# Oracle® Retail Xstore Point of Service Mobile User Guide

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Version 7.1 User Guide

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C H A P T E R

# **Introduction to Xstore Mobile**



The rebranding for the latest version of this documentation set is in development as part of post MICROS acquisition activities. References to former MICROS product names may exist throughout this existing documentation set.

Xstore<sup>®</sup> Mobile is a mobile point-of-sale (POS) extension of the Xstore register software. Using Xstore Mobile, many of the actions that employees normally performed on a register can now be performed out on the sales floor.

# **About this Guide**

The Xstore Mobile User Guide describes how to perform the functions available in Xstore Mobile. These functions are described in the following chapters:

- <u>Chapter 2, "Installation and Configuration" on page 19</u> Describes the installation and configuration of Xstore Mobile.
- <u>Chapter 3, "Custom Branding" on page 43</u> Describes how to customize the Xstore Mobile user interface for your brand.
- <u>Chapter 4, "Sale" on page 53</u> Describes the sale transaction process.
- <u>Chapter 5, "Item Lookup" on page 95</u> Describes how to look up an item to view information about it.

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- <u>Chapter 6, "Time Clock" on page 97</u> Describes clocking in, clocking out, and changing the work code under which time is logged.
- <u>Chapter 7, "Admin" on page 103</u> Describes the administrative functions that can be performed in Xstore Mobile.
- <u>Chapter 8, "Receiving" on page 113</u> Describes inventory receiving.
- <u>Chapter 9, "Shipping" on page 131</u> Describes inventory shipping.
- <u>Chapter 10, "Inventory Counts" on page 149</u> Describes how to create, perform, update, and submit inventory counts.
- <u>Chapter 11, "Inventory Adjustment" on page 165</u> Describes how to make adjustments to inventory counts.
- <u>Chapter 12, "Item Transfer" on page 173</u> Describes how to transfer items between inventory buckets.
- Appendix A: "Item Adjustment" on page 185 Explains each of the adjustments that can be made to sale items in Xstore Mobile.
- Appendix B: "SSL and Certificates" on page 203 Describes the methods for creating SSL certificates.

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# **Interface**

The interface for Xstore Mobile is made up of common elements in any mobile application. These elements include text fields, buttons, links, lists, and menus used to select options, enter data, or open new screens.



The appearance of Xstore Mobile differs depending upon the operating system and the specific device on which it runs. Therefore, your screens may differ from the screens that appear in this manual.

# **Main Menu**



The main menu for Xstore Mobile is the first screen displayed when opening the application. This screen displays a list of buttons, each of which accesses certain areas of Xstore Mobile.

Select the respective option to access the appropriate functionality.

■Sale - Perform sale transactions. See Chapter 4, "Sale" on page 53.

■Item Lookup - Look up information about items in the system. See Chapter 5, "Item Lookup" on page 95.

■Time Clock - Perform time clock functions, such as clocking in and clocking out. See Chapter 6, "Time Clock" on page 97.

■Inventory - Perform inventory actions. See <u>Chapter 8, "Receiving" on page 113</u>, <u>Chapter 9, "Shipping" on page 131</u>, <u>Chapter 10</u>, "Inventory Counts" on page 149, <u>Chapter 11</u>, "Inventory Adjustment" on page 165.

■Admin - Access administrative tasks that can be performed in Xstore Mobile. See Chapter 7, "Admin" on page 103.

#### **Text Field**



A text field is used for keying in information. When a text field is selected, an on-screen keyboard opens on the mobile device, which you can use to enter the requested information.

Note that the appearance of the keyboard will depend upon the device on which you run Xstore Mobile.



# **Button**

By selecting a button on the screen, you select the action that button performs. Buttons can take many forms, depending on their use.



Figure 1-1: Standard
Buttons



Figure 1-2: Back Button



Figure 1-3: <u>Context Menu</u> Button



Figure 1-4: Item Lookup
Button

# **Back Button**

The Back button exits out of the current activity and returns to the previous activity. The text in a Back button may differ and the activity to which it returns depends upon its location in the application.







Figure 1-5: Back Buttons

#### **Context Menu Button**



The Context Menu Button opens a context menu.

- ■When it is present, the Context Menu Button will always be in the upper-right hand corner of the screen.
- ■The Context Menu Button will not be present on all screens.
- ■The options in the context menu itself will depend upon the screen in which it is located.

# **Selection Menu**

A selection menu displays a list of options among which one item can be picked. Selection menus are generally used as part of a set of entry fields within a form.

A closed selection menu displays the option that has been selected (below).



To change the option selected, select the selection menu to display the list of possible options (right), then select the correct option in the list.

# <a href="#"> <a hr

# List

A list displays a series of items. Each item in the list can be selected to open it.

- Lists are frequently used to display search results, such as customers returned by a <u>Customer Search</u>, or documents returned when you <u>Search for a Receiving Document</u>.
- Lists are also used for standard menus throughout the Xstore Mobile application.



# **Status Bar**



The status bar is shown on the bottom of the screen. It is divided into three parts, each displaying information about the system.

The status bar has the following organization:

- On the left, the name of the logged-in user. If no user is currently logged in, nothing will be displayed in the lower-left corner.
- In the center, the register number and whether the store is open or closed.
  - ☐ If the store is open, the indicator will be green:



☐ If the store is closed, the indicator will be red:



On the right, Xstore Mobile displays the business date.

CHAPTER 2

# **Installation and Configuration**

This chapter describes the procedures for setting up an Xstore Mobile server, and installing and configuring Xstore Mobile on a mobile device.

Xstore Mobile is installed on an Android or iOS device as a thin client for Xstore. Therefore, Xstore must be installed and configured on an Xstore Mobile server before Xstore Mobile can be used.

# **About This Chapter**

This chapter contains the following information:

- "Installation" on page 20 Provides a basic procedure for installing Xstore Mobile on the server and on the mobile device(s).
- <u>"Configure Xstore Mobile" on page 40</u> Describes how to configure Xstore Mobile on a mobile device.
- "Update Xstore Mobile Configuration" on page 39 Describes how to open Xstore Mobile configuration on a mobile device after the initial configuration.

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# **Installation**

This installation procedure assumes the following:

■ You have a file archiver application that can navigate both .jar and .zip files (for example, 7-Zip).



- You have the necessary SSL certificates. See <u>Appendix B: "SSL and Certificates" on page 203</u> for information on creating SSL certificates.
- You have mobile device management software installed on a system (not the Xstore Mobile server).
- You have a utility for creating MD5 hashes.
- If you are installing Xstore Mobile on an unsupported device (for example, an iPad), you have turned off screen rotation on the device.

To install Xstore Mobile, do the following before installing Xstore:

# **Extract the Jetty Utility File**

- **1.** Navigate to the file location of the Xstore installation .jar file.
- **2.** Open the Xstore installation file in a file archiver that can navigate both .jar and .zip files (for example, 7-Zip).
- **3.** Open xstore-pos-mobile.zip in the archive.
- **4.** Open the lib\ext\jetty\ subdirectory in the archive.
- **5.** Copy the file jetty-util-9.1.3.v20140225.jar from the archive to your local file system. This should be placed in an easy-to-find directory.

# **Edit ant.install.properties**

**6.** Open the installation file ant.install.properties in a text editor (e.g. Notepad).

See also: The Xstore® Implementation Guide for the location of the ant.install.properties file, a description of the use of encrypt.bat and encrypt.sh for encrypting information (step 9), more information about password obfuscation (step 12), and/or the full installation procedure (step 15.).

7. Search for the text # Xstore Mobile in the ant.properties file.

**8.** Configure the following settings in ant.properties:

```
# Xstore Mobile
xstore.mobile = true
mobileInstallDir = C\:\\xstore-mobile
```

- **9.** Generate an MD5 hash of a the Xstore Mobile password.
- **10.** Enter the plain-text username and MD5 hash of the password for Xstore Mobile:

```
mobileUserName =
mobilePasswordHash =
```

11. Enter the key alias that will be used by Xstore Mobile:

```
mobileKeyAlias =
```

**12.** Enter the obfuscated keystore password that will be used by Xstore Mobile:

```
mobileKeystorePassword =
```

To obfuscate the password:

- **a.** Open a command prompt.
- **b.** Run the following command:

```
java -cp <jetty_util_path>/jetty-util-9.1.3.v20140225.jar
    org.eclipse.jetty.util.security.Password <keystore_password>
where <jetty_util_path> is the location of the jetty-util-9.1.3.v20140225.jar file (see step 5 on page 20).
and <keystore password> is the password to obfuscate.
```

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The output of the command will look like the following (if the password is allgoodthings).

```
allgoodthings
OBF:1v1p1uv81w8t1u9p1vnq1y0q1sov1y101vnc1u9t1w8x1uuy1v2p
MD5:dfc8e399fa36b8db59d3c94f24821e72
```

- **c.** Copy the string on the line starting with OBF: (including OBF:).
- **d.** Paste the string into the mobileKeystorePassword line, so that it looks like the following:

```
mobileKeystorePassword = OBF:1v1p1uv81w8t1u9p1vnq1y0q1sov1y101vnc1u9t1w8x1uuy1v2p
```

**13.** Save and close the ant.install.properties file.

# **Software Installation**

- **14.** Prepare the security certificate for use by Xstore Mobile:
  - **a.** If necessary, change the name of the keystore file to xstore mobile.keystore.
  - **b.** Move the file xstore mobile.keystore to the same folder as the Xstore installer.
- **15.** Install version 7.0 of Xstore<sup>®</sup> (including Xenvironment) on the system that will be the Xstore Mobile server.

**See also:** The *Xstore Implementation Guide* for the full installation procedure.

**16.** If necessary, move the file xstore\_mobile.keystore to the mobile directory of the Xstore Mobile installation. Do not change the name of this file.

# **Configure Xenvironment**

17. Open the system.properties file for Xenvironment in a text editor (e.g. Notepad).

**See also:** The *Xenvironment Manual* for more information about this file.

**18.** Ensure that Xservices are turned off by setting the xservices-hh.disabled configuration to the following:

xservices-hh.disabled=True

19. Ensure that the Xstore Mobile server is turned on by setting the xservices-hh.disabled configuration to the following:

xstore-mobile.disabled=False

**20.** If necessary, restart the system to ensure that the configuration changes are enabled.

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#### Create and Install SSL Certificates

**21.** If necessary, create the SSL certificates from the Xstore Mobile server and Xstore Mobile. See <a href="#">Appendix B: "SSL and Certificates"</a> on <a href="#">page 203</a>.

- **22.** Install the SSL certificate on the device.
  - ☐ If you are installing Xstore Mobile on an Android device:
    - O <u>"CA-Signed Certificate" on page 23</u> Install a certificate signed by a certificate authority.
    - <u>"Self-Signed Certificate" on page 23</u> Install a self-signed certificate.
  - If you are installing Xstore Mobile on an iOS device, you must use a certificate signed by a certificate authority. See <u>"CA-Signed Certificate" on page 23</u>. Xstore Mobile will not work on iOS with a self-signed certificate.

#### **Android**

## **CA-Signed Certificate**

- a. Copy the provided certificate file to the storage of the Android device. If you used the certificate creation process in <u>Appendix B: "SSL and Certificates" on page 203</u>, this is the cacert.pem file.
- **b.** If necessary, change the extension of the file from .pem to .cer.
- **c.** Open the device's security menu.
- **d.** In the security menu of the Android device, enable a face unlock, pattern, PIN, or password lock screen.
- **e.** In security menu of the Android device, select the **Install from storage** option and, when prompted for the name, select the file that was copied to the device's storage.

## **Self-Signed Certificate**

**a.** Export the certificate from the keystore file by typing the following command:

```
keytool -export -alias xstoremobile-YYYYMMDD -keystore xstoremobile.keystore -rfc
-file xstoremobile-YYYYMMDD.cer
```

- **b.** Copy the xstoremobile-YYYYMMDD.cer file to the storage of the Android device.
- **c.** Open the device's security menu.
- **d.** In the security menu of the Android device, enable a face unlock, pattern, PIN, or password lock screen.

e. In security menu of the Android device, select the Install from storage option and, when prompted for the name, select the file that was copied to the device's storage.

#### iOS



iOS devices can only use CA-signed certificates. You cannot use Xstore Mobile with a self-signed certificate.

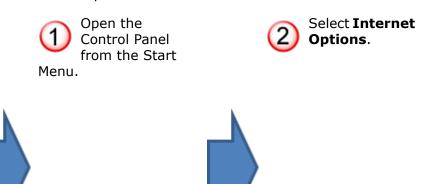
#### Before you start

Before starting this procedure:

Download and install the Windows iPhone Configuration Utility from the Apple website.

