



D210 Inventory and Order Management: Automated Warehouse Operations

Dale Simmerly

Product Support Specialist

Timing and Agenda

August 24, 2020 – 1 PM - 3 PM (EST)

Day 1

Automated Inventory Transfers

Automated Counting in Physical Inventory

Q&A

Automated Processing of Inventory Issues

Automated Processing Inventory Receipts

Q&A

August 25, 2020 – 1 PM - 3 PM (EST)

Day 2

Item and Storage Lookup

Automated Pick and Packing Operations

Q&A

Automated Packing Operations

Automated Receiving and Putting Away

Q&A

Timing and Agenda

August 26, 2020 - 1 PM - 2 PM (EST)

Day 3

Automated Fulfilling Order with Batch Picking

Automated Fulfilling Order with Wave Picking

Q&A

Automated Operation with Lot and Serial Tracked

Q&A

Company Story

SweetLife Office and Wholesale Center

- This branch of the company consists of a jam factory and a large warehouse where fruit (purchased from wholesale vendors) and the produced jam are stored.

SweetLife Store

- This branch has a retail shop with a small warehouse, to which the goods to be sold are distributed from the company's main warehouse.

SweetLife and Equipment Sale Center

- This branch is a service center with a small warehouse where juicers are stored. This branch sells juicers, installs juicers, trains customers' employees to operate juicers, and provides juicer servicing.

Company Story

Operational Activity

- The company has been operating starting in the 01-2018 financial period. In November 2018, the company started using Acumatica ERP as an ERP and CRM system and migrated all data of the main office and retail store to Acumatica ERP. Because the company has grown, the equipment center has begun its operations in 01-2019.

Company Purchases

- The company purchases fruits and spices from large fruit vendors for sale and for jam production. For producing jams and packing jams and fruits, the company purchases jars, labels, and paper bags from various vendors. For the internal needs of the main office and store, the company purchases stationery (printing paper, pens, and pencils), computers, and computer accessories from various vendors. The company also purchases juicers for sale from a large juicer vendor and purchases the installation service or provides the installation service on its own depending on the complexity of the installation.

Company Story

Company Sales and Services

SweetLife Office and Wholesale Center

- In this branch, jams and fruit are sold to wholesale customers, such as restaurants and cafés. The company also conducts home canning training at the customer's location, and webinars on the company's website.

SweetLife Store

- In the store, small retail customers purchase fresh fruit, berries, and jams, or pick up the goods they have ordered on the website. Some of the goods listed in the website catalog are not stored in the retail warehouse, such as tropical fruits (which are purchased on demand) and tea (which is drop-shipped from a third-party vendor).

SweetLife and Equipment Sale Center

- This branch sells juicers, provides training on equipment use, and offers equipment installation, including site review and maintenance services.



Automated Warehouse Operations

Automated Warehouse Operations

Acumatica ERP provides a solution to automate basic warehouse operations, such as the picking, packaging, receiving, putting away, transferring, and counting of items. This functionality and the related forms become available if the Warehouse Management feature is enabled on the Enable/Disable Features (CS100000) form.

You can automate the following warehouse operations by using a barcode scanner or a mobile device with barcode scanning support:

- Picking and packing the items for a shipment
- Processing picking of shipments in a wave
- Processing picking of shipments in a batch
- Receiving items based on a purchase receipt and putting away the items to storage locations
- Issuing items from a warehouse
- Transferring items within a warehouse
- Receiving items in a warehouse
- Counting items within the physical inventory

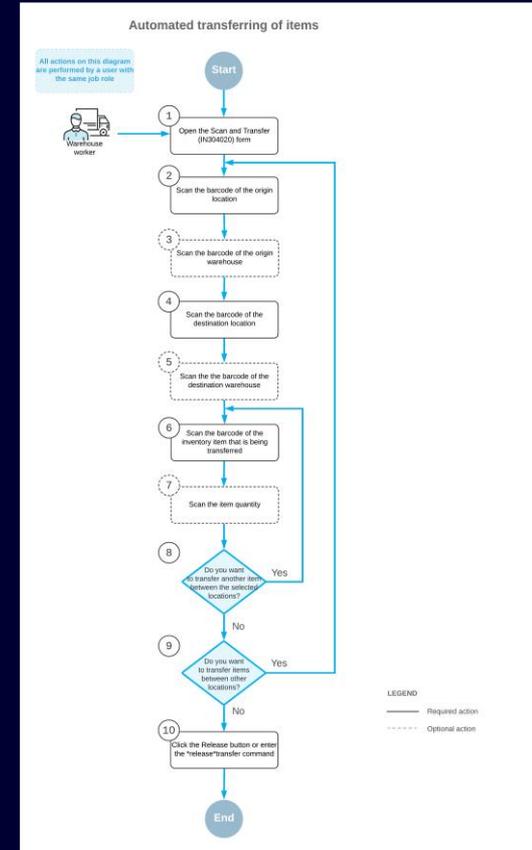
Lesson 1: Automated Inventory Transfers

Learning Objectives

In this lesson, you will learn how to process single-step transfers of items between warehouse locations by using the functionality of automated warehouse operations.

Applicable Scenarios

You process single-step transfers when you need to move items from one location to another location within the same warehouse or between locations of different warehouses that are assigned to the same building by using a barcode scanner or a mobile device with a scanning option and to track this movement in the system.



Lesson 1: Automated Inventory Transfers

Story (browser)

Suppose that you as a warehouse worker of the SweetLife Fruits & Jams company have a task to transfer all jam jars from one location of the wholesale warehouse to another to clear the origin location for a new batch of jam.

You will prepare the single-step transfer to reflect the movement of jam jars between the warehouse locations.

