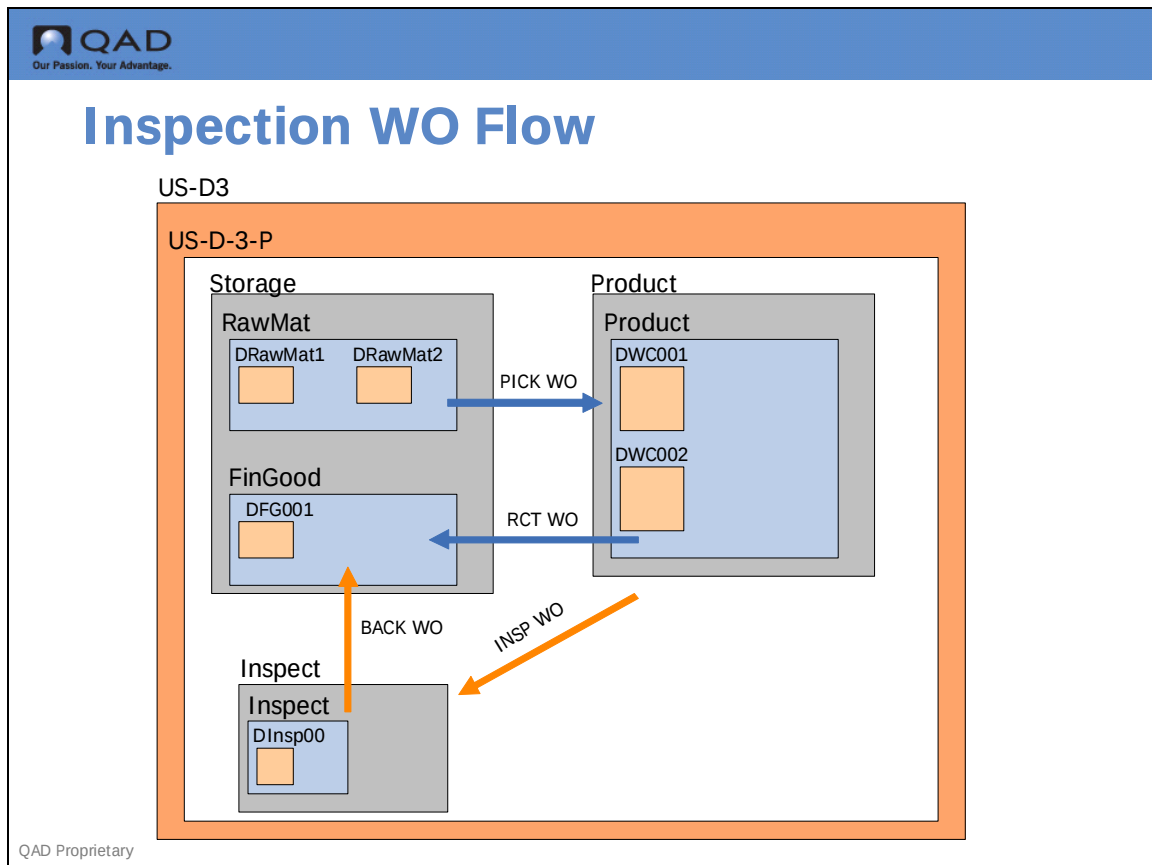
QAD Proprietary

QAD Warehousing supports quality inspection with sample control, change of inventory status, and creation of warehouse transaction.

For work orders, inspection typically takes place once warehouse staff pick raw materials and put away finished goods within a manufacturing process.

Note You should review the Inspection chapter and Work Order chapter of *User Guide: QAD Warehousing* or complete the Inspection chapter and Work Order Chapter in *Training Guide: QAD Warehousing Fundamentals* before you read the material in this chapter.

Inspection WO Flow



Raw material and finished goods are stored within the warehouse. Within a manufacturing environment, a PICK WO transaction lets staff pick the components of the assembled item. They assemble the item in another location, then when finished, return the item to storage. A RCT WO (receipt- work order) transaction signifies the receipt of the finished good in storage. Once returned, finished goods are inspected in a separate inspection location. BACK WO is the transaction type for a sample return after inspection.

Inspection WO Setup



Inspection WO Setup

- ✓ Internal Routing Maintenance
- ✓ Internal Routing Assignment Maintenance
- ✓ Algorithm Assignment Maintenance
- ✓ Inspection Status Change Maintenance

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You must set up internal routing, assign the internal routing, and assign algorithms for each of the areas involved in the WO inspection flow. The following topics discuss the setup of these areas.

Internal Routing Maintenance

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Internal Routing Maintenance

Internal Routing Maintenance X

Go To Actions Copy Print Preview

Site: us-d3 Warehouse: us-d-3-p Internal Routing: Insptr

Description: Manufacturing Inspection

Sequence: 10 Internal Routing Group: product

Transaction Create

Confirmed at Source: ☐

System Code: RF

Two Phase: ☒

Keep From Status: ☒

Transaction Confirmation

From Location Option: 0

From Item Option: 0

From Lot/Serial Option: 0

From Reference Option: 0

Allow Quantity Increase: ☐

Allow Quantity Decrease: ☒

Quantity Change Option: 0

Internal Routing Maintenance X

Go To Actions Copy Print Preview

Site: us-d3 Warehouse: us-d-3-p Internal Routing: Insptr

Description: Manufacturing Inspection

Sequence: 10 Internal Routing Group: inspect

Transaction Create

Confirmed at Source: ☐

System Code: RF

Two Phase: ☒

Keep From Status: ☐

Task: TRANSFER

Priority: 100

Increment: 10

Transaction Confirmation

From Location Option: 0 Repick Type: To Location Option: 0

From Item Option: 0 To Item Option: 0

From Lot/Serial Option: 0 To Lot/Serial Option: 0

From Reference Option: 0 To Reference Option: 0

Allow Quantity Increase: ☐

Allow Quantity Decrease: ☒

Quantity Change Option: 0 Alternative UM Option: 0

Expire Date (Days): 0

QAD Proprietary WARNING: End of data Back Next

Use Internal Routing Maintenance (4.2.5) to set up an internal routing so that a sequence can be established that identifies each step along the route.

Fields

Internal Routing. Specify the code that identifies the internal routing you want to maintain or assign to a particular transaction type.

In the training example, you have three areas for storage of both raw and finished goods, a product area to build the finished product, and an inspection area.

Sequence. Enter the number that identifies the order of this routing step. Each internal routing consists of a number of steps, identified by a sequence number. To make it easier to add steps within the sequence later, number the sequences as 10, 20, 30 rather than 1, 2, 3.

Internal Routing Group. Specify for this sequence step of the routing the next IRG to which the inventory should move.

Internal Routing Assignment Maintenance

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Internal Routing Assignment Maintenance

Int Routing Assignment Maint

Go To Actions Copy Print Preview

Transaction Type: INSP\WO
 Site: us-d3
 Warehouse: us-d-3-p
 Item Number:
 Warehouse Item Type:
 Address:
 Custom: ☐
 Internal Routing: inspir
 Custom Program:

Delete Back Next

Modifying existing record

QAD Proprietary

Use Internal Routing Assignment Maintenance (4.2.9 if using QAD Warehousing and 80.2.9 if using AIM) to link transaction types to internal routings. You can also specify a combination of a transaction type with an item, an item type, or an address relating to a supplier or customer so that the internal routing is used when that particular combination occurs.

In the training example, you need the following transaction types for transactions that take place in the storage, product, and inspection areas:

- PICK WO: Pick raw materials for the work order.
- RCT WO: Receive newly built finished goods into storage.
- INSP WO: Inspect the work order goods.
- BACK WO: Send inspected work order goods back to storage.

Fields

Transaction Type. This field is used to specify the transaction type. You maintain transaction types using Transaction Type Maintenance.

You specify the transaction type to link to an internal routing in Internal Routing Assignment Maintenance. You specify the transaction type to link to a sequence of algorithms in Algorithm Assignment Maintenance.

You also specify the transaction type when using the Algorithm Simulation Menu. These options simulate either location-find and put-away, or picking. The system simulates the running of the algorithms that you have assigned to the specified transaction type and displays the results of the simulated put-away or picking.

Internal Routing. Specify the IR that you set up in the previous step for the transactions; see “Internal Routing Maintenance” on page 40.

Algorithm Assignment Maintenance

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Algorithm Assignment Maintenance

Algorithm Assignment Mainten... x

Go To Actions Copy Print Preview

Algorithm Type: LF
Site: us-d3
Item Number:
Address:

Transaction Type: INSP\WO
Warehouse: us-d3-p
Warehouse Item Type:
Custom: ☐

Assigned Algorithms

Seq	Algo	Description
10	12	Find Last Work Centre Of Routing
20	1	First Location in First Storage Location Group

Sequence: 10 Algorithm: 12
Description: Find Last Work Centre Of Routing

Back Next

QAD Proprietary

Use Algorithm Assignment Maintenance (4.6.9 if using QAD Warehousing and 80.6.9 if using AIM) to specify the algorithm to use for the transaction types you set up in the previous step.

Fields

Algorithm Type. Use Algorithm Type to specify the two-character code for the type of algorithm you want to maintain or assign. The standard two-character codes are CM, LA, LF, PA, PK, QA, and SC.

Set up a Location Find (LF) algorithm for an INSP WO transaction type.

Sequence. Each algorithm assignment consists of a number of individual algorithms, in order, identified by a sequence number.

For a new assignment, Sequence defaults to 10. Number sequences by 10's (10, 20, 30, and so on) so that additional steps can be inserted easily later, if required.

Algorithm. Assign algorithms of the type you selected at the top of the frame. You can either type in the required number, or you can use the Up and Down arrow keys to move through the list of algorithms.

Use Algorithm Master Maintenance to modify the description of the algorithm you select. You can also assign algorithms of the type you selected at the top of the screen. For example, if you selected algorithm type PA, you can assign any of the put-away algorithms.

Transaction Type. Specify the transaction type you set up in the previous step.

Internal Routing Maintenance

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Internal Routing Maintenance

Internal Routing Maintenance X

Go To Actions Copy Print Preview

Site: us-d3 Warehouse: us-d3-p Internal Routing: InspBack

Description:

Sequence: 110 Internal Routing Group: inspect

Transaction Create X

Go To Actions Copy Print Preview

System: Two F

Keep From S

Site: us-d3 Warehouse: us-d3-p Internal Routing: InspBack

Description:

Sequence: 120 Internal Routing Group: storage

Transaction Confirmation

Confirmed at Source: ☐ Task: TRANSFER

System Code: RF Priority: 100

Two Phase: ☒ Increment: 10

Keep From Status: ☐

Transaction Confirmation

From Location Option: 0 Repick Type: To Location Option: 0

From Item Option: 0 To Item Option: 0

From Lot/Serial Option: 0 To Lot/Serial Option: 0

From Reference Option: 0 To Reference Option: 0

Allow Quantity Increase: ☐ Alternative UM Option: 0

Allow Quantity Decrease: ☒ Expire Date (Days): 0

Quantity Change Option: 0

WARNING: Beginning

WARNING: End of data

Back Next

QAD Proprietary

Return to Internal Routing Maintenance and set up an IR for the inspected goods to return to the storage area.

For field descriptions, see “Internal Routing Maintenance” on page 36.

Internal Routing Assignment Maintenance



Our Passion. Your Advantage.

Internal Routing Assignment Maintenance

Int Routing Assignment Maint

Go To

Actions

Copy

Print

Preview

Transaction Type: BACK-WO

Site: us-d3

Warehouse: us-d-3-p

Item Number:

Warehouse Item Type:

Address:

Custom:

Internal Routing: insback

Custom Program:

Modifying existing record

Delete

Back

Next

QAD Proprietary

Return to Internal Routing Assignment Maintenance and specify a BACK WO transaction type for the internal routing step that lets you return inspected goods to the storage area.

For field descriptions, see “Internal Routing Assignment Maintenance” on page 41.

Algorithm Assignment Maintenance-Put Away Algorithm

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Algorithm Assignment Maintenance: PA

Algorithm Assignment Mainten... x

Go To Actions Copy Print Preview

Algorithm Type: PA Transaction Type: BACK-WO

Site: us-d3 Warehouse: us-d3-p

Item Number: Warehouse Item Type:

Address: Custom: ☐

Assigned Algorithms

Seq	Algo	Description
10	9	S.L. - Merge with Item and UM
20	3	S.L. - Merge with part
30	1	Storage Locations

Sequence: 10 Algorithm: 9

Description: S.L. - Merge with Item and UM

Back Next

QAD Proprietary

Return to Algorithm Assignment Maintenance to specify a Put Away (PA) algorithm for the BACK WO transaction type. The system uses the algorithm to put inspected goods back into the storage area.

For field descriptions, see “Algorithm Assignment Maintenance” on page 39.

Algorithm Assignment Maintenance - Quality Assurance Algorithm

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Algorithm Assignment Maintenance: QA

Algorithm Assignment Mainten...

Go To Actions Copy Print Preview

Algorithm Type: QA

Transaction Type: RCT-WO

Site: us-d3

Warehouse: us-d3-p

Item Number:

Warehouse Item Type:

Address:

Assigned Algorithms

Seq	Algo	Description
10	8	Inspection of all Items with Inspection Required

Sequence: 10Algorithm: 8Description: Inspection of all Items with Inspection Required

Item-Warehouse Maintenance

Go To Actions Copy Print Preview Attach

Attachments

Item Number: D-FG001

UM: EA

Site: US-D3

Warehouse: us-d3-p

Inspection Data

Selective Inspection: ☒

Inspection Frequency: 0

Insp Freq (Days): 0

Random Inspection %: 0

Sample Quantity: 1

Sample Percent: 0

Destructive: ☐

Ref: ☐

Back

Next

Specify a Quality Assurance (QA) algorithm for the RCT WO transaction type.

Inspection Status Change Maintenance

Use Inspection Status Change Maintenance (4.19.13 if using Warehousing and 80.22.13 if using AIM) to modify the status associated with inventory being inspected, based on its original status. You can use this in two situations.

- While a sample is in the inspection area waiting inspection results, you can prevent any transactions with the inventory the inventory by changing its status. Change Inspection Status Maintenance lets you define the new status of this inventory, based on its original status.
- Similarly, after a successful inspection is performed, you can release the inventory by changing its status again.

Fields

Inventory Status. Inventory status codes identify the status of inventory at a specific site and location with a specific lot/serial number and lot reference.

Inventory status codes determine whether specific inventory balances on hand are available for allocation to sales orders or work orders, are considered available by MRP, and are allowed to go negative.

Inventory status codes also restrict particular transactions at specific locations -- you can restrict issues from an inspection location.

Release/Inspect Status. Enter a valid inventory status code defined in Inventory Status Code Maint. The system changes the sample ID to the status code you specify when the sample is moved to the inspection area. Release/Inspect Status needs to be a valid status code defined in

Exercise1: Move Stock throughout Warehouse for Inspection



Exercise 1 Objectives

- ✓ Review stock in warehouse locations
- ✓ Prepare and review work order
- ✓ Move stock from work center area to storage area and transfer sample from work center area to inspection area
- ✓ Validate inspection sample
- ✓ Move sample from inspection area to storage area
- ✓ Review stock

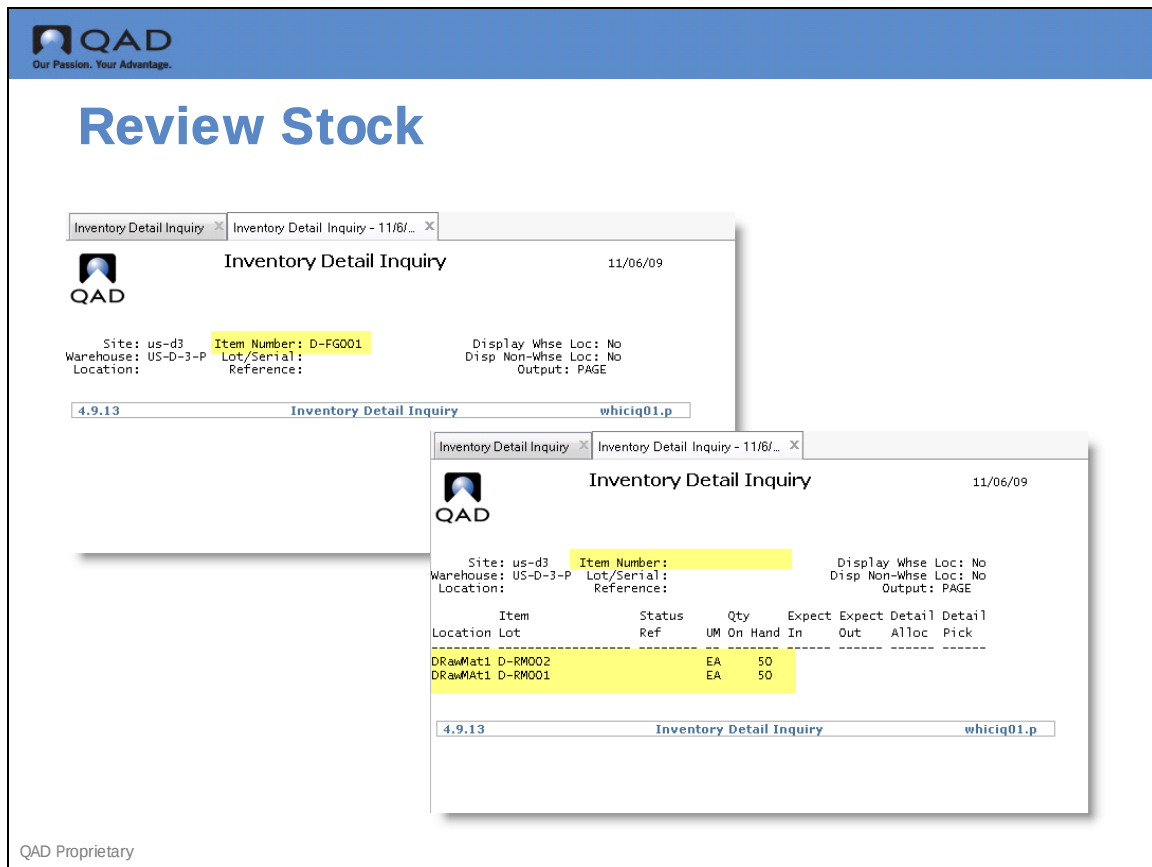
QAD Proprietary

Before You Begin

You must review information on work orders in QAD EE user documentation and on processing orders and inspecting stock in both the QAD Warehousing user documentation and QAD Warehousing Fundamentals Training Guide. Once you are fully familiar with processing orders in a warehouse using Warehousing features, you can complete the training in this section.

For the exercise, you will use QAD Warehousing on the RF Device and EE standard programs and inquiries.

Step 1: Review Stock



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Review Stock

Inventory Detail Inquiry - 11/6/09

Inventory Detail Inquiry

Site: us-d3 Item Number: D-FG001 Display Whse Loc: No
Warehouse: US-D-3-P Lot/Serial: Disp Non-Whse Loc: No
Location: Reference: Output: PAGE

4.9.13 Inventory Detail Inquiry whiciq01.p

Inventory Detail Inquiry - 11/6/09

Inventory Detail Inquiry

Site: us-d3 Item Number: D-FG001 Display Whse Loc: No
Warehouse: US-D-3-P Lot/Serial: Disp Non-Whse Loc: No
Location: Reference: Output: PAGE

Item	Status	Qty	Expect	Expect	Detail	Detail
Location Lot	Ref	UM On Hand In	Out	Alloc	Pick	
DRAWMat1 D-RM002	EA	50				
DRAWMat1 D-RM001	EA	50				

4.9.13 Inventory Detail Inquiry whiciq01.p

QAD Proprietary

Use Inventory Detail Inquiry (4.8.17) to check that items exist at the warehouse location. Check the quantity of the items.

Step 2: Create or Verify a Work Order Exists



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Ensure WO Exists

Work Order Maintenance

Go To

Actions

Copy

Print

Preview

Work Order: 2318

ID: 88956239

Item Number: d-FG001

Type:

Site: us-d3

Quantity Ordered: 3.0

Order Date: 11/7/2009

Quantity Completed: 0.0

Release Date: 11/7/2009

Qty Rejected: 0.0

Due Date: 11/7/2009

Work Order Status: F

Site: us-d3

Sales/Job:

Routing Code:

Supplier:

BOM/Formula Code:

Yield Percent: 100.00%

Remarks:

Post variances at SFC: ☒

Comments: ☐

Back

Next

QAD Proprietary

Use Work Order Maintenance (16.1) to ensure that you have a work order for the item at the location. Check the quantity ordered of the item.

Step 3: Release the Work Order

Release Work Order

Work Order Release/Print
DOM1 USD DB NY

Work Order Picklist

Work Order: 2318
ID: 88956239
Batch: d-FG001
Item Number: d-FG001
Rev:
Remarks:
Qty Ordered: 3.0
EA
Sales/Deliver To:
Issue Date: 4.9.13
Inventory Detail Inquiry: whiciq01.p

Item Number	Rev	Site	Lot/Serial	Location	Ref	Qty to Issue	UM	Issued
D-RM001		us-d3		DRawMat1		3.0	EA	()
D-RM002		us-d3		DRawMat1		6.0	EA	()

Inventory Detail Inquiry
11/07/09

Site: us-d3
Warehouse: US-D-3-P
Location:
Item Number:
Lot/Serial:
Reference:
Display Whse Loc: No
Disp Non-Whse Loc: No
Output: PAGE

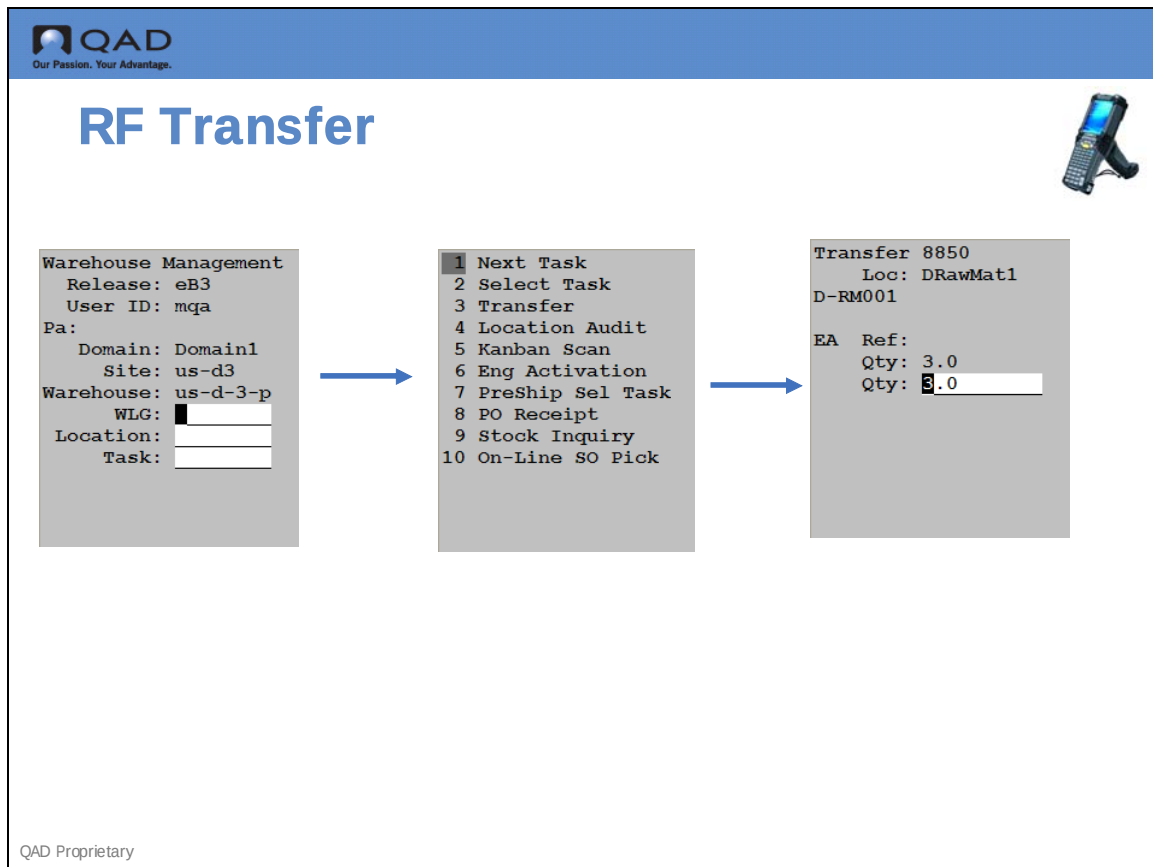
Item	Location	Lot	Status	Ref	Qty	Expect	Expect	Detail	Detail
					UM	On Hand	In	Out	Alloc
DRawMat1	D-RM001		EA		50			3	3
DRawMat1	D-RM002		EA		50			6	6
DWC001	D-RM001		EA					3	
DWC002	D-RM002		EA					6	

Work Order Release/Print
DOM1 USD DB NY
11/07/09 05:03:36
Page: 2

QAD Proprietary

Use Work Order Release Print to release the work order, ensuring that you issue the quantities required to match the Expected In quantities shown for the storage location in the warehouse. Use the Expected In field of Inventory Detail Inquiry to check.

Step 4: Transfer Stock Using the RF



- 1 Log onto the RF, using Warehousing.
- 2 Enter the warehouse, work location group (WLG) and location.
- 3 Select the Next Task option (1.).
- 4 The system prompts you to transfer stock from the raw material location.
- 5 Enter the quantity, then press Go.

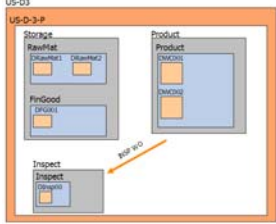
Step 5: Transfer Stock to Build Location



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Transfer to Build Location



US-D3
US-D3-F

RawMat: DDrawMat2
Product: DW001
Product: DW002
Product: DW003
Product: DW004
Product: DW005
Product: DW006
Product: DW007
Product: DW008
Product: DW009
Product: DW010

Product: DW001
Product: DW002
Product: DW003
Product: DW004
Product: DW005
Product: DW006
Product: DW007
Product: DW008
Product: DW009
Product: DW010

Product: DW001
Product: DW002
Product: DW003
Product: DW004
Product: DW005
Product: DW006
Product: DW007
Product: DW008
Product: DW009
Product: DW010

Transfer 8850
To Loc: DWC001
Loc: Dwc001
Chk:
Item Number:
D-RM001
Lot/Serial:
EA Ref:

→

Transfer 8851
Loc: DDrawMat1
D-RM002
EA Ref:
Ref: 6.0
Qty: 6.0

→

Transfer 8851
To Loc: DWC002
Loc: Dwc002
Chk:
Item Number:
D-RM002
Lot/Serial:
EA Ref:

QAD Proprietary

- 1 Enter the build location to which you are transferring stock.
- 2 Repeat the transfer process, transferring a second quantity of stock to the second build area.
- 3 Press Go.

Step 6: Verify the Transfer



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Verify Transfer

Inventory Detail Inquiry

Inventory Detail Inquiry - 11/7/09



Inventory Detail Inquiry

11/07/09

Site: us-d3 Item Number:
Warehouse: US-D-3-P Lot/Serial:
Location: Reference:

Display Whse Loc: No
Disp Non-Whse Loc: No
Output: PAGE

Location	Item	Status	Qty	Expect	Expect	Detail	Detail
	Lot	Ref	UM On Hand In	Out	Alloc	Pick	
DRawMat1	D-RM001	EA	47				
DRawMat1	D-RM002	EA	44				
DWC001	D-RM001	EA	3			3	
DWC002	D-RM002	EA	6			6	

4.9.13

Inventory Detail Inquiry

whiciq01.p

QAD Proprietary

Use Inventory Detail Inquiry to verify that the quantities (3, 6) were transferred to the build location.

Step 7: Backflush/Issue Items

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Backflush Materials

Work Order Receipt Backflush

Go To Actions Copy Print Preview

Work Order: 2318 ID: 88956239 Effective Date: 11/7/2009
 Item Number: dFG001 W/O Stat: R Receive: ☒ Backflush: ☒
 Document:

Remarks:
 Open Quantity: 3.0 UM: EA Lot/Ser:
 Batch: Automatic Lot Numbers: ☐
 Quantity: 3.000000000 Site: us-d3
 UM: EA Location: us-d-3-p
 Conversion: 1.0000 Lot/Serial:
 Scrapped Qty: 0.0 Reference:
 UM: EA
 UM Conversion: 1.0000

Inventory Detail Inquiry - 11/7/09

Inventory Detail Inquiry 11/07/09

QAD

Site: us-d3 Item Number: d-FG001 Display: Whse Loc: No
 Warehouse: Lot/Serial: Disp Non-Whse Loc: No
 Location: Reference: Output: PAGE
 Warehouse: us-d-3-p

Location	Status	Qty	Qty	Expect	Expect	Detail	Detail
Lot/Serial	Ref	UM On Hand	Alloc	In	Out	Alloc	Pick
DFG001	inspect	EA			2		
Dinsp10	inspect	EA			1		
DWC002	inspect	EA	3			3	

4.9.13 Inventory Detail Inquiry whiciq01.p

QAD Proprietary

- 1 Use Work Order Receipt Backflush to receive completed products and issue the items used to make them at the same time.
 A receipt with backflush increases end-item inventory quantities at the designated location and decreases component inventory. It also updates the work order to reflect quantities completed.
- 2 Enter the quantity; then press Go.
- 3 Use Inventory Detail Inquiry to verify that the system allocated the quantity you entered for the correct location.

Step 8: Transfer Stock to Inspection Location



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Transfer Second Qty to Inspection Area



Transfer 8853
Fr Loc: DWC002
Loc:
Chk:

→

Transfer 8853
Loc: DWC002
D-FG001
EA Ref:
Qty: 2.0
Qty:

→

Transfer 8853
To Loc: DFG001
Loc:
Chk:
Item Number:
d-FG001
Lot/Serial:
EA Ref:

QAD Proprietary

- 1 Use the RF Next Task function to transfer stock to the inspection area.
- 2 The system defaults a quantity; accept or change the default, then press Go.
- 3 Enter the inspection location; then press Go.
- 4 Use Inventory Detail Inquiry to verify that stock was moved to the inspection area.

Step 9: Transfer Second Qty to Inspection Location





Transfer Second Qty to Inspection Area

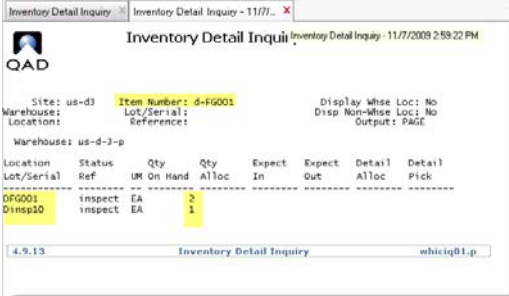
Transfer 8853
 Fr Loc: DWC002
 Loc:
 Chk:

→

Transfer 8853
 Loc: DWC002
 D-FG001
 EA Ref:
 Qty: 2.0
 Qty:

→

Transfer 8853
 To Loc: DFG001
 Loc:
 Chk:
 Item Number:
 d-FG001
 Lot/Serial:
 EA Ref:



QAD Proprietary

- 1 Use the RF Next Task function to transfer the second quantity of stock to the inspection area.
- 2 The system defaults a quantity; accept or change the default, then press Go.
- 3 Enter the inspection location; then press Go.
- 4 Use Inventory Detail Inquiry to verify the transfer.