# Import the certificate

If you have not imported the certificate into Windows:



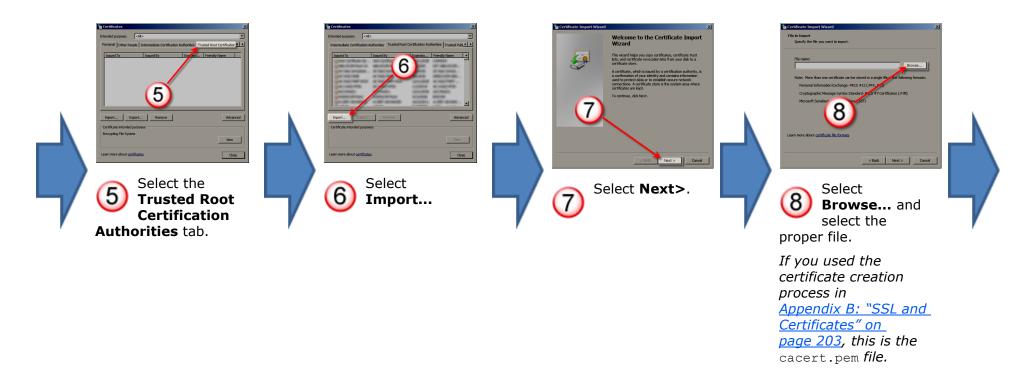


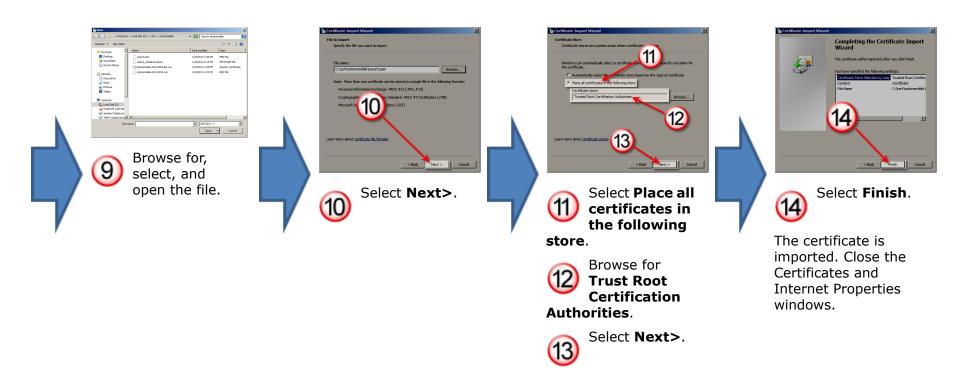






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# **Apply the certificate**



To apply the certificate, you must have the iPhone Configuration Utility installed on your system.

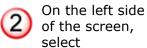
You can download the iPhone Configuration Utility from the Apple website.

#### To apply the certificate:









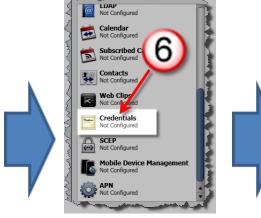
Configuration Profiles.





Enter **Xstore Mobile** in the Profile Name field.

Enter **com.micros-retail.xstorem** in the Identifier field.



Select Credentials.



Select Configure.



Locate and select the certificate in the Personal Certificate Store.

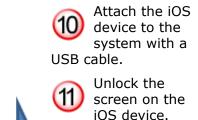


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Select **OK**.

The certificate is loaded and shown in the Configuration Profile.



The iPhone Configuration Utility shows the device.





Select the device.





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Select the Configuration Profiles tab.



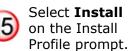


Select the **Install** button for the Xstore Mobile profile.

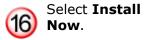


#### On the iOS device:









The configuration profile and its associated certificate are installed on the iOS device.



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# **Install Xstore Mobile**

#### **Android**

- If you are using mobile device management (MDM) software:
  - **a.** Use your mobile device management software to install Xstore Mobile on the device(s).
  - **b.** Run Xstore Mobile on the mobile device. Continue with "Configure Xstore Mobile" on page 40.
- If you are not using MDM software:
  - **a.** Connect to the device using a USB cable.
  - **b.** Copy the .apk file onto the device.
  - **c.** Use an Android software installation program to install the .apk file.
  - **d.** Continue with "DataWedge configuration (Android only)" on page 32.

## iOS

- If you are using mobile device management (MDM) software:
  - **a.** Use your MDM software to install Xstore Mobile on the device(s).
  - **b.** Run Xstore Mobile on the mobile device. Continue with "Configure Xstore Mobile" on page 40.

# **DataWedge configuration (Android only)**

If you are installing Xstore Mobile on an Android device, configure DataWedge:

- 1. Install DataWedge, if necessary. DataWedge should already be installed on the Motorola MC40 or Motorola TC70.
- 2. Open DataWedge.
- 3. Continue with "Create and configure a new profile in DataWedge" on page 32.

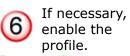
# Create and configure a new profile in DataWedge

To create and configure a new profile in DataWedge:



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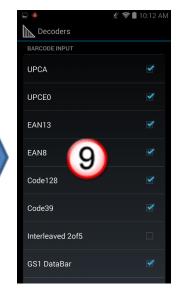


#### [DEFAULT]

If necessary, enable barcode input in the profile. [DEFAULT]







Exit the barcode decoder screen to return to the profile screen.

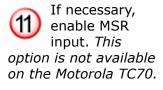




- Enable the following decoders (do not disable any enabled decoders):
- UPC-A [DEFAULT]
- Code 128 [DEFAULT]
- Code 39
  [DEFAULT]
- QR Code
  [DEFAULT]
- Code 93

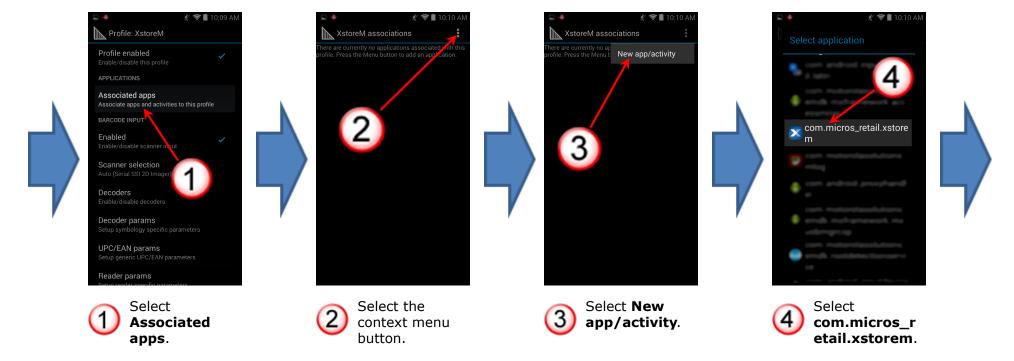


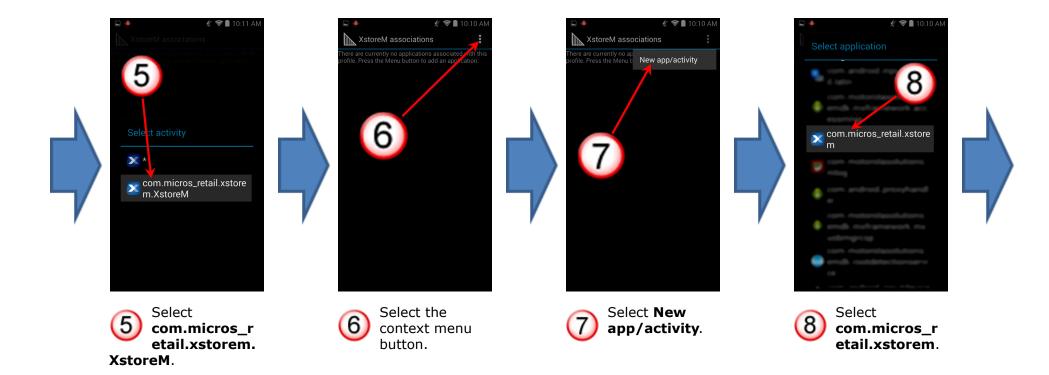
Continue with "Associate the profile with Xstore Mobile" on page 35.



# **Associate the profile with Xstore Mobile**

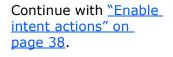
To associate the profile with Xstore Mobile:







Exit the XstoreM application associations screen and return to the profile screen.





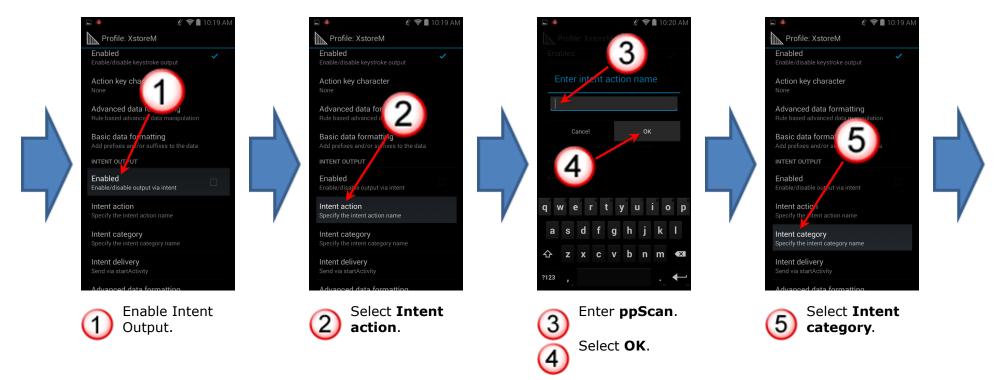


Select \*.

Installation 37

#### **Enable intent actions**

To enable intent actions in the profile:



38 Installation



DataWedge configuration is complete.

Exit DataWedge.



6

Enter android.intent.category.DEFAULT.



Select  $\mathbf{OK}$ .

# **Update Xstore Mobile Configuration**

To update the configurations on Xstore Mobile after installation, long-select the Xstore logo (1) on the Main Menu of Xstore Mobile. This opens the Server Configuration screen. See "Configure Xstore Mobile" on page 40.



**≺** Back

# **Configure Xstore Mobile**

Configuration of Xstore Mobile includes the following procedures:

- "Server Configuration" on page 40
- "Location Configuration" on page 41

# **Server Configuration**

Enter the server configuration information on the device:



- Enter the hostname or IP address for the Xstore Mobile server.
- 2 Enter 8443 as the server port.



Select **Test Connection** to test the connection to

the server.

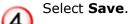
- If the test is successful, continue the procedure.
- If the test fails, check the hostname and port, and the network connection.

If necessary, perform "Location Configuration" on page 41.





X



Configuration is complete. Xstore Mobile continues to the Main Menu.



# **Location Configuration**

To configure the location information in Xstore Mobile:



Xstore Mobile returns to the <u>Server</u> <u>Configuration</u> screen.

# **Additional Configuration**

Additional configuration of Xstore Mobile is performed through Xstore configuration in Xadmin.

**See also:** The *Xadmin User Guide* for more information about Xadmin and these configurations.

# **Functional Settings**

#### **Inventory**

- **Prompt For a Quantity After Manual Entry Of An Item?** Determines whether Xstore and Xstore Mobile will prompt for a quantity after a user enters an item ID.
- **Prompt For a Quantity After Scanning An Item?** Determines whether Xstore and Xstore Mobile will prompt for a quantity after the user scans an item.

#### **Inventory Count**

■ **Enable Count Sheet Mode?** - Determines whether count sheets are used in inventory counts. *This must be set to* **False** *for any implementation using Xstore Mobile.* 

## **Item Options**

■ **Show item images?** - Determines whether images will be shown for items in Xstore Mobile.

# **Security Settings**

Xstore Mobile also uses the following user security settings for Xstore:

- **Search Inventory Count** Permission to search for inventory counts.
- **Create Inventory Count** Permission to create inventory counts.
- Complete Inventory Count Permission to complete inventory counts.
- Cancel Inventory Count Permission to cancel inventory counts.

CHAPTER 5

# **Custom Branding**

Xstore Mobile allows you to set up the user interface so that it is configured specifically for your organization. Setting up your brand on Xstore Mobile is done by configuring a custom skin on the Xstore Mobile server.

Custom branding in Xstore Mobile is performed by placing override configurations in the XstoreMobileBranding.properties override file within the cust config directory.

The configurations in this file are described in "XstoreMobileBranding.properties" on page 44.

# **XstoreMobileBranding.properties**

This file has the following properties:



The main menu logo image.

This image has the following configurations:

mainMenuLogoImageUrl - The file location for the image. This can be a URL or a file location within the root directory for Xstore Mobile.

#### **Examples:**

```
mainMenuLogoImageUrl=res/graphics/branding/xstoremobile/XstoreM_MainImage.png
mainMenuLogoImageUrl=http://www.example.com/xstoremobileimages/main image.png
```

mainMenuLogoStyles - CSS style information that configures how the image is displayed.

#### Example:

```
mainMenuLogoStyles=background-size: cover; background-repeat: no-repeat;
background-position: 50%; min-height: 150px;
```

B The main menu background image.
This image has the following configurations:

mainMenuMainBackgroundImageUrl - The file location for the image. This can be a URL or a file location within the root directory for Xstore Mobile.

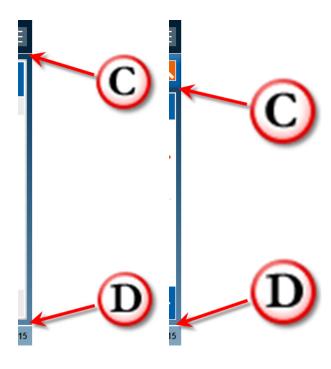
#### **Examples:**

```
mainMenuMainBackgroundImageUrl=res/graphics/branding/xstoremobile/
    XstoreM_MainBackground.png
mainMenuMainBackgroundImageUrl=http://www.example.com/xstoremobileimages/
    main menu background image.png
```

■ mainMenuMainBackgroundStyles - CSS style information that configures how the image is displayed.

#### **Example:**

```
mainMenuMainBackgroundStyles=background-size: cover;
background-repeat: no-repeat; background-position: 50%;
```



The start color for the gradient on the sale items and item details screens.

This color is configured using the following:

saleScreenBackgroundGradientStartColor=rgb(rrr,ggg,bbb) - The start color of the gradient in the background. This color is configured using CSS color formatting.

#### **Examples:**

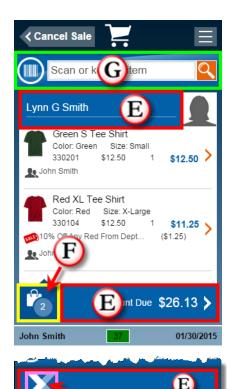
saleScreenBackgroundGradientStartColor=Red
saleScreenBackgroundGradientStartColor=#FF0000
saleScreenBackgroundGradientStartColor=rgb(0,50,87)

- The end color for the gradient on the sale items screen, and the item details screen.