Lesson 2: Automated Counting in Physical Inventory

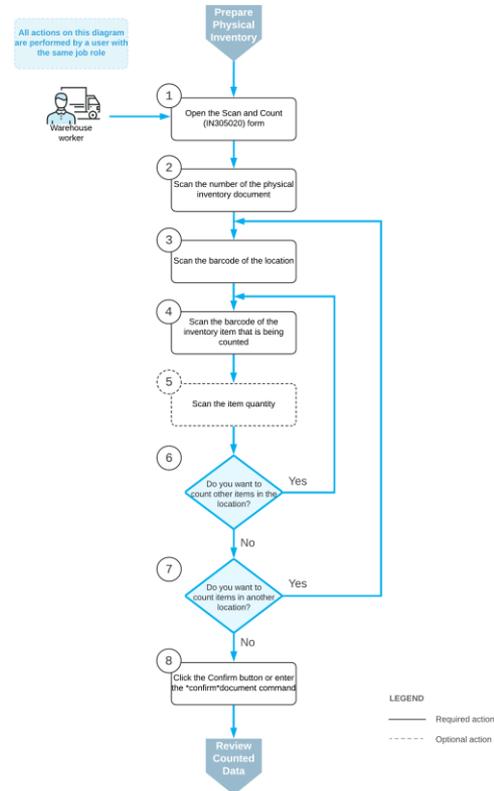
Automated counting in physical inventory

Learning Objectives

In this lesson, you will learn how to count stock items during physical inventory by using the functionality of automated warehouse operations.

Applicable Scenarios

You can use automated counting during physical inventory if your organization uses barcode scanners or mobile devices with a scanning option and all stock items and locations in warehouses are barcoded.



Lesson 2: Automated Counting in Physical Inventory

Process Activity (mobile)

Story

Suppose that you are a warehouse worker and you are assigned to perform physical inventory count by scanning barcodes of stock items and locations with your mobile device. You will count the quantities of orange jam in particular warehouse locations added to the physical inventory document, which your manager provided to you.

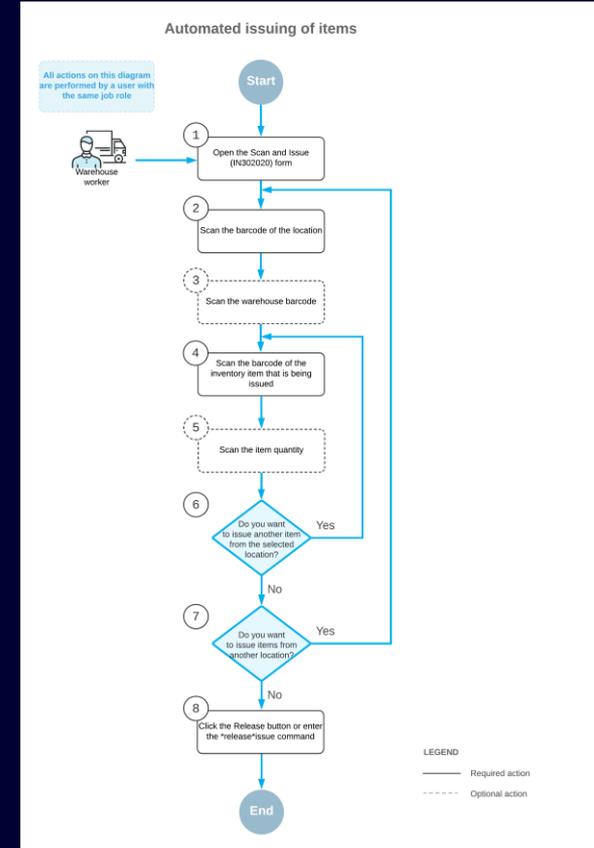
Lesson 3: Automated Processing of Inventory Issues

Learning Objectives

In this chapter, you will learn how to process inventory issues of items from warehouse locations by using the functionality of automated warehouse operations.

Applicable Scenario

You process inventory issues when you need to remove items from a warehouse location, for example, expired items that must be removed from warehouse locations and, in your organization, all items and locations have barcodes and warehouse workers are equipped with barcode scanners or a mobile devices with a scanning option.



Lesson 3: Automated Processing of Inventory Issues

Process Activity (mobile)

Story

Suppose that you as a warehouse worker of the SweetLife Fruits & Jams company have a task to review jars of apple jam to find out if they are of appropriate quantity and write off jars with any defects. If you find any jars with defects, you remove them from location and process an inventory issue to record this removal in the system.

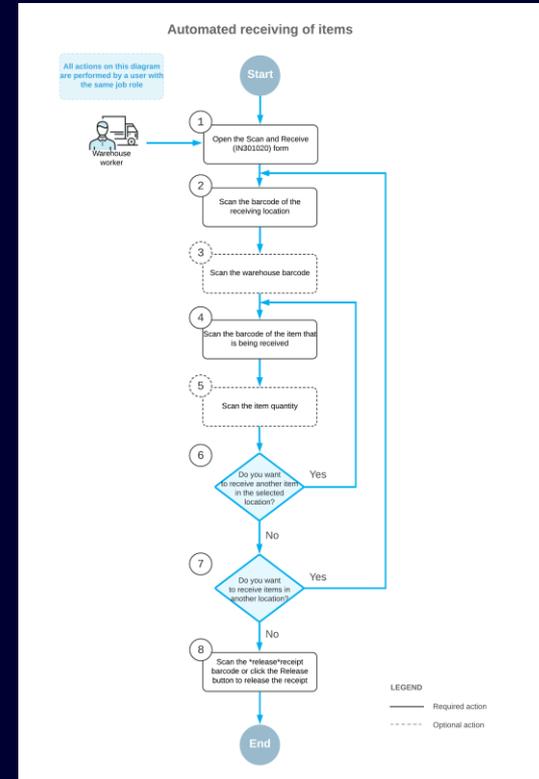
Lesson 4: Automated Processing of Inventory Receipts

Learning Objectives

In this chapter, you will learn how to process inventory receipts of items from warehouse locations by using the functionality of automated warehouse operations.

Applicable Scenario

You can use automated processing of inventory receipts when you need to move items to a warehouse location and, in your organization, all items and locations have barcodes and warehouse workers are equipped with barcode scanners or mobile devices with a scanning option.



Lesson 4: Automated Processing of Inventory Receipts

Process Activity (browser/mobile)

Story

Suppose that you, as a warehouse worker of the SweetLife Fruits & Jams company, have a task to put apple, orange, and lemon jam, which you recently have received from production, to appropriate warehouse locations and process an inventory receipt to register this operation in the system.