Step 10: Start the Sample Inspection



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Start Sample Inspection

Sample Inspection Maintenance

Go To

Actions

Copy

Print

Preview

Site: us-d3

To: us-d3

Warehouse:

To:

Item Number:

To:

Address:

To:

Receiver:

To:

Default Include: ☒

ID	Item Number	Lot/Serial	Ref	Qty to Insp	Fai	Inc
134	d-FG001			1.0000	☐	☒

Back

Next

QAD Proprietary

- 1 Use the Sample Inspection Maintenance (4.19.1 if using QAD Warehousing and 4.22.1 if using AIM) to start the inspection.
- 2 Select the item to be inspected, ensuring that Inc is selected.

Step 11: Verify Inspected Items


Our Passion. Your Advantage.

Verify Inspected Quantity

Inventory Detail Inquiry X
Inventory Detail Inquiry - 11/7/... X



Inventory Detail Inquiry

11/07/09

Site: us-d3
Warehouse: US-D-3-P
Location:

Item Number: d-FG001
Lot/Serial:
Reference:

Display Whse Loc: No
Disp Non-Whse Loc: No
Output: PAGE

Location	Status	Qty	Qty	Expect	Expect	Detail	Detail
Lot/Serial	Ref	UM On Hand	Alloc	In	Out	Alloc	Pick
DFG001		EA	2		1		
Dinsp10	inspect	EA	1			1	

4.9.13
Inventory Detail Inquiry
whiciq01.p

QAD Proprietary

Use Inventory Detail Inquiry to verify that the system indicates the status of the items in the inspection location are inspected.

Step 12: Transfer Inspected Items to Storage

Transfer: 8854
Fr Loc: Dinspl0
Loc:
Chk:

Transfer: 8854
Loc: dinspl0
d-fg001
EA Ref:
Qty: 1.0
Qty:

Transfer: 8854
To Loc: DFG001
Loc:
Chk:
Item Number:
d-FG001
Lot/Serial:
EA Ref:

Inventory Detail Inquiry - 11/7/09

Inventory Detail Inquiry

11/07/09

Site: us-d3
Warehouse: US-D-3-P
Location:

Item Number: d-FG001
Lot/Serial:
Reference:

Display Whse Loc: No
Disp Non-Whse Loc: No
Output: PAGE

Location	Status	Qty	Qty	Expect	Expect	Detail	Detail	
Lot/Serial	Ref	UM	On Hand	Alloc	In	Out	Alloc	Pick
DFG001	EA		3					

4.9.13

Inventory Detail Inquiry

whiciq01.p

QAD

Our Passion. Your Advantage.



- 1 Use the RF Select Task to transfer inspected stock to the storage area.
- 2 Enter the inspected quantity to transfer.
- 3 Enter the storage location; then press Go.
- 4 Use Inventory Detail Inquiry to verify the transfer.

QAD

Step 9: Transfer Second Qty to Inspection Location



Transfer 8853
Fr Loc: DWC002
Loc:
Chk:

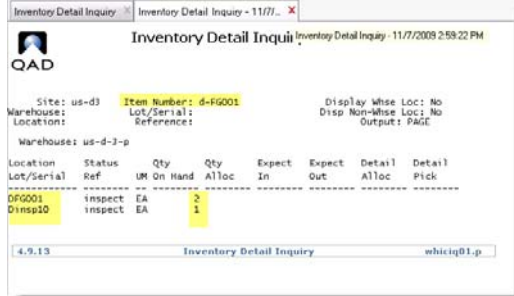
→

Transfer 8853
Loc: DWC002
D-FG001
EA Ref:
Qty: 2.0
Qty:

→

Transfer 8853
To Loc: DFG001
Loc:
Chk:
Item Number:
d-FG001
Lot/Serial:
EA Ref:





QAD Proprietary

- 1 Use the RF Select Task to transfer the second quantity of stock to the inspection area.
- 2 Enter a sample to inspection; for example, enter 2; then press Go.
- 3 Enter the inspection location; then press Go.
- 4 Use Inventory Detail Inquiry to verify the transfer.

Study Questions

- 1 For work orders, when does inspection typically occur?
- 2 Why is the BACK WO transaction used in the inspection process?
- 3 Briefly describe the setup process for work order inspection.
- 4 Name the three areas you set up in Internal Routing Maintenance for inspection. Hint: You set up the areas in the exercise.
- 5 Name at least two of the transaction types that you use in inspection.
- 6 True or False. You set up a Quality Assurance (QA) algorithm for an INSP WO transaction type.
- 7 What is the purpose of the Put Away (PA) algorithm for the BACK WO?

- 8 You specify a Quality Assurance (QA) algorithm for which transaction type?
- 9 Describe one situation in which you need to modify the status associated with inventory being inspected in Inspection Status Change Maintenance.
- 10 True or False. Inventory status codes also restrict particular transactions at specific locations.

Chapter 3

Containerization

Chapter Overview



Containerization Overview

- ✓ **Introduction**
- ✓ **RF Screen overview**
- ✓ **Containerization features**
- ✓ **Containerization controls**
- ✓ **Exercise**

QAD Proprietary

Introduction



Introduction

- ▲ Place all boxes filled during picking into other containers for shipping.

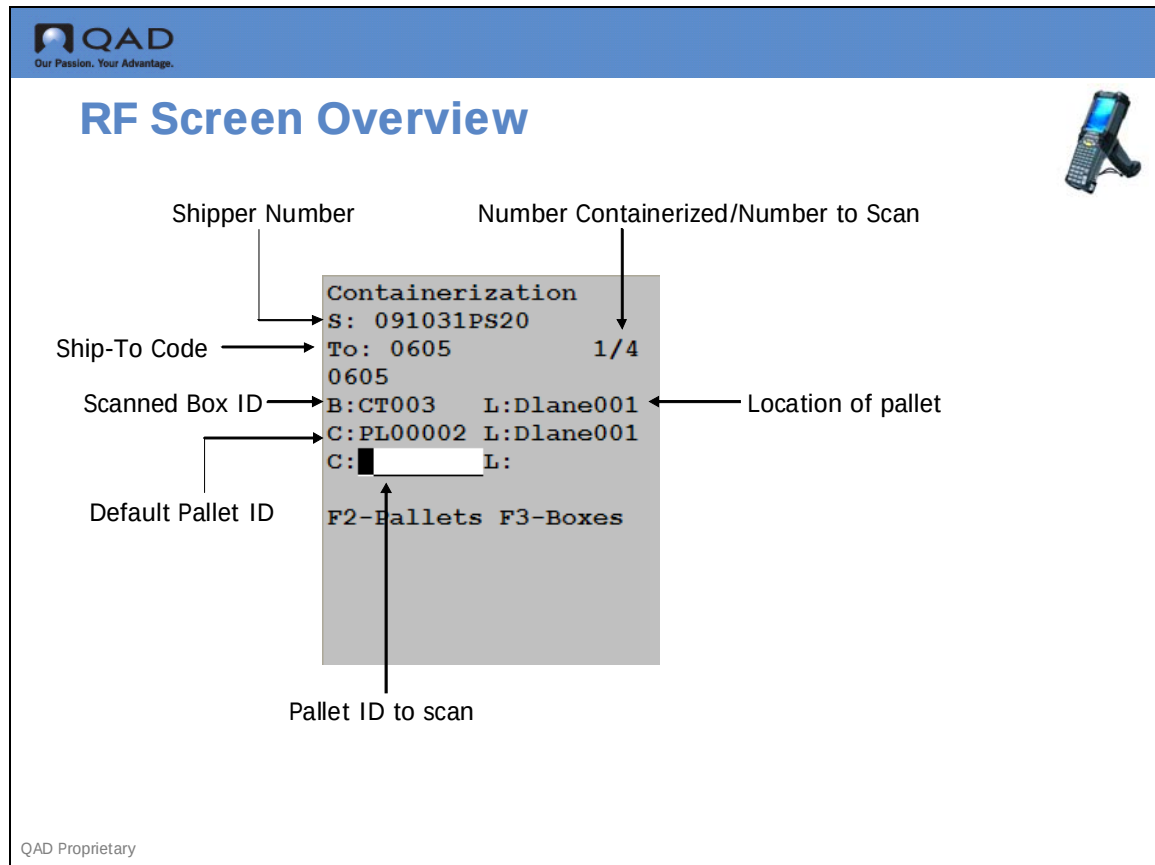


QAD Proprietary

Containerization is the process of placing all boxes that were filled during picking into other containers, such as pallets, for shipping.

The RF lets staff assemble pallets for shipment until all shipments for a particular customer ship-to address are complete. The RF containerization option lets warehouse staff use the RF to place all boxes or pallets they filled during picking into other containers for shipping.

RF Screen Overview



The RF Screen shows you the function at the top, followed by this information on the left side of the screen:

- Shipper number
- Ship-to code
- Scanned box ID
- Default Pallet ID
- Blank pallet ID to scan

The right side depicts the number of boxes already in the container, and the number remaining to go into the container. The ID after the L indicates the location of the pallet.

Features



Containerization Features

- ▲ Available for sales orders and distribution orders
- ▲ Scan boxes first and add them to a pallet
- ▲ Remove boxes from containers or pallets
- ▲ View order status or shipper data that reflects warehouse containerization
- ▲ View the number of boxes already containerized and the remaining boxes to be containerized on the RF
- ▲ Merge a pallet into another pallet
- ▲ Transfer a scanned box to a pallet in another location on the same shipper
- ▲ Optionally, print pallet labels

QAD Proprietary

The RF containerization functionality is available for both sales orders (SOs) and distribution orders (DOs).

Warehouse staff can create a container and link it to a pre-shipper number. All boxes for a container must be on the same pre-shipper; otherwise, the RF displays an error message.

Through the RF device, warehouse staff can create a new or modify an existing pallet and attach boxes to the pallet. They can also remove boxes from a pallet. When they do, the system updates the shipper to reflect this. When all boxes have been containerized for a shipper, the RF displays a message notifying staff that the shipper is ready for shipping.

View Boxes Containerized




Viewing Containerized Boxes

▲ View the number of boxes already containerized and the remaining boxes to be containerized on the RF

```
Containerization
S: 091031PS20
To: 0605      1/4
0605
B:CT003      L:Dlane001
C:PL00002    L:Dlane001
C:          L:
F2-Pallets F3-Boxes
```

→

```
Containerization
S: 091031PS20
To: 0605      1/4
0605
B:CT003      L:Dlane001
C:PL00002    L:Dlane001
C:          L:
PL00002      Dlane001
```

F2

```
Containerization
S: 091031PS20
To: 0605      1/4
0605
B:CT003      L:Dlane001
C:PL00002    L:Dlane001
C:          L:
CT003        Dlane001
CT006        Dlane001
CT007        Dlane001
```

F3

QAD Proprietary

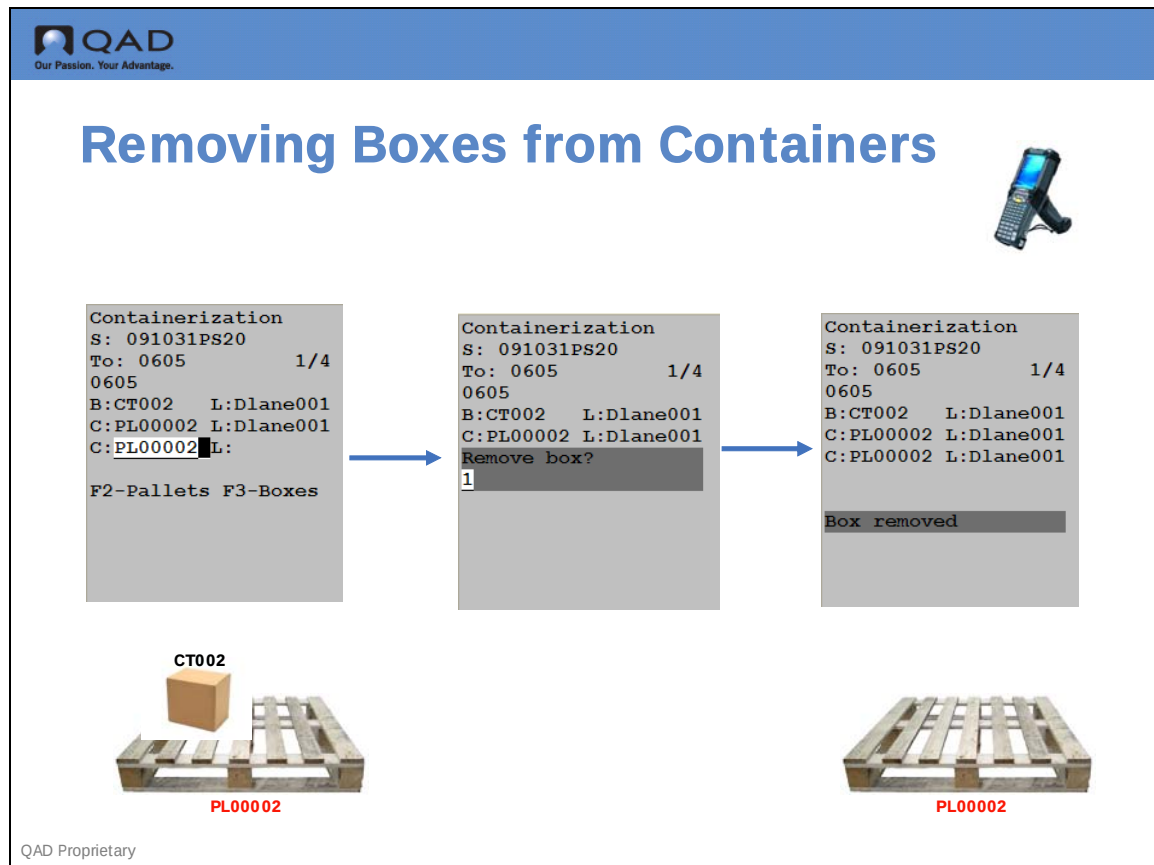
On the RF device, warehouse staff can view the number of:

- Boxes already containerized
- Remaining boxes to be containerized

Optionally, you can use function keys to view more:

- F2 to see pallet data
- F3 to see box data

Removing Boxes from Containers



You remove boxes and containers using the RF Container Build (3.3) menu option. To delete a box, warehouse staff scan the box and its container. The system knows the pallet for the box and understands this action is to remove the box from the pallet, so it prompts you to remove the box.

When staff respond with a Yes, and remove one box from a pallet, the system displays the message:

Box Removed

If staff remove all boxes from a pallet container, the pallet container is removed, too, so the pallet container level does not display under the shipper ID on the RF device.

If you remove boxes and the container at the next level up is empty, the system deletes the empty container.

When staff scan in another container, the system understands that the intent is to transfer the box to the other container, and prompts staff to transfer the box, as shown in the following graphic.



Remove Boxes, continued

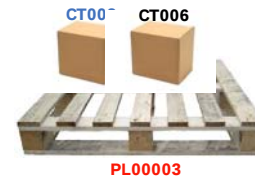


- Remove boxes from containers or pallets.

```
Containerization
S: 091031PS20
To: 0605          3/4
0605
B:CT002   L:Dlane001
C:PL00002 L:Dlane001
C:PL00003 L:
F2-Pallets F3-Boxes
```

```
Containerization
S: 091031PS20
To: 0605          3/4
0605
B:CT002   L:Dlane001
C:PL00002 L:Dlane001
C:PL00003 L:Dlane001
Transfer box?
1
```

```
Containerization
S: 091031PS20
To: 0605          3/4
0605
B:CT002   L:Dlane001
C:PL00002 L:Dlane001
C:PL00003 L:Dlane001
Box added
```



QAD Proprietary

View Order Status



View Order Status

▲ View order status or shipper data that reflects warehouse containerization.

```
Containerization
S: 091031PS19  READY
To: 002 3/3
Quality Products Div
B:CT005 L:Dlane001
C:PL00001 L:Dlane001
C:PL00001 L:Dlane001

Box added
```

QAD Proprietary

The RF displays the number of boxes containerized, the number of boxes to containerize, and containerization status in the upper right corner of the screen. Containerization status can be any of the following:

Blank: More containerization is required.

Pick: There are open pick tasks for the pre-shipper. The total number of boxes to scan does not reflect the actual number because totals are unknown at this point.

Ready: There are no more open pick tasks for the pre-shipper, and all boxes have been containerized.

Note The status displays boxes, not full pallet picking.

Containerization Controls

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Containerization Controls

Batch Picking Control x Batch Picking Control x

Go To Actions Copy Print Preview

Site: us-d3
Warehouse: us-d3

Undo Available: ☒ Container Length: 5
Release Orders Option: 2

Create Date: 10/31/2009 Miguel Alonso
Modified Date: 11/8/2009 Miguel Alonso

Containerization

Pallet Item: Pallet container Item

Pallet Print Program:

Pallet Print Option: 0

Prompt to Remove Constraint: ☒

Generate Identification: ☒

Explosion Option: 2

Delete Back Next

QAD Proprietary

Containerization controls are in the Containerization frame within Batch Picking Control (4.15.24 if you use QAD Warehousing or 80.15.24 if you use AIM).

Fields

Pallet Item. Enter the default pallet container item. You must define the container item first in Item Maintenance (1.4.1).

Pallet Print Program. Enter a print program to use when printing labels for pallets. The default program is `whprtpal.p`.

Pallet Print Option. Indicate whether pallet labels print automatically, not at all, or if the system prompts to print labels. You must specify the print program in Pallet Print Program. The system prints labels for pallets that do not already have a label.

0: Never print pallet labels.

1: Always print pallet labels.

2: Prompt RF user to print pallet labels.

Prompt to Remove Container. Indicate if you want the system to prompt RF users to remove a container. If users respond to the prompt with Yes, the box is removed from the pallet. When you view the shipper structure in Order Warehouse Detail Status Inquiry (4.15.4.1), the display

shows the box below the shipper level, instead of below the pallet. When you remove all boxes in a pallet, the system automatically deletes the pallet and moves all items below the shipper level for the pallet.

No (the default): The system removes the box from the pallet without prompting warehouse staff for confirmation.

Yes: The system prompts warehouse staff to remove the box from the pallet.

Generate Identification. Specify whether the system generates a new container ID when warehouse staff use the RF Container Build menu option.

No: The system does not generate a new container ID.

Yes: The system generates a new number during RF containerization. You should set up pallet label printing if the system generates new numbers.

Generating a new ID can lead to errors if warehouse staff accidentally press Return in the RF containerization process and Generate Identification is set to Yes. The system considers stock to be on the newly generated pallet number while it may actually be on a different pallet ID.

Explosion Option. Specify whether the system prompts the RF user to enter the number of boxes or splits the items into boxes when you explode a pallet.

0: The RF does not prompt the user to specify the number of boxes. The system splits goods into x boxes of y items, where x and y are values that the system calculates based on the item's base UM conversion factor. You define the conversion factor in Alternate Unit of Measure Maintenance (4.5.1). If the items cannot be split into boxes equally, the last box contains the remaining items from the conversion.

1: The RF prompts the user to enter the number of boxes into which the contents of the pallet are exploded.

Exercise1: Put Boxes into Pallets and Review Stock



Exercise Objectives

- ▲ Put boxes from the lanes in pallets
- ▲ Review stock inquiries and preshipper inquiry

QAD Proprietary

In this exercise, you will put the boxes in the shipping lanes into containers, then review the status of the containerized boxes through EE inquiry programs.

Before You Start

Before you start the exercise, ensure that you have existing sales orders with pre-shippers, items are picked through the RF device for the pre-shippers, and boxes are dropped off to shipping lanes.

Note These tasks were completed in the exercise for the Batch chapter.

Step 1: Use Pre-Shipper/Shipper Inquiry to Review



Containerization

CT001



D-IT005 6 EA

CT004



D-IT006 6 EA

CT005



D-IT007 4 EA
D-IT006 15 EA

Pre-Shipper/Shipper Inquiry Pre-Shipper/Shipper Inquiry - 1...



Pre-Shipper/Shipper Inquiry

11/08/09

Ship-From ID: us-d3
Pre-Shipper/Shipper: Pre-Shipper
Number: 091031PS19

Ship-To/Dock: 002 Quality Products Div 1000 Output: PAGE

Master Bill ID: Inventory Movement Code: Status:

ID Site	Item Number Location Customer Ref	PO Number Lot/Serial Model Year	Order Ref	Line Stat	To Ship
091031PS19				0	1.0
	.CCT001 Box			0	EA
us-d3	Dlane001				
..I	D-IT005		S011035	1	6.0
us-d3	Dlane001				EA
	.CCT004 Box			0	EA
us-d3	Dlane001				
..I	D-IT006		S011035	2	6.0
us-d3	Dlane001				EA
	.CCT005 Box			0	EA
us-d3	Dlane001				
..I	D-IT007		S011035	3	4.0
us-d3	Dlane001				EA
..I	D-IT006		S011038	1	15.0
us-d3	Dlane001				EA

7.9.3
Pre-Shipper/Shipper Inquiry
rciq03.p

QAD Proprietary

Review the orders you set up in the exercise for Batch Picking. Review the boxes and their ID codes as well as the shipping lanes that depict the current location of the boxes.

Ensure that you have boxes CT001 through CT007, and that the boxes are in various shipping lanes.

 QAD

Step 3: Use the RF Container Build Menu to Put Boxes to Containers



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RF Container Build



Warehouse Management

Release: eB3

User ID: mqa

Pa:

Domain: Domain1

Site: US-D3

Warehouse: us-d-3

WLG:

Location:

Task:



1 BP Pick SO/DO

2 BP Pick All

3 Container Build

4 Container Move

5 Ship Truck

6 Pallet Explosion

7 Item Move

8 Print Paperwork

9 Cancel Shipment

QAD Proprietary

- 1 Log onto the RF device version of QAD Warehousing, specifying the site, warehouse, or location.
- 2 From the RF main menu, select option 3, Container Build.

Step 4: Enter the Container IDs and Move Boxes to Containers





Containerization

```

Containerization
S: 091031PS19
To: 002          0/3
Quality Products Div
B:CT001   L:Dlane001
C:       L:
C:       L:
F2-Pallets F3-Boxes
          
```

→

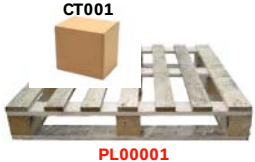
```

Containerization
S: 091031PS19
To: 002          0/3
Quality Products Div
B:CT001   L:Dlane001
C:       L:
C:PL00001 L:Dlane001
          
```

→

```

Containerization
S: 091031PS19
To: 002          1/3
Quality Products Div
B:CT001   L:Dlane001
C:       L:
C:PL00001 L:Dlane001
Box added
          
```



QAD Proprietary

- 1 Enter a valid container ID (pallet ID) at the C: prompt.
- 2 Enter the location (the shipping lane) of the container.
The system adds the box to the container.
- 3 Continue adding boxes to containers until all boxes in the shipping lanes are in valid containers.

Step 5: Review the Order Status

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Containerization

Pre-Shipper/Shipper Inquiry
Pre-Shipper/Shipper Inquiry - 1...

Pre-Shipper/Shipper Inquiry
11/08/09

Ship-From ID: us-d3
 Pre-Shipper/Shipper: Pre-Shipper
 Number: 091031PS19

Ship-To/Dock: 002 Quality Products Div 1000 Output: PAGE

Master Bill ID: Status: Inventory Movement Code:

ID Site	Item Number Location Customer Ref	PO Number Lot/Serial Model Year	Order Ref	Line Stat	To Ship
091031PS19				0	1.0
	.CPL00001 Pallet			0	EA
	us-d3 Dlane001				
	.CCT001 Box			0	EA
	us-d3 Dlane001				
	...I D-IT005		5011035	1	6.0 EA
	us-d3 Dlane001				
	.CCT004 Box			0	EA
	us-d3 Dlane001				
	...I D-IT006		5011035	2	6.0 EA
	us-d3 Dlane001				
	.CCT005 Box			0	EA
	us-d3 Dlane001				
	...I D-IT007		5011035	3	4.0 EA
	us-d3 Dlane001				
	...I D-IT006		5011038	1	15.0 EA
	us-d3 Dlane001				

7.9.3
Pre-Shipper/Shipper Inquiry
rciq03.p

QAD Proprietary

Use Pre-Shipper/Shipper Inquiry again to view the status of the order.

Verify that boxes are depicted at levels lower than that of the container.

Study Questions

- 1 True or False. The RF lets staff assemble pallets for shipment until all shipments for a particular customer ship-to address are ready to move out of the forward pick area.
- 2 Name three things the RF screen shows you about containers.
- 3 True or False. Although the RF displays container information, the location only displays when picking for the containers.
- 4 True or False. The RF containerization feature is for all three order types, work, distribution, and sales.
- 5 True or False. All boxes for a container must be on the same pre-shipper; otherwise, the RF displays an error message.
- 6 Name two things that the function keys provide while using the containerization features on the RF device.
- 7 Which RF option lets you remove boxes and containers?

- 8 Which function keys do you use in the RF when containerizing to indicate to the system that you want to scan in another container?
- 9 Name the three containerization statuses.
- 10 Name three options you can set up for containerization in Batch Picking Control.

Chapter 4

Container Move

Container Move Chapter Overview



Container Move Overview

- ✓ **Introduction**
- ✓ **Container Move features**
- ✓ **Setting up Container Move**
- ✓ **Exercises**

QAD Proprietary

Introduction



Container Move Introduction

- ▲ Move pallets with detail allocation and containerization to any other location, including trucks.



QAD Proprietary

Warehouse staff need to move the containers from location to location within the warehouse, to the loading docks, and to the shipping truck. To do this, they use the RF Container Move functionality.

Features



Container Move Features

- ▲ Allows moving a container with:
 - Detail allocations
 - Container structure (pre-shipper/shipper)
 - On-hand quantity
- ▲ Can also move a pallet (with no container) and all its content
- ▲ Typically used for:
 - Pallet Staging before shipment
 - Truck Loading

QAD Proprietary

- Let staff move any pallet with detail allocation and containerization to any other location, including another truck.
- Optionally, let you add staging or validation steps when moving containers.
- Facilitate cross-docking functionality.
- Report the position of each pallet in the truck.
- Load pallets in the appropriate reverse dropping order if a drop-off sequence has been specified in a load.

Setting Up Container Move

Use the Container Move frame of Batch Picking Control (4.15.24) to set up Container Move options.

Fields

Sequential Shipper Option. Specify the type of message the system displays when it checks for partially loaded pre-shippers or shippers; that is, pre-shippers/shippers for which the truck loading began, but pallets still remain to be loaded.

0: The system does not display messages and does not take action.

1: The system displays a warning message.

2: The system displays a message and prompts for user confirmation of the message before continuing.

3: The system displays an error message and you cannot continue.

Use the setting to ensure all pallets for a given shipment are loaded consecutively in the truck, ideally in the reverse order of unloading so that the unloading process is easier.

Example You have three shippers for which you are loading a truck: Shipper 1 has three pallets, all of which are loaded. Shipper 2 has two pallets, only one of which is loaded. Shipper 3 has two pallets, none of which are loaded. You set this option to 3. The system displays an error message when you attempt to load and scan pallets for Shipper 3 because Shipper 2 has a pallet remaining to be loaded.

Only Shipper Option. Specify the type of message the system displays when it verifies whether users can load both pre-shippers and shippers or just shippers. If you set this option so that users can continue processing despite messages before loading the truck, the system converts any selected pre-shippers to shippers.

0: The system does not display messages and does not take action.

1: The system displays a warning message.

2: The system displays a message and prompts for user confirmation of the message before continuing.

3: The system displays an error message and you cannot continue.

Additional Setup Steps



Additional Container Move Setup Steps

- ✓ Define an IRG for a truck load
- ✓ Define a truck SLG
- ✓ Define storage for the truck
- ✓ Define an IR for the truck
- ✓ Link a truckload transaction to the IR
- ✓ Assign an algorithm to the transaction type

QAD Proprietary

In addition to setting up options for Container Move within Batch Picking Control, you must set up QAD Warehousing so that trucks can be included as locations and routings, routing groups, and transactions exist within the system to interact with the truck location when moving containers. The flowchart shown above depicts the steps you must complete to do this.

Defining an IRG for Truck Load

The screenshot shows the 'Internal Routing Group Maint' window in the QAD system. The window has a title bar with the QAD logo and the text 'Our Passion. Your Advantage.' Below the title bar, the main heading is 'Container Move: Defining an Internal Routing Group'. The window contains the following fields and options:

- Site:** us-d3
- Warehouse:** us-d-3
- Internal Routing Group:** Truck (highlighted in yellow)
- Description:** Truck Area
- Functional:** ☒
- SLG Default Values:**
 - Allow Issues: ☒
 - Allow Receipts: ☒
 - Allow Outgoing Returns: ☒
 - Allow Incoming Returns: ☒

At the bottom right of the window are three buttons: 'Delete', 'Back', and 'Next'. The bottom left corner of the window displays 'QAD Proprietary'.

You must define an internal routing group (IRG) for all truck locations in Internal Routing Group Maintenance (4.2.1). To do this:

- Specify the truck as the Internal Routing Group.
- Set Functional to Yes.
- Optionally, set additional fields or accept the defaults.

If you optionally define a stage location instead of a truck location, you must define the IRG for the stage location, not the truck location. By defining an IRG for a stage location rather than a truck location, you let staff perform the following movements:

- From the shipping lane to the stage area
- Between locations in the stage area
- Between the stage area and the truck location
- Between a truck and the stage area (that is, return to a stage area from the truck location)

Staff cannot return to the stock area or any other IRG from the stage area.