  This color is configured using the following:
- saleScreenBackgroundGradientEndColor=rgb(rrr,ggg,bbb) The end color of the gradient in the background. This color is configured using CSS color formatting.

#### **Examples:**

saleScreenBackgroundGradientEndColor=Yellow
saleScreenBackgroundGradientEndColor=#FFFF00
saleScreenBackgroundGradientEndColor=rgb(255,255,0)



The primary color used on the sale item screen. This is the background color displayed behind the customer name area (either when a customer is assigned, or in the blank area when no customer is assigned), and the amount due area.

This color is configured using the following:

saleScreenPrimaryColor - The primary color on the sale screen. This color is configured using CSS color formatting.

#### **Example:**

```
saleScreenPrimaryColor=ForestGreen
saleScreenPrimaryColor=rgb(34,139,34)
saleScreenPrimaryColor=#228B22
```

F The secondary color used on the sale item screen. This is the background color displayed behind the item count area.

This color is configured using the following:

■ saleScreenAccentColor - The primary color on the sale screen. This color is configured using CSS color formatting.

#### **Examples:**

```
saleScreenAccentColor=Salmon
saleScreenAccentColor=rgb(250,128,114)
saleScreenAccentColor=#FA8072
```

(cont'd)





The item entry background image.

This image has the following configurations:

saleItemEntryBackgroundImageUrl - The file location for the image. This can be a URL or a file location within the root directory for Xstore Mobile.

#### **Examples:**

```
saleItemEntryBackgroundImageUrl=res/graphics/branding/xstoremobile/
    XstoreM_BlueBackground_small.png
saleItemEntryBackgroundImageUrl=http://www.example.com/xstoremobileimages/
    blue item entry background.png
```

saleItemEntryBackgroundStyles - CSS style information for the image. This configures how the image is displayed.

#### **Example:**

saleItemEntryBackgroundStyles=background-size: 100% 100%;

The header image for a sale without an assigned customer.

This images has the following configurations:

■ saleItemHeaderNoCustomerImageUrl - The file location for the image. This can be a URL or a file location within the root directory for Xstore Mobile.

#### **Examples:**

```
saleItemHeaderNoCustomerImageUrl=res/graphics/branding/xstoremobile/
    XstoreM_SmallXLogo.png
saleItemHeaderNoCustomerImageUrl=http://www.example.com/xstoremobileimages/
    small logo.png
```

saleItemHeaderNoCustomerStyles - CSS style information for the image. This configures how the image is displayed.

#### Example:

# **Example Configuration**

This sample configuration uses the following images, placed in the res/graphics/branding/Sample folder in the Xstore Mobile root directory.:

**Table 3-1:** *Images Used in XstoreMobileBranding.properties Example* 

Image	Used in section
Star.png	A Main menu logo image
Diamond.png	B Main menu background image
Arrows.png	G Sale item entry background
Lightning	Header image for a sale without a customer

### **Configuration Descriptions**

The configurations in the XstoreMobileBranding.properties configure the following areas of Xstore Mobile.

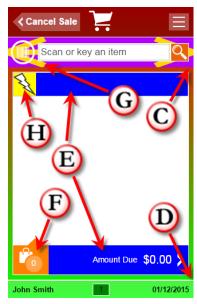


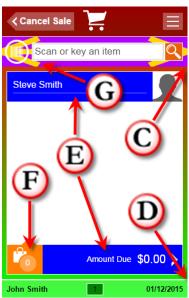


# Main Menu logo configuration
mainMenuLogoImageUrl=res/graphics/branding/Sample/Star.png
mainMenuLogoStyles=background-size: cover; background-repeat: no-repeat; background-position: 50%; min-height: 150px;



# Main Menu background configuration
mainMenuMainBackgroundImageUrl=res/graphics/branding/Sample/Diamond.png
mainMenuMainBackgroundStyles=background-size: auto; background-repeat: repeat;
background-position: 50%;







- # Start color for the gradient. In this case, red.
- # This gradient will also be displayed behind the item details screen and the customer context menus.
- # Note that the gradient continues up behind the action bar.

saleScreenBackgroundGradientStartColor=rqb(255,0,0)



- # End color for the gradient. In this case, green.
- # This gradient will also be displayed behind the item details screen and the customer context menus.
- # Note that the gradient continues down under the register information bar.

saleScreenBackgroundGradientEndColor=rgb(0, 255, 0)



# Primary color on the sale screen. In this case, blue.

saleScreenPrimaryColor=Blue



# Accent color on the sale screen. In this case, orange.

saleScreenAccentColor=#FF8000



# Background image for the item entry field.

saleItemEntryBackgroundImageUrl=res/graphics/branding/Sample/Arrows.png

saleItemEntryBackgroundStyles=background-size: 110% 110%; background-position: center
center;



 $\ensuremath{\text{\#}}$  Image shown on the item list header when no customer is assigned.

 $\verb|saleItemHeaderNoCustomerImageUrl=res/graphics/branding/Sample/Lightning.png| \\$ 

saleItemHeaderNoCustomerStyles=background-repeat: no-repeat; background-position:
left center;

#### **File Contents**

The complete file, as described in "Configuration Descriptions" on page 49, would be the following:

```
# Main Menu logo configuration
mainMenuLogoImageUrl=res/graphics/branding/Sample/Star.png
mainMenuLogoStyles=background-size: cover; background-repeat: no-repeat; background-position: 50%; min-height: 150px;
# Main Menu background configuration
mainMenuMainBackgroundImageUrl=res/graphics/branding/Sample/Diamond.png
mainMenuMainBackgroundStyles=background-size: auto; background-repeat: repeat; background-position: 50%;
# Start color for the gradient. In this case, red.
# This gradient will also be displayed behind the item details screen and the customer context menus.
# Note that the gradient continues up behind the action bar.
saleScreenBackgroundGradientStartColor=rgb(255,0,0)
# End color for the gradient. In this case, green.
# This gradient will also be displayed behind the item details screen and the customer context menus.
# Note that the gradient continues down under the register information bar.
saleScreenBackgroundGradientEndColor=rgb(0, 255, 0)
# Primary color on the sale screen. In this case, blue.
saleScreenPrimaryColor=Blue
# Accent color on the sale screen. In this case, orange.
saleScreenAccentColor=#FF8000
# Background image for the item entry field.
saleItemEntryBackgroundImageUrl=res/graphics/branding/Sample/Arrows.png
saleItemEntryBackgroundStyles=background-size: 110% 110%; background-position: center center;
# Image shown on the item list header when no customer is assigned.
saleItemHeaderNoCustomerImageUrl=res/graphics/branding/Sample/Lightning.png
saleItemHeaderNoCustomerStyles=background-repeat: no-repeat; background-position: left center;
```

# C H A P T E R

# Sale



The Sale option in Xstore Mobile provides users with the ability to perform sale transactions. To begin a sale transaction, select the **Sale** option (left) on the <u>Main Menu</u> of Xstore Mobile.

The process for a sale transaction in Xstore Mobile follows the steps configured for Xstore.

The process for your version of Xstore Mobile may differ from the procedure(s) described below.

# **Start Transaction**

To start a sale transaction:



Select **Sale** in the <u>Main Menu</u> to start a new transaction.

# **Register Login**

To log in to a register:



54 Start Transaction

# **Choose Commissioned Associate**

There are two ways to select a commissioned associate for a transaction:

-Or-

#### **Select Associate**

## **Enter Associate ID**



Select the associate(s) in the list.

Select Ok.

Continue the transaction with:

"Lovalty Registration" on page 59

-Or-

"Add an Item" on page 60



Select the **Select By Associate ID** button.



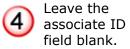
For each associate to add to the transaction:

**Enter Associate** ID. The ID of the logged-in user is the default value.

Select **Ok**.



When you are finished adding associates:





Continue the transaction with:

"Loyalty Registration" on page 59

-Or-

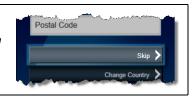
"Add an Item" on page 60



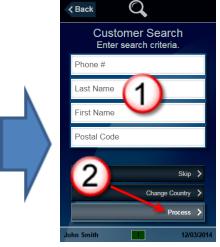
# **Assign a Customer**



To continue the transaction without adding a customer, select the **Skip** button.



To assign a customer to a transaction:



1

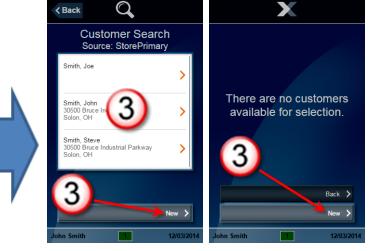
Enter search information.



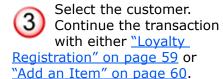
Select the **Process** button.

To change the states/ provinces in the State search menu,

see "Change Country" on page 57.



Do one of the following:



-Or-

Long-select the proper customer for additional options. See "View

<u>Customer Menu" on page 58</u> for more information.

-Or-

Select the **New** button to add a customer. See "Create a Customer" on page 109 for more information.

Continue the transaction with either:

■ "Loyalty Registration" on page 59

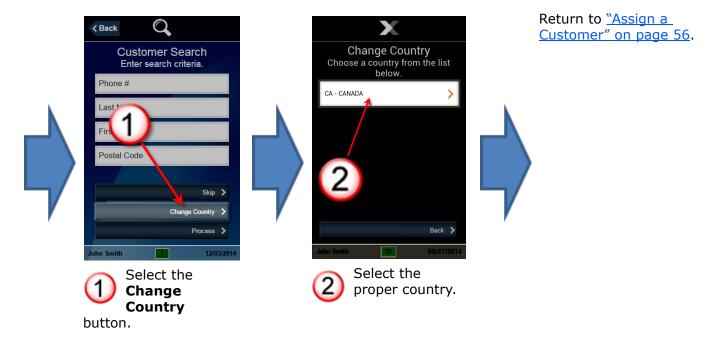
-Or-

\*Add an Item" on page 60

56 Assign a Customer

# **Change Country**

To change the states/provinces in the State field (if present) to those of a different country:

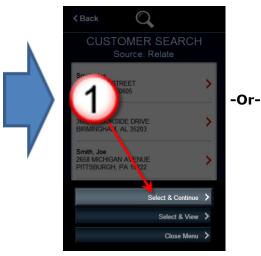


Assign a Customer 57

#### **View Customer Menu**

By long-selecting a customer in the customer search list, you can open a customer options menu that provides additional options:

# Assign the Customer



Select the Select & Continue

button.

Continue the transaction with either:

"Loyalty Registration" on page 59

-Or-

■ "Add an Item" on page 60

# Select and View the Customer



Select the
Select & View
button.



Do one of the following:

- ■Select **Edit Customer** to edit the customer information. See <u>"Edit a Customer" on page 110</u>.
- ■Select **Enroll in Loyalty** to assign a loyalty card to the customer. See <u>"Enroll in Loyalty" on page 111</u>.
- ■Select **Assign and Continue** to assign the customer to the transaction and continue the transaction with either:
- □"Loyalty Registration" on page 59
- -Or-

04/22/2014

□"Add an Item" on page 60

58 Assign a Customer

# **Loyalty Registration**

If a customer is not registered with a loyalty program, Xstore Mobile prompts to add a loyalty card. Do one of the following:

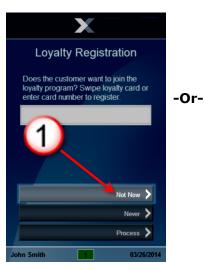
# Register a Card



Swipe a loyalty card, or enter the card number.

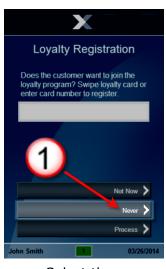
Select the **Process** button.

# Continue Without Adding a Card



Select the Not Now button.

# Never Ask Again About a Card



Select the **Never** button.

Loyalty Registration 59

# Add an Item

To add an item to a transaction:



Scan an item to add it to the transaction.

-Or-



Enter an Item ID.



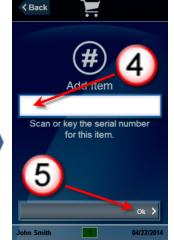
If the entered item is age-restricted:



Enter the customer's ID number.



Select **OK**.



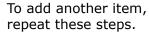
If prompted for an item serial number:



Enter the item serial number.



Select **OK**.



To adjust an item, see "Adjust an Item" on page 61.

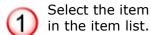
When you are finished entering/adjusting items, tender the transaction.
See <u>"Tender Transaction"</u> on page 83.

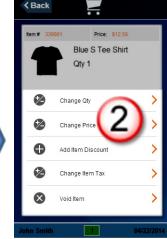


# **Adjust an Item**

To adjust an item that has been added to a transaction:







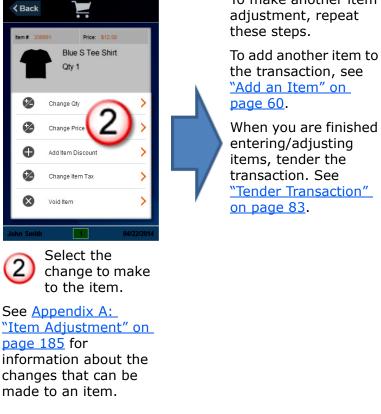
to the item.

"Item Adjustment" on page 185 for information about the changes that can be made to an item.

To make another item

page 60.