Automated Warehouse Operations

Lesson 5: Automated Item and Storage Lookup

Learning Objectives

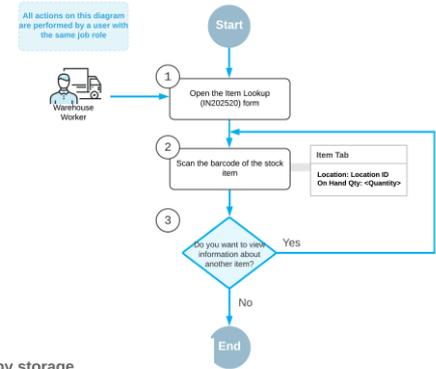
In this chapter, you will learn how to search for information about stock items by scanning an item barcode and for the list of items stored in a particular location by scanning a location barcode with a barcode scanner or a mobile device with a scanning option.

Applicable Scenarios

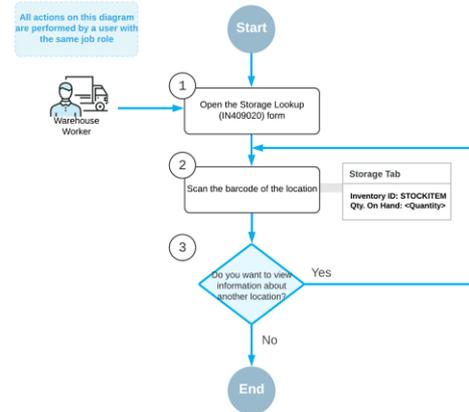
You can use automated lookup if your organization uses barcode scanners or mobile devices with a scanning option to perform warehouse operations and all stock items and locations in warehouses are barcoded. You can look up for items and locations in any of the following cases:

- In a warehouse, you find a stock item that is not in a location and you would like to find an appropriate location for the item.
- You would like to view the list of stock items stored in a particular warehouse location as it is registered in the system.

Automated lookup by item



Automated lookup by storage



Lesson 5: Automated Item and Storage Lookup

Process Activity (mobile)

Story

Suppose that you are a warehouse worker in the wholesale warehouse of the SweetLife Fruits & Jams company. When you walk around the warehouse you accidentally find items and boxes on the floor or on tables. One of your work tasks is to find out what are these items and where they should be stored to move the items to the appropriate storage.

Lesson 6: Automated Picking and Packing Operations

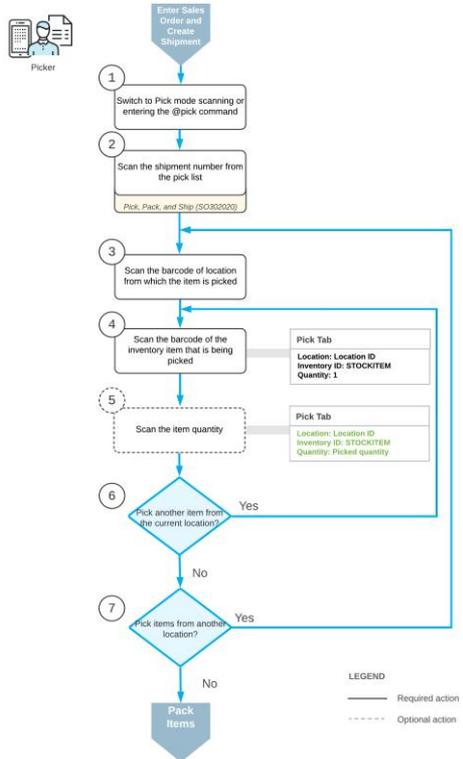
Learning Objectives

In this chapter, you will learn about configuring and performing automated picking and packing operations. In particular, you will do the following:

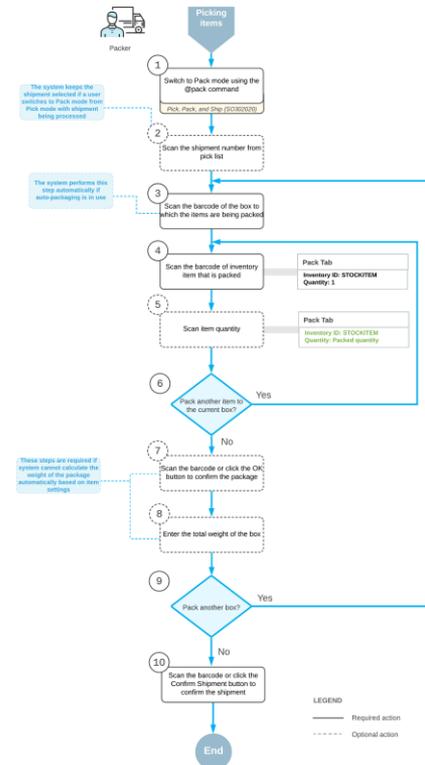
- Enable the needed system features
- Specify the minimum required configuration for the automated picking and packing workflow
- Learn the recommended settings that you can specify to make the system fit your business requirements
- Pick items for shipment in automated mode
- Pack items to a box in automated mode
- Confirm a shipment after picking and packing items

Lesson 6: Automated Picking and Packing Operations

Automated workflow of picking before packing



Automated workflow of packing already picked items



Lesson 6: Automated Picking and Packing Operations

Process Activity (browser)

Story

Suppose that you are a warehouse worker of the wholesale warehouse of SweetLife company. Your warehouse manager gives you a task to prepare the shipment. In your organization, the pick and pack workflow is used, that is you go through the warehouse locations and pick items listed in a shipment pick list. Then you go to the packing line and pack the picked items to boxes.