Define a Truck SLG

The screenshot shows the 'Storage Location Group Maint' window in the QAD system. The window title is 'Storage Location Group Maint'. The menu bar includes 'Go To', 'Actions', 'Copy', 'Print', and 'Preview'. The main form displays the following information:

- Site: us-d3
- Warehouse: us-d3
- Storage Location Group: **Truck** (highlighted in yellow)
- Description: Truck Area
- Internal Routing Group: **Truck** (highlighted in yellow)

Below this information, there are several checkboxes and input fields for configuration:

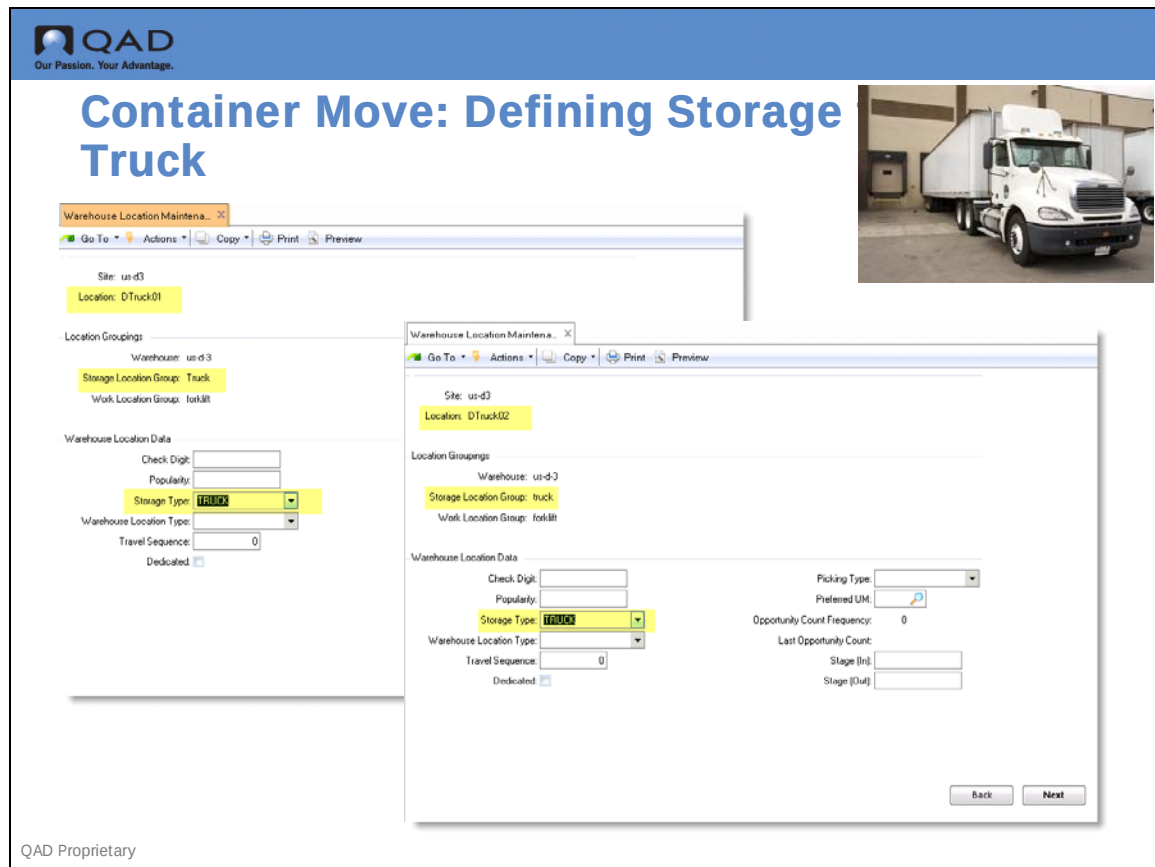
- Allow Issues: ☒
- Allow Receipts: ☒
- Allow Incoming Returns: ☒
- Allow Outgoing Returns: ☒
- Opportunity Counts: ☐
- Opportunity Count Frequency: 0
- Check Digits: ☐
- Cycle Count Status Option: 0
- Exclude from Picking: ☐
- Picking Level: 0
- Over Pick: ☐
- Multi-Trans: ☐
- Detail Overflow Group: ☐
- Capacity Check when OTF: ☐
- Optimized Storage: ☐
- Allow Mixed Status Codes: ☐
- Recount UM: ☐
- Picking Multiple UM: ☐
- Acquisition UM: ☐

At the bottom right, there are three buttons: 'Delete', 'Back', and 'Next'.

QAD Proprietary

To use container move features, you must set up the truck as a location and specify its storage location group and storage type. For example, you can define a Truck location and specify the storage location group and storage type as Truck. When a truck is defined as a storage location, you can use functions to report on truck capacity and contents and the warehousing system can use the truck location for storage.

Defining Storage for the Truck



The screenshot displays the QAD Warehouse Location Maintenance interface. The title bar reads "Container Move: Defining Storage Truck". The main window is titled "Warehouse Location Maintenance" and shows the following configuration:

- Site:** us-d3
- Location:** DTruck01
- Location Groupings:**
 - Warehouse: us-d3
 - Storage Location Group: Truck
 - Work Location Group: forklift
- Warehouse Location Data:**
 - Check Digit: [empty]
 - Popularity: [empty]
 - Storage Type: TRUCK (highlighted in yellow)
 - Warehouse Location Type: [empty]
 - Travel Sequence: 0
 - Dedicated: ☒

A smaller, overlapping window shows the same form but with the location set to "DTruck02". This window includes additional fields on the right side:

- Picking Type:** [empty]
- Preferred UM:** [empty]
- Opportunity Count Frequency:** 0
- Last Opportunity Count:** [empty]
- Stage (In):** [empty]
- Stage (Out):** [empty]

Buttons for "Back" and "Next" are visible at the bottom right of the overlapping window. The QAD logo and "Our Passion. Your Advantage." tagline are in the top left corner. A small image of a white truck is in the top right corner.

Use Warehouse Location Maintenance (4.3.13) to specify the location for the truck, the SLG for the truck, and the storage type for the truck.

Defining an IR for the Truck

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Container Move: Defining an IR

Internal Routing Maintenance

Go To Actions Copy Print Preview

Site: US-D3 Warehouse: us-d-3 Internal Routing: Loadpal

Description: Truck Loading

Sequence: 10 Internal Routing Group: truck

Transaction Create

Confirmed at Source: System Code: RF

Two Phase: ☒ Keep From Status:

Task: TRANSFER Priority: Increment:

To Location Option: 3 To Item Option: 0 To Lot/Serial Option: 0 To Reference Option: 0 Alternative UM Option: 0 Expire Date (Days): 0

From Lot/Serial Option: 0 From Reference Option: 0 Allow Quantity Increase: ☐ Allow Quantity Decrease: ☒ Quantity Change Option: 0

Delete Back Next

QAD Proprietary

You must define an internal routing (IR) for the truck load transaction type. Define the internal routing for type LOC-TR with a single step that moves to the truck IRG.

Note The location transfer transaction (LOC-TR) is included with the system data as a generalized code for field tr_type.

Define a single-step movement that lets staff move items:

- From the shipping lane IRG to the IRG truck location
- Between locations of the same IRG should you need to transfer from one truck to another

Use Internal Routing Maintenance (4.2.5) to define a one-phase movement for the truck. A one-phase internal routing represents movement within the IRG.

Linking a Truck Load Transaction to the IR

The screenshot displays the 'Int Routing Assignment Maint' window in the QAD system. The window has a title bar with the QAD logo and the tagline 'Our Passion. Your Advantage.' Below the title bar, there is a menu bar with 'Go To', 'Actions', 'Copy', 'Print', and 'Preview'. The main area contains the following fields:

- Transaction Type: loc-tr
- Site: us-d3
- Warehouse: us-d-3
- Item Number:
- Warehouse Item Type:
- Address:
- Custom: ☐
- Internal Routing: LoadPal
- Custom Program:

At the bottom right, there are three buttons: 'Delete', 'Back', and 'Next'. At the bottom left, it says 'Modifying existing record' and 'QAD Proprietary'.

You must link the truck load internal routing to the truck location transfer transaction. Use Internal Routing Assignment Maintenance (4.2.9) to assign an internal routing to the LOC-TR transaction.

Define the transaction type, then specify the internal routing for the transaction type.

Assign an Algorithm to the Transaction Type

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Container Move: Assigning an Algorithm

Algorithm Assignment Maintenance

Go To Actions Copy Print Preview

Algorithm Type: cm Transaction Type: loc-tr
Site: us-d3 Warehouse: us-d3
Item Number: Warehouse Item Type:
Address: Custom: ☐

Assigned Algorithms

Seq	Algo	Description
10	11	Mov to Dock - Find Empty Location
20	12	Mov to Dock - Merge with same Shipper/Ship-To
30	13	Mov to Dock - Find Location with Best Load

Sequence: 10 Algorithm: 11
Description: Mov to Dock - Find Empty Location

Back Next

QAD Proprietary

Use Algorithm Assignment Maintenance to assign a container move algorithm to the transaction type you previously created.

Fields

Algorithm Type. Use Algorithm Type to specify the two-character code for the type of algorithm you want to maintain or assign. The standard two-character codes are CM, LA, LF, PA, PK, QA, and SC.

These standard codes are supplied with the system, and you will not normally need any other algorithm types. If you should ever need to add another algorithm type code, you must create it, and its description using Generalized Code Maintenance.

Transaction Type. This field is used to specify the transaction type.

Maintain transaction types using Transaction Type Maintenance.

You specify the transaction type to link to an internal routing in Internal Routing Assignment Maintenance. You specify the transaction type to link to a sequence of algorithms in Algorithm Assignment Maintenance.

You also specify the transaction type when using the Algorithm Simulation Menu. These options simulate either location-find and put-away, or picking. The system simulates the running of the algorithms that you have assigned to the specified transaction type and displays the results of the simulated put-away or picking.

Sequence. Each algorithm assignment consists of a number of individual algorithms, in order, identified by a sequence number.

For a new assignment, Sequence defaults to 10. Number sequences by 10's (10, 20, 30, and so on) so that additional steps can be inserted easily later, if required.

Algorithm . Assign algorithms of the type you selected at the top of the frame. You can either type in the required number, or you can use the Up and Down arrow keys to move through the list of algorithms.

Use Algorithm Master Maintenance to modify the description of the algorithm you select.

In Algorithm Assignment Maintenance, you can assign algorithms of the type you selected at the top of the screen. For example, if you selected algorithm type PA, you can assign any of the put-away algorithms.

Exercise 1: Loading Pallets into Different Trucks



Exercise Objectives

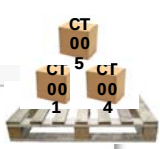
- ▲ Load Pallet PL00001 and Pallet PL00002 in 2 different trucks
- ▲ Review stock inquiries and preshipper to see how algorithms handle movements

QAD Proprietary

In this exercise, you will load two different pallets, then load them into two different trucks. Once the pallets are loaded, you will review stock inquiries and explore how the container move algorithms handled the movement of the pallet containers.

Step 1: Review the Boxes/Pallets to Move

Exercise: Review Pallet / Boxes



PL00 001

Pre-Shipper/Shopper Inquiry

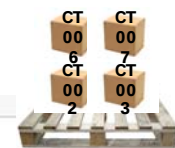
Ship-From ID: us-d3
Pre-Shipper/Shopper: Pre-Shipper Number: 091031P519

Ship-To/Dock: 002 Quality Products Div 1000

Master Bill ID: Inventory Movement Code: Status: Output: PAGE

ID Site	Item Number Location Customer Ref	PO Number Lot/Serial Model Year	Order Ref	Line Stat	To Ship
091031P519				0	1.0
..CPL00001	Pallet US-d3 D1ane001			0	EA
..CCT001	Box us-d3 D1ane001			0	EA
...I	D-IT005 us-d3 D1ane001	5011035	1	6.0	EA
..CCT004	Box us-d3 D1ane001			0	EA
...I	D-IT006 us-d3 D1ane001	5011035	2	6.0	EA
..CCT005	Box us-d3 D1ane001			0	EA
...I	D-IT007 us-d3 D1ane001	5011035	3	4.0	EA
...I	D-IT006 us-d3 D1ane001	5011038	1	15.0	EA

7.9.3 Pre-Shipper/Shopper Inquiry rcicq03.p



PL000 02

Pre-Shipper/Shopper Inquiry

Ship-From ID: us-d3
Pre-Shipper/Shopper: Pre-Shipper Number: 091031P520

Ship-To/Dock: 0605 0605

Master Bill ID: Inventory Movement Code: Status: Output: PAGE

ID Site	Item Number Location Customer Ref	PO Number Lot/Serial Model Year	Order Ref	Line Stat	To Ship
091031P520				0	1.0
..CPL00002	Pallet US-d3 D1ane001			0	EA
..CCT002	Box us-d3 D1ane001			0	EA
...I	D-IT005 us-d3 D1ane001	5011036	1	3.0	EA
..CCT003	Box us-d3 D1ane001			0	EA
...I	D-IT008 us-d3 D1ane001	5011036	2	6.0	EA
..CCT006	Box us-d3 D1ane001			0	EA
...I	D-IT009 us-d3 D1ane001	5011036	3	3.0	EA
..CCT007	Box us-d3 D1ane001			0	EA
...I	D-IT009 us-d3 D1ane001	5011036	3	2.0	EA

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Use Pre-Shipper/Shopper Inquiry (7.9.3) to review the pallets and boxes to move.

Step 2: Use the RF to Transfer the Container




Exercise: Use the RF to Transfer

```

Loc Transfer
Ref: PL00001
Loc: Dlane001
Chk:
S:
Sh:

Via:
Lo:
        
```

→

```

Loc Transfer
Ref: PL00001
Loc: Dlane001
Chk:
S: 091031PS19
Destination
  Loc: DTruck01
  Chk:
Via:
Lo:
        
```

→

```

Loc Transfer
Ref: PL00001
Loc: Dlane001
Chk:
S: 091031PS19
Sh: 002
Quality Products Div

Via:
Transfer complete
        
```

```

Loc Transfer
Ref: PL00002
Loc: Dlane001
Chk:
S: 091031PS20
Destination
  Loc: DTruck02
  Chk:
Via:
Lo:
        
```

→

```

Loc Transfer
Ref: PL00002
Loc: Dlane001
Chk:
S: 091031PS20
Sh: 0605
0605

Via:
Shipment Ready
        
```

QAD Proprietary

- 11** Log onto the RF device software, then use the Container Move function to transfer the container.
- 12** Log onto the RF software.
- 13** Select Container Move (3.4).
- 14** Enter the Container Reference number in the Ref field.
- 15** Enter the destination location (the truck) in the Loc field, under Destination.
The system informs you the shipment is ready to ship.

Step 3: Review the Move

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Exercise: Review the Move

Pre-Shipper/Shipper Inquiry
Pre-Shipper/Shipper Inquiry - 1...

Pre-Shipper/Shipper Inquiry
11/08/09

Ship-From ID: us-d3
Pre-Shipper/Shipper: Pre-Shipper
Number: 091031PS20

Output: PAGE

Ship-To/Dock: 0605 0605

Master Bill ID: Inventory Movement Code:

ID	Item Number	PO Number	Order	Line	To
Site	Location	Lot/Serial	Ref	Stat	Ship
091031PS20				0	1.0
JCPL00002	Pallet			0	
US-D3	DTruck02				EA
...	Box			0	
US-D3	DTruck02				EA
...	D-IT005		5011036	1	3.0
US-D3	DTruck02				EA
...	Box			0	
US-D3	DTruck02				EA
...	D-IT008		5011036	2	6.0
US-D3	DTruck02				EA
...	Box			0	
US-D3	DTruck02				EA
...	D-IT009		5011036	3	3.0
US-D3	DTruck02				EA
...	Box			0	
US-D3	DTruck02				EA
...	D-IT009		5011036	3	2.0
US-D3	DTruck02				EA

Inventory Detail Inquiry
Inventory Detail Inquiry - 11/8/...

Inventory Detail Inquiry
11/08/09

Site: us-d3 Item Number:

Warehouse: us-d-3 Lot/Serial:

Location: dtruck02 Reference:

Display Whse Loc: No

Disp Non-Whse Loc: No

Output: PAGE

Item	Status	Qty	Expect	Expect	Detail	Detail
Lot	Ref	UM On Hand	In	Out	Alloc	Pick
D-IT005	EA	3				3
D-IT008	EA	6				6
D-IT009	EA	5				5

4.9.13
Inventory Detail Inquiry
whiciq01.p

QAD Proprietary

Use Pre-Shipper/Shipper Inquiry (7.9.3) to review that the shipment moved locations to the truck and is ready to ship.

Study Questions

- 1 True or False. Container Move provides functions to move the containers from the picking area, to the staging area, to the loading docks.
- 2 True or False. You can include validation functions when moving containers.
- 3 In which control program and which field ensures consecutive loading for pallets?
- 4 Which field do you set so that users can continue processing despite messages before loading the truck?
- 5 What must you ensure is set up QAD Warehousing for Container Move?
- 6 True or False. You must specify the truck as the Internal Routing Group in Internal Routing Group Maintenance (4.2.1).
- 7 How do you specify the staging location?
- 8 To use container move features, you must set up the truck as a location and specify what else?

- 9 True or False. Use Warehouse Location Maintenance (4.3.13) to specify the location for the truck, the SLG for the truck, and the storage type for the truck.
- 10 What is the name of the truck load transaction type?

Chapter 5

Ship Truck

Course Overview



Course Overview

- ✓ **Introduction to Ship Truck**
- ✓ **Ship Truck features**
- ✓ **Ship Truck control file**
- ✓ **Screen overview**
- ✓ **Exercise**

QAD Proprietary

Ship Truck Introduction



Introduction

- ▲ After the truck has been loaded and the shipment is ready, you can use a single transaction to confirm truck shipment



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After the truck has been loaded, shipment documentation has been printed, and the shipment is ready, you can use a single transaction to confirm that the truck shipped. You use the Ship Truck transaction to confirm a sales order shipper, much like you use Pre-Shipper/Shipper Confirm (7.9.5) for a sales order or DO Pre-Shipper/Shipper Confirm (12.19.13) for a distribution order.

Ship Truck Features



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Ship Truck: Features

- ▲ View all shippers loaded on the truck for a given truck location
- ▲ Create a master bill of lading (MBOL) that includes all shippers for both Sales Orders and distribution Orders
- ▲ Indicate truck shipment, resulting in shipment of all orders on the truck
- ▲ Indicate shipment status

QAD Proprietary

Ship Truck features let you:

- Indicate truck shipment, resulting in shipment of all orders on the truck.
- Create a master bill of lading (MBOL) that includes all shippers for both SOs and DOs.
- View all shippers loaded on the truck for a given truck location.

Additionally, If specified in the Truck Shipment (whtraxtx.p) field in Local Exit Routines Setup (4.23.10), a process end of day (PEOD) message can be produced and exported to the TMS.

View Shippers



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Ship Truck Features: View shippers



Ship Truck		
Location: truck01		
ID	St	
091030PS10	OK	*
091030PS11	OK	*
091030PS13	OK	*
090030PS19	OK	*
091031PS19	OK	*

Via:
Ship-To: 002

QAD Proprietary

RF Ship Truck features lets you view DOs or SO pre-shippers/shippers for items loaded on the truck. The system:

- Scans the location representing the truck or dock.
- Finds all SO and DO pre-shippers/shippers for all items loaded in the truck.
- Prompts to confirm the pre-shipper/shipper and issues all items for them.

If the pre-shipper/shipper is large and the items cannot fit in a single truck, warehouse staff can partially load another truck.

Indicate Status



Ship Truck Features: Indicate Status



Ship Truck		
Location: truck01		
ID	St	
091030PS10	N/OK	
091030PS11	OK	*
091030PS13	OK	*
090030PS19	TASK	
091031PS19	OK	*

Via:
Ship-To: 002

QAD Proprietary

The RF Ship Truck software indicates the status of the shipment:

OK: Can be shipped

N/OK: Can be shipped; however, some items are not in the truck. If shipped, the items are shipped from their current location.

TASK: There are open pick tasks against the pre-shipper, and you cannot confirm the shipment.

Ship Truck Controls

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Ship Truck Controls

Batch Picking Control

Go To Actions Copy Print Preview

Site: un-d3
Warehouse: un-d3

Print Paperwork

Include Shipper Comments: ☐ Print Paperwork Option: 0
Inc Packing Create: ☐
Print Features and Options: ☐
Print Order Details: ☐
Assign Shipper Number: ☒
Display Quantity In SD UIM: ☐
Print Lot/Serial Numbers: ☐

Container Move

Sequential Shipper Option: 0
Only Shipper Option: 0

Ship Truck

Master Bill Ship-To/Dock: Confirm on Error: ☐

Delete Back Next

Preview

Print Paperwork Option: 0

Specify whether RF Ship Truck option should confirm shipments when errors are received from a Transportation Management System (TMS).

Confirm on Error: ☐

Delete Back Next

QAD Proprietary

Use fields in the Ship Truck frame of Batch Picking Control (4.15.24) to set up ship truck options.

Master Bill. Enter the bill of lading ID for this load. If you use RF Ship Truck option in combination with the process end of day (EOD) message sent from the TMS, the system populates this field automatically and creates an MBOL in Master Bill of Lading Maintenance.

Confirm on Error. Specify Yes if you want to confirm shipments when errors are received from a Transportation Management System (TMS). A warning message displays but you can proceed and confirm shippers.

RF Screen Overview



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Ship Truck RF Screen Overview

Location (Truck)

Carrier Shipment Reference

Identifier Carrier Vehicle

Master Bill of Lading

Ship Truck

Location: Truck01

Carrier Shipment Ref

REF0093837

Vehicle ID

AB0974-CV

Master BOL

MBOL0938747

Carrier:

Shipment Carrier

QAD Proprietary

You use RF Ship Truck options (3.5) to enter shipment data. You enter the truck location, and optionally, vehicle ID, or master bill of lading (MBOL).

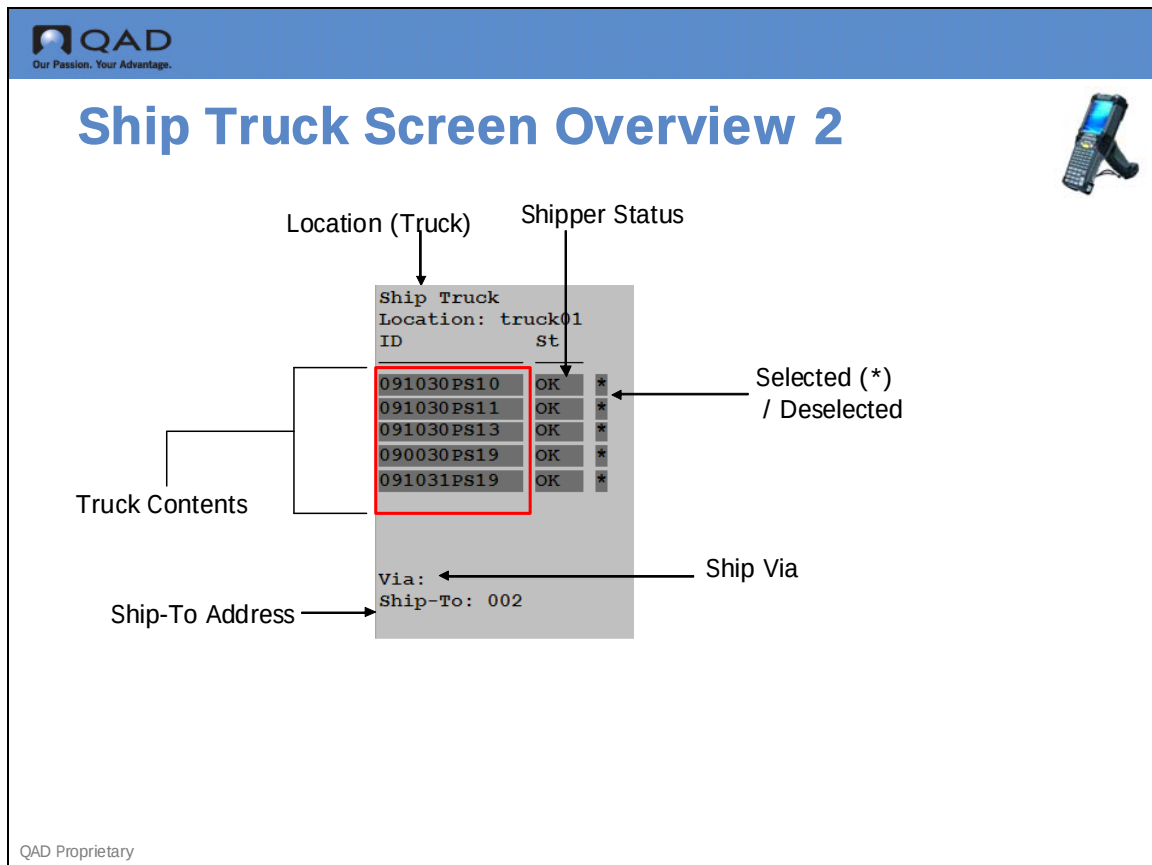
Note If you do not enter an MBOL, the system generates one and assigns shippers that are being confirmed to it. Print the MBOL using the RF Print Paperwork option. If you enter an MBOL, the system adds the shippers that are being confirmed to the existing MBOL.

You can specify a valid carrier as defined in Carrier/Service Assignment Maintenance (4.15.2.13). When you enter a carrier, the system validates that all shippers being confirmed belong to a service of the carrier. The RF displays shipper IDs with varying shipper status.

RF Screen Overview (continued)

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Ship Truck Screen Overview 2



The diagram illustrates the 'Ship Truck' screen on an RF device. The screen displays the following information:

- Location (Truck):** truck01
- Shipper Status:** St
- Truck Contents:** A list of shipper IDs and their status (OK or *):

Shipper ID	Status
091030PS10	OK *
091030PS11	OK *
091030PS13	OK *
090030PS19	OK *
091031PS19	OK *
- Ship Via:** Via: Ship-To: 002

Annotations indicate that the asterisk (*) denotes a 'Selected (*) / Deselected' status. The 'Ship-To Address' is also shown as 'Ship-To: 002'.

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When you press Enter, the system shows you the shippers that are for items loaded on the truck; this constitutes the truck contents.

An asterisk displays if the shipper is selected. You can press Enter while the cursor is on the shipper number to deselect the shipper.

Exercise: Print Pre-Shipper, Confirm Truck Ship, and Review



Objectives

- ▲ Pre-Shippers should be printed and converted to shipper (Print Paper Work)
- ▲ Confirm Dtruck01 and Dtruck02
- ▲ Review stock inquiries and pre-shipper inquiry
- ▲ Print pre-shipper and convert to shipper

QAD Proprietary

In this exercise, you will ensure that the pre-shipper is converted to a shipper and shipper contents are printed. You will also confirm that goods are on two trucks (truck locations) and the shipment is ready to ship; then you will review the stock and pre-shipper status through system inquiries.

Step 1: Review the Inventory on the Truck

Inventory Detail Inquiry

Inventory Detail Inquiry - 11/8/...

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Exercise: Review Inventory

Inventory Detail Inquiry

11/08/09

Site: us-d3

Item Number:

Warehouse: us-d-3

Lot/Serial:

Location: dtruck01

Reference:

Display Whse Loc: No

Disp Non-Whse Loc: No

Output: PAGE

Item	Status	Qty	Expect	Expect	Detail	Detail
Lot	Ref	UM On Hand	In	Out	Alloc	Pick
D-IT005	EA	6				6
D-IT006	EA	21				21
D-IT007	EA	4				4

4.9.13

Inventory Detail Inquiry

whiciq01.p

Inventory Detail Inquiry

Inventory Detail Inquiry - 11/8/...

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Inventory Detail Inquiry

11/08/09

Site: us-d3

Item Number:

Warehouse: us-d-3

Lot/Serial:

Location: dtruck02

Reference:

Display Whse Loc: No

Disp Non-Whse Loc: No

Output: PAGE

Item	Status	Qty	Expect	Expect	Detail	Detail
Lot	Ref	UM On Hand	In	Out	Alloc	Pick
D-IT005	EA	3				3
D-IT008	EA	6				6
D-IT009	EA	5				5

4.9.13

Inventory Detail Inquiry

whiciq01.p

QAD Proprietary

Use Inventory Detail Inquiry (4.9.13) to review the inventory on the truck (truck location).

QAD

Step 2: Use the RF Ship Truck Option



Exercise: RF Ship Truck Option



1 BP Pick SO/DO
2 BP Pick All
3 Container Build
4 Container Move
5 Ship Truck
6 Pallet Explosion
7 Item Move
8 Print Paperwork
9 Cancel Shipment

→

Ship Truck
Location: truck01
ID St
SHI0000003 OK *

Via:
Ship-To: 002

→

Ship Truck
Location: truck01
ID St
SHI0000003 OK *

Confirm shipment
1

QAD Proprietary

- 1 Log onto the RF device software.
 - 2 Select Ship Truck (3.5).
 - 3 Enter the Container Reference number in the Ref field.
 - 4 Enter the destination location (the truck) in the Loc field, under Destination.
 - 5 Enter the Truck Location.
- The system informs you the shipment is ready to ship.

Step 3: Review the Move



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Ship Truck

Inventory Detail Inquiry

Inventory Detail Inquiry - 11/9/...



Inventory Detail Inquiry

11/09/09

Site: us-d3 Item Number: Display Whse Loc: No

Warehouse: US-D-3 Lot/Serial: Disp Non-Whse Loc: No

Location: DTruck02 Reference: Output: PAGE

4.9.13

Inventory Detail Inquiry

whiciq01.p

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Use Inventory Detail Inquiry to check that the location of the inventory is the truck location.

Step 4: Print and Convert Pre-Shipper to Shipper

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Batch Picking Control (4.15.24)

Batch Picking Control ✕

Go To
Actions
Copy
Print
Preview

Site: 10000
Warehouse: whse

NJ Plant
Warehouse for testing

Print Paperwork

Include Shipper Comments: ☐
Inc Packing Cmnts: ☐
Print Features and Options: ☐
Print Order Details: ☐
Assign Shipper Number: ☒
Display Quantity In SD UM: ☐
Print Lot/Serial Numbers: ☐

Print Paperwork Option: 0

Container Move
Sequential Shipper Option:
Only Shipper Option:

QAD Proprietary

Use the RF Print Paperwork (3.8) option to print the pre-shipper and convert it to a shipper. You can set options in the Print Paperwork frame of Batch Picking Control (4.15.24) to set defaults for shipper printing when using the RF Print Paperwork function.

Field Descriptions

Print Paperwork Option. Indicate the type of message the RF displays when the system finds pending tasks (unconfirmed tasks) or finds that inventory is not on the truck when staff attempt to print shipper paperwork to ship items.

- 0: The system does not display messages and does not take action when either condition exists.
- 1: The system displays a warning message when either condition exists.
- 2: The system displays a message when either condition exists and prompts for user confirmation of the message before continuing.
- 3: The system displays an error message when either condition exists.

Parcel Manifest

A manifest is a list of goods carried on a truck, train, or ship. Before starting the container move and truck load process, RF users can produce the necessary shipment manifest by using the RF Print Paperwork (3.8) function. Print Paperwork allows RF users to:

- Print pre-shipper/shippers by scanning the document number in the RF device.

- Convert pre-shippers to shippers by assigning a shipper number.
- If the Send Shipment (whtraxsx.p) routine is specified in Local Exit Routines Setup (4.23.10), the system produces a ship shipment (SHIP) message and exports it to the TMS for rating.

Study Questions

- 1 True or False. You can use a single transaction to confirm that the truck shipped.
- 2 Name three Ship Truck features.
- 3 True or False. You can view only converted shippers from the RF Ship Truck option.
- 4 What can warehouse staff do if the pre-shipper/shipper is large and the items cannot fit in a single truck?
- 5 Name the three statuses available for a shipment:
- 6 In which program can you find Ship Truck controls?
- 7 When does the system automatically supply the bill of lading?
- 8 Name three types of data that you enter about the shipment using the RF Ship Truck options (3.5).
- 9 True or False. Once you select a shipper for truck loading and the system uses the shipper as part of the truck's contents, you cannot deselect the shipper.
- 10 True or False. Because the truck is a warehouse location, you cannot use QAD EE inquiries to check loaded truck inventory.

Chapter 6

Inspection (Work Orders)

Chapter Overview



Inspection WO Chapter Overview

- ✓ Introduction to Inspection with WO
- ✓ Set up Inspection with WO
- ✓ Exercise

QAD Proprietary

Introduction



Inspection WO Introduction

- ▲ Inspect finish goods after manufacturing process.



