**SCT and** **PO Automation**

Requirement Document

Version 2.1

Revision History

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| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 28 Dec 2022 | 1.0 | Document Creation | Pope, Justin |
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# Introduction

## Purpose

Currently, orders from retail stores come in and are manually processed for placing Supply Chain Transfers (SCT) and Purchase Orders (PO). The business can use a process to automate the creation of SCTs and POs.

## Scope

This automation will be for Retail Sales Orders (300 Branches) placed on backordered and fully defined items is Syspro to create a SCT or PO.

## Contributors

|  |  |  |
| --- | --- | --- |
| **Name** | **Department** | **Title** |
| Ben Erickson | Executive Management | VP of Information Technology |
| Alyssa Carnahan | Retail Management | Senior Director of Operations and Visual |
| Shawn Feely | Retail Management | Director of Retail Operations |
| Justin Pope | MIS | Software Developer |
| Clay Halla | Distribution | VP of Distribution and Logistics |
| Aaron Bennett | Distribution | Logistics Manager |
| Laurie Lewis | Accounting and Finance | Controller |
| Manny Bustamante | Business Development | Regional Director of Retail |

## Definitions, Acronyms and Abbreviations

|  |  |
| --- | --- |
| **Term** | **Definition** |
| SCT | Supply Chain Transfer |
| PO | Purchase Order |
| Syspro | Enterprise Resource Planning system used by Gabriella White |
| ERP | Enterprise Resource Planning system |
| SOH | Sales Order Handler |
| SQL | Structured Query Language |

# Overview

## Current State

The business must process orders through Backorder review and set up the SCTs and POs for items that are on back order. During the Backorder review process the following is done:

* Items that are in a different warehouse, a SCT is created for the item.
* Items that are purchased from a different vendor, a PO is created.

The following process is for the current state of Back Order review:

**Items for SCT:**

1. Within Syspro the program SO Back Order Review can be found by the following:  
   Program List -> Sales Orders -> Sales Order Processing -> Back Order Review

Graphical user interface, table

Description automatically generated

1. Once in the Back Order Review program, a user will enter in the Back Order Review Criteria panel the following:
   1. Sales order selection: Single
   2. From sales order: Sales Order number to process
   3. Click ‘Start Review Button’

Application, table

Description automatically generated

1. Within the SO Back Order Review panel, the order lines will be pulled up

A picture containing graphical user interface

Description automatically generated

1. For each line, double click the item to open the selection window ‘Purchase Order/SCT/Job’

Table

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1. For items coming out of our warehouse, the SCT option will be selected and click ‘Accept’. This will open the ‘Create SCT’ window

Table

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1. Depending on how many items on the order, the following instructions will be used within the Create SCT window:
   1. For the first item, the user will first create a the SCT by clicking ‘Create SCT’
   2. For other items coming out of the same Warehouse on the same order, those items will be added to the same SCT that was just created. When in the ‘Create SCT’ window, enter the SCT number in the ‘SCT’ field in the bottom left and then click ‘Update SCT’.
2. For items coming out of a different warehouse, repeat Step 4
3. After every item has been allocated to a SCT, print an Order Acknowledgement for the SCT.
4. For the created SCTs, the user will use Sales Order Entry to make the following updates:
   1. Customer Purchase Order line: enter the Customer’s last name and original retail order number
   2. Enter in a promo code by doing the following:
      1. Click magnifying glass on the Order Rec Info Line
      2. Double click the Customer option
      3. Click magnifying glass on the Promo Code Line
      4. Double click on the promo code that matches if the customer is using one, else select None
   3. Customer Tag line: Customer Last Name and 100 number
   4. Delivery Info Line: Customer phone number
   5. Based on the Delivery type, the following information will be entered:
      1. Local Delivery
         1. Shipping Instructions: SC
         2. Address Type: Store
         3. Delivery Type: Standard
         4. Ship to Address: Store Address
      2. White Glove Delivery
         1. Shipping Instructions: PRE-PAID FREIGHT
         2. Address Type: Residential or Commercial
         3. Delivery Type: White Glove
         4. Ship to Address: Customers Address
      3. Drop Ship
         1. Shipping Instructions: PRE-PAID FREIGHT
         2. Address Type: Residential or Commercial0
         3. Delivery Type: Standard
         4. Ship to Address: Customers Address
      4. 3PL
         1. Shipping Instructions: SC
         2. Address Type: 3PL
         3. Delivery Type: Standard
         4. Ship to Address: 3PL Address
      5. Store
         1. Shipping Instructions: SC
         2. Address Type: Store
         3. Delivery Type: Standard
         4. Ship to Address: Store Address
   6. Print Pick Ticket Now: No
   7. After updates have been made, End Order and print Order Acknowledgement

**Items for POs:**

This process would start from step four from the SCT process:

Table

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1. For items that will be purchased from a valid vendor, a Purchase Order will be created. Select Purchase Order and click ‘Accept’. This will open the ‘Create Purchase Order’ window.

Graphical user interface, application, table

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1. The window pre-populates the necessary fields. Once the Purchase Order is set, click ‘Create P/order’ to create the PO. The ‘End P/order’ window will display.

Graphical user interface, application

Description automatically generated

1. If there are more items to purchase from the supplier, note the Purchase Order to use for the other items. Click ‘End Order’.
2. When adding to a Purchase Order, use the ‘Add to existing Purchase Order’ field to fill the noted Purchase Order number.
3. Once all items have been added to a Purchase order, print the Purchase Order.