Lesson 7: Automated Packing Operations

Learning Objectives

In this chapter, you will learn about configuring and performing automated packing operations. In particular, you will do the following:

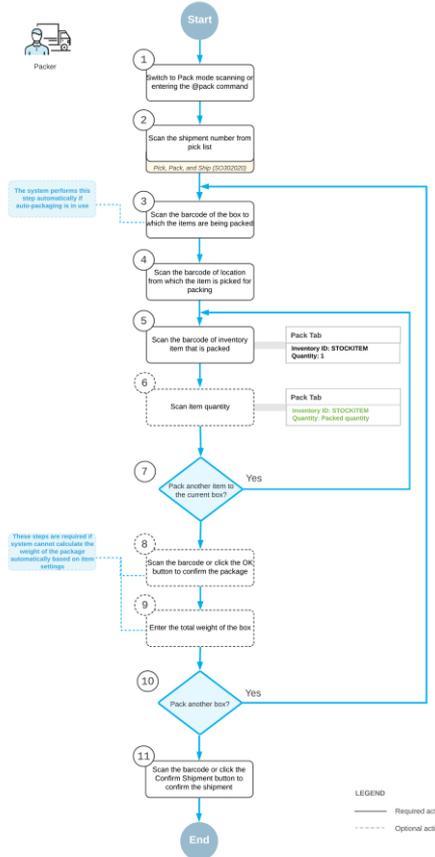
- Enable the needed system features
- Specify the minimum required configuration for the automated packing workflow
- Learn the recommended settings that you can specify to make the system fit your business requirements
- Pack items for shipment in automated mode
- Confirm a shipment after packing items

Applicable Scenarios

In your company's warehouse, there is not separate packing line, so each warehouse worker goes through the warehouse with a printed pick list, picks the items from warehouse locations specified in the pick list, and immediately packs the items to a box for shipping. To track the performed operations, the warehouse worker scans the appropriate barcodes by using a barcode scanner or mobile device. After picking and packing of items is finished, the warehouse worker confirms the shipment.

Lesson 7: Automated Packing Operations

Automated packing workflow without picking



Lesson 7: Automated Packing Operations

Story

Suppose that you are a warehouse worker of the wholesale warehouse of the SweetLife Fruits & Jams company. Your warehouse manager gives you a task to pack the shipment. In your organization, the pack workflow is used, that is you go through the warehouse locations, take items and pack them to boxes for shipping.

Lesson 8: Automated Receiving and Putting Away Operations

Learning Objectives

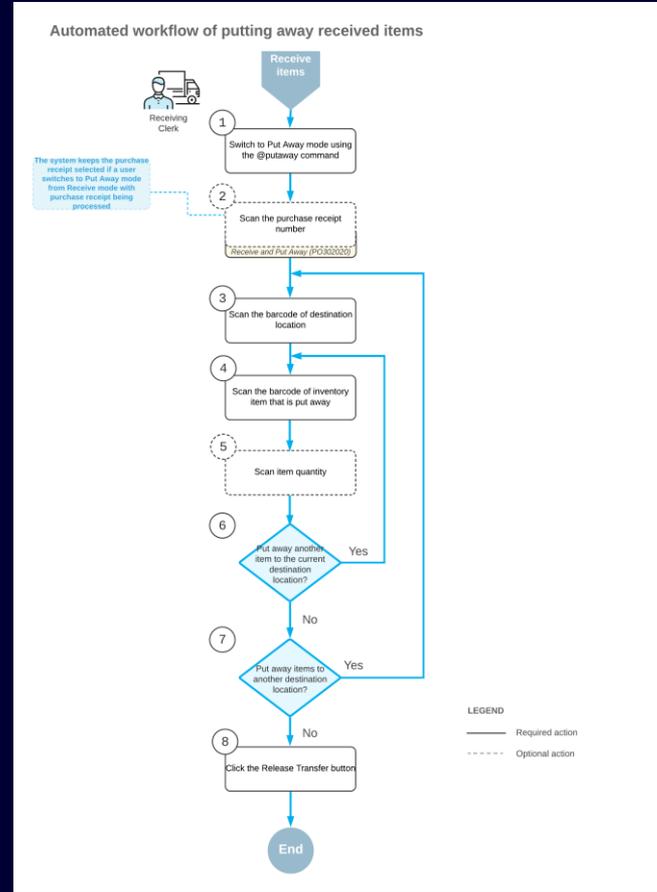
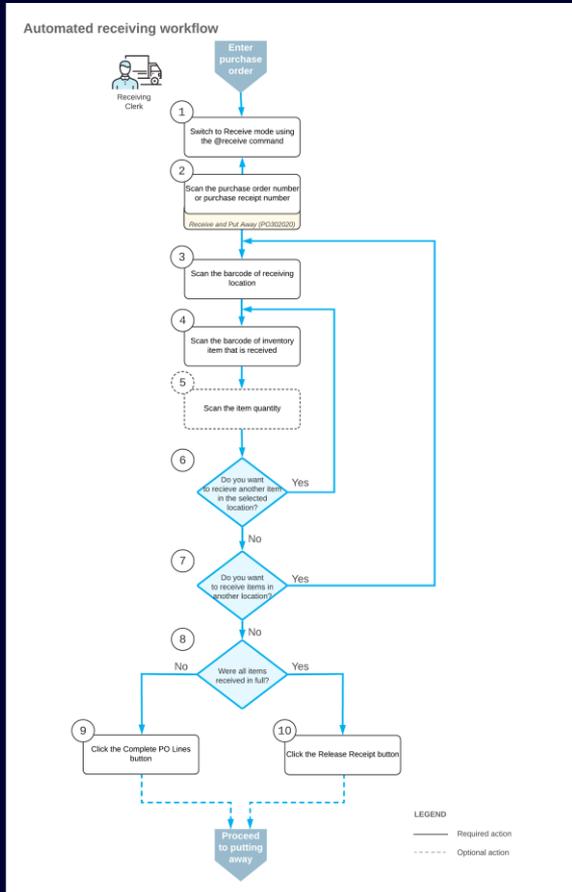
In this chapter, you will learn about configuring and performing automated receiving and putting away operations. In particular, you will do the following:

- Enable the needed system features
- Specify the minimum required configuration for the automated receiving and putting away workflow
- Learn the recommended settings that you can specify to make the system fit your business requirements
- Receive items to a receiving location of a warehouse in automated mode
- Put away items to storage locations in automated mode

Applicable Scenarios

In your company's warehouse, all purchased items are received to a separate location. A warehouse worker receives items from a purchase receipt to this location. Then the warehouse worker puts away the received items to the locations where the items will be stored. To track the performed operations, the worker scans the appropriate barcodes by using a barcode scanner or mobile device.