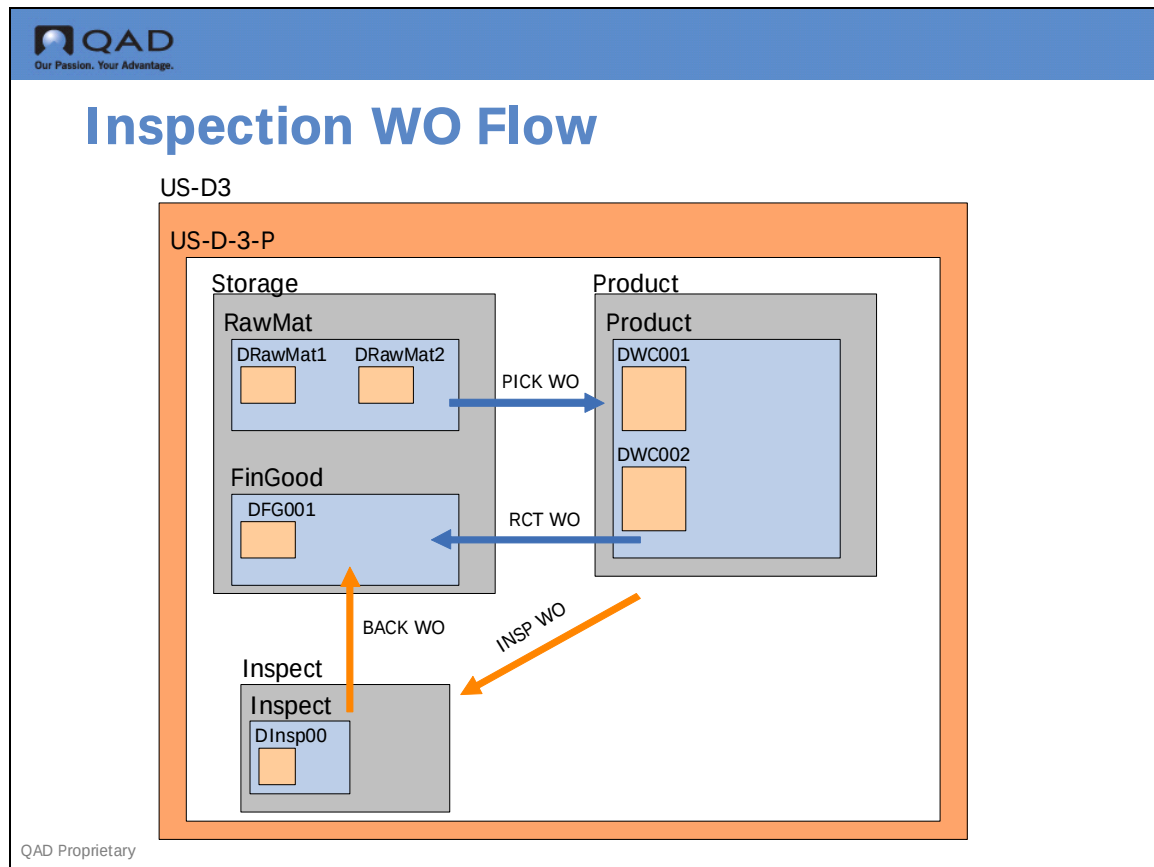
QAD Proprietary

QAD Warehousing supports quality inspection with sample control, change of inventory status, and creation of warehouse transaction.

For work orders, inspection typically takes place once warehouse staff pick raw materials and put away finished goods within a manufacturing process.

Note You should review the Inspection chapter and Work Order chapter of *User Guide: QAD Warehousing* or complete the Inspection chapter and Work Order Chapter in *Training Guide: QAD Warehousing Fundamentals* before you read the material in this chapter.

Inspection WO Flow



Raw material and finished goods are stored within the warehouse. Within a manufacturing environment, a PICK WO transaction lets staff pick the components of the assembled item. They assemble the item in another location, then when finished, return the item to storage. A RCT WO (receipt- work order) transaction signifies the receipt of the finished good in storage. Once returned, finished goods are inspected in a separate inspection location. BACK WO is the transaction type for a sample return after inspection.

Inspection WO Setup



Inspection WO Setup

- ✓ Internal Routing Maintenance
- ✓ Internal Routing Assignment Maintenance
- ✓ Algorithm Assignment Maintenance
- ✓ Inspection Status Change Maintenance

QAD Proprietary

You must set up internal routing, assign the internal routing, and assign algorithms for each of the areas involved in the WO inspection flow. The following topics discuss the setup of these areas.

Internal Routing Maintenance

Internal Routing Maintenance

Site: us-d3 Warehouse: us-d-3-p Internal Routing: Insptr

Description: Manufacturing Inspection

Sequence: 10 Internal Routing Group: product

Transaction Create

Confirmed at Source: ☐ System Code: RF Two Phase: ☒ Keep From Status: ☒

Transaction Confirmation

From Location Option: 0 From Item Option: 0 From Lot/Serial Option: 0 From Reference Option: 0 Allow Quantity Increase: ☐ Allow Quantity Decrease: ☒ Quantity Change Option: 0

Internal Routing: Insptr

Task: TRANSFER Priority: 100 Increment: 10

Transaction Confirmation

From Location Option: 0 Repick Type: To Location Option: 0 From Item Option: 0 To Item Option: 0 From Lot/Serial Option: 0 To Lot/Serial Option: 0 From Reference Option: 0 To Reference Option: 0 Allow Quantity Increase: ☐ Alternative UM Option: 0 Allow Quantity Decrease: ☒ Expire Date (Days): 0 Quantity Change Option: 0

QAD Proprietary WARNING: End of data Back Next

Use Internal Routing Maintenance (4.2.5) to set up an internal routing so that a sequence can be established that identifies each step along the route.

Fields

Internal Routing. Specify the code that identifies the internal routing you want to maintain or assign to a particular transaction type.

In the training example, you have three areas for storage of both raw and finished goods, a product area to build the finished product, and an inspection area.

Sequence. Enter the number that identifies the order of this routing step. Each internal routing consists of a number of steps, identified by a sequence number. To make it easier to add steps within the sequence later, number the sequences as 10, 20, 30 rather than 1, 2, 3.

Internal Routing Group. Specify for this sequence step of the routing the next IRG to which the inventory should move.

Internal Routing Assignment Maintenance

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Internal Routing Assignment Maintenance

Int Routing Assignment Maint

Go To Actions Copy Print Preview

Transaction Type: INSP\WO
 Site: us-d3
 Warehouse: us-d-3-p
 Item Number:
 Warehouse Item Type:
 Address:
 Custom: ☐
 Internal Routing: inspir
 Custom Program:

Modifying existing record

Delete Back Next

QAD Proprietary

Use Internal Routing Assignment Maintenance (4.2.9 if using QAD Warehousing and 80.2.9 if using AIM) to link transaction types to internal routings. You can also specify a combination of a transaction type with an item, an item type, or an address relating to a supplier or customer so that the internal routing is used when that particular combination occurs.

In the training example, you need the following transaction types for transactions that take place in the storage, product, and inspection areas:

- PICK WO: Pick raw materials for the work order.
- RCT WO: Receive newly built finished goods into storage.
- INSP WO: Inspect the work order goods.
- BACK WO: Send inspected work order goods back to storage.

Fields

Transaction Type. This field is used to specify the transaction type. You maintain transaction types using Transaction Type Maintenance.

You specify the transaction type to link to an internal routing in Internal Routing Assignment Maintenance. You specify the transaction type to link to a sequence of algorithms in Algorithm Assignment Maintenance.

You also specify the transaction type when using the Algorithm Simulation Menu. These options simulate either location-find and put-away, or picking. The system simulates the running of the algorithms that you have assigned to the specified transaction type and displays the results of the simulated put-away or picking.

Internal Routing. Specify the IR that you set up in the previous step for the transactions; see “Internal Routing Maintenance” on page 124.

Algorithm Assignment Maintenance

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Algorithm Assignment Maintenance

Algorithm Assignment Mainten... x

Go To Actions Copy Print Preview

Algorithm Type: LF Transaction Type: INSP\WO
 Site: us-d3 Warehouse: us-d3-p
 Item Number: Warehouse Item Type:
 Address: Custom: ☐

Assigned Algorithms

Seq	Algo	Description
10	12	Find Last Work Centre Of Routing
20	1	First Location in First Storage Location Group

Sequence: 10 Algorithm: 12
 Description: Find Last Work Centre Of Routing

Back Next

QAD Proprietary

Use Algorithm Assignment Maintenance (4.6.9 if using QAD Warehousing and 80.6.9 if using AIM) to specify the algorithm to use for the transaction types you set up in the previous step.

Fields

Algorithm Type. Use Algorithm Type to specify the two-character code for the type of algorithm you want to maintain or assign. The standard two-character codes are CM, LA, LF, PA, PK, QA, and SC.

Set up a Location Find (LF) algorithm for an INSP WO transaction type.

Sequence. Each algorithm assignment consists of a number of individual algorithms, in order, identified by a sequence number.

For a new assignment, Sequence defaults to 10. Number sequences by 10's (10, 20, 30, and so on) so that additional steps can be inserted easily later, if required.

Algorithm. Assign algorithms of the type you selected at the top of the frame. You can either type in the required number, or you can use the Up and Down arrow keys to move through the list of algorithms.

Use Algorithm Master Maintenance to modify the description of the algorithm you select. You can also assign algorithms of the type you selected at the top of the screen. For example, if you selected algorithm type PA, you can assign any of the put-away algorithms.

Transaction Type. Specify the transaction type you set up in the previous step.

Internal Routing Maintenance

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Internal Routing Maintenance

Internal Routing Maintenance X

Go To Actions Copy Print Preview

Site: us-d3 Warehouse: us-d3-p Internal Routing: InspBack

Description:

Sequence: 110 Internal Routing Group: inspect

Transaction Create X

Go To Actions Copy Print Preview

System: Two Phase: Keep From Status: Transaction Confirmation:

Confirmed at Source: ☐ Task: TRANSFER Priority: 100 Increment: 10

System Code: RF Two Phase: ☒ Keep From Status: ☐

Transaction Confirmation:

From Location Option:	Repick Type:	To Location Option:
0		0
From Item Option:		To Item Option:
0		0
From Lot/Serial Option:		To Lot/Serial Option:
0		0
From Reference Option:		To Reference Option:
0		0
Allow Quantity Increase:		Alternative UM Option:
☐		0
Allow Quantity Decrease:		Expire Date (Days):
☒		0
Quantity Change Option:		
0		

WARNING: Beginning

WARNING: End of data

Back Next

QAD Proprietary

US-D3

US-D-3-P

Storage

RawMat

FinGood

Product

Inspect

BACK WFO

Return to Internal Routing Maintenance and set up an IR for the inspected goods to return to the storage area.

For field descriptions, see “Internal Routing Maintenance” on page 120.

Internal Routing Assignment Maintenance



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Internal Routing Assignment Maintenance

Int Routing Assignment Maint

Go To

Actions

Copy

Print

Preview

Transaction Type: BACK-WO

Site: us-d3

Warehouse: us-d-3-p

Item Number:

Warehouse Item Type:

Address:

Custom:

Internal Routing: inspback

Custom Program:

Modifying existing record

Delete

Back

Next

QAD Proprietary

Return to Internal Routing Assignment Maintenance and specify a BACK WO transaction type for the internal routing step that lets you return inspected goods to the storage area.

For field descriptions, see “Internal Routing Assignment Maintenance” on page 125.

Algorithm Assignment Maintenance-Put Away Algorithm

Algorithm Assignment Maintenance: PA

Algorithm Type: PA Transaction Type: BACK-WO

Site: us-d3 Warehouse: us-d3-p

Item Number: Warehouse Item Type:

Address: Custom: ☐

Assigned Algorithms

Seq	Algo	Description
10	9	S.L. - Merge with Item and UM
20	3	S.L. - Merge with part
30	1	Storage Locations

Sequence: 10 Algorithm: 9

Description: S.L. - Merge with Item and UM

Back Next

QAD Proprietary

Return to Algorithm Assignment Maintenance to specify a Put Away (PA) algorithm for the BACK WO transaction type. The system uses the algorithm to put inspected goods back into the storage area.

For field descriptions, see “Algorithm Assignment Maintenance” on page 123.

Algorithm Assignment Maintenance - Quality Assurance Algorithm

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Algorithm Assignment Maintenance: QA

Algorithm Assignment Mainten... X

Go To Actions Copy Print Preview

Algorithm Type: QA

Transaction Type: RCT-WO

Site: us-d3

Warehouse: us-d-3-p

Item Number:

Warehouse Item Type:

Address:

Assigned Algorithms

Seq	Algo	Description
10	8	Inspection of all Items with Inspection Required

Item-Warehouse Maintenance X

Go To Actions Copy Print Preview Attach

Attachments

Item Number: D-FG001

UM: EA

Site: US-D3

Warehouse: us-d-3-p

Inspection Data

Selective Inspection: ☒

Inspection Frequency: 0

Insp Freq (Days): 0

Random Inspection %: 0

Sample Quantity: 1

Sample Percent: 0

Destructive: ☐

Ref: ☐

Sequence: 10

Algorithm: 8

Description: Inspection of all Items with Inspection Required

Back

Next

QAD Proprietary

Specify a Quality Assurance (QA) algorithm for the RCT WO transaction type.

Inspection Status Change Maintenance

Use Inspection Status Change Maintenance (4.19.13 if using Warehousing and 80.22.13 if using AIM) to modify the status associated with inventory being inspected, based on its original status. You can use this in two situations.

- While a sample is in the inspection area waiting inspection results, you can prevent any transactions with the inventory the inventory by changing its status. Change Inspection Status Maintenance lets you define the new status of this inventory, based on its original status.
- Similarly, after a successful inspection is performed, you can release the inventory by changing its status again.

Fields

Inventory Status. Inventory status codes identify the status of inventory at a specific site and location with a specific lot/serial number and lot reference.

Inventory status codes determine whether specific inventory balances on hand are available for allocation to sales orders or work orders, are considered available by MRP, and are allowed to go negative.

Inventory status codes also restrict particular transactions at specific locations -- you can restrict issues from an inspection location.

Release/Inspect Status. Enter a valid inventory status code defined in Inventory Status Code Maint. The system changes the sample ID to the status code you specify when the sample is moved to the inspection area. Release/Inspect Status needs to be a valid status code defined in

Exercise1: Move Stock throughout Warehouse for Inspection



Exercise 1 Objectives

- ✓ Review stock in warehouse locations
- ✓ Prepare and review work order
- ✓ Move stock from work center area to storage area and transfer sample from work center area to inspection area
- ✓ Validate inspection sample
- ✓ Move sample from inspection area to storage area
- ✓ Review stock

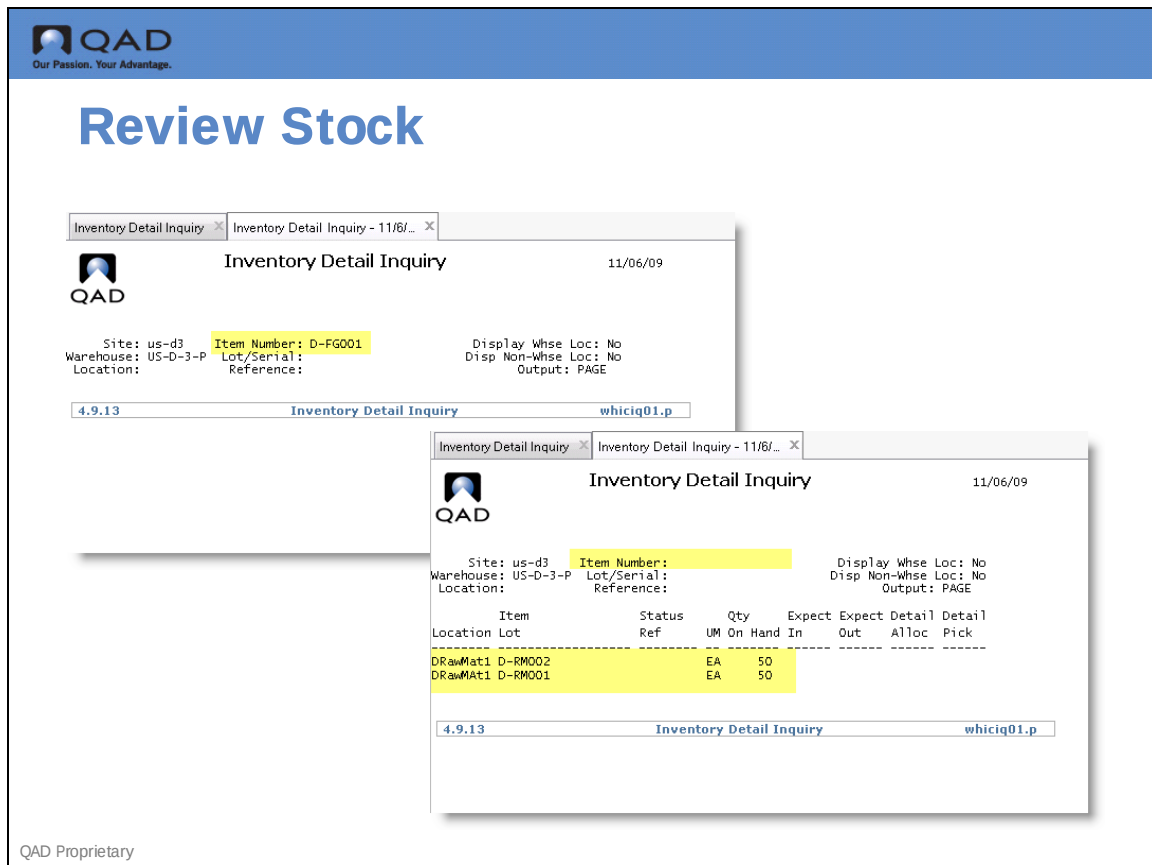
QAD Proprietary

Before You Begin

You must review information on work orders in QAD EE user documentation and on processing orders and inspecting stock in both the QAD Warehousing user documentation and QAD Warehousing Fundamentals Training Guide. Once you are fully familiar with processing orders in a warehouse using Warehousing features, you can complete the training in this section.

For the exercise, you will use QAD Warehousing on the RF Device and EE standard programs and inquiries.

Step 1: Review Stock



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Review Stock

Inventory Detail Inquiry - 11/6/09

Inventory Detail Inquiry

Site: us-d3 Item Number: D-FG001 Display Whse Loc: No
Warehouse: US-D-3-P Lot/Serial: Disp Non-Whse Loc: No
Location: Reference: Output: PAGE

4.9.13 Inventory Detail Inquiry whiciq01.p

Inventory Detail Inquiry - 11/6/09

Inventory Detail Inquiry

Site: us-d3 Item Number: D-FG001 Display Whse Loc: No
Warehouse: US-D-3-P Lot/Serial: Disp Non-Whse Loc: No
Location: Reference: Output: PAGE

Item	Status	Qty	Expect	Expect	Detail	Detail
Location Lot	Ref	UM On Hand In	Out	Alloc	Pick	
DRawMat1 D-RM002	EA	50				
DRawMat1 D-RM001	EA	50				

4.9.13 Inventory Detail Inquiry whiciq01.p

QAD Proprietary

Use Inventory Detail Inquiry (4.8.17) to check that items exist at the warehouse location. Check the quantity of the items.

Step 2: Create or Verify a Work Order Exists



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Ensure WO Exists

Work Order Maintenance

Go To

Actions

Copy

Print

Preview

Work Order: 2318

ID: 88956239

Item Number: d-FG001

Type:

Site: us-d3

Quantity Ordered: 3.0

Order Date: 11/7/2009

Quantity Completed: 0.0

Release Date: 11/7/2009

Qty Rejected: 0.0

Due Date: 11/7/2009

Work Order Status: F

Site: us-d3

Sales/Job:

Routing Code:

Supplier:

BOM/Formula Code:

Yield Percent: 100.00%

Remarks:

Post variances at SFC: ☒

Comments: ☐

Back

Next

QAD Proprietary

Use Work Order Maintenance (16.1) to ensure that you have a work order for the item at the location. Check the quantity ordered of the item.

Step 3: Release the Work Order

Release Work Order

Work Order Release/Print
DOM1 USD DB NY

Work Order Picklist

Work Order: 2318
ID: 88956239
Batch: d-FG001
Item Number: d-FG001
Rev:
Remarks:
Qty Ordered: 3.0
EA
Sales/Deliver To:
Issue Date: 4.9.13
Work Order Due Date:
Inventory Detail Inquiry: whiciq01.p

Item Number	Rev	Site	Lot/Serial	Location	Ref	Qty to Issue	UM	Issued
D-RM001		us-d3		DRawMat1		3.0	EA	()
D-RM002		us-d3		DRawMat1		6.0	EA	()

Inventory Detail Inquiry
11/07/09

Site: us-d3
Warehouse: US-D-3-P
Location:
Item Number:
Lot/Serial:
Reference:
Display Whse Loc: No
Disp Non-Whse Loc: No
Output: PAGE

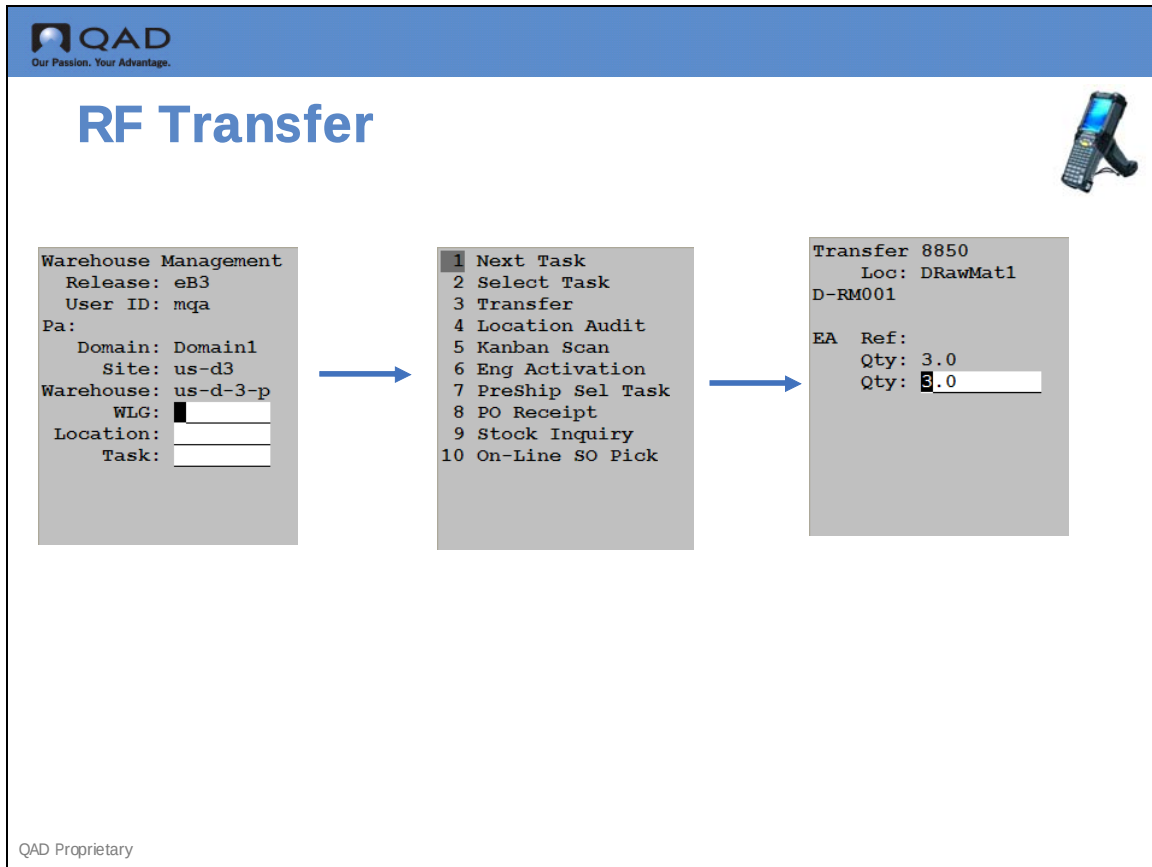
Item	Location	Lot	Status	Ref	Qty UM	On Hand	In	Expect Out	Expect Alloc	Detail Pick
DRawMat1	D-RM001		EA		50			3		3
DRawMat1	D-RM002		EA		50			6		6
DWC001	D-RM001		EA					3		
DWC002	D-RM002		EA					6		

Work Order Release/Print
DOM1 USD DB NY
11/07/09 05:03:36
Page: 2

QAD Proprietary

Use Work Order Release Print to release the work order, ensuring that you issue the quantities required to match the Expected In quantities shown for the storage location in the warehouse. Use the Expected In field of Inventory Detail Inquiry to check.

Step 4: Transfer Stock Using the RF



- 1 Log onto the RF, using Warehousing.
- 2 Enter the warehouse, work location group (WLG) and location.
- 3 Select the Next Task option (1.).
- 4 The system prompts you to transfer stock from the raw material location.
- 5 Enter the quantity, then press Go.

Step 5: Transfer Stock to Build Location

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Transfer to Build Location

Transfer 8850
To Loc: DWC001
Loc: DWC001
Chk:
Item Number:
D-RM001
Lot/Serial:
EA Ref:

→

Transfer 8851
Loc: DRawMat1
D-RM002
EA Ref:
Qty: 6.0

→

Transfer 8851
To Loc: DWC002
Loc: DWC002
Chk:
Item Number:
D-RM002
Lot/Serial:
EA Ref:

QAD Proprietary

- 1 Enter the build location to which you are transferring stock.
- 2 Repeat the transfer process, transferring a second quantity of stock to the second build area.
- 3 Press Go.

Step 6: Verify the Transfer



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Verify Transfer

Inventory Detail Inquiry

Inventory Detail Inquiry - 11/7/09



Inventory Detail Inquiry

11/07/09

Site: us-d3 Item Number:
Warehouse: US-D-3-P Lot/Serial:
Location: Reference:

Display Whse Loc: No
Disp Non-Whse Loc: No
Output: PAGE

Location	Item	Status	Qty	Expect	Expect	Detail	Detail
	Lot	Ref	UM On Hand In	Out	Alloc	Pick	
DRawMat1	D-RM001	EA	47				
DRawMat1	D-RM002	EA	44				
DWC001	D-RM001	EA	3				3
DWC002	D-RM002	EA	6				6

4.9.13

Inventory Detail Inquiry

whiciq01.p

QAD Proprietary

Use Inventory Detail Inquiry to verify that the quantities (3, 6) were transferred to the build location.

Step 7: Backflush/Issue Items

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Backflush Materials

Work Order Receipt Backflush

[Go To](#) | [Actions](#) | [Copy](#) | [Print](#) | [Preview](#)

Work Order: 2318
Item Number: dFG001

ID: 88956239
 W/O Stat: R

Effective Date: 11/7/2009
 Receive: ☒ Backflush: ☒

Remarks:

Open Quantity: 3.0 UM: EA Lot/Ser:

Batch: _____

Quantity: 3.000000000

UM: EA Automatic Lot Numbers: ☐

Conversion: 1.0000 Site: us-d3

Scrapped Qty: 0.0 Location: us-d-3-p

UM: EA Lot/Serial: _____

UM Conversion: 1.0000 Reference: _____

Remarks: _____

Close: ☐

Inventory Detail Inquiry

Inventory Detail Inquiry - 11/7/09

Site: us-d3
 Warehouse: us-d-3-p
 Location: us-d-3-p

Item Number: d-FG001
 Lot/Serial:
 Reference:

Display: Whse Loc: No
 Disp Non-Whse Loc: No
 Output: PAGE

Location	Status	Ref	Qty UM On Hand	Qty Alloc	Expect In	Expect Out	Detail Alloc	Detail Pick
DFG001	inspect	EA				2		
Dinsp10	inspect	EA				1		
DWC002	inspect	EA	3				3	

4.9.13
Inventory Detail Inquiry
whiciq01.p

QAD Proprietary

- 1 Use Work Order Receipt Backflush to receive completed products and issue the items used to make them at the same time.
 A receipt with backflush increases end-item inventory quantities at the designated location and decreases component inventory. It also updates the work order to reflect quantities completed.
- 2 Enter the quantity; then press Go.
- 3 Use Inventory Detail Inquiry to verify that the system allocated the quantity you entered for the correct location.

Step 8: Transfer Stock to Inspection Location



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Transfer Second Qty to Inspection Area



Transfer 8853
Fr Loc: DWC002
Loc:
Chk:

→

Transfer 8853
Loc: DWC002
D-FG001
EA Ref:
Qty: 2.0
Qty:

→

Transfer 8853
To Loc: DFG001
Loc:
Chk:
Item Number:
d-FG001
Lot/Serial:
EA Ref:

QAD Proprietary

- 1 Use the RF Next Task function to transfer stock to the inspection area.
- 2 The system defaults a quantity; accept or change the default, then press Go.
- 3 Enter the inspection location; then press Go.
- 4 Use Inventory Detail Inquiry to verify that stock was moved to the inspection area.

Step 9: Transfer Second Qty to Inspection Location



Transfer 8853
Fr Loc: DWC002
Loc:
Chk:

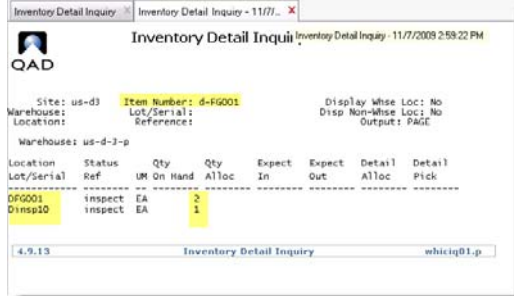
→

Transfer 8853
Loc: DWC002
D-FG001
EA Ref:
Qty: 2.0
Qty:

→

Transfer 8853
To Loc: DFG001
Loc:
Chk:
Item Number:
d-FG001
Lot/Serial:
EA Ref:





QAD Proprietary

- 1 Use the RF Next Task function to transfer the second quantity of stock to the inspection area.
- 2 The system defaults a quantity; accept or change the default, then press Go.
- 3 Enter the inspection location; then press Go.
- 4 Use Inventory Detail Inquiry to verify the transfer.

Step 10: Start the Sample Inspection



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Start Sample Inspection

Sample Inspection Maintenance

Go To

Actions

Copy

Print

Preview

Site: us-d3

To: us-d3

Warehouse:

To:

Item Number:

To:

Address:

To:

Receiver:

To:

Default Include: ☒

ID	Item Number	Lot/Serial	Ref	Qty to Insp	Fai	Inc
134	d-FG001			1.0000	☐	☒

Back

Next

QAD Proprietary

- 1 Use the Sample Inspection Maintenance (4.19.1 if using QAD Warehousing and 4.22.1 if using AIM) to start the inspection.
- 2 Select the item to be inspected, ensuring that Inc is selected.

Step 11: Verify Inspected Items

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Verify Inspected Quantity

Inventory Detail Inquiry
Inventory Detail Inquiry - 11/7/...

QAD

Inventory Detail Inquiry

11/07/09

Site: us-d3
 Warehouse: US-D-3-P
 Location:

Item Number: d-FG001

Display Whse Loc: No
 Disp Non-Whse Loc: No
 Output: PAGE

Lot/Serial:
 Reference:

Location	Status	Qty	Qty	Expect	Expect	Detail	Detail
Lot/Serial	Ref	UM On Hand	Alloc	In	Out	Alloc	Pick
DFG001		EA	2		1		
Dinsp10	inspect	EA	1			1	

4.9.13
Inventory Detail Inquiry
whiciq01.p

QAD Proprietary

Use Inventory Detail Inquiry to verify that the system indicates the status of the items in the inspection location are inspected.