When you are finished "Tender Transaction"



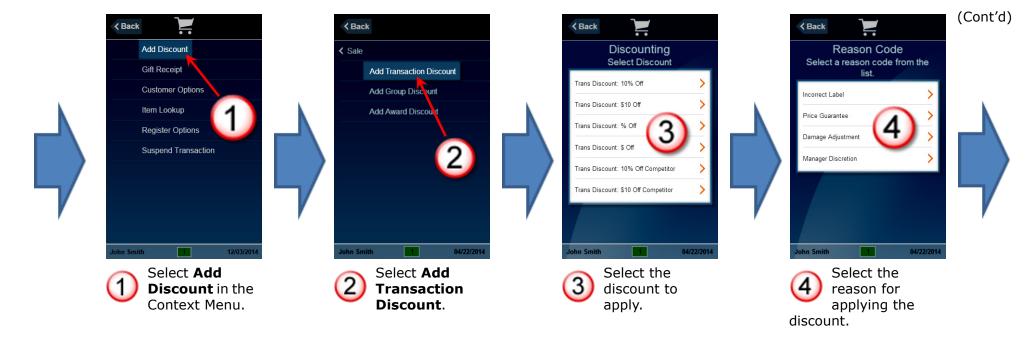
Adjust an Item 61

# **Context Menu Options**

To access all additional transaction options through the context menu, select the <u>Context Menu Button</u> in the upper-right corner of the transaction screen. This opens the context menu for transactions.

#### **Add a Transaction Discount**

To add a discount to a transaction:



(Cont'd)



The discount is applied to the transaction. Return to the sale screen.

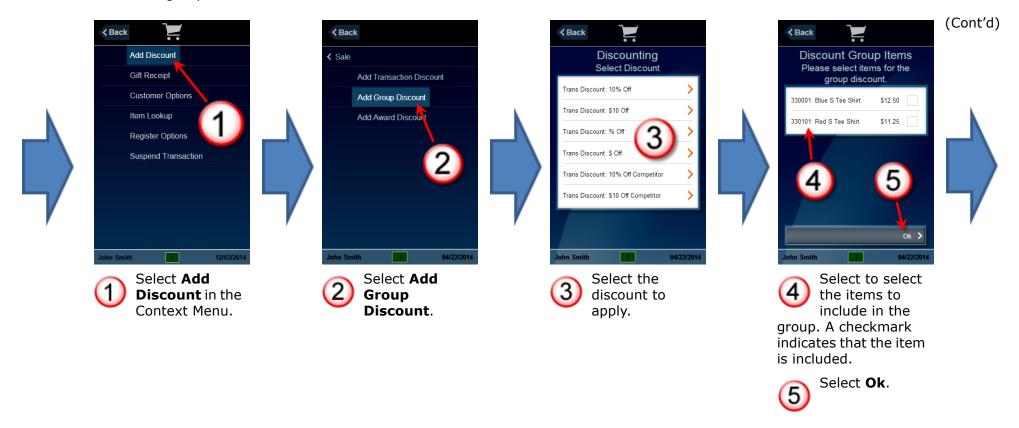


If the discount is not fixed, enter the amount or percentage of the discount.

6 Select **Ok**.

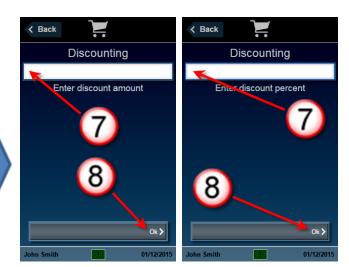
# **Add a Group Discount**

To add a discount to a group of items in a transaction:





Select the reason for applying the discount.



7) If the discount is not fixed, enter the amount or percentage of the discount.

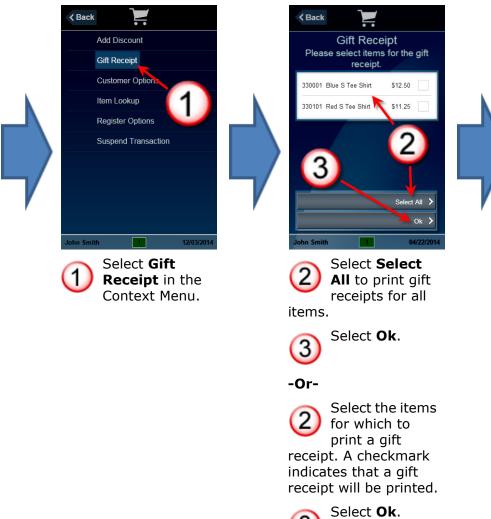
8 Select **Ok**.

The discount is applied to the items. Return to the sale screen.



# **Print Gift Receipts**

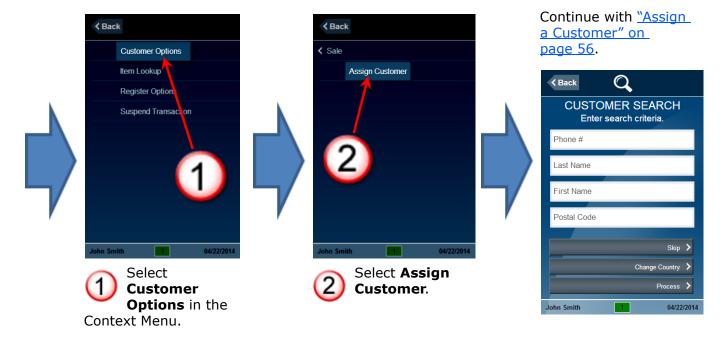
To select items for which gift receipts will be printed:



Return to the sale screen.

# **Assign Customer**

To add a customer to a transaction:

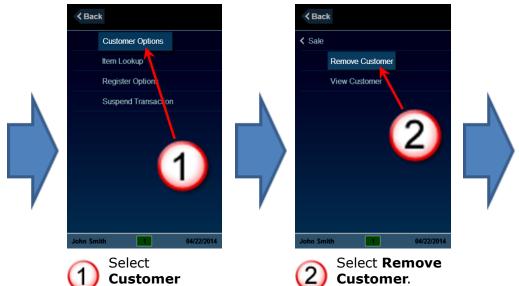


#### **Remove Customer**

To remove a customer from a transaction:

**Options** in the

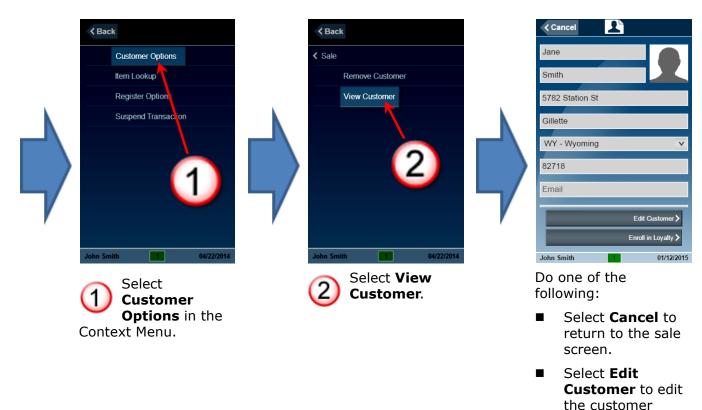
Context Menu.



The customer is removed from the transaction. Return to the sale screen.

# **View/Edit Customer Information**

To view or edit information about the customer assigned to a transaction:



the customer. See
"Enroll in Loyalty"
on page 111.

Context Menu Options 69

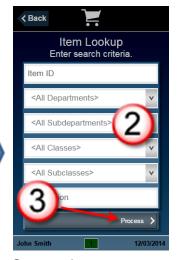
information. See "Edit a Customer" on page 110.
Select Enroll in Loyalty to assign a loyalty card to

### **Find an Item**

To search for an item to add to the transaction:



Select **Item Lookup** in the Context Menu.



Scan an item to proceed directly to the item detail screen (far right).

-Or-



Enter the item search criteria



Select Process.



Select an item in the list.

Xstore Mobile displays details about the item.



Select **Back** to return to the sale screen.

-Or-

Continue with the appropriate procedure:

- "Add Item to Transaction" on page 71
- <u>"Print Rain Check"</u> on page 72

#### **Add Item to Transaction**

Item Detail screen.

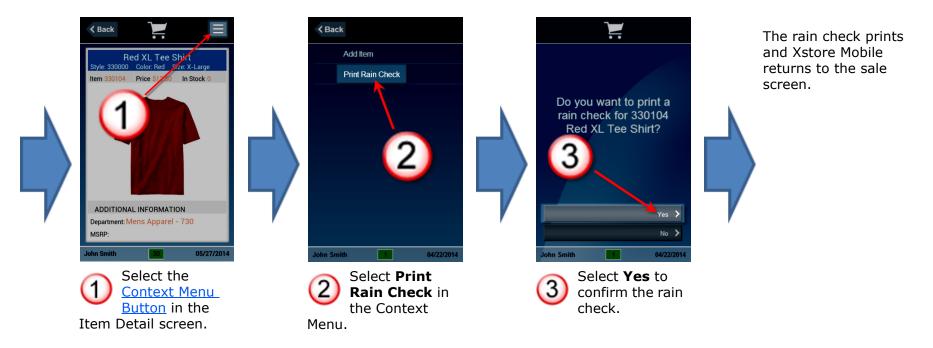
To add the searched-for item to a transaction:



The item is added to the transaction. Return to the sale screen.

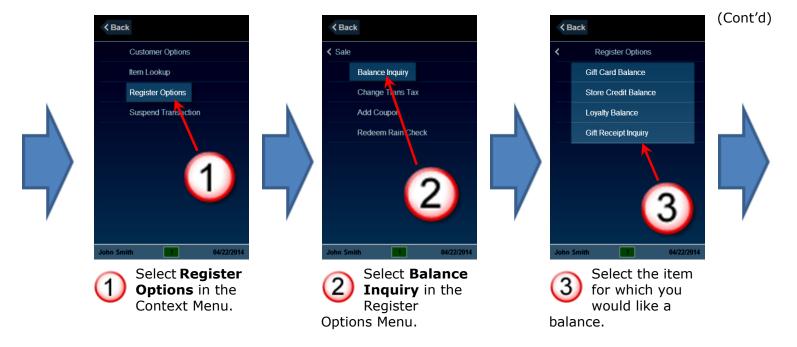
#### **Print Rain Check**

To print a rain check for the item:



# **Balance Inquiry**

To find the balance for any account or tender possessed by or associated with a customer:



(Cont'd)





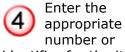






Scan or swipe the appropriate item.

-Or-



identifier for the item or account.



Select Ok.

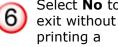


Card #3710357061621955 has the following account balances: LOYALTY = 57 Would the customer like a receipt?

Select Yes to with the

balance.

-Or-



receipt.

Xstore Mobile returns to the sale screen.



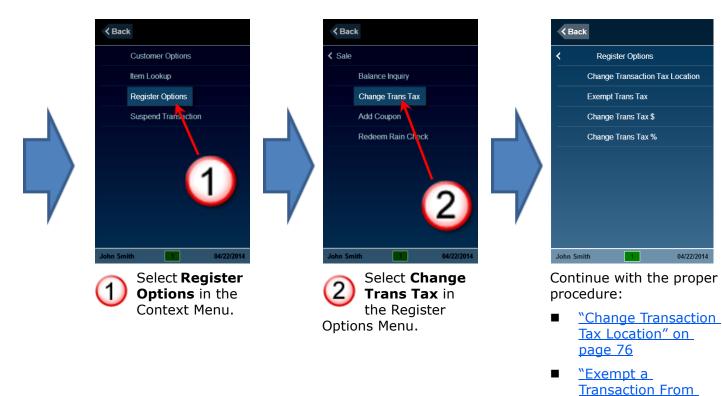
print a receipt



Select No to exit without

## **Change Transaction Tax**

To change the tax applied to a transaction:



Context Menu Options 75

Tax" on page 77

<u>page 78</u>

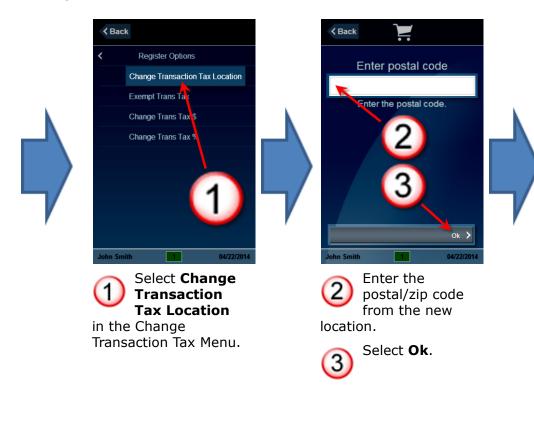
page 79

"Change Transaction
Tax Amount" on

"Change Transaction
Tax Percentage" on

### **Change Transaction Tax Location**

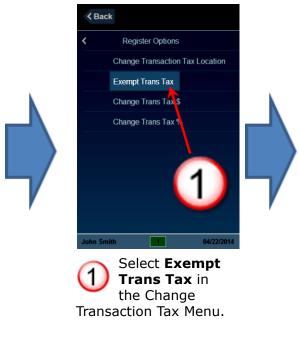
To change the location used to determine the tax on a transaction:



The transaction tax location is changed and Xstore Mobile returns to the item entry screen.

### **Exempt a Transaction From Tax**

To exempt a transaction from tax:





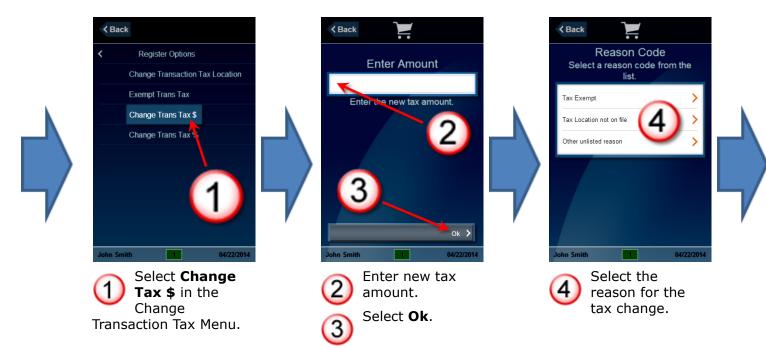


The tax exemption is applied to the transaction and Xstore Mobile returns to the item entry screen.

Select the reason for the tax change.