Lesson 8: Automated Receiving and Putting Away Operations



Lesson 8: Automated Receiving and Putting Away Operations

Process Activity (Web)

Story

Suppose that you are a warehouse worker of the wholesale warehouse of the SweetLife Fruits & Jams company. Your warehouse manager gives you a task to receive the purchased fruits (80 pounds of apples and 60 pounds of oranges) to the warehouse. In your organization, the receive and put away is used, that is you receive the purchased items to a receiving location of the warehouse, and then go through the warehouse locations and put away the items to the fruit locations where the fruits are stored. Also suppose that you put away apples and a part of oranges to one fruit locations, and the rest of the oranges to another fruit location.



Automated Warehouse Operations

Lesson 9: Automated Fulfilling Orders with Wave Picking

Learning Objectives

In this chapter, you will learn about using wave picking workflow for fulfilling the orders. In particular, you will do the following:

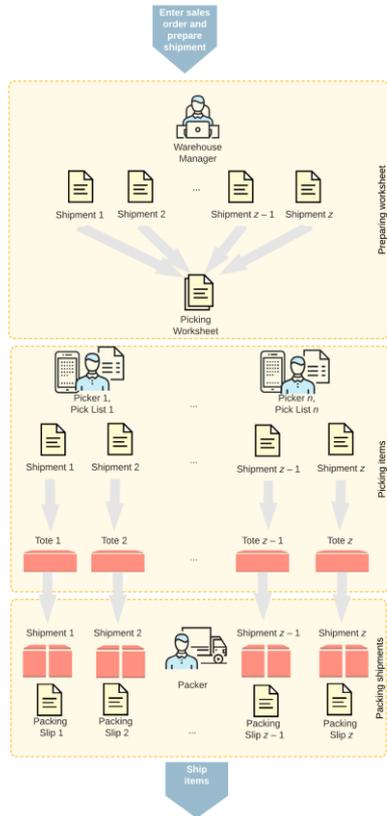
- Enable the needed system features
- Specify the minimum required configuration for the wave picking workflow
- Learn the recommended settings that you can specify to make the system fit your business requirements
- Prepare a wave picking worksheet
- Pick and pack items in a wave
- Confirm a shipment after packing the items

Applicable Scenarios

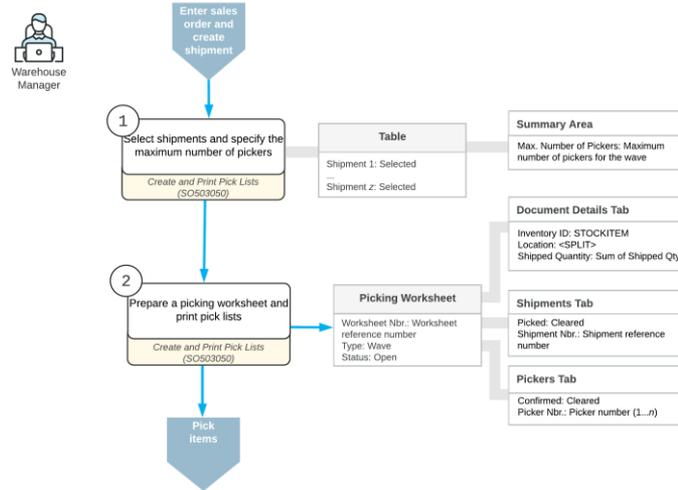
You use wave picking if you need to optimize the process of picking and packing items for a group of orders to be shipped. With a wave picking flow, the warehouse manager prepares a series of pick lists for a group of orders to be shipped (also called a *wave*). Each picker receives a consolidated pick list that includes multiple shipments for which the picker can pick all the listed items in one pass through the warehouse. The pickers collect the items and organize them in the individual totes assigned to each of the shipments. When the items are brought to the packing location, the packer takes the items from each of the totes, verifies that the shipment is collected correctly, and packs the items into boxes.

Lesson 9: Automated Fulfilling Orders with Wave Picking

Wave picking process



Preparation of the picking worksheet for wave picking



Lesson 9: Automated Fulfilling Orders with Wave Picking

Story

Suppose that the wholesale warehouse of SweetLife was temporarily closed because of inventory counting. During this time, multiple orders have been entered to the system and now require shipping. A warehouse manager wants to speed up the process of picking and packing items by creating a wave picking worksheet and assigning this work to multiple pickers. After warehouse workers pick the items in a wave, a warehouse worker acting as a packer need to pack the items and confirm the shipments.

Lesson 10: Automated Fulfilling Orders with Batch Picking

Learning Objectives

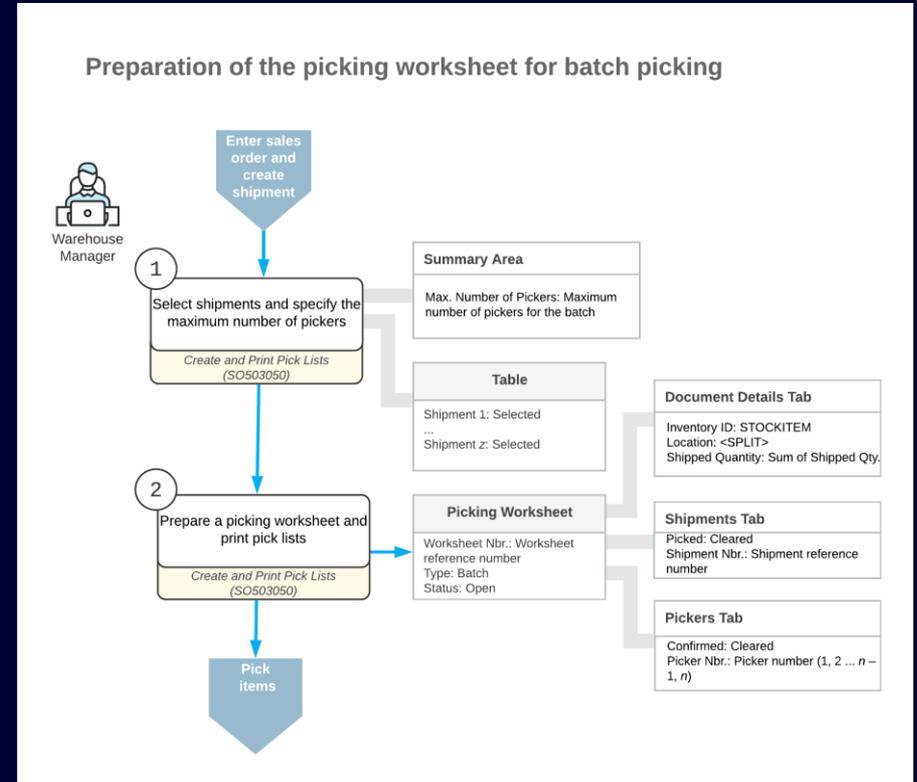
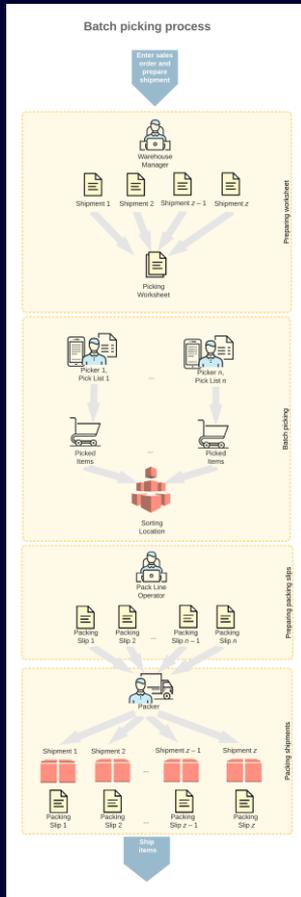
In this chapter, you will learn about using batch picking workflow for fulfilling the orders. In particular, you will do the following:

- Enable the needed system features
- Specify the minimum required configuration for the batch picking workflow
- Learn the recommended settings that you can specify to make the system fit your business requirements
- Prepare a batch picking worksheet
- Pick and pack items in a batch
- Confirm a shipment after packing the items

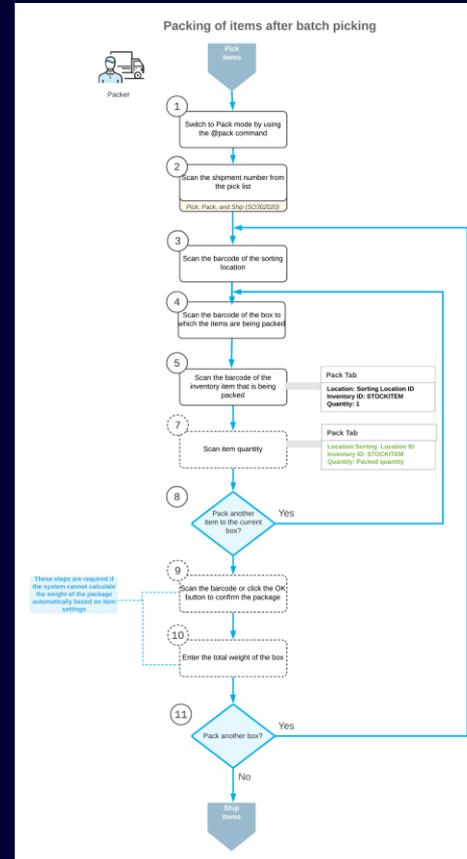
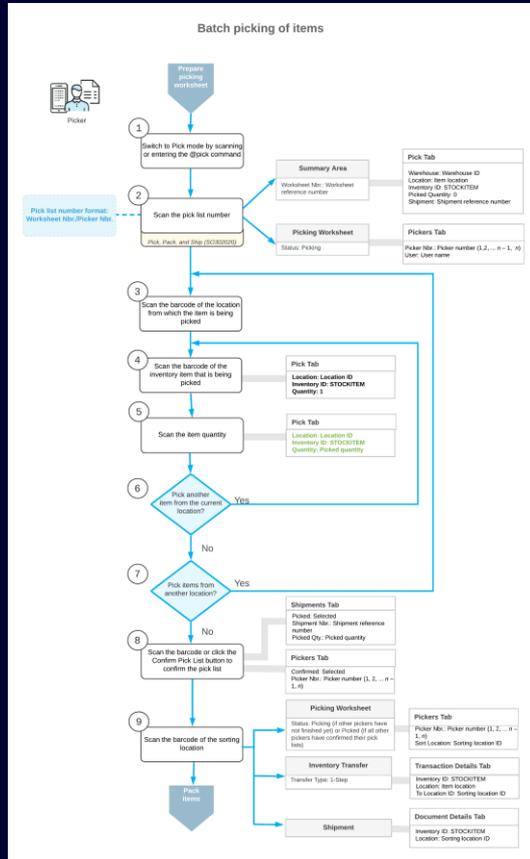
Applicable Scenarios

You use batch picking if you need to optimize the process of picking and packing items for a group of orders to be shipped. With a batch picking flow, the warehouse manager prepares a batch picking worksheet with a batch of orders to be shipped, prints the related pick lists, and gives the pick lists to the pickers who will perform this work. In batch picking, each pick list generally includes items from multiple sales orders. The pickers collect the items listed in the pick lists from the specified warehouse locations and bring these items to the sorting location. A pack line operator prints packing slips for the shipments ready for packing and give these packing slips to a packer. The packer sorts the picked items by shipments and packs them into boxes.

Lesson 10: Automated Fulfilling Orders with Batch Picking



Lesson 10: Automated Fulfilling Orders with Batch Picking



Lesson 10: Automated Fulfilling Orders with Batch Picking

Story

Suppose that the wholesale warehouse of SweetLife was temporarily closed because of inventory counting. During this time, multiple orders have been entered to the system and now require shipping. A warehouse manager wants to speed up the process of picking and packing items by creating a batch picking worksheet and assigning this work to multiple pickers. After warehouse workers pick the items and transfer them to sorting location, a warehouse worker acting as a packer need to pack the items and confirm the shipments.