QAD

Step 12: Transfer Inspected Items to Storage

Transfer: 8854
Fr Loc: Dinspl0
Loc:
Chk:

Transfer: 8854
Loc: dinspl0
d-fg001
EA Ref:
Qty: 1.0
Qty:

Transfer: 8854
To Loc: DFG001
Loc:
Chk:
Item Number:
d-FG001
Lot/Serial:
EA Ref:

Inventory Detail Inquiry - 11/7/09

Inventory Detail Inquiry

11/07/09

Site: us-d3
Warehouse: US-D-3-P
Location:

Item Number: d-FG001
Lot/Serial:
Reference:

Display Whse Loc: No
Disp Non-Whse Loc: No
Output: PAGE

Location	Status	Qty	Qty	Expect	Expect	Detail	Detail	
Lot/Serial	Ref	UM	On Hand	Alloc	In	Out	Alloc	Pick
DFG001	EA		3					

4.9.13

Inventory Detail Inquiry

whiciq01.p

QAD

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- 1 Use the RF Select Task to transfer inspected stock to the storage area.
- 2 Enter the inspected quantity to transfer.
- 3 Enter the storage location; then press Go.
- 4 Use Inventory Detail Inquiry to verify the transfer.

QAD

Step 9: Transfer Second Qty to Inspection Location



Transfer 8853
Fr Loc: DWC002
Loc:
Chk:

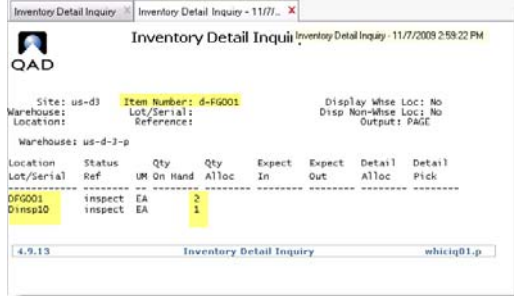
→

Transfer 8853
Loc: DWC002
D-FG001
EA Ref:
Qty: 2.0
Qty:

→

Transfer 8853
To Loc: DFG001
Loc:
Chk:
Item Number:
d-FG001
Lot/Serial:
EA Ref:





QAD Proprietary

- 1 Use the RF Select Task to transfer the second quantity of stock to the inspection area.
- 2 Enter a sample to inspection; for example, enter 2; then press Go.
- 3 Enter the inspection location; then press Go.
- 4 Use Inventory Detail Inquiry to verify the transfer.

Study Questions

- 1 For work orders, when does inspection typically occur?
- 2 Why is the BACK WO transaction used in the inspection process?
- 3 Briefly describe the setup process for work order inspection.
- 4 Name the three areas you set up in Internal Routing Maintenance for inspection. Hint: You set up the areas in the exercise.
- 5 Name at least two of the transaction types that you use in inspection.
- 6 True or False. You set up a Quality Assurance (QA) algorithm for an INSP WO transaction type.
- 7 What is the purpose of the Put Away (PA) algorithm for the BACK WO?

- 8 You specify a Quality Assurance (QA) algorithm for which transaction type?
- 9 Describe one situation in which you need to modify the status associated with inventory being inspected in Inspection Status Change Maintenance.
- 10 True or False. Inventory status codes also restrict particular transactions at specific locations.

Chapter 7

Kanban Scan

Chapter Overview



Kanban Scan Chapter Overview

- ✓ Introduction to Kanban Scan
- ✓ Set up Kanban Scan
- ✓ Exercise

QAD Proprietary

Introduction TO Kanban Scan



Kanban Scan

- ▲ Manually request replenishment for a given location of a specified quantity of an item.



QAD Proprietary

With replenishment functionality, warehouse staff define a minimum level of inventory for an item in a location. As soon as the system issues inventory and stock drops below the minimum level, a replenishment task is created for staff to move inventory from the main storage area to the location to be replenished. Inventory is successfully replenished in this way except during a work order backflush. During a backflush, the system does not issue inventory until the receipt of the quantity of end items. Because time can lapse between when items are actually issued from inventory and when the system backflushes items, it is possible to run out of stock before the system is aware of the actual level.

Warehouse staff can use the RF Kanban Scan (1.5) to correct this and manually request replenishment of a specified quantity of an item. They can also use RF Kanban Scan when they need an item in the production area but warehouse staff are not picking the item.

Kanban Setup



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Kanban Setup

- ✓ **Internal Routing Maintenance**
- ✓ **Internal Routing Assignment Maintenance**
- ✓ **Algorithm Assignment Maintenance**
- ✓ **Replenishment List Maintenance**
- ✓ **Multi-Level Item Maintenance**

QAD Proprietary

You must set up kanban scanning by creating and assigning the internal routing, assigning algorithms, setting up replenishment lists, and setting up multi-items. The following topics discuss the setup of these areas.

Internal Routing Maintenance

The screenshot displays the QAD Internal Routing Maintenance interface. It features a blue header with the QAD logo and the tagline 'Our Passion. Your Advantage.' Below the header, the title 'Internal Routing Maintenance' is prominently displayed. The interface includes a menu bar with 'Go To', 'Actions', 'Copy', 'Print', and 'Preview' options. The main form is divided into several sections:

- Site:** US-D3
- Warehouse:** us-d-3-p
- Internal Routing:** ReplenIR
- Description:** (empty field)
- Sequence:** 10 (highlighted in yellow)
- Internal Routing Group:** Storage (highlighted in yellow)

The form also includes a 'Transaction Create' section with checkboxes for 'Confirmed at Source', 'System Code: RF', 'Two Phase' (checked), and 'Keep From Status'. Below this is a 'Transaction Confirmation' section with various options for location, item, lot/serial, and reference, along with checkboxes for 'Allow Quantity Increase', 'Allow Quantity Decrease' (checked), and 'Quantity Change Option'.

An overlapping window is shown in the foreground, displaying similar fields but with a different 'Internal Routing Group' of 'Product' (highlighted in yellow). This window also includes a 'Task: TRANSFER' section with 'Priority: 100' and 'Increment: 10'. At the bottom of the overlapping window are 'Back' and 'Next' buttons.

Use Internal Routing Maintenance (4.2.5) to set up an internal routing so that a sequence can be established that identifies each step along the route.

Fields

Internal Routing. Specify the code that identifies the internal routing you want to maintain or assign to a particular transaction type.

Sequence. Enter the number that identifies the order of this routing step. Each internal routing consists of a number of steps, identified by a sequence number. To make it easier to add steps within the sequence later, number the sequences as 10, 20, 30 rather than 1, 2, 3.

Internal Routing Group. Specify for this sequence step of the routing the next IRG to which the inventory should move.

Internal Routing Assignment Maintenance

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Internal Routing Assignment Maintenance

Int Routing Assignment Maint X

Go To Actions Copy Print Preview

Transaction Type: pick-re
 Site: us-d3
 Warehouse: us-d-3-p
 Item Number:
 Warehouse Item Type:
 Address:
 Custom: 
 Internal Routing: ReplenIR
 Custom Program:

Delete Back Next

Modifying existing record

QAD Proprietary

Use Internal Routing Assignment Maintenance (4.2.9 if using QAD Warehousing and 80.2.9 if using AIM) to link transaction types to internal routings. You can also specify a combination of a transaction type with an item, an item type, or an address relating to a supplier or customer so that the internal routing is used when that particular combination occurs.

In the training example, you need the PICK-RE transaction types for kanban scan transactions.

Fields

Transaction Type. This field is used to specify the transaction type. You maintain transaction types using Transaction Type Maintenance.

You specify the transaction type to link to an internal routing in Internal Routing Assignment Maintenance. You specify the transaction type to link to a sequence of algorithms in Algorithm Assignment Maintenance.

You also specify the transaction type when using the Algorithm Simulation Menu. These options simulate either location-find and put-away, or picking. The system simulates the running of the algorithms that you have assigned to the specified transaction type and displays the results of the simulated put-away or picking.

Internal Routing. Specify the IR that you set up in the previous step for the transactions.

Algorithm Assignment Maintenance

'. Below these is a section titled 'Assigned Algorithms' containing a table with columns 'Seq', 'Algo', and 'Description'. The table has one row: '10', '1', 'Pick by Location'. At the bottom, there are fields for 'Sequence: 10', 'Algorithm: 1', and 'Description: Pick by Location'. 'Back' and 'Next' buttons are at the bottom right. The QAD logo and 'QAD Proprietary' text are at the bottom left."/>

QAD
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Algorithm Assignment Maintenance

Algorithm Assignment Mainten...

Go To Actions Copy Print Preview

Algorithm Type: pk
Site: us-d3
Item Number:
Address:

Transaction Type: pick-re
Warehouse: us-d3-p
Warehouse Item Type:
Custom: ☐

Assigned Algorithms

Seq	Algo	Description
10	1	Pick by Location

Sequence: 10
Algorithm: 1
Description: Pick by Location

Back Next

QAD Proprietary

Use Algorithm Assignment Maintenance (4.6.9 if using QAD Warehousing and 80.6.9 if using AIM) to specify the algorithm to use for the transaction types you set up in the previous step.

Fields

Algorithm Type. Use Algorithm Type to specify the two-character code for the type of algorithm you want to maintain or assign. The standard two-character codes are CM, LA, LF, PA, PK, QA, and SC.

Set up a pick (PK) algorithm for kanban scanning.

Sequence. Each algorithm assignment consists of a number of individual algorithms, in order, identified by a sequence number.

For a new assignment, Sequence defaults to 10. Number sequences by 10's (10, 20, 30, and so on) so that additional steps can be inserted easily later, if required.

Algorithm. Assign algorithms of the type you selected at the top of the frame. You can either type in the required number, or you can use the Up and Down arrow keys to move through the list of algorithms.

Use Algorithm Master Maintenance to modify the description of the algorithm you select.

In Algorithm Assignment Maintenance, you can assign algorithms of the type you selected at the top of the screen.

Transaction Type. Specify the transaction type you set up in the previous step.

Replenishment List Maintenance

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Replenishment List Maintenance

Replenishment List Maintenance

Go To Actions Copy Print Preview

Site: us-d3
Description: Replenishment List Bulk

Replenishment List: RepList
Comments:

Replenishment List Details

Seq	Warehouse	Description	SLG	Description
10	US-D-3-P	RawMat	Raw Material Area	

Seq: 10 Warehouse: US-D-3-P Store Loc Group: RawMat

Back Next

QAD Proprietary

Use Replenishment List Maintenance (4.16.1 if using QAD Warehousing and 80.16.1 if using AIM). The replenishment list contains SLGs you want to consider for picking the scanned item.

Fields

Seq. Enter the sequence number for the SLG. The sequence number indicates the order that the system will use at the SLGs in order to pick inventory for the replenishment—step 10 first, step 20 second, and so on.

Store Loc Group. Enter the storage location group code, or choose a code from the drop-down list.

Warehouse. Enter the warehouse code, or choose a code from the drop-down list.

Multi-Item Level Maintenance

Multi-Level Item Maintenance

Item Number: D-RM001
UM: EA
Site: US-D3

Site Data and Default Warehouse Data

Location: RMList2
Warehouse Item Type:
Replenishment Type:
Popularity:
Default Kanban Quantity: 15.0

Single PA Trans:
Issue Method:
Print ID:
ID Qty: 0
OPC Threshold: 0.0
Kanban Replen List: ReplList

Modify existing record

Delete Back Next

QAD Proprietary

Use Multi-Level Item Maintenance (4.4.5 if using QAD Warehousing and 80.4.5 if using AIM) to specify the following in the Site Data and Default Warehouse Data frame:

- Replenishment list
- Default quantity to replenish

Fields

Default Kanban Quantity. Enter the default quantity to replenish.

Replenishment List. Enter the replenishment list that contains SLGs you want to consider for picking the scanned item. You create the list in Replenishment List Maintenance (4.16.1).

Exercise1: Replenish using Kanban Scan



Exercise 1: Replenish Using Kanban Scan

- ✓ Review items to replenish
- ✓ Use the RF Kanban Scan Option to replenish items
- ✓ Review replenished items

QAD Proprietary

For the exercise, you will use QAD Warehousing on the RF Device and EE standard programs and inquiries.

To run the RF Kanban Scan, warehouse staff scan the item, enter the quantity required, and scan the destination location. You will use QAD Warehousing for the RF device to do this. When you enter RF Kanban scan, it notifies the system that an item requires replenishment and creates a replenishment task for it at the correct time. A default quantity displays in the Kanban Qty field if you specified a default quantity in Multi-Level Item Maintenance (4.4.5). You enter the actual quantity in the Qty field.

The system dynamically creates an item-location replenishment definition for the duration of the scan and a replenishment task for the quantity required, and then removes the definition from the system.

Step 1: Review Stock


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Inventory Detail Inquiry

Inventory Detail Inquiry
Inventory Detail Inquiry - 11/14/09



Inventory Detail Inquiry

11/14/09

Site: us-d3
 Warehouse:
 Location:
 Warehouse: us-d-3-p

Item Number: D-RM001
 Lot/Serial:
 Reference:

Display Whse Loc: No
 Disp Non-Whse Loc: No
 Output: PAGE

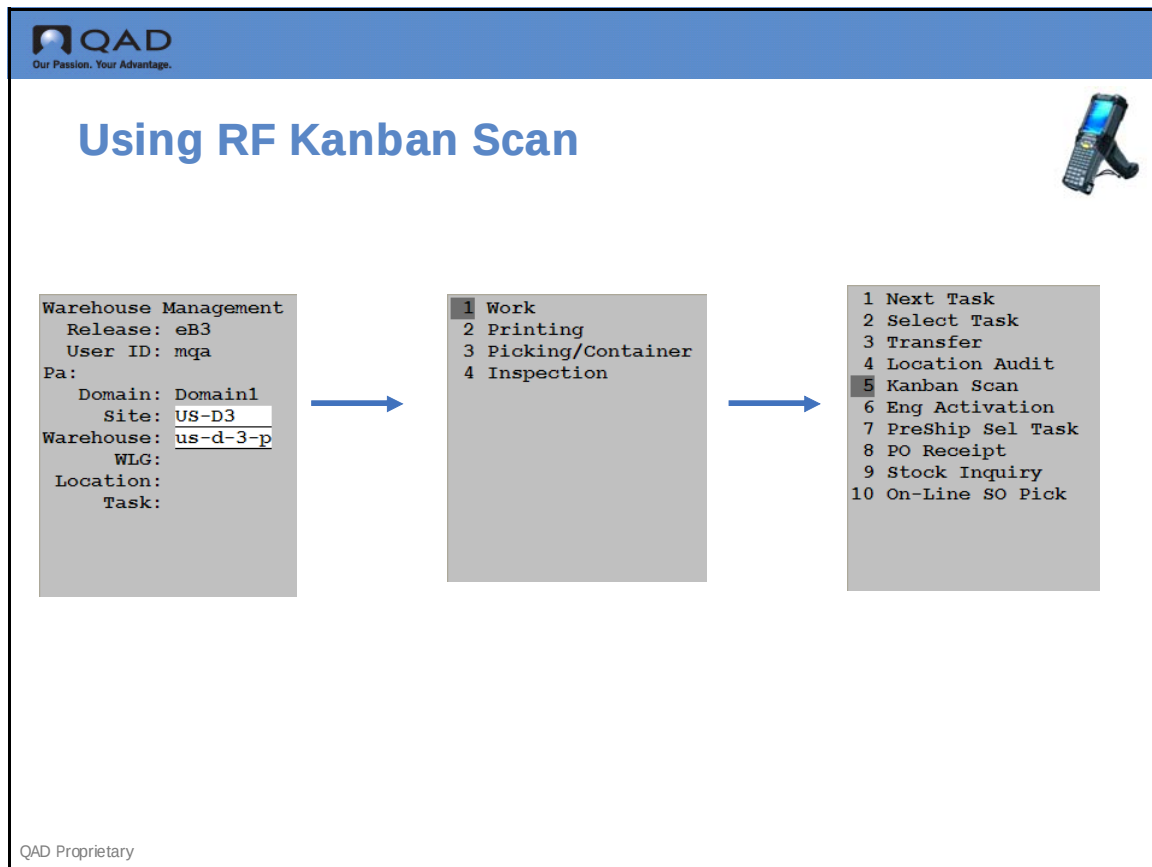
Location	Status	Qty	Qty	Expect	Expect	Detail	Detail
Lot/Serial	Ref	UM On Hand	Alloc	In	Out	Alloc	Pick
DRawMat1	EA	44					
DWC001	EA	3					

4.9.13
Inventory Detail Inquiry
whiciq01.p

QAD Proprietary

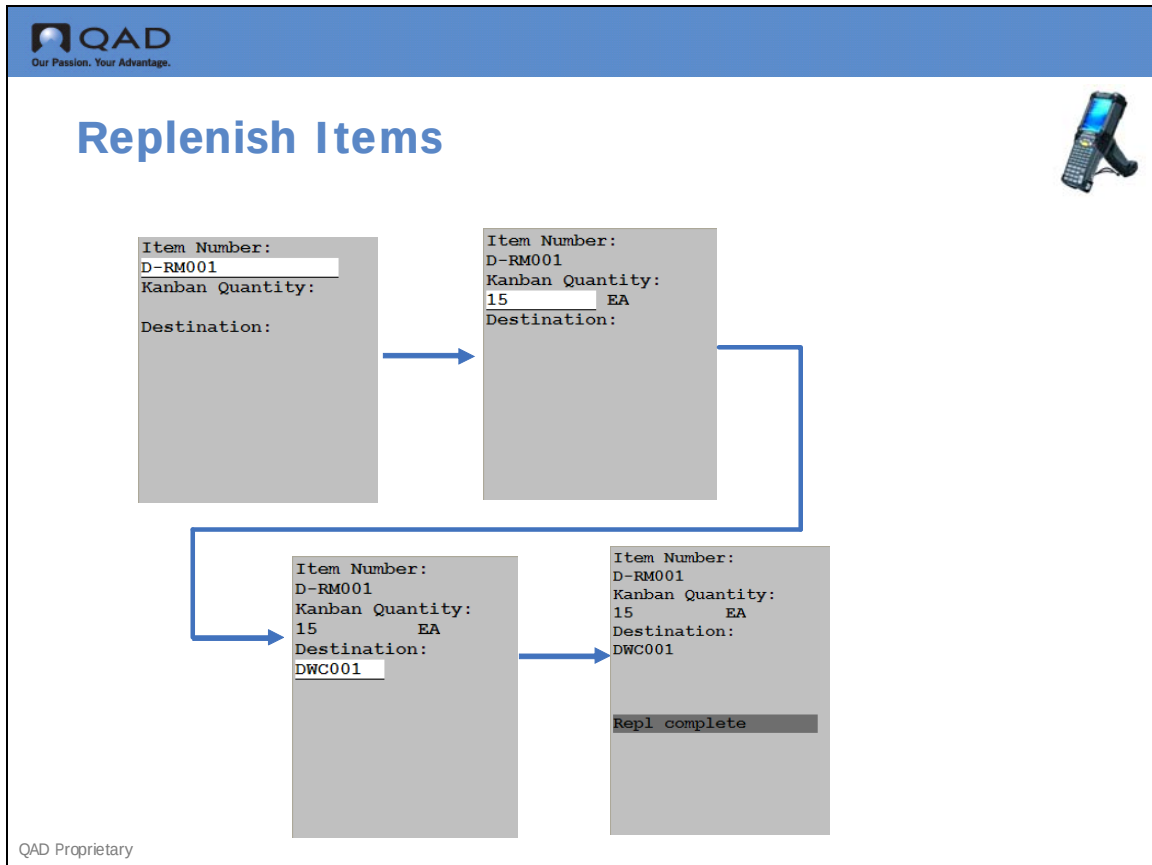
Use Inventory Detail Inquiry (4.8.17) to check the quantity on hand for the locations you want to replenish.

Step 2: Use the RF Kanban Scan Function



- 1 Log onto the RF device software, entering the site and warehouse.
- 2 Select Work (1.), then Kanban Scan (5.).

Step 3: Scan Items to Replenish



- 1 Scan (Enter) the item number.
- 2 Enter the kanban quantity to replenish.
Note You set the default for the quantity in Multi-Item Level Maintenance; see “Multi-Item Level Maintenance” on page 153
- 3 Enter the destination location for the replenishment.
- 4 Press Go.
 The system informs you that the replenishment is complete.

Step 4: Verify Replenished Items

The screenshot shows the QAD Inventory Detail Inquiry screen. The title bar indicates the window is titled 'Inventory Detail Inquiry' and 'Inventory Detail Inquiry - 11/14/09'. The QAD logo is in the top left corner. The screen displays the following information:

Site: us-d3
Warehouse: us-d-3-p
Location: us-d-3-p

Item Number: D-RM001
Lot/Serial: EA
Reference: EA

Display Whse Loc: No
Disp Non-Whse Loc: No
Output: PAGE

Location	Status	Qty	Qty	Expect	Expect	Detail	Detail
Lot/Serial	Ref	UM	On Hand	In	Out	Alloc	Pick
DRawMat1	EA		44			15	
DWC001	EA		3	15			

At the bottom of the screen, there is a status bar showing '4.9.13', 'Inventory Detail Inquiry', and 'whiciq01.p'.

QAD Proprietary

Use Inventory Detail Inquiry to verify items were replenished in the location.

Study Questions

- 1 Describe a warehouse scenario in which you need kanban scan features.
- 2 Briefly describe the kanban scan setup process.
- 3 True or False. You use the PICK-RE transaction types for kanban scan transactions.
- 4 In Algorithm Assignment Maintenance, which algorithm type do you specify for kanban scan?
- 5 Why is a replenishment list used in kanban scan?
- 6 Where do you specify the replenishment list?
- 7 Briefly describe what happens when you enter the Kanban Scan option on the RF device.
- 8 When does the system display a default quantity displays in the Kanban Qty field on the RF in Kanban Scan options?
- 9 True or False. True. The system dynamically creates an item-location replenishment definition for the duration of the scan and later removes the definition from the system.
- 10 What happens after you enter the destination location on the RF device during kanban scanning?

Chapter 8

Replenishment

Chapter Overview



Replenishment Chapter Overview

- ✓ **Introduction**
- ✓ **Setup**
- ✓ **Exercise**

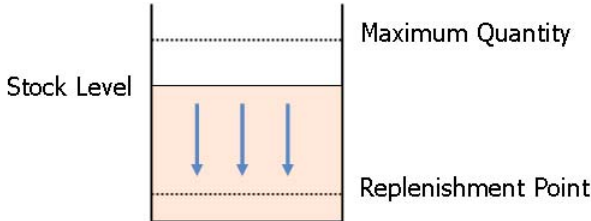
QAD Proprietary

Introduction



Replenishment

- ✓ Replenishment process maintain areas or locations with the optimum stock level.



QAD Proprietary

QAD Warehousing lets you define areas in the warehouse where the main picking activity occurs. In order for this area to be maintained at the optimum stock levels, the system uses a process called *replenishment*. The area in which stock is stored prior to picking is generally called the primary picking area. This area would typically contain the stock required for picking first and in quantities and locations that are easy to maintain.

You define the types of items and the quantities that can be stored in the replenishment, or primary picking, locations. Picking functions look in these locations first before searching the rest of the warehouse.

In warehousing, you can define:

- Replenishment for a given item and a given location.
- Replenishment for a given item in a storage location group. This means that a put-away is performed in the storage location group in order to place the items at the best suitable location inside this storage location group.
- Replenishment lists. A series of storage location groups in which the system looks for the item to replenish. Sequences allow searching some storage location groups first and then others by order corresponding to the sequence.
- Replenishment in real-time on the RF device.

- **Overpick Replenishment.** Warehouse staff can select a multi- or single-item pallet from the reserve area and replenish one or multiple locations from the pallet in the picking area. After staff replenish, they can return the remainder on the pallet to the reserve area.

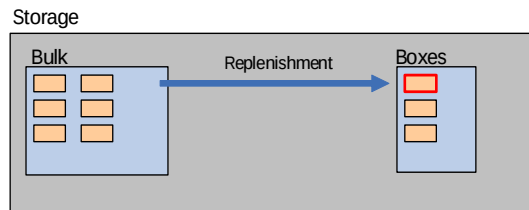
Replenishment and SLGs

In warehousing, you can define replenishment for a given item and a given location. More commonly, though, you can define replenishment for a given item in a storage location group. This means that a put-away is performed in the storage location group in order to place the items at the best suitable location inside this storage location group. The system typically uses the

- Pick (PK) algorithm for locations
- PK and put away (PA) algorithms for SLGs

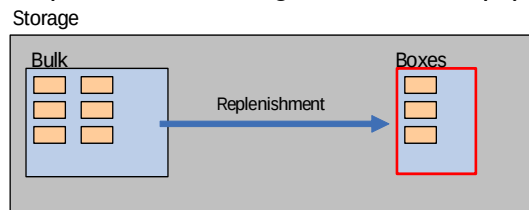
Fig. 8.1
Replenishment and Locations

▲ Replenishment Location



PK Algorithm

▲ Replenishment Storage Location Group (SLG)



PK and PA
Algorithm

You can also create a replenishment list. This is a series of storage location groups in which the system looks for the item to replenish. Sequences allow searching some storage location groups first and then others by order corresponding to the sequence.

Replenishment Requests

When you have warehousing set up for replenishment, you can run a Replenishment Request (4.16.13).

This function lets you:

- Run a simulation of the replenishment. By default, the Create Transactions field is set to No. You can then run a report to look at all the replenishments to be done, simulate a picking, and generate a list of all potential transactions, without actually creating the transactions. You can run this report several times using different percentages each time, until you select a quantity of work that can be handled by the current staffing levels.

- When you are satisfied that the replenishment report contains a manageable workload, change the Create Transactions field to Yes, and then run the report again.

The field Include Area Below Replenishment Point enables you to adjust the value of the replenishment point defined in Replenishment-Location Maintenance or Replenishment-SLG Maintenance.

When the inventory for a given item in a given location stays above the replenishment point, running the replenishment has no effect. When an inventory movement makes the inventory in that location drop below the replenishment point, running the replenishment request with Create Transactions set to No tries to find available stock for the replenishment. The Include Area Below Replenishment Point field enables you to change the value of the replenishment point. This is a way to have fewer transactions to carry out if the load is too high.

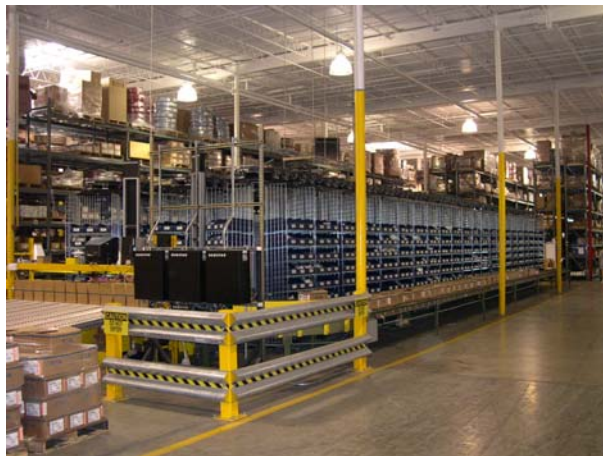
Automatic Replenishment

Replenishment can happen automatically, without running Replenishment Request. As soon as the system issues inventory and stock drops below the minimum level, the system automatically creates a replenishment task.



Replenishment

- ✓ Replenishment request
Activated by menu option.
- ✓ Automatic Replenishment:
As soon as the system issues inventory and stock drops below the minimum level, a replenishment task is created.



QAD Proprietary

Replenishment Objectives



Objectives

- ✓ **Create a Boxes SLG within a Storage area**
- ✓ **Set up one location (DBox000) for item D-IT000 in the Boxes area.**
 - This location is the one that should be replenished. Replenishment point will be 20 EA and Maximum quantity to replenish 100 EA.

QAD Proprietary

Replenishment Setup



Replenishment Setup



- ▲ Create a new 'Boxes' SLG for replenishment.
- ▲ Set up one location for an item in the Boxes SLG to be replenished.
- ▲ Ensure a replenish IR exists and a transaction type is assigned to the IR.
- ▲ Ensure an algorithm is assigned to the item/transaction.
- ▲ Create a replenishment list.
- ▲ Link the replenishment list to item/SLG or item/location.

QAD Proprietary

A typical setup based on the receipt of a purchase order includes the following steps:

- Use Storage Location Group Maintenance to create a new area for replenishment.
- Use Warehouse Location Maintenance to set up a location for an item within the new SLG area to be replenished.
- Use Internal Routing Maintenance to ensure a replenishment routing and sequence exist.
- Use Internal Routing Assignment to ensure a transaction type is assigned to the IR.
- Use Algorithm Assignment Maintenance to ensure an algorithm is assigned to the transaction type.
- Use Replenishment List Maintenance to create a replenishment list.
- Use Replenishment Location Maintenance to link the replenishment list to the item/SLG.

Storage Location Group Maintenance

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Replenishment (Storage Location Group)

Storage Location Group Maint X

Go To Actions Copy Print Preview

Site: US-D6

Warehouse: US-D-3

Storage Location Group: Boxes

Description: Pick Face(Boxes)

Internal Routing Group: Storage

Allow Issues: ☒

Allow Receipts: ☒

Allow Incoming Returns: ☒

Allow Outgoing Returns: ☒

Opportunity Counts: ☐

Opportunity Count Frequency: 0

Check Digits: ☐

Cycle Count Status Option: 0

Picking Multiple UM:

Acquisition UM:

Exclude from Picking: ☐

Picking Level: 20

Over Pick: ☐

Multi-Trans: ☐

Detail Overflow Group:

Capacity Check when DTF: ☐

Optimized Storage: ☐

Allow Mixed Status Codes: ☐

Recount UM:

Back Next

QAD Proprietary

Use Storage Location Group Maintenance (4.3.1) to create a new SLG area for items to be replenished.

Field Definitions

Storage Location Group . Enter the code that identifies the storage location group you want to create or modify.

Warehouse Location Maintenance

Warehouse Location Maintenance

Site: US-D3 Warehouse Site
Location: DB0000

Warehouse Location Groupings
Warehouse: US-D3
Storage Location Group: Boxes
Work Location Group: Forklift

Warehouse Location Data
Check Digit:
Popularity:
Storage Type:
Warehouse Location Type:
Travel Sequence: 0
Dedicated:

Item Number	UM	Quantity	Height	Length	Width
	EA	100.0000			

WARNING: End of data.

Back Next

Use Warehouse Location Maintenance (4.3.13.1) to set up all locations within a warehouse.

Field Definitions

Location. Enter the name of the warehouse location you are creating.

Storage Location Group. Enter the SLG to which this location belongs.

Item Number . The fields on the third Warehouse Location Maintenance screen are used to specify the quantities of a particular unit of measure that will fit in the location. You can enter multiple lines for different items and different units of measure.

Enter the item number for the inventory item to which this quantity definition relates.

If you entered Yes in the Dedicated field on the previous screen, you must also specify the item to which this location is dedicated.

UM . The fields on the third Warehouse Location Maintenance screen are used to specify the quantities of a particular unit of measure that will fit in the location. You can enter multiple lines for different items and different units of measure.

Enter the unit of measure in which this quantity definition is specified.

Quantity . Enter the quantity of the selected UM that will fit in this location. You can enter multiple lines for different items and different units of measure.