### **Change Transaction Tax Amount**

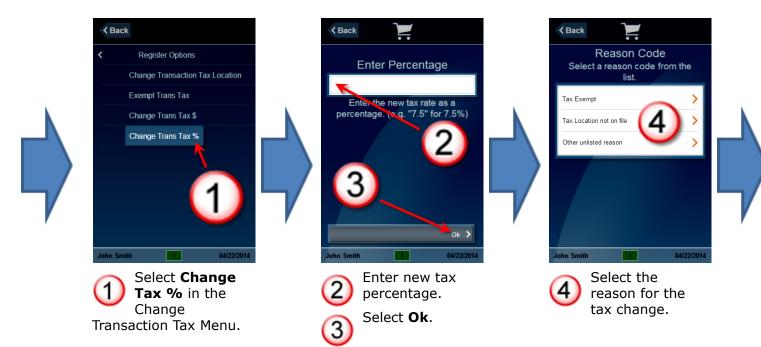
To change the amount of the transaction tax:



The amount of the tax for the transaction is changed to the new value and Xstore Mobile returns to the item entry screen.

### **Change Transaction Tax Percentage**

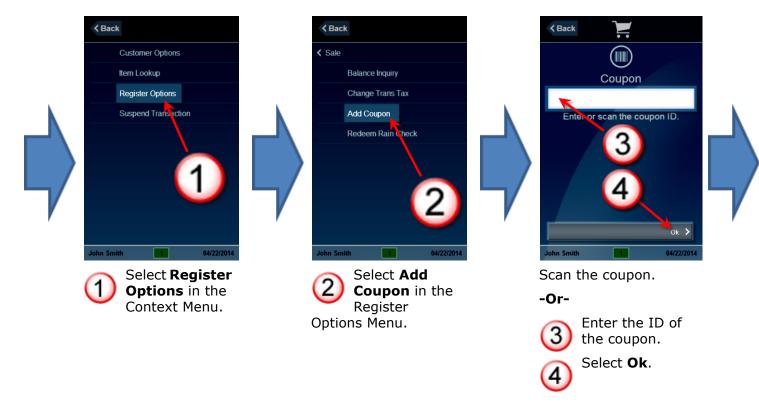
To change the percentage of the transaction tax:



The percentage of the tax for the transaction is changed to the new value and Xstore Mobile returns to the item entry screen.

## **Add Coupon**

To add a coupon to a transaction:



The coupon is applied to the transaction and Xstore Mobile returns to the item entry screen.

### **Redeem Rain Check**

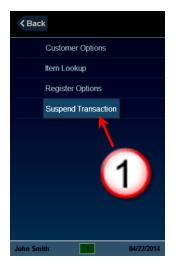
To redeem a rain check:



The rain check is applied to the transaction and Xstore Mobile returns to the item entry screen.

### **Suspend Transaction**

To suspend a transaction:



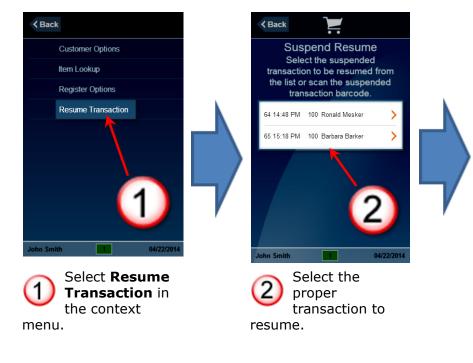
Select **Suspend Transaction** in the context menu to suspend a transaction.

Xstore Mobile returns to the Main Menu.

### **Resume Transaction**

A transaction must have no customer assigned and no items added for it to be used for resuming a suspended transaction.

To resume a suspended transaction:



The transaction resumes. Xstore Mobile returns to the sale screen.

## **Tender Transaction**

transaction tendering.

To tender a transaction:



Tender and complete the transaction. For more information:

- "Credit Card" on page 84
- "Gift Card" on page 87
- "Redeem Store Credit" on page 90

### **Credit Card**



Debit cards are not supported in Xstore® 7.1 Mobile.

To tender a transaction with a credit card:



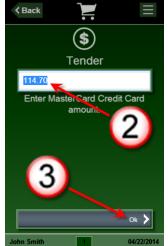
Enter the card information by doing one of the following:

 Swipe the card on the Xstore Mobile device.

#### -Or-

Enter the card manually. See "Manual Entry" on page 86.





Enter the tender amount.
Default value is the total for the

3

transaction.

Select **OK**.

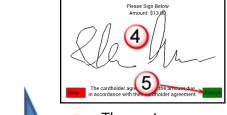
Xstore Mobile attempts to authorize the tender.

■ If authorization is successful,

continue the

 transaction.
 If authorization fails, either use a different tender, or continue with

"Tender Authorization" on page 92.



- The customer should provide their signature.
- After the customer signs, select Accept.

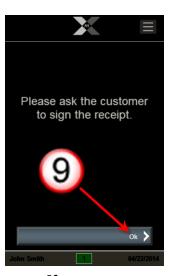




- Select the method for providing the receipt:
- Click **Email** to email the receipt and, if necessary, also provide a printed copy.
- Click **Print Only** to provide only a printed copy. The transaction ends.



- If you selected an email receipt, enter the customer's email address.
- Indicate whether to only create an email receipt, or whether to both email and print the receipt.



- If necessary, confirm that the customer signed the receipt.
- The transaction is complete.

## **Manual Entry**

To enter a card manually:



Continue the transaction.

### **Gift Card**

To tender a transaction with a gift card:



Select Gift Card.

Enter the card information by doing one of the following:

 Swipe the card on the Xstore Mobile device.

-Or-

Enter the card manually. See <u>"Manual Entry" on page 86</u>.

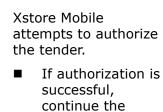








Select **OK**.

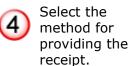


transaction.

If authorization fails, either use a different tender, or continue with "Tender Authorization" on page 92.



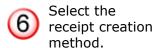




- Click Email to email the receipt and, if necessary, also provide a printed copy.
- Click Print Only to provide only a printed copy.



If you selected an email receipt, enter the customer's email address.



- Click Ok Email
   Only to only email the receipt.
- Click Ok Print & Email to both email and print the receipt.

The transaction is complete. Return to the Main Menu.



## **Manual Entry**

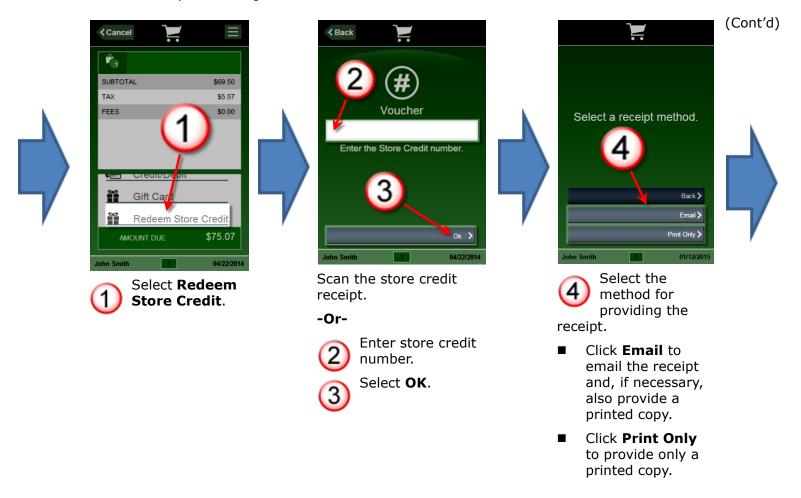
To enter a card manually:



Select **OK**.

### **Redeem Store Credit**

To tender a transaction by redeeming store credit:

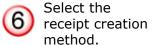


### (Cont'd)



The transaction is complete. Return to the

If you selected an email receipt, enter the customer's email address.



- Click **Ok Email** Only to only email the receipt.
- Click **Ok Print &** Email to both email and print the receipt.

Select the

Main Menu

### **Tender Authorization**

If an attempt to authorize a tender fails, perform one of the following procedures to continue with the same tender:

### **Retry Authorization**

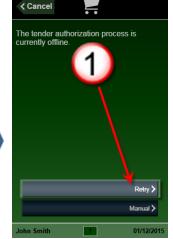
To attempt the authorization again:

Troubleshoot the connection to the authorizer.

 Check the network connection for the Xstore Mobile server.

Check whether the Xstore Mobile server can connect to the internet.





Select the **Retry** button.

If the retry is successful, continue the transaction.

If the retry fails, either perform another retry, or continue with "Manual Authorization" on page 93.

### **Manual Authorization**



Call the appropriate authorization provider to manually authorize a tender. Xstore Mobile does not provide manual authorization numbers.

To enter manual authorization information:



# **Item Lookup**



The Item Lookup option in Xstore Mobile provides the ability to look up and find information about items in the database.

The procedure for performing an item lookup is described in "Look Up An Item" on page 96.

# **Look Up An Item**

To perform an item lookup:



Select **Item Lookup** in the <u>Main</u> (Cont'd) <u>Menu</u>.

-Or-

Select **Item Lookup** in the <u>Inventory</u> area of the <u>Admin</u> menu.

-Or-

Select the Item Lookup button in the Item Entry screen.



05/27/2014



Scan an item to go directly to the Item Detail screen (far right).

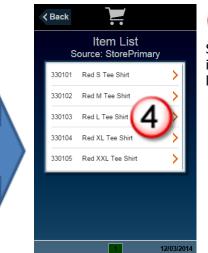
-Or-

2

Enter the item search criteria.

3

Select Process.



4

Select an item in the list.



Xstore Mobile displays details about the item.

When you are finished, select **Back** to return to the item lookup criteria screen.

96 Look Up An Item

# C H A P T E R

# **Time Clock**



The time clock area in Xstore Mobile provides users with the ability to clock in, clock out, and change the work code used for logging their time. All time clock options are accessed through the Time Clock button on the <a href="Main Menu">Main Menu</a> (left).

## **About This Chapter**

This chapter contains the following procedures:

- ■"Clock In" on page 98 Describes how to clock in.
- ■"Clock Out" on page 99 Describes how to clock out.
- ■"Change Work Code" on page 100 Describes how to change the work code under which your time is to be logged.

Xstore Mobile User Guide CHAPTER 6: Time Clock

## **Clock In**



You must be clocked out to clock in.

### To clock in:



98 Clock In

## **Clock Out**



You must be clocked in to clock out.

### To clock out:

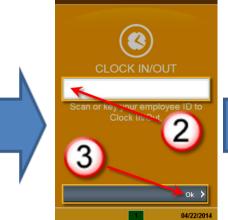


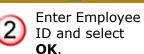
Select **Time** 

Clock in the

Main Menu.







Select the employee ID field to select it.



**Enter Password** and select **OK**.

Select the password field to select it.



You are now clocked out. Xstore Mobile returns to the Main Menu.

Select Clock Out.

Clock Out 99 **Xstore Mobile User Guide CHAPTER 6: Time Clock** 

# **Change Work Code**

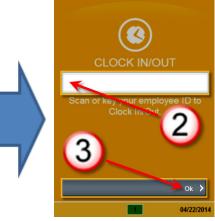


You must be clocked in to change your work code.

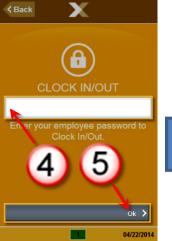
### To change your work code:

















Select **Time** Clock in the Main Menu.

- Enter Employee ID and select OK.
- Select the employee ID field to select it.

**Enter Password** and select **OK**.

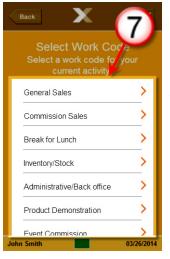
Select the password field to select it.

Select **Change** Work Code.

Change Work Code 100

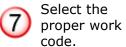


Continued from previous page.



Your work code has been changed.

Xstore Mobile returns to the Main Menu.



Change Work Code 101

Xstore Mobile User Guide CHAPTER 6: Time Clock

102 Change Work Code

# **Admin**

The Admin option provides access to Xstore back office functions available in Xstore Mobile.

## **About This Chapter**

This chapter provides information about the following procedures:

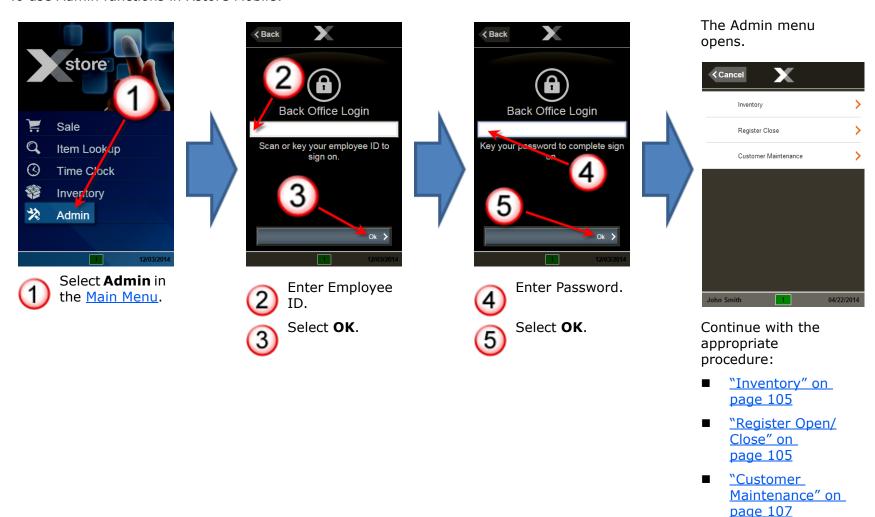
- ■"Using Admin Functions" on page 104
- ■"Inventory" on page 105
- ■"Register Open/Close" on page 105
- ■"Customer Maintenance" on page 107



Xstore Mobile User Guide CHAPTER 7: Admin

# **Using Admin Functions**

To use Admin functions in Xstore Mobile:



# **Inventory**

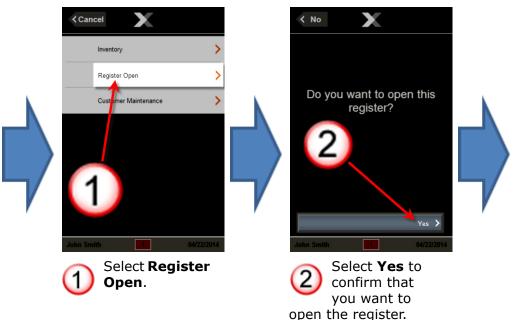
The inventory options in the Admin menu can be accessed from other areas of the application. See <u>"Receiving" on page 113</u> or <u>"Shipping" on page 131</u> for more information.