Lesson 11: Automated Operations with Lot- and Serial-Tracked Items

Learning Objectives

In this chapter, you will learn how to do the following:

- Perform automated picking and packing operations with lot- and serial-tracked items
- Perform automated receiving and putting away operations with lot- and serial-tracked Items
- Perform automated transfer operations with lot- and serial-tracked items
- Perform automated counting of lot- and serial-tracked items during physical inventory
- Perform automated issue of lot- and serial-tracked items

Lesson 11: Automated Operations with Lot- and Serial-Tracked Items

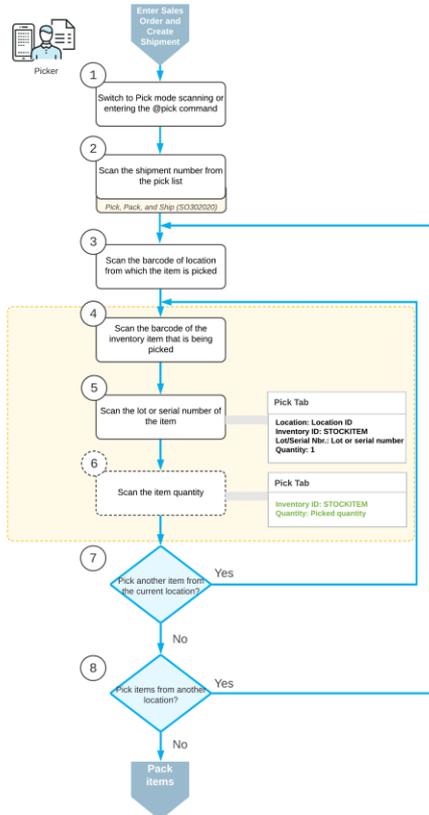
Applicable Scenarios

You may need to track lot or serial numbers for items in the following cases:

- When your organization purchases items with serial numbers provided by vendors and you need to track these items by the serial numbers in a warehouse
- When your organization accepts returns or replacements of serialized items that it has sold
- When your organization provides services (such as installation or repair) for serialized items that it has sold
- When a vendor from which your organization buys items sells them in lots and provides lot numbers and expiration dates for each lot, which you want to track for the items
- When your organization sells items in lots and it is important to keep the assigned lot number tracked in the sales documents
- When your organization sells items with an expiration date and issues items based on this date

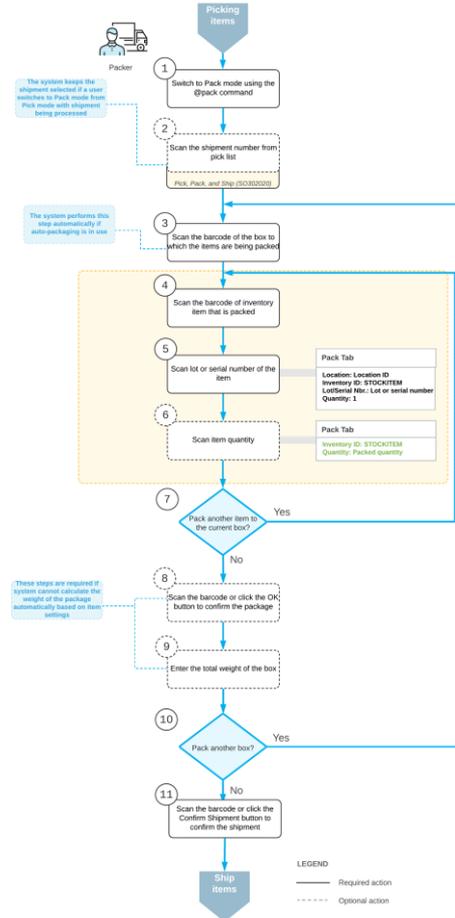
Lesson 11: Automated Operations with Lot- and Serial-Tracked Items

Automated picking workflow for lot- and serial-tracked items



LEGEND
 — Required action
 - - - - - Optional action

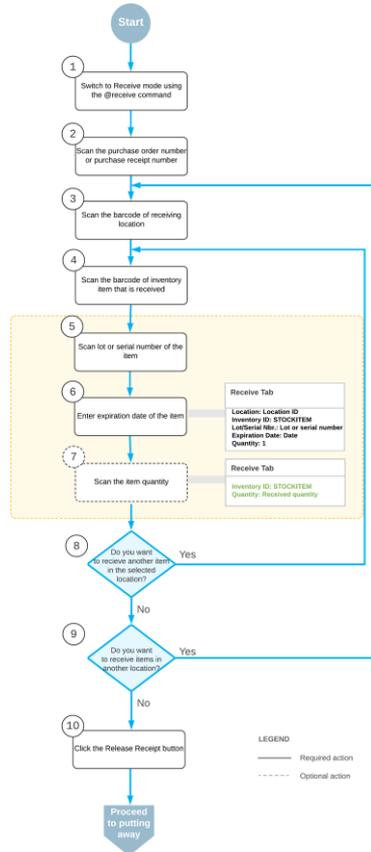
Automated packing workflow for lot- and serial-tracked items



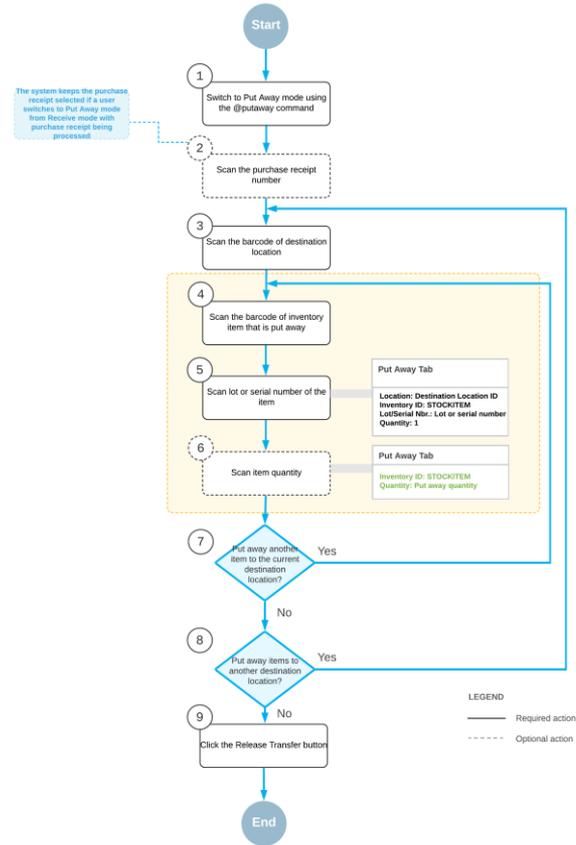
LEGEND
 — Required action
 - - - - - Optional action