Internal Routing Maintenance

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Replenishment (Internal Routing Maintenance)

Internal Routing Maintenance X

Go To Actions Copy Print Preview

Site: US-D3 Warehouse: US-D-3 Internal Routing: ReplenIR

Description: Wave Replenishment IR

Sequence: 10 Internal Routing Group: Storage

Transaction Create

Confirmed at Source: ☒ Task: TRANSFER

System Code: RF Priority: 100

Two Phase: ☒ Increment: 10

Keep From Status: ☐

Transaction Confirmation

From Location Option: 0 Repick Type:

From Item Option: 0

From Lot/Serial Option: 0

From Reference Option: 0

Allow Quantity Increase: ☒

Allow Quantity Decrease: ☒

Quantity Change Option: 0

US-D3

US-D-3

Storage

Bulk DBik001 DBik004 DBik002 DBik005 DBik003 DBik006

Boxes DBox000

Replenishment

WARNING: End of data.

QAD Proprietary

Use Internal Routing Maintenance (4.2.5) to define the pathways through your warehouse that you want your inventory to take.

For each sequence step within an internal routing, you can also specify a number of parameters that control how the inventory is processed as it reaches that point in the sequence. The system displays default values for these processing parameters that are defined in Warehouse Maintenance. You can accept the default values, or override them with new values.

Field Definitions

Internal Routing . Specify the code that identifies the internal routing you want to maintain or assign to a particular transaction type.

Sequence . Enter the number that identifies the order of this routing step.

Each internal routing consists of a number of steps, identified by a sequence number. To make it easier to add steps within the sequence later, number the sequences as 10, 20, 30 rather than 1, 2, 3.

Internal Routing Group . Specify for this sequence step of the routing the next IRG to which the inventory should move.

Internal Routing Assignment


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Replenishment (Internal Routing Assignment)

▲ Assign Internal Routing to PICK-RE transaction.

Int Routing Assignment Maint
Go To Actions Copy Print Preview

Transaction Type: PICK-RE

Site: US-D3

Warehouse: US-D-3

Item Number:

Warehouse Item Type:

Address:

Custom:

Internal Routing: ReplenR

Custom Program:

Back

Next

QAD Proprietary

Use Internal Routing Assignment Maintenance (4.2.9) to link transaction types to internal routings. For this training, assign the Internal Routing to the PICK-RE transaction.

Field Definitions

Transaction Type. This field is used to specify the transaction type.

Maintain transaction types using Transaction Type Maintenance.

You specify the transaction type to link to an internal routing in Internal Routing Assignment Maintenance. You specify the transaction type to link to a sequence of algorithms in Algorithm Assignment Maintenance

Internal Routing. Specify the code that identifies the internal routing you want to maintain or assign to a particular transaction type.

Algorithm Assignment Maintenance

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Replenishment (Algorithm Assignment)

Algorithm Assignment Mainten... X

Go To Actions Copy Print Preview

Algorithm Type: PK
Site: US-D3
Item Number: D4T000
Address:

Transaction Type: PICK-RE
Warehouse: US-D-3
Warehouse Item Type:
Custom:

Assigned Algorithms

Seq	Algo	Description
10	4	Pick by Expiration Date
20	1	Pick by Location

Sequence: 10 Algorithm: 4
Description: Pick by Expiration Date

Back Next

QAD Proprietary

Use Algorithm Assignment Maintenance (4.6.9) to link a specified sequence of algorithms (of one type per sequence) to a defined combination transaction type, site, warehouse, item number, or address.

Field Definitions

Transaction Type. This field is used to specify the transaction type.

Maintain transaction types using Transaction Type Maintenance.

You specify the transaction type to link to an internal routing in Internal Routing Assignment Maintenance. You specify the transaction type to link to a sequence of algorithms in Algorithm Assignment Maintenance.

You also specify the transaction type when using the Algorithm Simulation Menu. These options simulate either location-find and put-away, or picking. The system simulates the running of the algorithms that you have assigned to the specified transaction type and displays the results of the simulated put-away or picking.

Warehouse Item Type. If you want to assign a sequence of algorithms to a combination of transaction type and warehouse item type, enter the item type code here. If you leave this field blank, the assignment will be valid for all item types.

The warehouse item type codes are a way of grouping together items that have similar properties. You assign the codes to items using any of the warehouse item Maintenance functions.

Replenishment List Maintenance


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Replenishment (Replenishment List Maintenance)

▲ Storage location groups in which the system looks for the item to replenish.

Replenishment List Maintenance
Go To
Actions
Copy
Print
Preview

Site: US-D3 Warehousing Site
 Description: Rep List D-IT000

Replenishment List: RepList
 Comments:

Replenishment List Details

Seq	Warehouse	Description	SLG	Description
10	US-D-3	Warehouse D-3	Bulk	Reserve Area(Pallets)

Seq: 10
Warehouse: US-D-3
Store Loc Group: Bulk

Back
Next

QAD Proprietary

Use Replenishment List Maintenance (4.16.1) to define a replenishment list. This is a series of storage location groups in which the system looks in sequence for items in order to replenish a specified location or set of locations. You link the list to a location or SLG to replenish.

Field Definitions

Replenishment List. Enter the name of the Replenishment List, for example, List A, to be used by Replenishment functions.

Replenishment Location Maintenance

Replenishment (Replenishment Location Maintenance)

▲ Set up Location that must be replenished.

Replenishment Location Maint X

Go To Actions Copy Print Preview

Site: US-08

Location: DBox000

Item Number: D-IT000

Replenishment Type:

Start Date:

Maximum Quantity: 100 EA

Replenishment Point: 20 EA

End Date:

Replenishment UOM: EA

Replenishment Point: 20.0

Maximum Quantity: 100.0

Replenishment List: RepList

Percent Full: 0.00 Capacity: 100

Back Next

QAD Proprietary

Use Replenishment Location Maintenance (4.1.6.5) to link the replenishment list to the location you want to replenish. You can also set additional parameters.

Field Definitions

Location. Indicate the location to replenish.

Item Number. Enter the code for the item to replenish.

Replenishment UM . Enter the UM to use for replenishment.

Replenishment Point. Enter the quantity of stock at which the location should be replenished.

Maximum Quantity. Specify the maximum quantity by which the location or SLG may be replenished. Leave this field blank to allow any quantity.

Replenishment List . Enter the name of the Replenishment List, for example, List A, to be used by Replenishment functions.

Exercise 1: Run a Replenishment Request



Objectives

- ✓ Review initial scenario
- ✓ Run Replenishment request menu option
- ✓ Use the QAD Warehousing RF Device to confirm tasks
- ✓ Review stock inquiries to see stock movements

QAD Proprietary

In this section, you will create and process a replenishment request. To do this, you will:

- 1 Review the initial scenario.
- 2 Create a replenishment request.
- 3 Confirm a receipt task using the RF.
- 4 Review stock inquiries.

Step 1: Review Initial Scenario



Replenishment (Inventory Detail Inquiry)

Inventory Detail Inquiry
Inventory Detail Inquiry - 10/9/08



Inventory Detail Inquiry
10/09/08

Site: US-D3
 Warehouse:
 Location:

Item Number:
 Lot/Serial:
 Reference:

Display Whse Loc: No
 Disp Non-Whse Loc: No
 Output: PAGE

Warehouse: US-D-3 Warehouse D-3

Location	Item Lot	Status Ref	Qty UM	On Hand	Expect In	Expect Out	Detail Alloc	Detail Pick
0B1k001	D-IT000	A-N	EA	500		100		
0B1k002	D-IT000	A-N	EA	200				
0B1k005	D-IT000	A-N	EA	500				
0B1k006	D-IT000	A-N	EA	200				
0B1k006	D-IT000	A-N	EA	100				
0B1k006	D-IT000	PL000031	p1					
0B1k006	D-IT000	A-N	EA	100				
0B1k006	D-IT000	PL000032	p1					
0B1k006	D-IT000	A-N	EA	100				
0B1k006	D-IT000	PL000033	p1					
0Box000	D-IT000	A-N	EA		100			

4.9.13
Inventory Detail Inquiry
whiciq01.p

QAD Proprietary

Use Inventory Detail Inquiry (4.9.13) to review stock Expected In and Expected Out quantities for the location.

Step 2: Run a Replenishment Request

Replenishment Request

Site: US-D3
Warehouse: US-D-3
Internal Routing Group: US-D-3
Storage Location Group: US-D-3
Location: DB1K001
Item Number: D-IT000
Replenishment Type: Replenishment

Item/Location Replenishment: ☒
Item/Storage Location Group Replenishment: ☒
Create Transactions ☒
Include Area below Replenishment Point: 100
Effective Date: 10/9/2008

Report Criteria:

Site	Warehouse	Location	Lot/Serial	Reference Qty	Picked
US-D3	US-D-3	DB1K001		100.0	

Report Submitted By: mfg

Report Criteria:

Site: US-D3	To: US-D3
Warehouse: US-D-3	To: US-D-3
Internal Routing Group: US-D-3	To: US-D-3
Storage Location Group: US-D-3	To: US-D-3
Location: DB1K001	To: D-IT000
Item Number: D-IT000	To: D-IT000
Replenishment Type: Replenishment	To: D-IT000
Item/Location Replenishment: Yes	
Item/Storage Location Group Replenishment: Yes	
Create Transactions: Yes	

Include Area below Replenishment Point: 100 %

When you have created a replenishment list and linked it to a location or storage location group, you can start a Replenishment Request.

By default, the Create Transactions field is set to No. This lets you generate a report listing the replenishments to be done, simulate a picking, and have a list of all potential transactions, without actually creating the transactions. You can run this report several times using different percentages each time, until you select a quantity of work that can be handled by the current staffing levels.

When you are satisfied that the replenishment report contains a manageable workload, change the Create Transactions field to Yes, and then run the report again.

Field Descriptions

Create Transactions. Indicate whether to run a simulation of replenishment using the parameters you input. Entering default No in the fields allows simulation. To create transactions and carry out a replenishment request, change this field to Yes.

Effective Date . Indicate the date you want to run the replenishment request.

Include Area below Replenishment Point . This field enables you to adjust the value of the replenishment point defined in the Replenishment Location Maint or Replenishment-SLG Maintenance.

On-line Replenishment. You use this screen to carry out replenishment for one or more locations on-line.

End Date . Enter the last date the replenishment should be carried out.

Internal Routing Group . Enter the first internal routing group in a range for selecting items for replenishment.

Once you run the request, you can recheck Inventory Detail Inquiry to see changes in the Expected In/Out quantities; see the following figure.

Fig. 8.2
Recheck Quantity in Inventory Detail Inquiry

Inventory Detail Inquiry - 10/9/08

QAD

Site: US-D3 Item Number: Display Whse Loc: No
Warehouse: Lot/Serial: Disp Non-Whse Loc: No
Location: Reference: Output: PAGE

Warehouse: US-D-3 Warehouse D-3

Location	Item	Lot	Status	Ref	Qty	Expect	Detail	Detail
					UM On Hand In	Out	Alloc	Pick
081k001	D-IT000		A-N	EA	500		100	
081k002	D-IT000		A-N	EA	200			
081k005	D-IT000		A-N	EA	500			
081k006	D-IT000		A-N	EA	200			
081k006	D-IT000		A-N	EA	100			
081k006	D-IT000		A-N	EA	100			
081k006	D-IT000		A-N	EA	100			
081k006	D-IT000		A-N	EA	100			
081k006	D-IT000		A-N	EA	100			
080x000	D-IT000		A-N	EA		100		

4.9.13 Inventory Detail Inquiry whicq01.p

RF Task Confirmation


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Receipt Task Confirmation

▲ Use Next Task Menu


→


QAD Proprietary

The following procedure illustrates how to replenish from the RF. Although you can perform this task with the RF Select Task function (1.2), the following procedure uses the Next Task (1.1) function.

- 1 Log in to the RF and enter your ID, password, site, warehouse, and if applicable, your work location group.
- 2 Select Work (1), then Next Task (1.1).
The RF displays the Overpick screen.
Note If the system displays other tasks, cancel the Next Task program, return to the RF login screen, and enter REPLEN in the Login screen's Task field; then select Work (1), then Next Task (1.1).
- 3 To pick for the replenishment, scan the source location, then scan the pallet number.
The RF displays the number of replenishment tasks to perform for the pallet in the counter at the top.
- 4 To replenish a bin, scan the destination location, then scan the items.
The system prompts for the quantity in the base UM.

Exercise2: Automatically Replenish



Objectives

- ▲ Set up item D-IT000 to be replenished automatically.
- ▲ Issue inventory (90 EA) with Unplanned Issue menu option.
- ▲ Use the QAD Warehousing RF Device to confirm tasks
- ▲ Review stock inquiries to see stock movements

QAD Proprietary

Step 1: Enable Auto Replenish

The screenshot shows the 'Warehouse Maintenance' window in QAD. The title bar indicates 'Warehouse Maintenance 80.1.1 whwhmt.p'. The window has a menu bar with 'Go To', 'Actions', 'Copy', 'Print', and 'Preview'. The main area is divided into sections: 'Cycle Count Defaults' and 'Miscellaneous'. In the 'Miscellaneous' section, the 'Auto Replenish' checkbox is checked and highlighted with a red box. Other fields include 'Mode' (Auto), 'Opportunity Counts' (0), 'Auto Replenishment %' (0.00%), 'Completion Option' (2), 'Fail Option' (2), 'Optimized Storage' (0), 'Transaction Search Window' (0), 'Check Digits' (0), 'Fail Status' (Fail), 'Hold Time (Minutes)' (0), and 'Repick Option' (2). 'Back' and 'Next' buttons are at the bottom right.

Warehouse Maintenance
80.1.1
whwhmt.p

Warehouse Maintenance X

Go To Actions Copy Print Preview

Site: US-D3
Warehouse: US-D-3

Cycle Count Defaults

Cycle Count Task: COUNT
Count System Code: RF
Cycle Count Priority: 0
Count Increment: 0
Cycle Count on Fail: ☐
Use Recount UM of SLG: ☐

Recount Task: RECOUNT
Recount System Code: RF
Recount Priority: 0
Recount Increment: 0
Cycle Count Status Option: 0
Blind Location Audit: ☐

Miscellaneous

Mode: Auto

Opportunity Counts: 0
Auto Replenish: ☒
Auto Replenishment %: 0.00%
Completion Option: 2
Fail Option: 2

Optimized Storage: 0
Transaction Search Window: 0
Check Digits: 0
Fail Status: Fail
Hold Time (Minutes): 0
Repick Option: 2

Back Next

QAD Proprietary

Use Warehouse Location Maintenance (4.1.1) to enable an automatic replenishment. Check Auto Replenish the field in the Miscellaneous frame.

Fields

Auto Replenish. Enter Yes to enable auto replenishment. If an existing replenishment definition for a location/item or an SLG/item is present when the inventory level falls below the replenishment point, the system automatically starts a replenishment process. This process picks the missing items and transfers them to the location/SLG to be replenished. With auto replenishment, you do not need to start a manual replenishment since the process is triggered automatically.

Note You can specify a the tolerance percentage for the replenishment point by entering a value in Auto Replenishment%, which is the quantity of stock below which an automatic replenishment is triggered. A value of 0% has the same effect as a value of 100%.

Step2: Enable Auto Replenish for the Item-Warehouse

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Replenishment (Item-Warehouse Maintenance)

Item-Warehouse Maintenance X

Go To Actions Copy Print Preview

Item Number: D-4T000
UM: EA
Site: US-D3
Warehouse: US-D-3

Item 001
Warehousing Site
Warehouse D-3

Warehouse Data

Location:
Storage Location Group: Bulk
SLG List:
Warehouse Item Type:
Replenishment Type:
Popularity:
Logistics UM Tolerance: 0.00%
Auto Replenish: ☒

Single PA Trans:
Issue Method:
Print ID:
ID Quantity: 0
OPC Threshold: 0.0
Logistics UM: pl
Pallet Max Height: 0
Auto Replenishment %: 0.00%
Print Unplanned Issue Tag:

Modifying existing record

Delete Back Next

QAD Proprietary

Use Item-Warehouse Maintenance (4.4.11) to check the Auto Replenish field for an item-warehouse combination.

QAD

Step 3: Check Processing


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Replenishment (Unplanned Issue)

▲ See message on the bottom.

Issues - Unplanned
Go To Actions Copy Print Preview

Item Number: 041000	Lot/Serial Control:	UM: EA	
Description: Item 001			
Quantity: 90.0	Site: US-D3		
Unit of Measure: EA	Location: DBox000		
Conversion: 1.0000	Lot/Serial:		
Unit Cost: 0.00	Reference:		
Order: 0	Multi Entry: ☐	Total Qty: 90.0	
Line: 0	Total Cost: 0.00		
Sales/Job:			
Address:			
Remarks:			
Effective Date: 10/9/2008			
Debit Account: 5770	Cons	Cost of Production	
Credit Account:			

Automatic replenishment being processed

Back
Next

QAD Proprietary

Check Issues-Unplanned (3.7) in QAD EE to see the system message that an automatic replenishment is in process.

Step 4: Check the Stock Movement

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Replenishment (Inventory Detail Inquiry)

▲ ...check stock movement and confirm the task.

Inventory Detail Inquiry
Inventory Detail Inquiry - 10/09/08

Inventory Detail Inquiry
10/09/08

Site: US-D3
Item Number: D-IT000
Display Whse Loc: No

Warehouse: US-D-3
Warehouse D-3
Disp Non-Whse Loc: No

Location:
Lot/Serial:
Reference:

Warehouse: US-D-3
Warehouse D-3
Output: PAGE

Location	Status	Qty	Qty	Expect	Expect	Detail	Detail
Lot/Serial	Ref	UM	On Hand	Alloc	In	Out	Alloc Pick
DB1k001	A-N	EA	400			90	
DB1k002	A-N	EA	200				
DB1k005	A-N	EA	500				
DB1k006	A-N	EA	200				
DB1k006	A-N	EA	100				
DB1k006	PL000031	p1					
DB1k006	A-N	EA	100				
DB1k006	PL000032	p1					
DB1k006	A-N	EA	100				
DB1k006	PL000033	p1					
DBox000	A-N	EA	10		90		

4.9.13
Inventory Detail Inquiry
whiciq01.p

Verify the replenishment by revisiting Inventory Detail Inquiry and checking quantities in the Expected In/Out columns.

Study Questions

- 1 Briefly describe the concept of replenishment in the warehouse.
- 2 What is the area called in which stock is stored prior to picking?
- 3 Describe at least two specifications you can set up for replenishment in QAD Warehousing.
- 4 Describe overpick replenishment.
- 5 True or False. In warehousing, you can define replenishment for a given item and a given location. More commonly, though, you can define replenishment for a given item in a warehouse location group.
- 6 What does the replenishment request do?
- 7 In which field and program can you adjust the value of the replenishment point defined in Replenishment-Location Maintenance or Replenishment-SLG Maintenance?
- 8 True or False. When the inventory for a given item in a given location stays above the replenishment point, running the replenishment has no effect.

- 9 What is the condition that triggers an automatic creation of a replenishment task?
- 10 Which two algorithms are typically used in a replenishment?

Chapter 9

Cross-Docking

Chapter Overview



Cross-Docking Chapter Overview

- ▲ Introduction to Cross-Docking
- ▲ Set up Cross-Docking
- ▲ Exercise

QAD Proprietary

Introduction



Cross-Docking

▲ Consider this scenario:

- Warehouse contains a certain number of an item, but a sales order requires more of that item. The sales order creates a shortage.
- Staff receive more of the items with an unplanned receipt.
- Staff can move stock from the receipt area to the storage area, and from there, move it directly to the dispatch area where the truck is waiting....

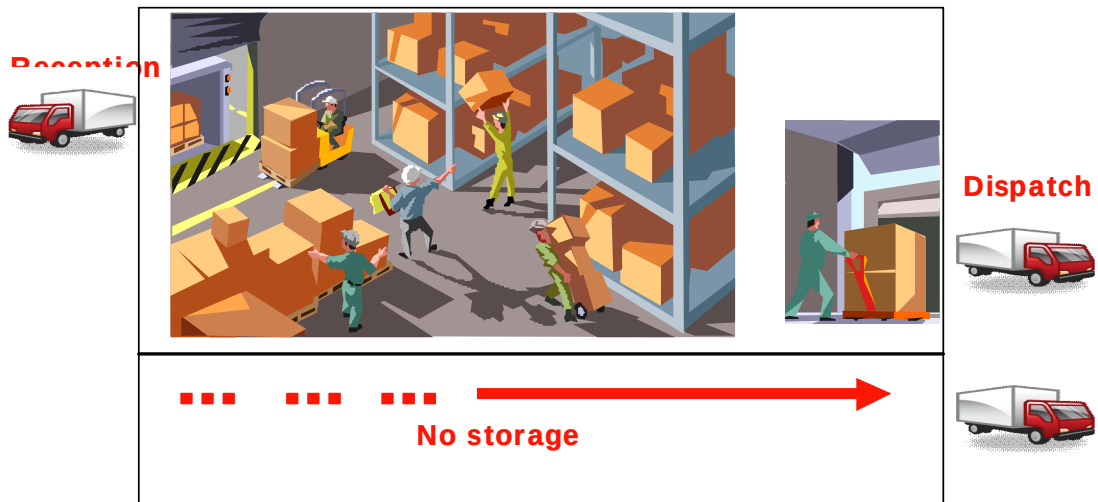


QAD Proprietary

In situations where insufficient stock prevents the complete filling of an order, the system keeps track of the order shortage quantities, item by item. To help you to fill the back orders with a minimum of inventory movements, you can use shortage clearance algorithms. When you link these algorithms to inventory receipt transactions, the system automatically checks to see if the received stock can be used to fill back orders. The inventory is moved from receipt to dispatch, being stored in between. This type of movement is also known as *cross-docking*.

By linking the appropriate internal routings to the transaction types, you can route the relevant stock directly from the receipt dock to the shipping dock, thus removing the need for additional put-away and picking activities. The remaining received stock that is not required for shortage clearance is put away using the normal routine. See Figure 9.1.

Fig. 9.1
Route Stock From Receipt to Shipping Dock



Cross-Docking Setup



Cross-Docking Setup

- ✓ Set up internal routings
- ✓ Assign transaction types to IRs
- ✓ Assign algorithms to the transaction types
- ✓ Specify transactions

QAD Proprietary

For setup, you define the sequences for internal routings. You need to define shortages; to do this, you create a shortage transaction type using Transaction Type Maintenance (4.7.1). You link the transaction in Internal Routing Assignment (4.2.9). Set the Clear Shortages field to Yes in Internal Routing Assignment. Then, you assign the shortage clearance algorithms to the appropriate transaction types using Algorithm Assignment Maintenance (4.6.9).

You can specify cross-docking details for the shortage clearance using the following four shortage fields defined for distribution order (SHRT-DO), sales order (SHRT-SO), and work order (SHRT-WO) transactions in Transaction Type Maintenance:

Shortage Definition. Specify what constitutes a shortage.

Shortage Quantity Definition. Specify how the system calculates a shortage quantity.

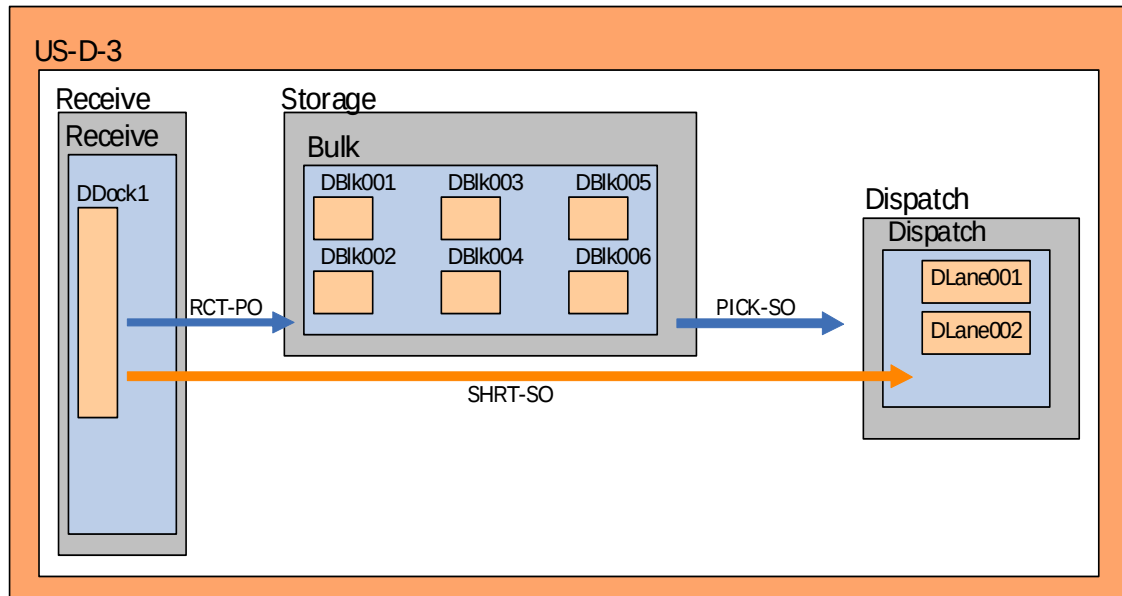
Shortage Action. Specify the action to take for a shortage.

Shortage Window. Specify a window of time to fulfill the order in terms of days.

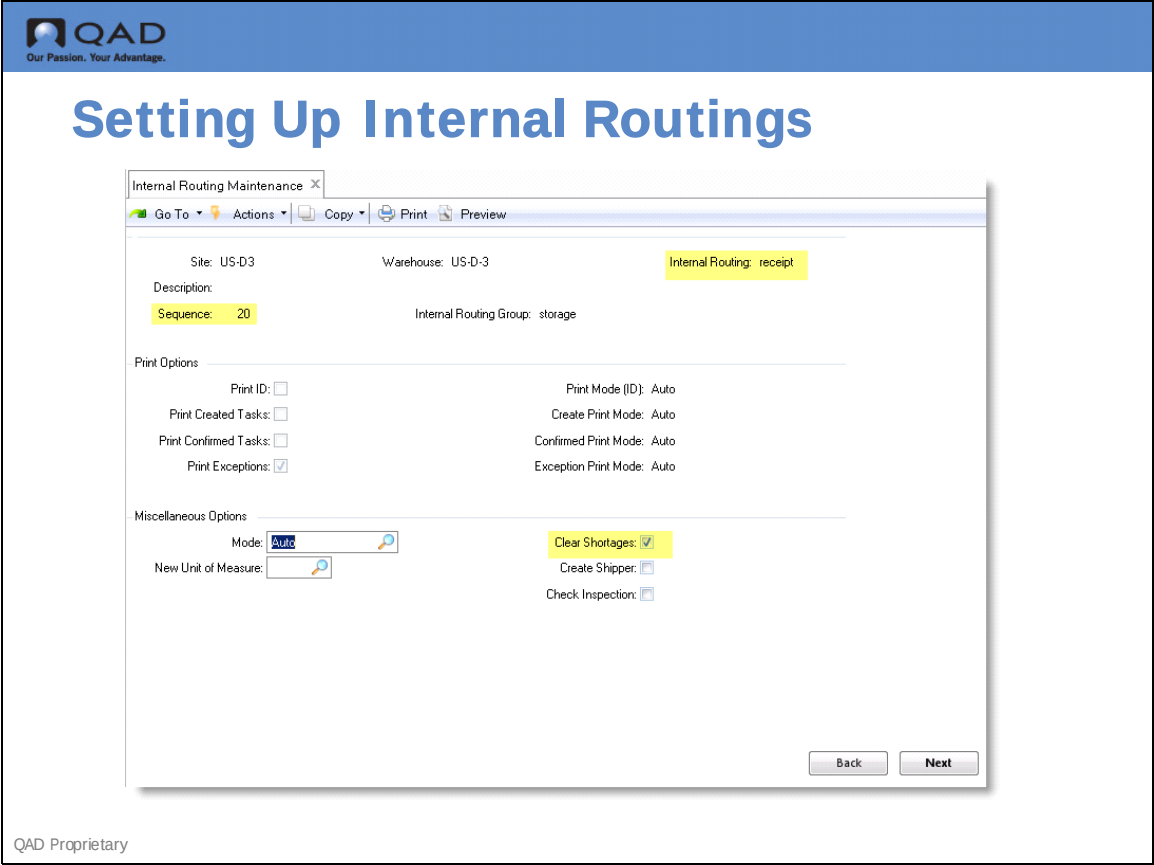
The following graphic depicts the setup.

Fig. 9.2
Setup Environment

US-D3



Setting Up Internal Routing



Use Internal Routing Maintenance to set up IRs for three different internal routing groups:

Internal Routing Field	Internal Routing Group Field	Additional Fields to Set
Receipt	Storage	Sequence=20 Clear Shortages=Yes
Shortpk	Receive	Sequence=10 Task=Transfer
Shortpk	Dispatch	Sequence=20

Fields

Internal Routing. To modify the fields for an existing internal routing, enter its name. To create a new internal routing, enter a new name for the routing.

Sequence. Each internal routing consists of a number of steps, identified by a sequence number. The process of setting up an internal routing consists of entering a sequence number in the Sequence field, entering the relevant internal routing group in the next field, and then specifying the processing required for this sequence step.

Internal Routing Group. Enter the name of an existing IRG.

Clear Shortages. Enter Yes to cause the shortage clearance algorithms to be run before a location is identified to receive the inventory. These algorithms look for orders that were not fully satisfied in the original picking because of insufficient inventory levels.

Linking Transactions to IRs

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Linking Transactions to IRs

Int Routing Assignment Maint

Go To Actions Copy Print Preview

Transaction Type: SHRT-S0

Site: us-d3

Warehouse: us-d3

Item Number:

Warehouse Item Type:

Address:

Custom: ☐

Internal Routing: rhootpl

Custom Program:

Delete Back Next

QAD Proprietary

Use Internal Routing Assignment Maintenance to link transaction types to the IRs you create for cross-docking.

Fields

Transaction Type. Enter the transaction type to which you want to assign an internal routing. You can maintain transaction types using Transaction Type Maintenance (4.7.1).

Internal Routing. Enter the name of the internal routing you want to assign to this transaction type.

Assigning Algorithms to Transactions

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Assigning Algorithms

Algorithm Assignment Mainten... x

Go To Actions Copy Print Preview

Algorithm Type: SC Transaction Type: RCT-*

Site: us-d3 Warehouse: us-d3

Item Number: Warehouse Item Type:

Address: Custom: ☐

Assigned Algorithms

Seq	Algo	Description
10	2	Sales Order Clearance by Due Date by Priority

Sequence: 10 Algorithm: 2

Description: Sales Order Clearance by Due Date by Priority

Back Next

QAD Proprietary

Use Algorithm Assignment Maintenance (4.6.9) to assign algorithms to transactions that the system uses in cross docking.

The reason for setting up a sequence of algorithms is so that you can specify the ideal method for selecting locations as the first step in the sequence. If the system cannot meet the full requirements either of put-away or picking by running the first choice algorithm, it then runs the second algorithm in the sequence, and so on until the requirement has been met.