# **Register Open/Close**

The Xstore Mobile register is opened and closed through the Admin menu. The following procedures describe the method for opening and closing the register.

# **Open Register**

To open a closed Xstore Mobile register:



The store opens and Xstore Mobile returns to the Admin menu.

Inventory 105

Xstore Mobile User Guide CHAPTER 7: Admin

# **Close Register**

To close an open Xstore Mobile register:



The store closes and Xstore Mobile returns to the Admin menu.

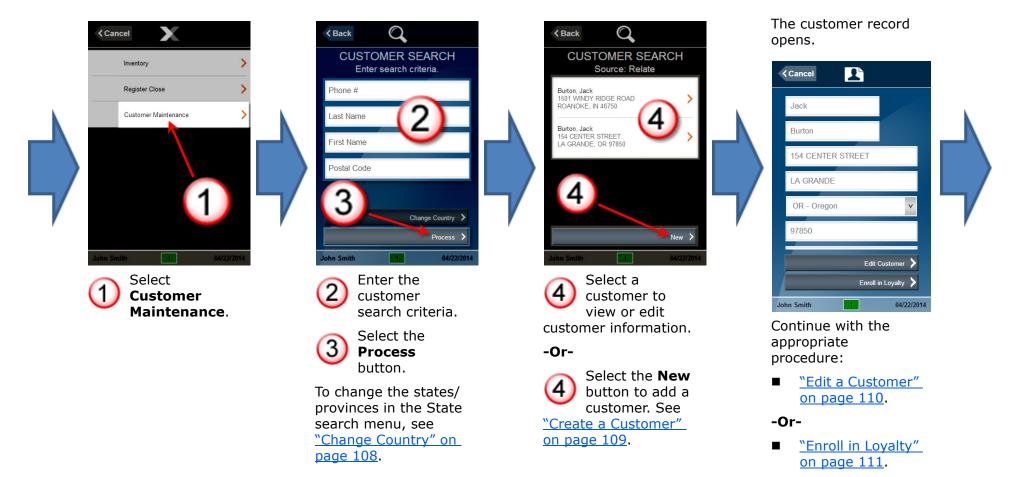
106 Register Open/Close

### **Customer Maintenance**

The Customer Maintenance option provides the ability to search for, view, and edit customer information, including adding loyalty cards to customer records.

### **Customer Search**

To search for a customer:

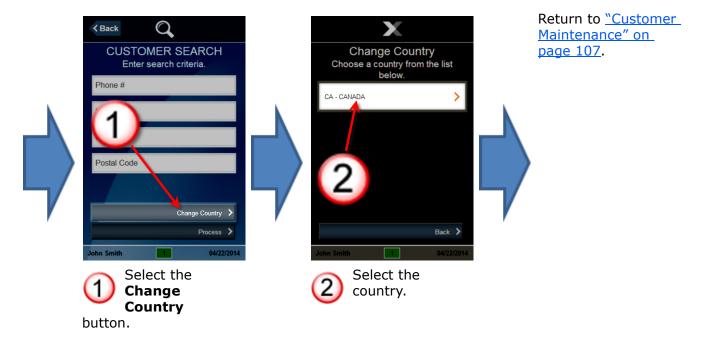


Customer Maintenance 107

Xstore Mobile User Guide CHAPTER 7: Admin

# **Change Country**

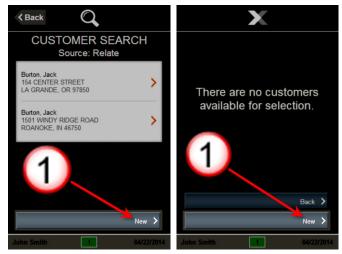
To change the states/provinces in the State field (if present) to those of a different country:



108 Customer Maintenance

#### **Create a Customer**

To create a new customer record:



Select the **New** button.



Enter the information for the customer.

Select the Save Changes button.

The customer is created. Xstore Mobile continues to the customer information screen.

Xstore Mobile User Guide CHAPTER 7: Admin

#### **Edit a Customer**

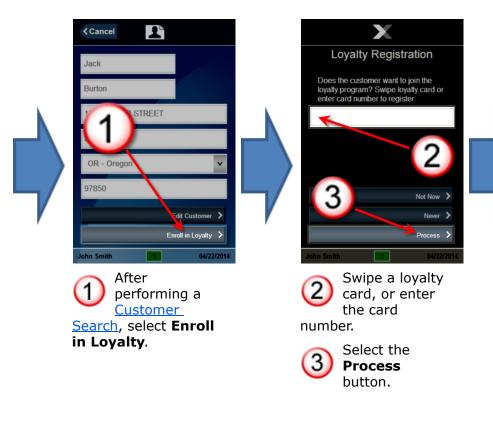
To edit customer information:



The customer information is saved and Xstore Mobile returns to the customer information screen.

## **Enroll in Loyalty**

To add a loyalty card to a customer account:



The loyalty card is assigned to the customer and Xstore Mobile returns to the view customer screen.

Xstore Mobile User Guide CHAPTER 7: Admin

# Receiving



Inventory receiving can be performed through Xstore Mobile. Through a handheld device, you can create a receiving document, open a receiving document, scan in items, and scan items directly into Xstore's inventory.

## **About This Chapter**

This chapter includes the following procedures:

- "Start Receiving" on page 114
- "Search for a Receiving Document" on page 116
- "Create a New Receiving Document" on page 117
- "Select or Add a Carton" on page 118

- "Item Entry Screen" on page 119
- "Add a Comment to a Document" on page 127
- "Receive Document in Total" on page 128
- "Save Document" on page 129

Xstore Mobile User Guide CHAPTER 8: Receiving

## **Start Receiving**

Document" on page 116.

The receiving process can be started through either the Main Menu, or the Admin menu.

#### **Main Menu**

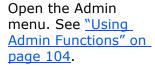
To start the receiving process through the Main Menu:



114 Start Receiving

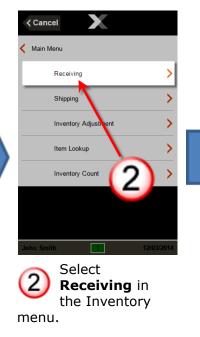
## **Admin Menu**

To start the receiving process through the Admin menu:

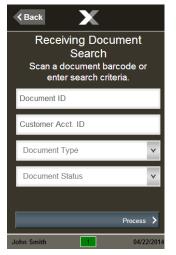








The Receiving document search screen opens.

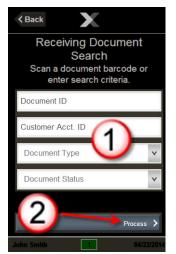


Continue with "Search for a Receiving Document" on page 116 or "Create a New Receiving Document" on page 117

Start Receiving 115

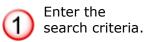
# **Search for a Receiving Document**

To search for and select a receiving document:



Scan a receiving document ID to open the carton list for the document (far right).

-Or-



Select **Process**.

Receiving
Scan or select from the following list:

ASN
ASN11PA113111111C

STORE TRANSFER
TF11PA113111119

ASN
ASN11PA113111117

CLOSED
Y

John Smith

1

04/22/2014

Select the correct receiving document in the list.

The carton list opens.



Continue with the appropriate procedure:

- "Select or Add a Carton" on page 118
- \*Add a Comment to a Carton" on page 125
- "Save Document" on page 129

# **Create a New Receiving Document**

To add a new receiving document:



Xstore Mobile User Guide CHAPTER 8: Receiving

## **Select or Add a Carton**

To select or add a carton for a receiving shipment:



Scan a carton ID.

-Or-

1 Enter a carton ID.

-Or-

Select to select the proper carton.

The <u>Item Entry Screen</u> opens.

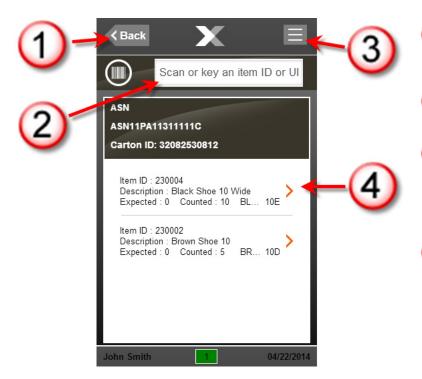


If you added a new carton, the <u>Item Entry Screen</u> will not have any items listed (right).

118 Select or Add a Carton

# **Item Entry Screen**

The item entry screen can be used for the following functions:



Back button.

Select this <u>Back Button</u> to return to the carton selection screen.

Item entry field.

See <u>"Enter Items" on page 120</u>.

Context Menu Button.

Select the  $\underline{\text{Context Menu Button}}$  for access to:

- "Add a Comment to a Carton" on page 125
- "View Exceptions" on page 126
- Receiving Items
  - Each item displays information about an item in the receiving document.

Select an item for access to:

- "Change Item Quantity" on page 121
- "Void a Line Item" on page 122

**Xstore Mobile User Guide CHAPTER 8: Receiving** 

#### **Enter Items**

To enter items into a received shipment:



-Or-

Enter an Item ID.

If prompted for an item quantity:



Enter the item quantity.

Select **OK**.

Xstore Mobile returns to the item entry screen.

Repeat these steps for each item in the carton.

When you have finished entering the items in a carton, select **Back** to return to the carton entry screen.



## **Change Item Quantity**

The change the number of an item in a carton:

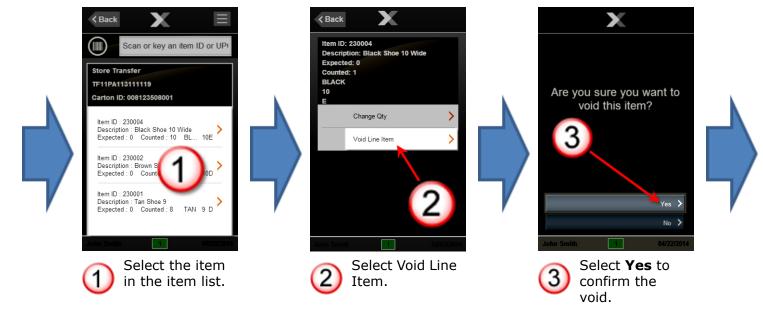


The item quantity is changed and Xstore Mobile returns to the item entry screen.

Xstore Mobile User Guide CHAPTER 8: Receiving

#### **Void a Line Item**

To remove a line item from a carton:



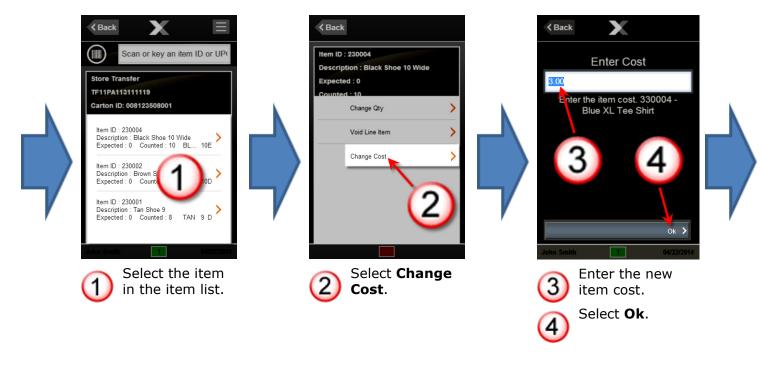
The item is removed and Xstore Mobile returns to the item entry screen.

## **Change Item Cost**



This option is only available if Stock Valuation is enabled in Xstore Mobile.

To change the cost of an item for Stock Valuation:



The cost of the item is updated and Xstore Mobile returns to the item entry screen.

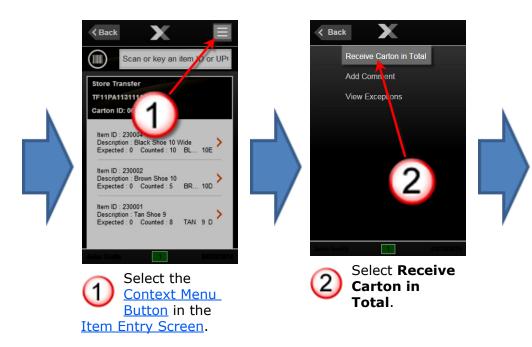
Xstore Mobile User Guide CHAPTER 8: Receiving

#### **Receive Carton in Total**

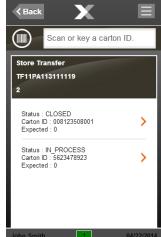
To receive all items within a carton:



The Receive Carton in Total option is only available on cartons with a status of OPEN, and for which no items have yet been received.