## Future State Request

The future state that would be desired is to automate the current process (steps 1-9 of the current state).

A service will be set up to be able to process orders with backordered items and create the necessary SCT or PO to fulfill the item. The service will be able to identify retail orders that have been released and have a deposit allocated to the order based on the Credit Terms on the order. The service will be able to determine for each backordered item the following:

* If the line item is ordered from another warehouse, create a SCT for the item from the default warehouse of the item.
  + Requested ship date to use is 42 days from current date.
* If the line item is to be special order from another vendor, create a PO.
  + The due date is the current date plus Lead Time for the item.

Each SCT or PO created for the order will use the shipping address, Address Type, Delivery Type, and Shipping Instructions Code determined by the branch, shipping Instructions Code, and Source (Source Warehouse or 3rd party vendor) from the retail order and the source of the back ordered items (Link: [Matrix](https://summerclassics.sharepoint.com/:x:/s/ITDepartment/Ee1WcWEZLe9Liwt4W5SqGf8BXQPalp9399Xpnq3u-jkEGw)).

The automation will process the entire order and email if it cannot. Possible issues that would be reported on:

* Could not find valid shipping address information.
* Item for Purchase Order could not find a valid price.
* Syspro returns with an error.

Here is a link to some examples of emails ([Link](https://summerclassics.sharepoint.com/:f:/s/ITDepartment/EomYlGditxBIhVDje6Vpat4B98hGy2M4rx7eW4W7rEwhDQ)).

For each SCT and PO that is created per order, the following documents will be created and emailed to the retail store manager and associate manager:

* SCT Order Acknowledgement ([Examples](https://summerclassics.sharepoint.com/:f:/s/ITDepartment/EjrUeRWc3pdKrXubsKYGP_8BVWOZ0ngcxQNrx5KIWWF4Bw))
* Purchase Order Acknowledgement ([Examples](https://summerclassics.sharepoint.com/:f:/s/ITDepartment/EkppffaLbWBItLh5V6HNUPcB4GxoW0X7ainSvPQmuzyZvQ))

# Understanding the User Environment

* Who are the users?

Store Manager, Assistant Manager, Design Consultant, Store Support, Regional Directors

* What are your expectations for usability of the product?

Users will no longer need to process items that are in Backorder and can be automatically ordered.

* What are your expectations for training time?   
  Expectations on handling exceptions when placing SCTs or POs and training on the automation
* What kinds of hard copy and online documentation do you need?   
  A technical documentation on the automation application will be provided. Operations manual document updated.

# Assessing the Opportunity

* Who needs this application in your organization?   
  Business Development
* How many of these types of users would use the application?   
  No user interaction will be needed unless the automation has specific exceptions when attempting to fulfill orders.
* How would you value a successful solution?   
  No longer need users to go through the Backorder review process for items that can be automatically processed.

# Functional Requirements

The following deliverables for this project.

## General Requirements

Technical document for the service.

Training documentation with Margaret Murray.

## User Interfaces

## Software Interfaces

A service will be set up to process orders on backorder to create SCTs and POs. The Sales Order Handler Service has been identified to be modified for this new process.

## Hardware Interfaces

# Error Handling

Logging and Error handling is handled within the SOH service.

# Questions and Issues

* Is the new CusSorDetailMerch+ column needed? Is there not a way to verify enough stock in the store? (Justin Pope)
  + Yes, the field is needed. Stock level in the store is not an indicator as it could be floor samples or backstock to keep if they must order other items from corporate for the same order. (Ben Erickson)
* If an item is ordered from in-store stock, how do we know that the item no longer needs to be processed? (Justin Pope)
  + The New custom form field would indicate if it’s a special order or not. We would only consider special orders that have also not already been processed. (Ben Erickson)
* What address should be used on the SCT / PO? Store, Warehouse (3PL) or customer? (Ben Erickson) Continuation of this, can shipping terms be used off the Sales Order? (Justin Pope)
* Are there other requirements for indicating an order is ready to process? Ex: credit terms, deposit value, etc. (Ben Erickson)
  + Orders require 50% deposit to place the order unless financing which would require 15% down payment (Alyssa Carnahan)
* When creating a purchase order, what price should be used when there are multiple PO cross reference prices for that stock code and supplier? I would assume the lowest price that is not expired and has a MinimumQty less than or equal to the sales order quantity. (Ben Erickson)
  + Finding a matching contract price: not expired, order quantity be minimum for price, and then take the lowest price (Ben Erickson & Alyssa Carnahan)
* When items are added to an order after it has been initially processed, should those items be processed, or would the assumption be that once an order is processed it is excluded from future processing? (Ben Erickson)
  + Yes, new items can be processed. New SCTs and POs will be created for said item. (Ben Erickson & Alyssa Carnahan)
* What is the desired format for the printout of the SCT Order and PO? (Justin Pope)
* What happens when the original order changes? Items changed and/or items deleted? (Alyssa Carnahan)

# Signoff

## Version 1

|  |  |
| --- | --- |
| Sign-off Signature | Date |
| Alyssa Carnahan | 2/8/2023 |
| Shawn Feely | 2/8/2023 |

*\*Approval was given in meeting on 2/8/2023\**

## Version 2

|  |  |
| --- | --- |
| Sign-off Signature | Date |
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|  |  |