Lesson 11: Automated Operations with Lot- and Serial-Tracked Items

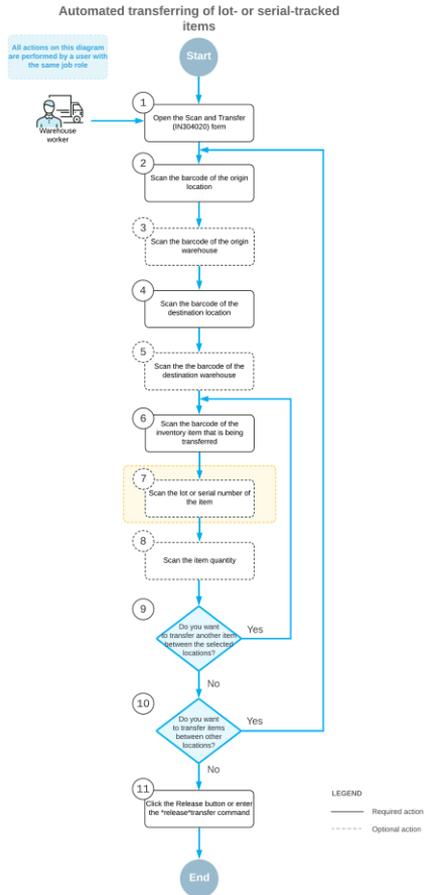
Automated receiving workflow for lot- and serial-tracked items



Automated putting away workflow for lot- and serial-tracked items



Lesson 11: Automated Operations with Lot- and Serial-Tracked Items



Lesson 11: Automated Operations with Lot- and Serial-Tracked Items

Activity for picking, packing, receiving, putting away, and transferring items.

Story

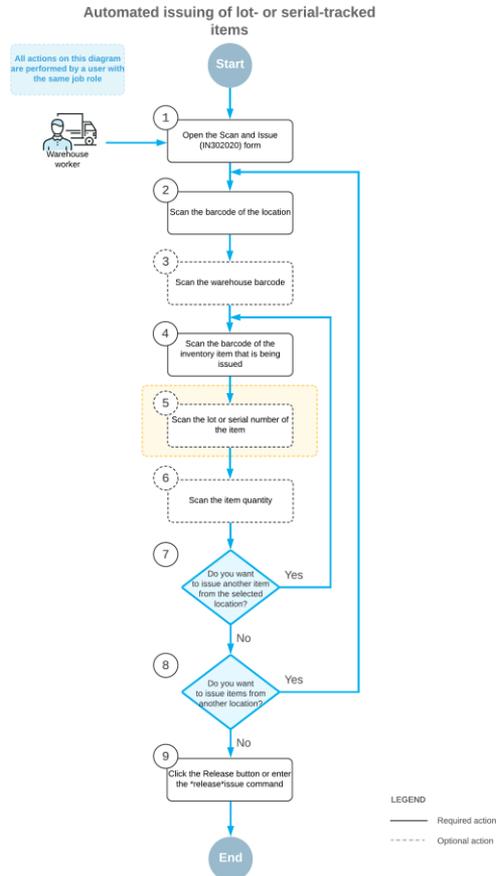
In this process activity, you will act as a sales and purchasing manager in the SweetLife Office and Wholesale Center, and as the warehouse worker in the Wholesale warehouse.

As the purchasing manager, you will enter a purchase order on 30 pounds of guavas (three boxes, 10 pounds each, with different expiration dates) from the Glory Fruit Case vendor.

The vendor supplies each box with a lot number that must be used for tracking the enclosed items in the Wholesale warehouse. The lot class is defined so that fruits with the earliest expiration date are issued first.

As a sales manager, you will create a sales order in 12 pounds of guavas being sold to GoodFood One Restaurant. As a warehouse worker, you will perform receiving the items for the purchase order and putting away them to the fridges; also, you perform picking and packing of items for the sales order; finally, you will move the items from one location to another.

Lesson 11: Automated Operations with Lot- and Serial-Tracked Items



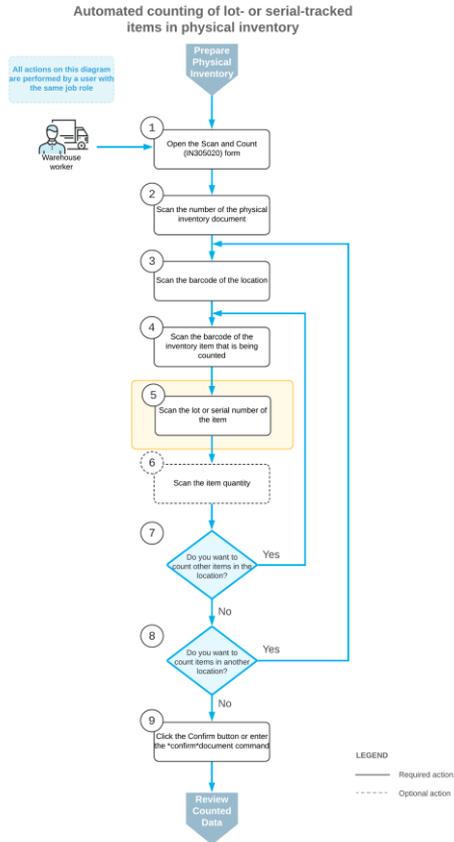
Lesson 11: Automated Operations with Lot- and Serial-Tracked Items

Activity for Issuing Items

Story

Suppose that you are a warehouse worker and your manager asks you to review boxes of bananas in refrigerators in order to find rotted bananas and write them off. To record writing off boxes with rotted bananas in the system, you will create an inventory issue.

Lesson 11: Automated Operations with Lot- and Serial-Tracked Items



Lesson 11: Automated Operations with Lot- and Serial-Tracked Items

Activity for Counting Items

Story

Suppose that you are a warehouse worker and you are assigned to perform physical inventory count by entering barcodes of stock items and locations. You will count the quantities of coconuts in particular warehouse locations added to the physical inventory document, which your manager provided to you.



Thank You

Dale Simmerly

No Reliance

This document is subject to change without notice. Acumatica cannot guarantee completion of any future products or program features/enhancements described in this document, and no reliance should be placed on their availability.

Confidentiality: This document, including any files contained herein, is confidential information of Acumatica and should not be disclosed to third parties.