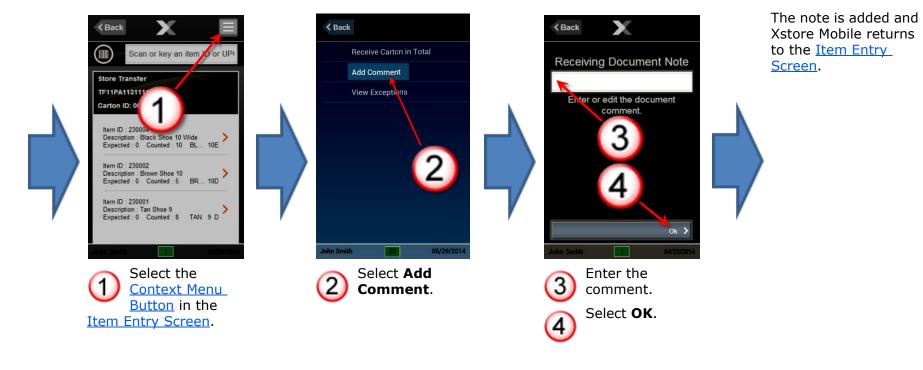


The received quantities of the items in the carton are set to the expected quantities, the carton is closed, and Xstore Mobile returns to the carton selection screen.



#### Add a Comment to a Carton

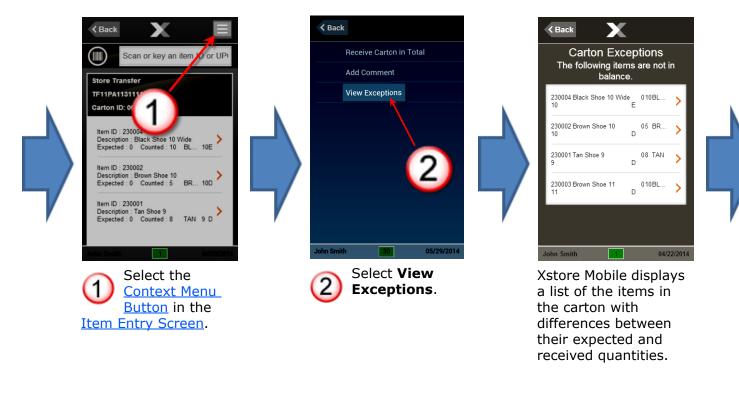
To add a comment to a carton:



Xstore Mobile User Guide CHAPTER 8: Receiving

## **View Exceptions**

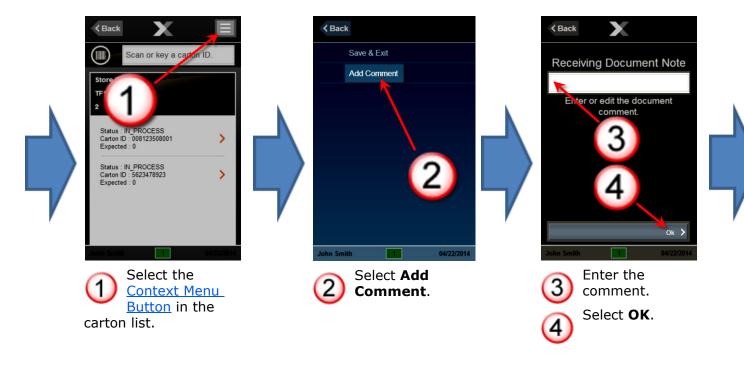
To search for items with differences between their expected and received quantities:



When you are finished viewing the item exceptions select **Back** to return to the Item Entry Screen.

## **Add a Comment to a Document**

To add a comment to a receiving document:



The note is added and Xstore Mobile returns to the carton list.

Add a Comment to a Document

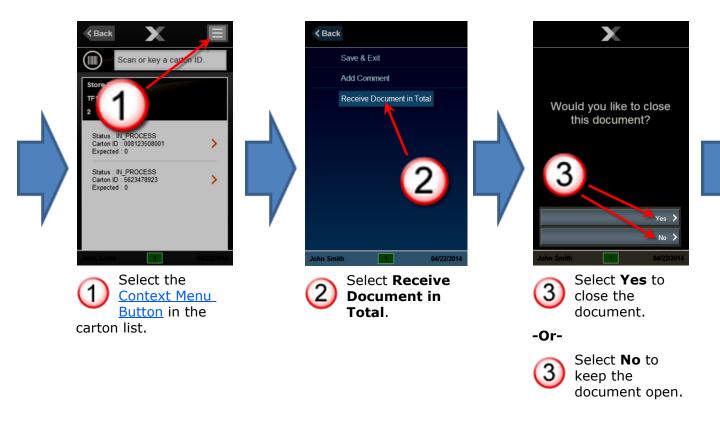
Xstore Mobile User Guide CHAPTER 8: Receiving

## **Receive Document in Total**



The ability to receive a document in total must be enabled for this option to be available in Xstore Mobile.

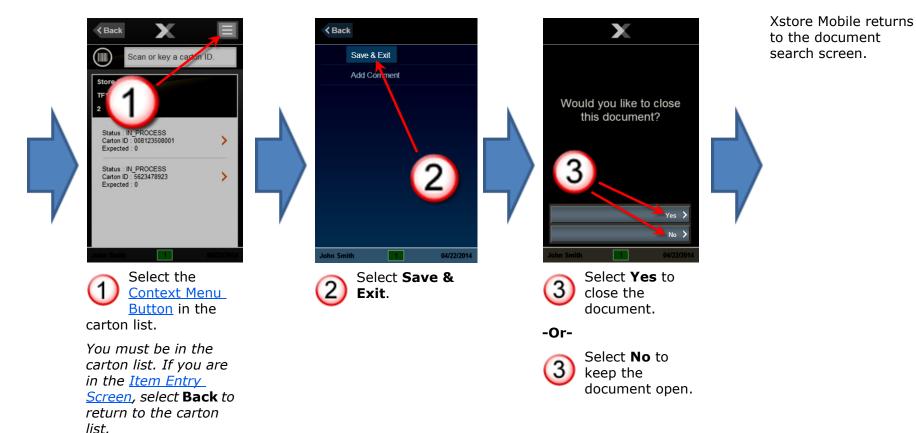
To receive all items within a document:



The received quantities of all the items in all the cartons are set to the expected quantities and the cartons are all closed. Xstore Mobile returns to the carton selection screen.

## **Save Document**

To save changes to a receiving document:



Save Document 129

Xstore Mobile User Guide CHAPTER 8: Receiving

130 Save Document

# C H A P T E R

# **Shipping**



Inventory shipping can be performed through Xstore Mobile. Through a handheld device, you can create a shipping document, open a shipping document, and scan items directly into a shipment.

## **About This Chapter**

This chapter includes the following procedures:

- "Start Shipping" on page 132
- "Search for a Shipping Document" on page 134
- "Create a New Shipping Document" on page 135
- "Enter Shipping Items" on page 137
- "Change Item Quantity" on page 138

- "Void a Line Item" on page 139
- \*Add a Comment to a Shipping Document" on page 140
- "Look Up an Item" on page 141
- "View Exceptions" on page 144
- "Save Document" on page 145

Xstore Mobile User Guide CHAPTER 9: Shipping

# **Start Shipping**

Document" on page 134.

The shipping process can be performed through either the Main Menu, or the Admin menu.

#### **Main Menu**

To start the shipping process through the Main Menu:



132 Start Shipping

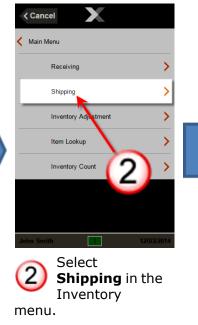
## **Admin Menu**

To start the shipping process through the Admin menu:

Open the Admin menu. See <u>"Using Admin Functions" on page 104</u>.



Select
Inventory in the Admin
Menu.



The Shipping document search screen opens.



Continue with "Search for a Shipping Document" on page 134 or "Create a New Shipping Document" on page 135

Start Shipping 133

# **Search for a Shipping Document**

To search for and select a shipping document:



Scan a shipping document ID to open that document (far right).

-Or-



Enter the search criteria.

2

Select **Process**.



Select the proper shipping document in the list.

The shipping document opens.



Continue with the appropriate procedure:

- "Enter Shipping Items" on page 137
- "Change Item Quantity" on page 138
- "Void a Line Item" on page 139
- "Add a Comment to a Shipping Document" on page 140
- "Look Up an Item" on page 141
- "View Exceptions" on page 144
- "Save Document" on page 145

# **Create a New Shipping Document**

To create a new shipping document:



The new shipping document opens.



#### Continue with:

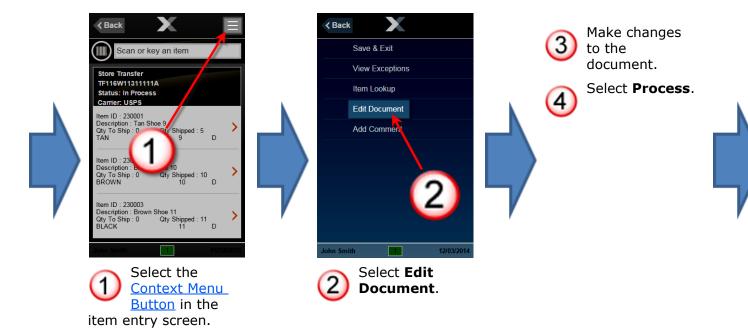
"Enter Shipping Items" on page 137

After adding one or more items:

- "Change Item Quantity" on page 138
- "Void a Line Item" on page 139
- \*Add a Comment to a Shipping Document" on page 140
- "Look Up an Item" on page 141
- "View Exceptions" on page 144
- "Save Document" on page 145

# **Edit a Shipping Document**

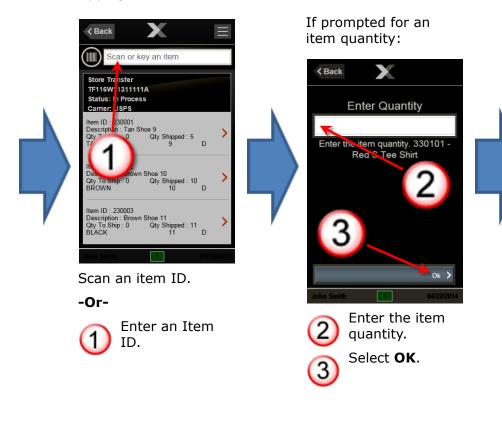
To edit a shipping document:



The shipping document is updated and Xstore Mobile returns to the item entry screen.

# **Enter Shipping Items**

To enter shipping items:



The item is added to the shipment and Xstore Mobile returns to the item entry screen.

Enter Shipping Items 137

Xstore Mobile User Guide CHAPTER 9: Shipping

# **Change Item Quantity**

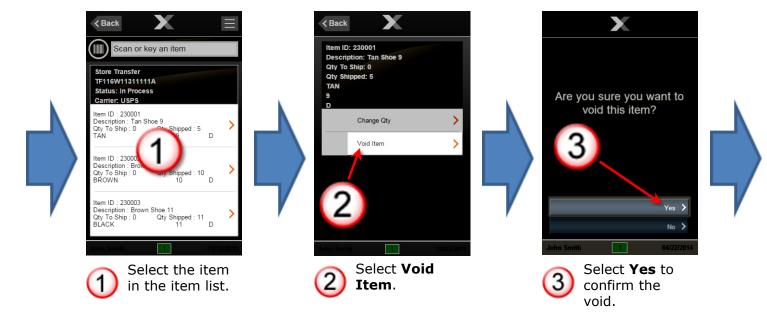
To change the quantity of an item in a shipment:



The item quantity is changed and Xstore Mobile returns to the item entry screen.

## **Void a Line Item**

To remove a line item from a shipment:

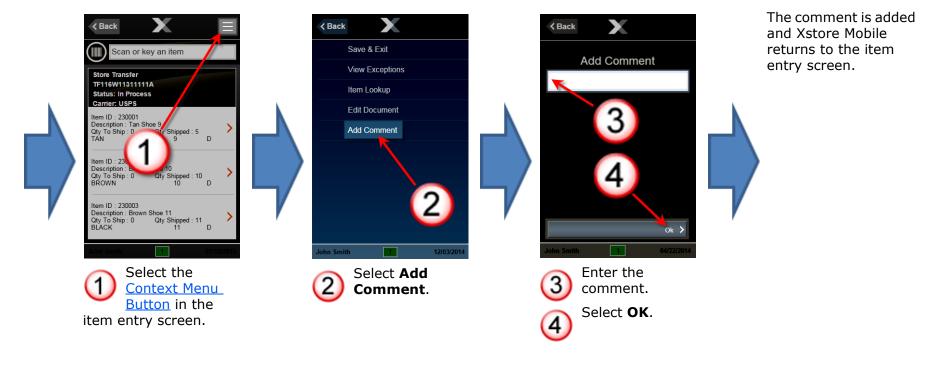


The item is removed from the shipment and Xstore Mobile returns to the item entry screen.

Void a Line Item 139

# **Add a Comment to a Shipping Document**

To add a comment to a shipping document:



# **Look Up an Item**

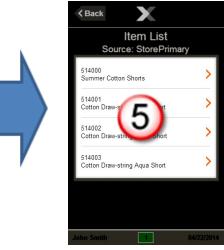
To look up an item:



Look Up an Item 141

Xstore Mobile User Guide CHAPTER 9: Shipping

(Cont'd) A list of items matching the search criteria is displayed.



Select the proper item.

The item is displayed.



Do one of the following:

- Select Back to return to the item search criteria screen.
- Add the item to the shipment. See "Add the Search Item" on page 143.

142 Look Up an Item

#### Add the Search Item

To add an item that has been located through the <u>Look Up an Item</u> procedure:



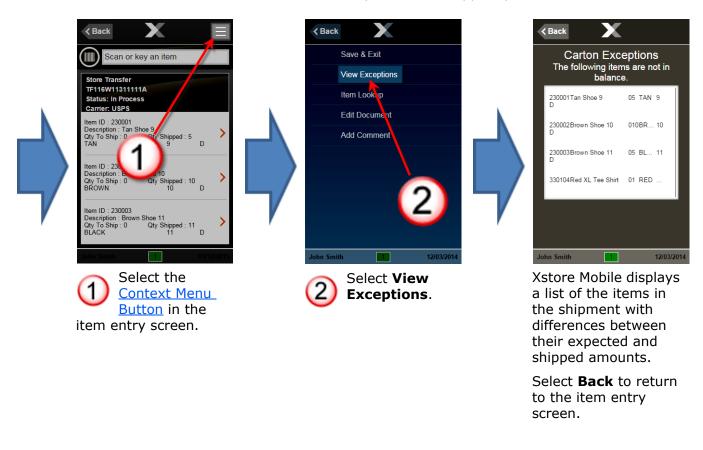
The item is added to the shipment and Xstore Mobile returns to the item entry screen.