Algorithm Type	Transaction Type	Additional Fields
SC (shortage clearance)	RCT-*	Sequence=10 Description=Sales order clearance by due date by priority Algorithm=2
PK	SHRT-SO	Sequence=10 Description= Pick by location Algorithm=3
LF	SHRT-SO	Sequence=10 Description=Merge with same order Algorithm=3 Sequence=20 Description=First location in first storage location group Algorithm=1

Fields

Algorithm Type. Enter the two-character code for the type of algorithm you want to assign. The standard codes are LF, PA, PK, SC and QA.

Transaction Type. Enter the transaction type to which you want to assign algorithms. You can use an asterisk as a wild card if you want to assign the same algorithm to a range of transaction types.

Example The transaction type RCT-* covers all receipt transaction types, such as RCT-PO, RCT-UNP, RCT-WO, and so on.

Sequence. For a new assignment, Sequence defaults to 10. Number sequences by 10's (10, 20, 30, and so on) so that additional steps can be inserted easily later, if required.

Algorithm. Assign algorithms of the type you selected at the top of the frame.

Specifying Transactions

Transaction Type Maintenance

Transaction Type: PICK-SO
Description: Sales Order Pick

Picking and Shortage Clearance Details

Control Over Pick at SLG: ☒
Over Pick: ☒

Shortage Definition: 3
Shortage Quantity Definition: 2
Shortage Action: 2
Shortage Window: 2

SLG Search Extension: ☐
SLG List Search Extension: ☐

Define what is a shortage condition.

Open order quantity: an order quantity greater than the sum of the allocated quantity, picked quantity, and shipped quantity indicates a shortage.

Delete Back Next

QAD Proprietary

Use Transaction Type Maintenance to modify or create transaction types. Each type of inventory transaction is identified by a transaction type code. Examples are a purchase order receipt (RCT-PO) or a sales order pick (PICK-SO). All standard transaction types are already set up within the system.

Fields

Transaction Type. Set this field to Yes so that t.

Shortage Definition. For picking transaction types, enter a code from 0 to 10 to specify what constitutes a shortage. The options are as follows:

Code	Definition
0	A field is available on each order detail record that can be manually set to Yes to indicate a shortage.
1	A field is available on each order detail record that is automatically set to Yes when picking is attempted. This constitutes a shortage.
2	General allocation: an allocated quantity greater than zero that is not detail allocated indicates a shortage.
3	Open order quantity: an order quantity greater than the sum of the allocated quantity, picked quantity, and shipped quantity indicates a shortage.

Code	Definition
4	Non-detail allocated quantity: an order quantity greater than the sum of any detail allocations and the picked quantity and shipped quantity indicates a shortage.
5	General allocation previously picked: as 2 except that the sum of the quantity picked and quantity shipped must be greater than zero.
6	Open order quantity previously picked: as 3 except that the sum of the quantity picked and quantity shipped must be greater than zero.
7	Non-detail allocated quantity previously picked: as 4 except that the sum of the quantity picked and quantity shipped must be greater than zero.
8	General allocation, other line previously picked: as 2 except that sum of the quantity picked and quantity shipped of a different line on the same order must be greater than zero.
9	Open order quantity, other line previously picked: as 3 except that sum of the quantity picked and quantity shipped of a different line on the same order must be greater than zero.
10	Non-detail allocated, other line previously picked: as 4 except that sum of the quantity picked and quantity shipped of a different line on the same order must be greater than zero.

Shortage Quantity Definition. For picking transaction types, enter a code from 0 to 2 to specify how the shortage quantity is calculated. The options are as follows:

Code	Definition
0	General allocated quantity
1	Open order quantity (ordered, less allocated, less picked, less shipped)
2	Non-detail allocated quantity (ordered, less total detail allocations, less picked, less shipped)

Shortage Action. For picking transaction types, enter a code from 0 to 3 to specify the action that the system should take when a shortage is detected. The options are as follows:

Code	Definition
0	No action: Warehouse transactions are created.
1	Order line is general allocated; warehouse transactions are created.
2	Order line is detail allocated. These allocations are converted to detail picks that create warehouse transactions.
3	Order Line is detail allocated—not detail picked, and warehouse transactions are created.

Shortage Window. Enter a number indicating the number of days before an order line due date that it can be considered short.

Example 1 indicates that an order line due tomorrow is short, but that one due the day after—2 days away—is not.

Exercise 1: Receive Inventory and Move



Exercise Objectives

- ▲ Create an SO with a shortage quantity
- ▲ Create the picklist and confirm picking tasks
- ▲ Receive inventory with Receipt Unplanned options
- ▲ Move stock from receive area to storage area
- ▲ Use the RF to confirm stock from receive area to dispatch area

QAD Proprietary

For this exercise, you:

- Create an SO for a quantity of 50 items.
- Pick the items through creation of a picklist in Picklist/Pre-Shipper-Automatic (7.9.1), but only pick a quantity of 35 because there are not enough available.
Note The picking step is not included in this exercise.
- Use the QAD EE Receipts-Unplanned (3.9) to receive more quantities of the same item.
If cross-docking is set up correctly, when you receive, the system creates a new task of 15 EA from receiving area to the shipping area. The system adds the 15 EA to the 35 EA already picked.
- Use the RF device to transfer the received items from the receiving dock to the shipping dock.

Step 1: Creating an SO with a Shortage Quantity

The screenshot displays the QAD Sales Order Maintenance interface. The title bar reads "Sales Order Maintenance" with a close button. Below the title bar is a menu bar with options: Go To, Actions, Copy, Print, Preview, and Attach. The main window has tabs for Attachments, Header, Lines, and Trailer. The "Lines" tab is active, showing a table of sales order lines. The first line is highlighted in yellow, showing item D-IT012 with a quantity ordered of 50.0. Below the table, the "Line Details" section is visible, showing various fields for the selected line item, including Desc, Loc, Site, Sales Acct, Disc Acct, Confirmed, Required, Promised, Due Date, Perform Date, Pricing Date, Salesperson, Commission, Category, Fixed Price, and Comments. The "Qty Allocated" field is highlighted in yellow and set to 0.0. The "Qty Picked" field is set to 35.0. The "Qty Shipped" field is set to 0.0. A warning message at the bottom left states "WARNING: End of data." Buttons for "End Lines" and "Next" are at the bottom right.

Creating an SO with a Shortage Qty

Sales Order Maintenance

Go To Actions Copy Print Preview Attach

Attachments Header Lines Trailer

Lines Line Details Freight Data Tax Info Comments

Header

Order: S011252 Sold-To: 00010000 Ln For: Single Org:

Sales Order Line

Ln	Item Number	Qty Ordered	UM	List Price	Discount	Net Price
1	D-IT012	50.0	EA	0.00	0.0	0.00

Line Details

Desc: Sales Acct: 3000 0001 0001
 Loc: Ddock1 Site: us-d3 Disc Acct: 3900 100
 USD Cost: 0.00 Confirmed: ☒ Required: 11/4/2009 Credit Terms Int: 0.00
 Lot/Serial: Qty Allocated: 0.0 Promised: UM Conversion: 1.0000
 Qty Picked: 35.0 Due Date: 11/4/2009 Consume Fcst: ☒
 Qty Shipped: 0.0 Perform Date: 11/4/2009 Detail Alloc: ☐
 Qty to Invoice: 0.0 Pricing Date: 11/4/2009 Taxable: ☐
 Salesperson 1: hrsrls Multiple: ☒ Freight List:
 Commission 1: 10.00% Category: Fixed Price: ☒ Comments: ☐

WARNING: End of data.

End Lines Next

QAD Proprietary

Use Sales Order Maintenance (7.1.1) to create a sales order with a shortage quantity. Create a new order, then add a line item for the order; for example, for item D-IT012.

Fields

Qty Allocated. Enter the number of items to allocate for this order line. There are two allocations:

- General allocations allocate the required quantity of the item.
- Detail allocations specify the site, locations, lot/serial numbers, and lot references for the allocated quantity.

Allocations reserve inventory for this order so it is not available for other orders in the system. Allocations also control shipment quantities when there are not enough items to fill all orders. You can choose to ship the quantity allocated or the quantity picked.

The total of quantity allocated, plus quantity shipped, plus quantity picked cannot be greater than the quantity open on the line item.

Qty Shipped. Read only.

Qty Picked. Read only.

Step 2: Review Inventory



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Review Inventory

Inventory Detail Inquiry

Inventory Detail Inquiry - 11/5/...



Inventory Detail Inquiry 11/05/09

Site: us-d3
Warehouse: us-d-3
Location:

Item Number: d-it012
Lot/Serial:
Reference:

Display Whse Loc: No
Disp Non-Whse Loc: No
Output: PAGE

Location	Status	Qty	Qty	Expect	Expect	Detail	Detail
Lot/Serial	Ref	UM On Hand	Alloc	In	Out	Alloc	Pick
Dlane001		EA	35				35

4.9.13

Inventory Detail Inquiry

whiciq01.p

Use Inventory Detail Inquiry (4.9.13) to review the quantities allocated and picked.

Step 3: Receive Items

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Receiving Items

Receipts - Unplanned

Go To Actions Copy Print Preview Attach

Attachments

Item Number: D-IT012 Lot/Serial Control UM: EA

Description:

Quantity: 200.0 Site: us-d3

Unit of Measure: EA Location: Ddock1

Conve Receipt Detail - Quantity: 200 EA

Site	Location	Lot/Serial	Reference	Quantity
us-d3	Ddock1		PL014324	100.0
us-d3	Ddock1		PL014325	100.0

Line:

Sales/Job:

Address:

Remarks:

Effective Date:

Site	Location	Lot/Serial	Reference	Quantity
us-d3	Ddock1		PL014324	100.0

Total lot/serial quantity entered: 200

Back Next

QAD Proprietary

Use Receipts-Unplanned (3.9) to receive the items into the warehouse from the sales order. You typically use this program to receive miscellaneous inventory such as floor stock items sent back from production, or materials from a manufacturing order that has been closed from an accounting standpoint.

Specify the item number; then, enter the site. Ensure that the location is the receiving dock of the warehouse.

Step 4: Review Received Items


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Review Received Items

Inventory Detail Inquiry
Inventory Detail Inquiry - 11/5/...



Inventory Detail Inquiry

11/05/09

Site: us-d3
 Warehouse: us-d-3
 Location:

Item Number: D-IT012
 Lot/Serial:
 Reference:

Display Whse Loc: No
 Disp Non-Whse Loc: No
 Output: PAGE

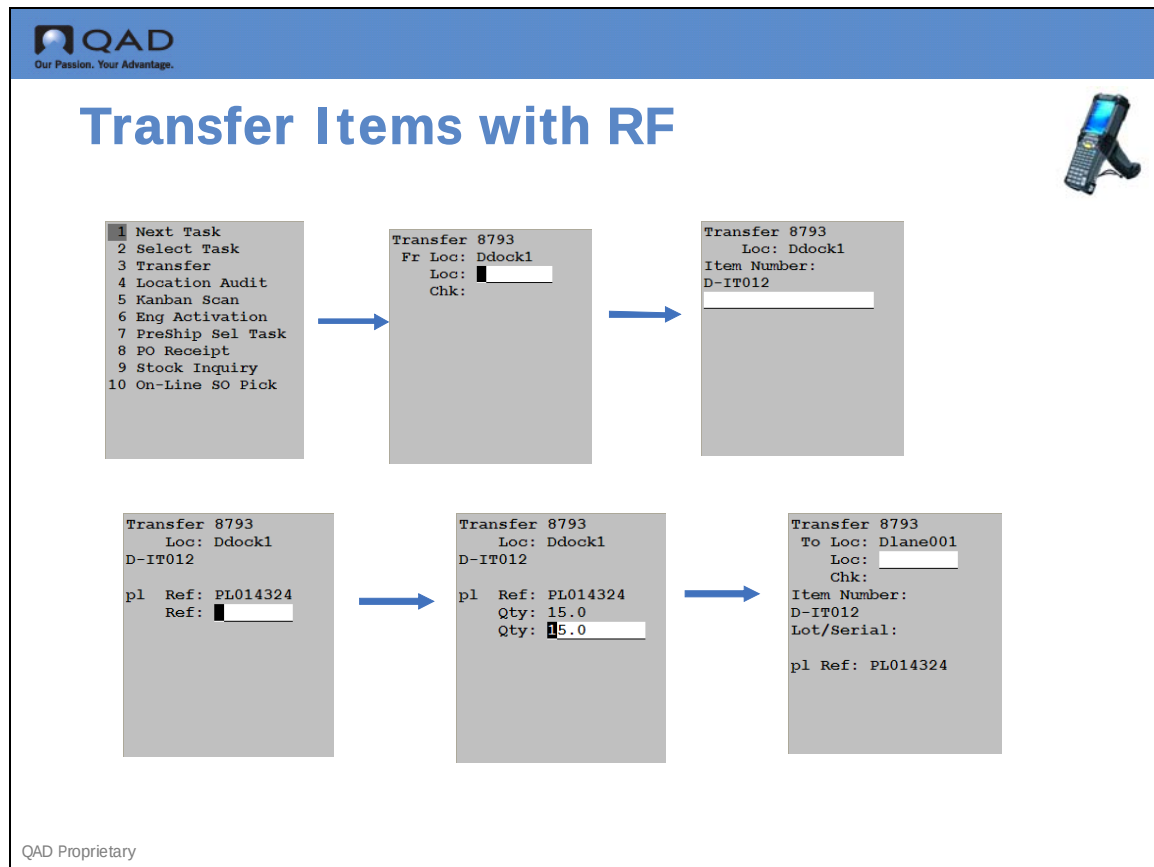
Location Lot/Serial	Status Ref	Qty UM On Hand	Qty Alloc	Expect In	Expect Out	Detail Alloc	Detail Pick
Db1k001	EA			85			
Db1k001	PL014324 p1			100			
Db1k001	PL014325 p1						
Ddock1	EA	100			100		15
Ddock1	PL014324 p1						
Ddock1	EA	100			100		
Ddock1	PL014325 p1						
Dlane001	EA	35					35
Dlane001	EA			15			
Dlane001	PL014324 p1						

4.9.13
Inventory Detail Inquiry
whicig01.p

QAD Proprietary

Use Inventory Detail Inquiry to review received items.

Step 5: Transfer Items with RF Device



Use the RF Next Task (1.1) option to transfer items from the receipt area to the dispatch area, which typically are the shipping lane locations.

- 1 Log onto the RF device, entering the site, warehouse, and other login data.
- 2 Select Next Task (1.1).
- 3 Enter the location of the receipt area.
- 4 Enter the item number, then the pallet reference number.
- 5 Enter the quantity to transfer to the dispatch area.
- 6 Enter the dispatch area location (shipping lane).

Review Transferred Items

QAD
Our Passion. Your Advantage.

Review Transferred Items

Inventory Detail Inquiry
Inventory Detail Inquiry - 11/5/09

Inventory Detail Inquiry

11/05/09

Site: us-d3
Warehouse: us-d-3
Location:

Item Number: D-IT012

Display Whse Loc: No
Disp Non-whse Loc: No
Output: PAGE

Lot/Serial
Ref

Status
UM

Qty
On Hand

Qty
Alloc

Expect
In

Expect
Out

Detail
Alloc

Detail
Pick

Db1k001		EA			85		
	PL014324	p1					
Db1k001		EA			100		
	PL014325	p1					
Ddock1		EA	85			85	
	PL014324	p1					
Ddock1		EA	100			100	
	PL014325	p1					
Dlane001		EA	35				35
Dlane001		EA	15				15
	PL014324	p1					

4.9.13
Inventory Detail Inquiry
whiciq01.p

QAD Proprietary

Use Inventory Detail Inquiry to check if inventory was moved to the location.

Field Descriptions

Expect In/Expect Out. Expected out/ expected in quantities indicate that tasks were created properly but must be confirmed.

Step 7: Review Allocated Inventory


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Review Allocated Inventory

Allocated Inventory Inquiry
Allocated Inventory Inquiry - 11...



Allocated Inventory Inquiry

11/05/09

Item Number D-IT012	Site us-d3	Location Lot/Serial	Status	Output PAGE																				
Description T Order Site Summary Site us-d3 Avail Status Qty On Hand UM Qty Allocated Unallocated 235.0 EA 35.0 200.0																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Line/ID</th> <th style="text-align: left;">Location Lot/Serial</th> <th style="text-align: left;">Qty Alloc</th> <th style="text-align: left;">Picked</th> </tr> </thead> <tbody> <tr> <td>so S011252</td> <td>1 Dlane001</td> <td>0.0</td> <td>35.0</td> </tr> <tr> <td></td> <td>Dlane001</td> <td>0.0</td> <td>15.0</td> </tr> <tr> <td colspan="2" style="text-align: center;">Ref: PL014324</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>0.0</td> <td>50.0</td> </tr> </tbody> </table>					Line/ID	Location Lot/Serial	Qty Alloc	Picked	so S011252	1 Dlane001	0.0	35.0		Dlane001	0.0	15.0	Ref: PL014324						0.0	50.0
Line/ID	Location Lot/Serial	Qty Alloc	Picked																					
so S011252	1 Dlane001	0.0	35.0																					
	Dlane001	0.0	15.0																					
Ref: PL014324																								
		0.0	50.0																					

3.18
Allocated Inventory Inquiry
icptiq02.p

QAD Proprietary

Use Allocated Inventory Inquiry (3.18) to verify the allocated quantities and picked quantities in the dispatch area.

Step 7: Review Pre-Shipper

QAD
Our Passion. Your Advantage.

Review Pre-Shipper

Pre-Shipper/Shipper Inquiry
Pre-Shipper/Shipper Inquiry - 1...

Pre-Shipper/Shipper Inquiry
11/07/09

Ship-From ID: us-d3
 Pre-Shipper/Shipper: Pre-Shipper
 Number: 091104PS04

Ship-To/Dock: 00010000 00010000

Master Bill ID: Inventory Movement Code: Status: PAGE

ID	Item Number	PO Number	Order	Line	To
Site	Location	Lot/Serial	Ref	Stat	Ship
	Customer Ref	Model Year			
091104PS04				0	1.0
.I	D-IT012		S011252	1	35.0
us-d3	Dlane001				EA
.I	D-IT012		S011252	1	15.0
us-d3	Dlane001		PL014324		EA

7.9.3
Pre-Shipper/Shipper Inquiry
rciq03.p

QAD Proprietary

Use Pre-Shipper/Shipper Inquiry (7.9.3) to review shipper for items in the dispatch area, ready to ship.

Study Questions

- 1 Describe a situation in which cross-docking is used in a warehouse.
- 2 True or False. When you route the relevant stock directly from the receipt dock to the shipping dock, you can remove additional put-away and picking activities.
- 3 How do you define a shortage?
- 4 How do you specify cross-docking details for the shortage clearance?
- 5 How do you specify that the system runs shortage-clearance algorithms?
- 6 What is the significance of setting up algorithms for clear shortage (SC)?
- 7 In which field and program do you specify a shortage condition?
- 8 True or False. You can set up shortages so that a field is available on each order detail record that can be manually set to Yes to indicate a shortage.
- 9 True or False. You can set shortage conditions based on open order quantities but only for previously picked amounts.
- 10 What are setting when you set the Shortage Window?

Chapter 10

Engine Processing

Chapter Overview



Engine Processing Chapter Overview

- ▲ Introduction to Engine Processing
- ▲ Set up Engine processing
- ▲ Exercise

QAD Proprietary

Introduction



Introduction

Consider this scenario:

- ✓ Storage area in the warehouse is blocked.
- ✓ Pallets should be unloaded from the truck and labels printed.
- ✓ Put away task must not be created until storage area is clear.



Blocked Storage Area

QAD Proprietary

QAD Warehousing lets you use software routines, or *engines*, to process transactions within a warehouse. The system creates *engine workfiles*—requests for a transaction—when processing warehouse tasks, such as picking and put-away. You can use the engines to process engine workfiles in the Engine menu (4.7). The engine workfiles are always in use, though, in QAD Warehousing, whether you choose not to process them with the engines.

Programs in the Engine menu let you process different time-consuming functions and decrease user waiting by running the processes in the background. You can use the programs to delay the creation of warehouse transactions, select and modify engine workfiles, and process engine workfiles singularly or in batch mode.

Use engines to create automatically warehouse tasks or delay the creation of tasks.

- **AUTO mode:** system processes engine workfiles automatically without user intervention. This is the most common use.
- **MANUAL mode:** system processes engine workfiles as you need them processed. This is useful when you need to delay processing of a warehouse task.

When in MANUAL mode, you must start one of the engine processor programs in the Engine menu to process an engine workfile request. Engine workfiles can be any of the following requests:

- Create a task, including the put-away logic when applicable.
- Start the picking logic and create a picking task.

- Confirm a task.
- Print a tag.

Note Warehouse staff typically print tags during task creation, confirmation, exception processing, or when they need an ID tag.

Exercise 1: Receive Items, Set Up Engine Processor, Print Labels



Exercise Objectives

- ▲ Storage area in the warehouse is blocked.
- ▲ Pallets should be unloaded from the truck and labels printed.
- ▲ Put away task must not be created until storage area is clear.

QAD Proprietary

For this exercise, you:

- Ensure Internal Routings are set up for the situation described in the objectives.
- Receive items using QAD EE Receipts-Unplanned.
- Review inventory.
- Set up the engine processor.
- Review inventory.
- Print tags.

Step 1: Ensuring IRs are Set Up

Setting Up IR

Internal Routing Maintenance

Go To Actions Copy Print Preview

Site: us-d3 Warehouse: us-d3 Internal Routing: receipt

Description:

Sequence: 20 Internal Routing Group: storage

Print Options

Print ID: ☒ Print Mode (ID): Auto

Print Created Tasks: ☐ Create Print Mode: Auto

Print Confirmed Tasks: ☐ Confirmed Print Mode: Auto

Print Exceptions: ☒ Exception Print Mode: Auto

Miscellaneous Options

Mode: Manual

New Unit of Measure:

Clear Shortages: ☐

Create Shipper: ☐

Check Inspection: ☒

Back Next

QAD Proprietary

Use Internal Routing Maintenance (4.2.6) to ensure that options are set for printing labels and that the mode is set for manual for the IR for the sequence (the step) within the IR you want to deactivate automatic processing.

Example You set up the picking process to include a packing step. You want warehouse staff to go from inventory to a packing area and when packing is complete, to a dispatch area. To do this, you define a three-step process that includes:

- 1 Step 10: storage
- 2 Step 20: packing
- 3 Step 30: dispatch

Normally, you want the system to use the AUTO mode for step 20 and step 30; however, you set up step 30 as a MANUAL mode because the shipment is large and the packing staff is short-handed. This lets the packing department take more time.

Since step 30 is in MANUAL mode, the system does not create the task from the packing area to the dispatch area when staff confirm that goods are moved from the storage area to the packing area. Instead, it creates a request for movement in the form of an engine workfile. The dispatch staff use the Engine Activation (1.6) menu option on the RF device to process the engine workfile. When the engine is activated, the system creates the movement from the packing area to the dispatch area. As an alternative to the RF Engine Activation function, you can also use one of the engine processor programs in Engine Menu (4.7).

Fields

Print ID. Enter the ID of the printer to use for label printing.

Mode. Ensure the mode is set for manual.

Step 2: Receive Items


Our Passion. Your Advantage.

Receive Items

Receipts - Unplanned
Go To Actions Copy Print Preview Attach

Item Number: D-IT012 Lot/Serial Control: UM: EA

Description:

Quantity: 200.0 Site: us-d3

Unit of Measure: EA Location: Ddock1

Conver Receipt Detail - Quantity: 200 EA

Site	Location	Lot/Serial	Reference	Quantity
us-d3	Ddock1		PL014290	100.0
us-d3	Ddock1		PL014291	100.0

Line:

Sales/Job:

Address:

Remarks:

Effective Date:

Site	Location	Lot/Serial	Reference	Quantity
us-d3	Ddock1		PL014290	100.0

Total lot/serial quantity entered: 200

Back
Next

QAD Proprietary

Use Receipts-Unplanned (3.9) to receive the items into the warehouse. You typically use this program to receive miscellaneous inventory such as floor stock items sent back from production, or materials from a manufacturing order that has been closed from an accounting standpoint.

Specify the item number; then, enter the site. Ensure that the location is the receiving dock of the warehouse. Specify the pallet (reference ID).

Step 3: Review Inventory



Our Passion. Your Advantage.

Review Inventory

Inventory Detail Inquiry

Inventory Detail Inquiry - 11/4/09



Inventory Detail Inquiry

11/04/09

Site: us-d3
Warehouse: us-d-3
Location:

Item Number: D-IT012
Lot/Serial:
Reference:

Display Whse Loc: No
Disp Non-Whse Loc: No
Output: PAGE

Location	Status	Qty	Qty	Expect	Expect	Detail	Detail
Lot/Serial	Ref	UM	On Hand	Alloc	In	Out	Alloc Pick
Ddock1	PL014290	EA	100				
Ddock1	PL014291	EA	100				

4.9.13

Inventory Detail Inquiry

whiciq01.p

QAD Proprietary

Use Inventory Detail Inquiry (4.9.13) to ensure that inventory was received.

Step 4: Set Up Engine Processor

Engine Processing

Engine Processor - LotSerial/Ref

Engine Type: [] To: []
 Create Date: 11/4/2009 To: 11/4/2009
 Site: us-d3 To: us-d3
 Location: [] To: []
 Item Number: D4IT012 To: D4IT012
 Lot/Serial: [] To: []
 Reference: [] To: []
 Order: [] To: []
 Line/ID: [] To: []
 Trans Type: [] To: []

Include Fail ☐ Terminate when no Records: ☐
 Update Fail ☒ Process Records: ☒
 Repeat Every: [0] Seconds

Output: PAGE

Engine Processor - LotSerial/Ref 11/04/09

Engine Type: [] To: []
 Create Date: 11/04/09 To: 11/04/09
 Site: us-d3 To: us-d3
 Location: [] To: []
 Item Number: D-IT012 To: D-IT012
 Lot/Serial: [] To: []
 Reference: [] To: []
 Order: [] To: []
 Line/ID: [] To: []
 Trans Type: [] To: []

Include Fail: No Terminate when no Records: No
 Update Fail: Yes Process Records: Yes
 Repeat Every: 0 Seconds

Output: PAGE

Site: us-d3

Location	Item Number	Lot/Serial	Ref	Quantity	Tran	Nbr	S	E
Ddock1	D-IT012		PL014290	100.0		8757	P	O
Ddock1	D-IT012		PL014291	100.0		8758	P	O

4.7.11 Engine Processor - LotSerial/Ref whenplrf.p

QAD Proprietary

Use Engine Processor-Lot/Serial/Ref (4.7.11) to process MANUAL engine workfiles. You can run the engine processors to process engine workfiles singularly or in batch mode. You can process engine workfiles by engine type, site, date, order, item, transaction number, and so on, and process at a later time.

You can run the processor programs in simulation mode first to view transaction processing by setting Process Records to No. The system displays the engine workfiles to process that meet your selection criteria. Optionally, specify the time in seconds at which you want to repeat engine processing.

After you specify engine workfiles for processing, the system locks the engine workfiles to prevent further processing by other engines. If an engine workfile is already locked and you specified a range, the system skips that engine workfile and continues with the next engine workfile in the range. Once the engine completes processing, it deletes the engine workfiles if you set control options to delete the files.

Specify the item number you received.

Step 5: Review Inventory



Our Passion. Your Advantage.

Review Inventory

Inventory Detail Inquiry

Inventory Detail Inquiry - 11/4/09



Inventory Detail Inquiry

11/04/09

Site: us-d3
Warehouse: us-d-3
Location:

Item Number: D-IT012
Lot/Serial:
Reference:

Display Whse Loc: No
Disp Non-Whse Loc: No
Output: PAGE

Location Lot/Serial	Status Ref	Qty UM On Hand	Qty Alloc	Expect In	Expect Out	Detail Alloc	Detail Pick
Db1k001	PL014290	EA		100			
Db1k001	PL014291	p1		100			
Ddock1	PL014290	EA	100		100		
Ddock1	PL014291	EA	100		100		

4.9.13

Inventory Detail Inquiry

whiciq01.p

QAD Proprietary

Use Inventory Detail Inquiry to review the quantities on hand in the warehouse locations.

Step 6: Print Labels


Our Passion. Your Advantage.

Print Labels





QAD Proprietary

Print the labels. Ensure that you have a printer specifications set up for the WL in Work Location Group Maintenance (4.3.9).

Study Questions

- 1 What is an engine workfile?
- 2 True or False. Engine workfiles are not in use until you choose to process them with the engines.
- 3 True or False. Programs in the Engine menu are set to run manually by you, so they always run as foreground programs.
- 4 Name three things that you can using the programs in the Engine menu.
- 5 Which of the following is NOT an engine workfile requests:
 - Create a task.
 - Create a picking task.
 - Confirm a task.
 - Create a wave.
 - Print a tag.

- 6 Describe a typical scenario in which warehouse staff need to process a workfile manually.
- 7 True or False. When in MANUAL mode, once you create the workfile request, the system reads and initiates the request.
- 8 Name at least three ways to process engine workfiles.
- 9 True or False. You can process engine workfiles in batch mode, but to avoid other real-time warehousing processing, you must run the engine processes once the workfiles are created.
- 10 True or False. Once the engine completes processing, the system creates engine history files so that you run engine reports.

Chapter 11

Location Audit

Chapter Overview



Location Audit Chapter Overview

- ▲ Introduction to Location Audit
- ▲ Set up Location Audit
- ▲ Features Location Audit
- ▲ Exercises

QAD Proprietary

Introduction



Introduction

- ✓ Start a cycle count or a recount of a bin location.



QAD Proprietary



From the RF, you can start a cycle count or a recount of a bin location. You can use functions in the RF Location Audit option to:

- Count the contents of a bin or pallet.
- View the stock you want to recount.
- Recount items that are not in the system yet.

After you select the Location Audit function, scan the location. The RF displays all pallets in the location. Select the pallet you want to audit. The RF displays item numbers and current quantities. Select the item you want recounted. If there are no pallets, the RF skips pallets and displays the items only. Once you select the item, the system creates a cycle count or a recount task.

Setup



Location Audit Setup

- ✓ Set the item class
- ✓ Set the item tolerance

QAD Proprietary

Setting the Item Class

Set the Item Class

Item Master Maintenance

Go To Actions Copy Print Preview Attach

Attachments

Item Planning Price

Item Item Data Inventory Item Shipping Data

Item

Item Number: D4T150 Description:

Unit of Measure: EA

Item Data

Prod Line: Added: 11/16/2009 Item Type: Status: Drawing: Revision: Size:

Design Group: Group: Drawing Loc: Price Break Category:

Promo Group:

Item Inventory Data

ABC Class: A Average Interval: 90

Lot/Serial Control: Cycle Count Interval: 120

Site: us-d3

Location: us-d3

Location Type:

Auto Lot Numbers: ☐ Active: ☐

Lot Group: Active: ☐

Article Number: Memo Order Type:

Delete Back Next

QAD Proprietary

Use Item Master Maintenance (1.4.1) to set the item class.

Fields

ABC. Enter a code classifying and ranking this item. ABC classification codes determine the count frequency and the error tolerance allowed for each item. The Cycle Count Worksheet selects items for counting based on ABC class. ABC class can also determine how an item is managed. Class A items usually require tighter physical control, such as a locked stocking area, and tighter planning parameters, as well as more frequent cycle counts.

You can generate some reports, such as the Inventory Valuation Report, for ranges of ABC classes.

You can use Item ABC Status Report/Update to calculate ABC codes automatically based on annual item usage amounts. Usually items in the top 20% are given class A, the next 30% class B, and the rest class C. However, you can adjust these percentage as needed.

Any quantity below C is assigned a blank ABC code. For example, when A is 10%, B is 20%, and C is 30%, the remaining 40% is set to blank.

You can also classify items manually. You might do this for an item that has low use but is expensive or theft-prone.

Setting Up Item Tolerance

Set the Item Tolerance

Inventory Control

Go To Actions Copy Print Preview

Inventory Count Parameters

Tolerance From Qty On Hand or Annual Usage: Qoh

Issue Days: 7

Default Site: 10000

Item Tolerances:

Class A:	3.00%	0.00	Class C:	5.00%	0.00
Class B:	4.00%	0.00	All Others:	11.00%	0.00

Error tolerance determine whether the entered count should be accepted or marked as an error to be corrected during recount

Check quantity entered in RF device and quantity on hand recorded in the system.

Back Next

QAD Proprietary

Use Inventory Control (3.24) to set the item tolerance.

Specify the count tolerance amount for items with this ABC class.

Cycle counting functions use this whenever a count is entered that is different from the quantity on hand recorded in the system. Error tolerance is calculated and used to determine whether the entered count should be accepted or marked as an error to be corrected during recount. Both percentage and amount tolerance is checked. The error must be within both tolerances for it to be accepted.

If the tolerance method is [Q]oh, item tolerances are calculated as a percentage of quantity on hand. If it is Usage, item tolerances are calculated as a percentage of annual usage. Value (currency) tolerance is always checked.

Note Unlike cycle counting, physical inventory counts let you enter out-of-tolerance quantities. No recount step is required. Instead, out-of-tolerance items are identified on count reports.

Tolerances are set up by ABC class. This allows you to exercise a greater degree of control over class A and B items than others. Setting tolerances based on annual usage further refines this by putting tolerance into perspective with the amount of use of an item.

Exercise 1: Create Stock, Audit Location, Review Stock



Exercise Objectives

- ✓ Review stock in a location (100 EA)
- ✓ Audit location and simulate that there is 98 EA
- ✓ Review stock inquiry

QAD Proprietary

Step 1: Create/Review Stock


Our Passion. Your Advantage.

Location Audit

Inventory Detail Inquiry
Inventory Detail Inquiry - 11/16/09



Inventory Detail Inquiry

11/16/09

Site: us-d3
 Warehouse: us-d-3
 Location:

Item Number: D-IT150
 Lot/Serial:
 Reference:

Display Whse Loc: No
 Disp Non-Whse Loc: No
 Output: PAGE

Location	Status	Qty	Qty	Expect	Expect	Detail	Detail
Lot/Serial	Ref	UM On Hand	Alloc	In	Out	Alloc	Pick
Dblk088		EA	100				

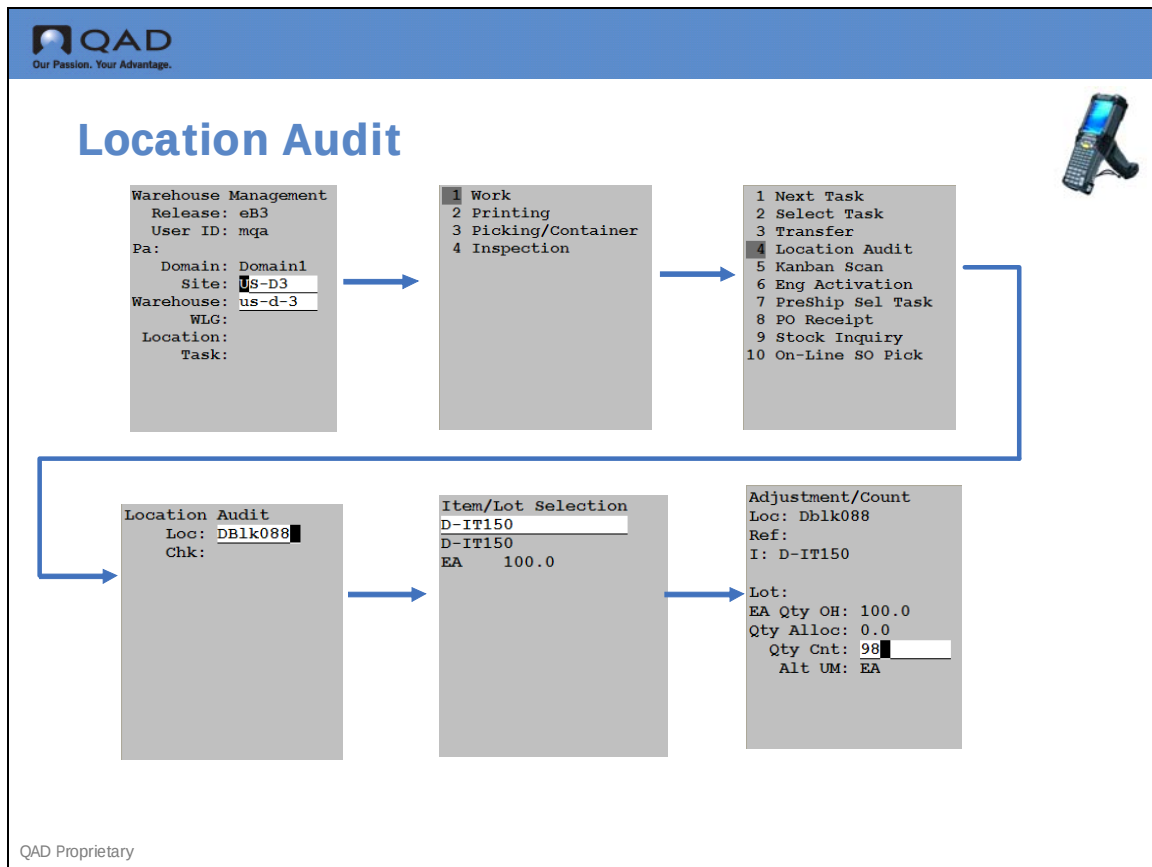
4.9.13
Inventory Detail Inquiry
whiciq01.p

QAD Proprietary

Use Inventory Detail Inquiry (4.9.13) to ensure that inventory exists at a specified warehouse location. Check the quantity on hand for the item you want to audit.



Step 2: Use the RF to Audit the Location



Use the RF Location Audit (1.4) to invoke a location audit.

- 1 Log onto the RF, entering site and warehouse.
- 2 Specify 1.4, Location Audit.
- 3 Enter the location with the stock to audit.
- 4 Enter the item number.
- 5 Enter the quantity counted.

Step 3: Review Inventory


Our Passion. Your Advantage.

Location Audit

Inventory Detail Inquiry Inventory Detail Inquiry - 11/16/09



Inventory Detail Inquiry
11/16/09

Site: us-d3
 Warehouse: us-d-3
 Location:

Item Number: D-IT150

Display Whse Loc: No
 Disp Non-Whse Loc: No
 Output: PAGE

Lot/Serial: Reference:

Location	Status	Qty	Qty	Expect	Expect	Detail	Detail
Lot/Serial	Ref	UM	On Hand	Alloc	In	Out	Alloc Pick
Db1k088		EA	98				

4.9.13
Inventory Detail Inquiry
whiciq01.p

QAD Proprietary

Use Inventory Detail Inquiry to review the quantities on hand in the warehouse locations.

Exercise 2: Audit Location, Creating a Recount



Objectives

- ✓ Create stock in a location (100 EA)
- ✓ Audit location and simulate that there is 95 EA
- ✓ Review stock inquiry
- ✓ Item is out of tolerance and system create a Recount task
- ✓ Confirm Recount task
- ✓ Review stock inquiry

QAD Proprietary

Step 1: Create/Review Stock in Location


Our Passion. Your Advantage.

Location Audit

Inventory Detail Inquiry
Inventory Detail Inquiry - 11/16/09



Inventory Detail Inquiry

11/16/09

Site: us-d3
 Warehouse: us-d-3
 Location:

Item Number: D-IT150
 Lot/Serial:
 Reference:

Display Whse Loc: No
 Disp Non-Whse Loc: No
 Output: PAGE

Location	Status	Qty	Qty	Expect	Expect	Detail	Detail
Lot/Serial	Ref	UM On Hand	Alloc	In	Out	Alloc	Pick
Dblk088		EA	100				

4.9.13
Inventory Detail Inquiry
whiciq01.p

QAD Proprietary

Use Inventory Detail Inquiry (4.9.13) to ensure that inventory exists at a specified warehouse location. Check the quantity on hand for the item you want to audit.

Step 2: Use the RF to Audit Location



QAD
Our Passion. Your Advantage.



Location Audit

Location Audit
 Loc: DBlk088
 Chk:

→

Adjustment/Count
 Loc: Dblk088
 Ref:
 I: D-IT150
 Lot:
 EA Qty OH: 100.0
 Qty Alloc: 0.0
 Qty Cnt: 95
 Alt UM: EA

QAD Proprietary

Use the RF Location Audit (1.4) to invoke a location audit.

- 1 Log onto the RF, entering site and warehouse.
- 2 Specify 1.4, Location Audit.
- 3 Enter the location with the stock to audit.
- 4 Enter the item number.
- 5 Enter the quantity counted as less than the quantity OH.

Note Because the quantity is out of tolerance, the system creates a recount automatically. This is considered an extra task that you should confirm using the RF Next Task option.

Step 3: Confirm Movement for the Recount

Confirm Movement

Movement Confirmation and Inquiry

Go To Actions Copy Print Preview

Trans: 8894 Status: OPEN 2P: ☒ Fail: ☐

Main Details

TT: CYC-RCNT	Qty Expected: 0.0	Iss Dataset: /
Routing: Seq: 0	Actual: 0.0	Iss Nbr/Line: /
Mode: Task: RECOUNT	Algo Type/Nbr: / 0	Receipt Dataset: /
Created: 11/16/2009 03:17:01	mqa whexaud.p	Ret Nbr/Line: /
	Priority: 100	

From To

Site: US-D3	Site: US-D3
Warehouse: us-d-3	Warehouse: us-d-3
SLG: bulk	SLG: bulk
Work Loc Grp: Forklift	Work Loc Grp: Forklift
Location: DBK088	Location: DBK088
Item Number: D-IT150	Item Number: D-IT150
Lot/Serial:	Lot/Serial:
Reference: UM: EA	Reference: UM: EA

WARNING: End of data.

Back Next

QAD Proprietary

Use Movement Confirmation and Inquiry (4.8.9) to display and confirm movement transactions. You select inventory movements by transaction number. The header displays the status of the transaction and indicates if the transaction previously failed processing by the system.

The system displays transaction details and the source and destination of the movement. Press Go to display other transaction details, such as the create date, the shipper ID, ship-from data, and so on.

After all data displays, the system prompts you if it is OK to confirm the movement. Specify Yes to confirm. The system informs you that it is confirming the movement for the transaction.

Step 3: Review Stock in Location



Our Passion. Your Advantage.

Location Audit

Inventory Detail Inquiry

Inventory Detail Inquiry - 11/16/09



Inventory Detail Inquiry

11/16/09

Site: us-d3
Warehouse: us-d-3
Location:

Item Number: D-IT150
Lot/Serial:
Reference:

Display Whse Loc: No
Disp Non-Whse Loc: No
Output: PAGE

Location	Status	Qty	Qty	Expect	Expect	Detail	Detail	
Lot/Serial	Ref	UM	On Hand	Alloc	In	Out	Alloc	Pick
D61k088		EA	100					

4.9.13

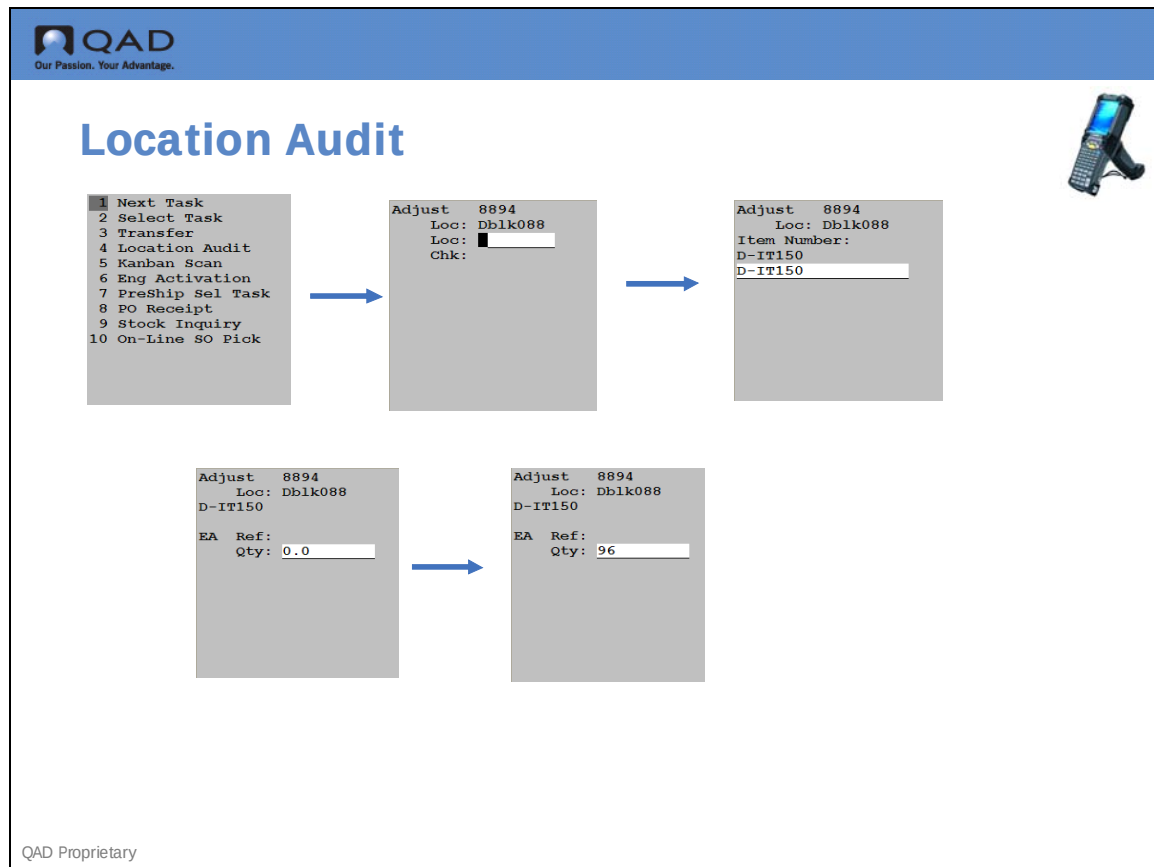
Inventory Detail Inquiry

whiciq01.p

QAD Proprietary

Use Inventory Detail Inquiry (4.9.13) to review inventory in the location.

Step 4: Use the RF to Adjust the Stock



Use the RF Next Task (1.1) to adjust stock.

- 1 Log onto the RF, entering site and warehouse.
- 2 Specify 1.1, Next Task.
- 3 Enter the location with the stock to adjust.
- 4 Enter the item number.

Note With the movement confirmation programs, cycle count transactions are created with an expected quantity of zero so that the Expected In and Out inventory quantities are not automatically updated. If cycle count transactions are confirmed without first modifying them, they are confirmed as zero counts. That is, if each transaction is not manually modified to reflect the counted quantity, the on-hand quantity of each piece of counted inventory is set to zero.

- 5 Enter the quantity to adjust.

Step 5: Review Stock in Location

The screenshot shows the QAD Inventory Detail Inquiry window. The title bar includes 'Inventory Detail Inquiry' and 'Inventory Detail Inquiry - 11/16/09'. The QAD logo and 'Our Passion. Your Advantage.' tagline are in the top left. The main header displays 'Inventory Detail Inquiry' and the date '11/16/09'. Below this, the site is 'us-d3' and the item number is 'D-IT150'. Warehouse information is also shown. A table of inventory data is displayed with columns for Location, Status, Qty, and Expect. The first row shows 'Db1k088' with a status of 'EA' and a quantity of '96'. The bottom of the window shows the version '4.9.13', the title 'Inventory Detail Inquiry', and the user 'whiciq01.p'.

Location	Status	Qty	Expect	Detail
Lot/Serial	Ref	UM On Hand	In	Alloc
Db1k088	EA	96		

Use Inventory Detail Inquiry (4.9.13) to review inventory in the location.

Study Questions

- 1 Name three functions for which you use the RF Location Audit option.
- 2 True or False. Once you select the RF Location Audit function, the count items, then enter only the quantity counted.
- 3 True or False. If there are no pallets, the RF skips pallets and displays the items only.
- 4 What are setting up in Item Master Maintenance for audits?
- 5 Where do you set up the count tolerance for an item?
- 6 What is error tolerance?
- 7 True or False. You can only set tolerances based on the average daily usage of an item.
- 8 True or False. Item tolerances can be calculated as a percentage of the quantity on hand.
- 9 True or False. Cycle counts and audits deal with expected quantities in a given location; therefore, value (currency) tolerance is not. checked
- 10 True or False. With ABC rankings, the system classifies all items as A, B, or C, and there are no blank settings for items.

Appendix A

Answers to Study Questions

Chapter 1: Printing

- 1 Printing labels for unplanned receipts or printing IDs for incoming inventory.
- 2 False. Barcode printing functions must be purchased from third-party vendors.
- 3 False. You must set up various QAD EE programs in addition to QAD Warehousing programs.
- 4 You specify the system printer in QAD EE Printer Setup Maintenance (36.13.2).
- 5 You set up the code to define printing procedures for a receipt transaction in Transaction Type Maintenance.
- 6 In AUTO mode, the system prints IDs automatically as soon as they are created. In AUTO SIG mode, the system prints IDs automatically, but holds them until a signal is received that triggers printing.
- 7 False. The print setup in Warehouse Maintenance defaults to WLG print fields.
- 8 Print flavor determines the format of the printed output. They are set up in Generalized Codes Maintenance (36.2.13).
- 9 False. Use Internal Routing Maintenance's printing fields to set up printing for the warehouse internal routings.
- 10 For printing tags, the system uses the Print Mode fields in the Print Options frame of Internal Routing Maintenance (4.2.5) to determine the mode for printing for created, confirmed, and exception tasks.

Chapter 2: Batch Picking

- 1 Three options include:
 - Pick items per order, customer, or pre-shipper.
 - Print labels before or after picking.
 - Ability to move items from one box to another
- 2 False. You can pick for sales, work, and distribution orders in QAD Warehousing.
- 3 True. Combining items from different orders is a major feature of batch picking.
- 4 A user location is typically the picking cart in a warehouse.
- 5 False. When selecting order types for picking from the RF Batch Pick-All option, you can specify work, distribution, or sales orders.
- 6 False. Set one or all of the following in Batch Picking Control:
 - Include Sales Order
 - Include Distribution Order
 - Include Work Order
- 7 You must Set Allow Merged Orders to Yes to merge orders while batch picking.
- 8 False. You specify a value in the Maximum Selection field that represents the maximum number of sales orders, pre-shippers, or customers that display on the RF screen.

- 9 You can set the following container options in Batch Picking Control.
 - Specify a container level to create for each tote/box/pallet staff use
 - Specify the item number of the container
 - Specify the number of characters in the container ID.
- 10 False. You must enable fields so that warehouse staff can enter data in the fields on the RF by setting the Scan Location field to Yes in Batch Picking Control.

Chapter 3: Containerization

- 1 False. The RF lets staff assemble pallets for shipment until all shipments for a particular customer ship-to address are complete.
- 2 The RF Screen shows you:
 - Shipper number
 - Ship-to code
 - Scanned box ID
 - Default Pallet ID
 - Blank pallet ID to scan
- 3 False. On the right side of RF screen, the ID after the L indicates the location of the pallet.
- 4 False. Items from work orders typically do not ship to customers and therefore, are not containerized.
- 5 True. All boxes for a container must be on the same pre-shipper.
- 6 Optionally, you can use function keys to:
 - F2 to see pallet data
 - F3 to see box data
- 7 You remove boxes and containers using the RF Container Build (3.3) menu option.
- 8 When staff scan in another container, the system automatically understands that the intent is to transfer the box to the other container, and prompts staff to transfer the box, so staff do not press any function keys.
- 9 Containerization status includes:

Blank: More containerization is required.

Pick: There are open pick tasks for the pre-shipper. The total number of boxes to scan does not reflect the actual number because totals are unknown at this point.

Ready: There are no more open pick tasks for the pre-shipper, and all boxes have been containerized.
- 10 Name three options you can set up for containerization in Batch Picking Control.
 - Specify a print program to use when printing labels for pallets.
 - Specify whether pallet labels print automatically.
 - Specify if you want the system to prompt RF users to remove a container.

Chapter 4: Container Move

- 1 False. Container Move provides functions to move the containers from location to location within the warehouse, to the loading docks, and to the shipping truck.
- 2 True. You can validation or staging steps when moving containers.
Set Sequential Shipper Option in Batch Picking Control to ensure all pallets for a given shipment are loaded consecutively in the truck, ideally in the reverse order of unloading so that the unloading process is easier.
- 3 Which field do you set so that users can continue processing despite messages before loading the truck?
- 4 Set Only Shipper Option to Yes so that users can continue processing despite messages before loading the truck?
- 5 You must set up QAD Warehousing so that trucks can be included as locations and routings, routing groups, and transactions exist within the system to interact with the truck location when moving containers.
- 6 True. You must define an internal routing group for all truck locations in Internal Routing Group Maintenance (4.2.1).
- 7 If you optionally define a stage location instead of a truck location, you must define the IRG for the stage location, not the truck location, in Internal Routing Group Maintenance.
- 8 To use container move features, you must set up the truck as a location and specify its storage location group and storage type.
- 9 True. Use Warehouse Location Maintenance (4.3.13) to specify the location for the truck, the SLG for the truck, and the storage type for the truck.
- 10 The location transfer transaction (LOC-TR) is included with the system data.

Chapter 5: Ship Truck

- 1 True. After the truck has been loaded, shipment documentation has been printed, and the shipment is ready, you can use a single transaction to confirm that the truck shipped.
- 2 Ship Truck lets you:
 - Indicate truck shipment, resulting in shipment of all orders on the truck.
 - Create a master bill of lading (MBOL) that includes all shippers for both SOs and DOs.
 - View all shippers loaded on the truck for a given truck location.
- 3 False. You can view pre-shipper or shippers from the RF Ship Truck option.
- 4 If the pre-shipper/shipper is large and the items cannot fit in a single truck, warehouse staff can partially load another truck.
- 5 The three statuses available for a shipment include;
 - OK: Can be shipped
 - N/OK: Can be shipped; however, some items are not in the truck. If shipped, the items are shipped from their current location.

- TASK: There are open pick tasks against the pre-shipper, and you cannot confirm the shipment.
- 6 In the Ship Truck frame of Batch Picking Control (4.15.24).
 - 7 If you use RF Ship Truck option in combination with the process end of day (EOD) message sent from a transportation management system (TMS), the system populates the Master Bill field automatically and creates an MBOL in Master Bill of Lading Maintenance.
 - 8 You enter the truck location, and optionally, vehicle ID, or master bill of lading (MBOL).
 - 9 False. An asterisk displays if the shipper is selected; however, you can press Enter while the cursor is on the shipper number to deselect the shipper.
 - 10 False. Use Inventory Detail Inquiry to check that the location of the inventory is the truck location.

Chapter 6: Inspection (Work Orders)

- 1 For work orders, inspection typically takes place once warehouse staff pick raw materials and put away finished goods within a manufacturing process.
- 2 BACK WO is the transaction type for a sample return after inspection.
- 3 You must set up internal routing, assign the internal routing, and assign algorithms for each of the areas involved in the WO inspection flow. The following topics discuss the setup of these areas
- 4 You set up areas for storage of both raw and finished goods, a product area to build the finished product, and an inspection area.
- 5 You need the following transaction types for transactions that take place in the storage, product, and inspection areas:
- 6 PICK WO: Pick raw materials for the work order.
- 7 RCT WO: Receive newly built finished goods into storage.
- 8 INSP WO: Inspect the work order goods.
- 9 BACK WO: Send inspected work order goods back to storage.
- 10 False. You set up a Location Find (LF) algorithm for an INSP WO transaction type.
- 11 The system uses the algorithm to put inspected goods back into the storage area.
- 12 You specify a Quality Assurance (QA) algorithm for the RCT WO transaction type.
- 13 You modify the status associated with inventory being inspected, based on its original status in any of these situations.
 - While a sample is in the inspection area waiting inspection results, you can prevent any transactions with the inventory the inventory by changing its status. Change Inspection Status Maintenance lets you define the new status of this inventory, based on its original status.

- Similarly, after a successful inspection is performed, you can release the inventory by changing its status again.

14 True. Inventory status codes restrict particular transactions at specific locations.

Chapter 7: Kanban Scan

- 1** Warehouse staff can use the RF Kanban Scan (1.5) to manually request replenishment of a specified quantity of an item or when they need an item in the production area but warehouse staff are not picking the item.
- 2** You set up kanban scanning by creating and assigning the internal routing, assigning algorithms, setting up replenishment lists, and setting up multi-items.
- 3** True. You use the PICK-RE transaction types for kanban scan transactions.
- 4** Set up a pick (PK) algorithm for kanban scanning.
- 5** The replenishment list contains SLGs you want to consider for picking the scanned item.
- 6** Use Multi-Level Item Maintenance to specify the replenishment list in the Site Data and Default Warehouse Data frame.
- 7** When you enter RF Kanban scan, it notifies the system that an item requires replenishment and creates a replenishment task for it at the correct time.
- 8** A default quantity displays in the Kanban Qty field if you specified a default quantity in Multi-Level Item Maintenance (4.4.5).
- 9** True. The system dynamically creates an item-location replenishment definition for the duration of the scan, and later removes the definition from the system.
- 10** Once you enter the destination location for the replenishment, then press Go, the system informs you that the replenishment is complete.

Chapter 8: Replenishment

- 1** Replenishment lets defined areas in the warehouse, where the main picking activity occurs, be maintained at optimum stock levels.
- 2** The area in which stock is stored prior to picking is generally called the primary picking area.
- 3** In warehousing, you can define:
 - Replenishment for a given item and a given location.
 - Replenishment for a given item in a storage location group.
 - Replenishment lists.
 - Replenishment in real-time on the RF device.
 - Overpick Replenishment.
- 4** In overpick replenishment, warehouse staff can select a multi- or single-item pallet from the reserve area and replenish one or multiple locations from the pallet in the picking area. After staff replenish, they can return the remainder on the pallet to the reserve area.

- 5 False In warehousing, more commonly, you can define replenishment for a given item in a storage location group.
- 6 The replenishment request lets you run a simulation of the replenishment. You can then run a report to look at all the replenishments to be done, simulate a picking, and generate a list of all potential transactions, without actually creating the transactions.
- 7 The Area Below Replenishment Point field in Replenishment Request (4.16.13) lets you adjust the value of the replenishment point defined in Replenishment-Location Maintenance or Replenishment-SLG Maintenance.
- 8 True. When the inventory for a given item in a given location stays above the replenishment point, running the replenishment has no effect.
- 9 As soon as the system issues inventory and stock drops below the minimum level, the system automatically creates a replenishment task.
- 10 The system typically uses the pick (PK) algorithm for locations and the PK and put away (PA) algorithms for SLGs

Chapter 9: Cross-Docking

- 1 When insufficient stock prevents the complete filling of an order, the system keeps track of the order shortage quantities, item by item. When inventory is received with receipt transactions, the system automatically checks to see if the received stock can be used to fill back orders. The inventory can then be moved from receipt to dispatch, being stored in between.
- 2 True. By linking the appropriate internal routings to the transaction types, you can route the relevant stock directly from the receipt dock to the shipping dock, removing the need for additional put-away and picking activities.
- 3 To define shortages, you create a shortage transaction type using Transaction Type Maintenance (4.7.1), then link the transaction to an internal routing, and assign shortage clearance algorithms.
- 4 You specify cross-docking details for the shortage clearance using these four shortage fields defined for distribution order (SHRT-DO), sales order (SHRT-SO), and work order (SHRT-WO) transactions in Transaction Type Maintenance.
- 5 Set Clear Shortages to Yes in Internal Routing Maintenance to cause the shortage clearance algorithms to be run before a location is identified to receive the inventory.
- 6 You set up a sequence of algorithms so that you can specify the ideal method for selecting locations as the first step in the sequence. If the system cannot meet the full requirements either of put-away or picking by running the first choice algorithm, it then runs the second algorithm in the sequence, and so on until the requirement has been met.
- 7 Specify a shortage condition in the Shortage Definition field in Transaction type Maintenance.
- 8 True. You can set up shortages so that a field is available on each order detail record that can be manually set to Yes to indicate a shortage.
- 9 False. You can set shortage conditions based on open order quantities for previously picked quantities, general allocated, the sum of the quantity picked and quantity shipped, and so on.

- 10 You set a Shortage Window value to indicate the number of days before an order line due date that it can be considered short.

Chapter 10: Engine Processing

- 1 Engine workfiles are requests for a transactions that the system creates when processing warehouse tasks, such as picking and put-away. You can use the engines to process engine workfiles in the Engine menu (4.7).
- 2 False. Engine workfiles are always in use, though, in QAD Warehousing, whether you choose not to process them with the engines.
- 3 False. Programs in the Engine menu let you process different time-consuming functions and decrease user waiting by running the processes in the background.
- 4 You can use the programs to delay the creation of warehouse transactions, select and modify engine workfiles, and process engine workfiles singularly or in batch mode.
- 5 You cannot create a wave with a workfile.
- 6 The storage area is blocked, but pallets require storage and labelling and this cannot happen until the area clears.
- 7 False. When in MANUAL mode, you must start one of the engine processor programs in the Engine menu to process an engine workfile request.
- 8 You can process engine workfiles by engine type, site, date, order, item, or transaction number.
- 9 False. You can process engine workfiles at a later time.
- 10 False. Once the engine completes processing, it deletes the engine workfiles if you set control options to delete the files.

Chapter 11: Location Audit

- 1 You can use functions in the RF Location Audit option to:
 - Count the contents of a bin or pallet.
 - View the stock you want to recount.
 - Recount items that are not in the system yet.
- 2 False. After you select the Location Audit function, you must scan the location. Once scanned, the RF displays the pallets to audit.
- 3 True. If there are no pallets, the RF skips pallets and displays the items only. Once you select the item, the system creates a cycle count or a recount task.
- 4 You set the item ranking in the ABC field in Item Master Maintenance. ABC classification codes determine the count frequency and the error tolerance allowed for each item.
- 5 Use Inventory Control (3.24) to set the item tolerance. Specify the count tolerance amount for items with this ABC class.

- 6 Error tolerance is calculated and used to determine whether the entered count should be accepted or marked as an error to be corrected during recount. Both percentage and amount tolerance is checked. The error must be within both tolerances for it to be accepted.
- 7 False. You can set tolerances based on annual usage; this puts tolerance into perspective with the amount of use of an item.
- 8 True. If the tolerance method is [Q]oh, item tolerances are calculated as a percentage of quantity on hand.
- 9 False. Value (currency) tolerance is always checked.
- 10 False. Any quantity below C is assigned a blank ABC code. For example, when A is 10%, B is 20%, and C is 30%, the remaining 40% is set to blank.