Look Up an Item 143

Xstore Mobile User Guide CHAPTER 9: Shipping

# **View Exceptions**

To search for items with differences between their expected and shipped quantities:



144 View Exceptions

## **Save Document**

To save changes to a shipping document:

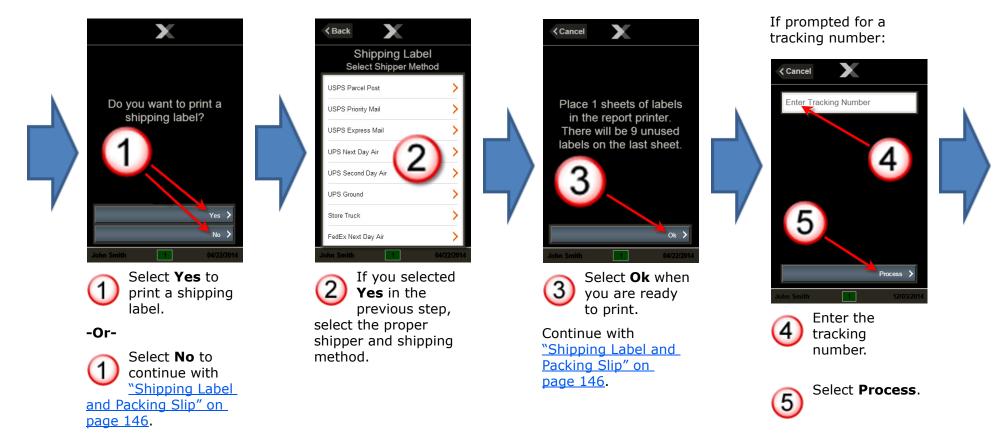


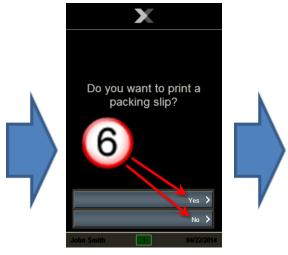
Continue with
"Shipping Label and
Packing Slip" on
page 146.

Xstore Mobile User Guide CHAPTER 9: Shipping

# **Shipping Label and Packing Slip**

To determine the printing options for the label and packing slip:





Xstore Mobile returns to the shipping document search criteria page.

- Select **Yes** to print a packing slip.
  - -Or-
- Select **No** to continue without printing a packing slip.

Xstore Mobile User Guide CHAPTER 9: Shipping

# **Inventory Counts**

Inventory counts can be performed using Xstore Mobile. Using a handheld device, you can create cycle counts and supply counts, perform counts, and submit completed counts.

## **About this Chapter**

This chapter includes the following procedures:

- "Open Inventory Count" on page 150
- "Inventory Count Search" on page 152

- "Create a Count" on page 153
- "Perform an Inventory Count" on page 158



# **Open Inventory Count**

An inventory count process can be started through the Main Menu, or the Admin Menu.

#### **Main Menu**

To start the receiving process through the Main Menu:



or <u>"Create a Count" on page 153.</u>

#### **Admin Menu**

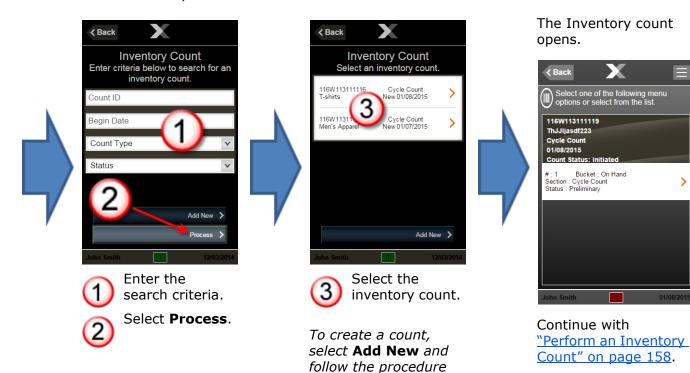
To start the shipping process through the Admin menu:



Open Inventory Count 151

# **Inventory Count Search**

To search for an inventory count:



"Create a Count" on

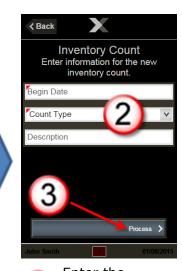
page 153.

### **Create a Count**

To create a new inventory count:







Enter the information describing the new count.

Select **Process**.

If you selected a Cycle Count as the count type, manage the items and hierarchy levels in the count:



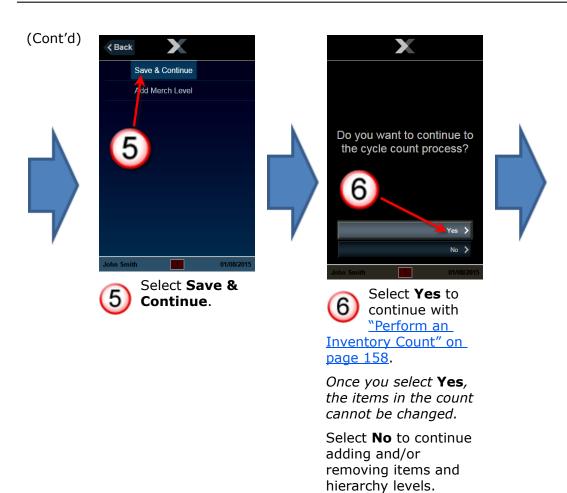
\*Add a Hierarchy Level to a Count" on page 156

"Remove an Item or Hierarchy Level from a Count" on page 157

Continue when the correct items are added to the count.



Select the context menu button.



## Add an Item to a Count

To add an item to a count:

Scan an item.

-Or-



ID.

The item is added to the count.

Repeat for each item to add to the count.

# Add a Hierarchy Level to a Count

To add a hierarchy level to a count:

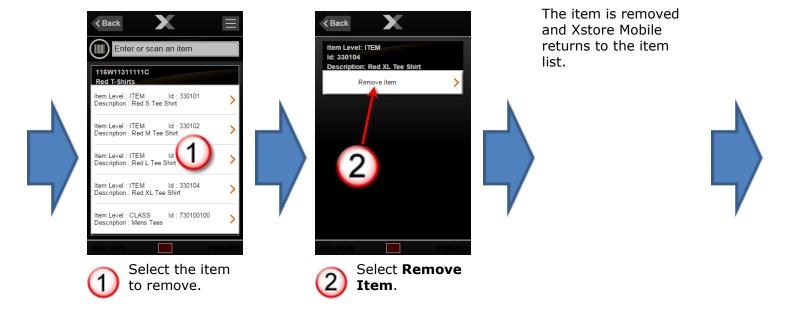


The hierarchy level is added to the count and Xstore Mobile returns to the item screen.

Repeat for each hierarchy level to add to the count.

# Remove an Item or Hierarchy Level from a Count

To remove an item or hierarchy level from a count:



# **Perform an Inventory Count**



The order in which you perform the actions below depends upon the policies in your store. For example, an actual count of items can be performed before initiating the count.

See the <u>Xstore Shipping</u>, <u>Receiving</u>, <u>& Inventory Guide</u> for more information about these processes.

#### **Initiate a Count**



When you initiate a count, Xstore Mobile takes a snapshot of the current inventory ledger. This step is usually performed on the day of count. This step can only be performed while the store is closed and online.

#### To initiate an inventory count:

If necessary, close the store.

A count can only be initiated while the store is closed.











Continue with <u>"Count Items" on page 159</u>.



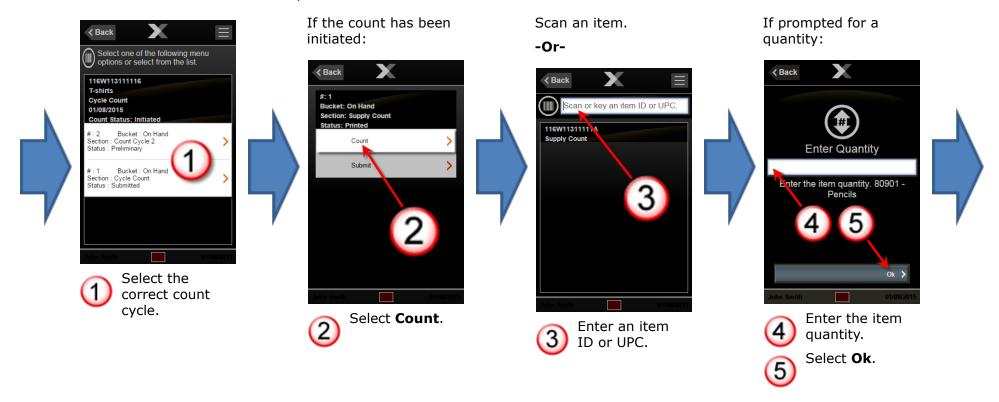
Select the context menu button.



Select Initiate Count.

#### **Count Items**

To count actual items in the store inventory:

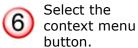


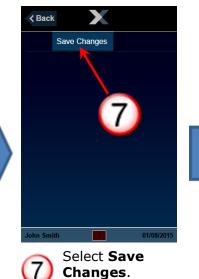
Scan or enter each item in the inventory count.

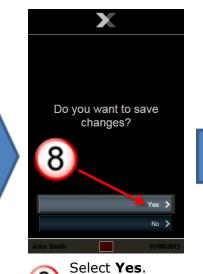
If necessary, make changes to the item counts:

"Change Item Quantity" on page 161 When the count is complete:





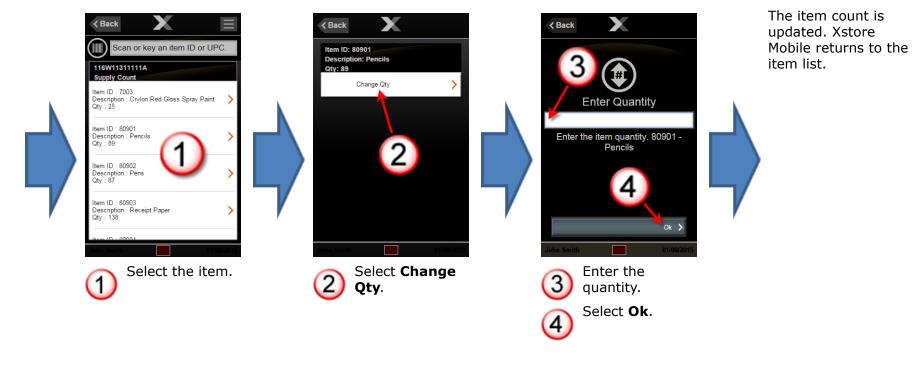




Xstore Mobile returns to the list of inventory buckets.

# **Change Item Quantity**

To change the quantity of an item in the count:



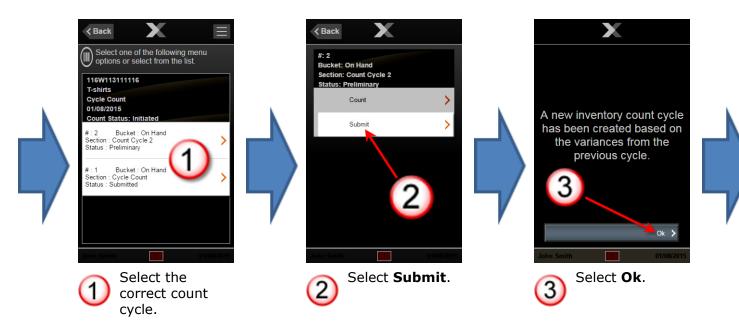
#### **Submit a Count**



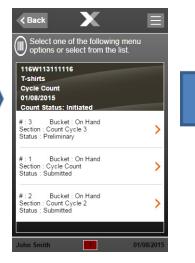
You can only submit a count that has been initiated. See <u>"Initiate a Count" on page 158</u> for more information.

After submitting a count, the count cannot be changed or updated.

#### To submit a count:



Xstore Mobile submits the count and a new count cycle is listed.



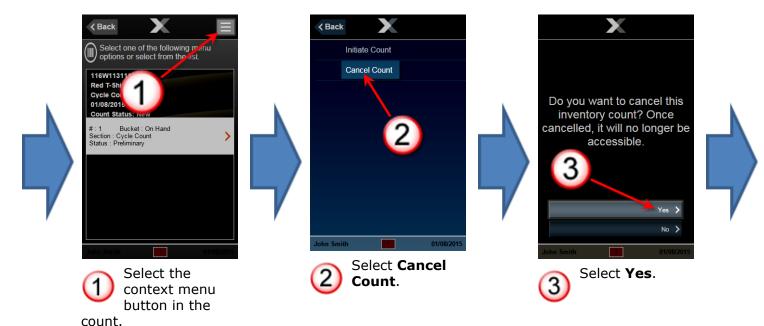
Perform a new count cycle, or select **Back** to return to the inventory count search screen.

## **Cancel a Count**



Once a count is canceled, it cannot be accessed. Canceling a count is the same as deleting a count.

To cancel a count:



The count is canceled. Xstore Mobile returns to the inventory count search screen.

# **Inventory Adjustment**



Inventory counts can be changed in Xstore Mobile using the inventory adjustment functionality. Inventory adjustments are performed through the Inventory menu item.

This chapter includes the following procedures:

- ■"Open Inventory Adjustment" on page 166
- ■"Perform an Inventory Adjustment" on page 168

# **Open Inventory Adjustment**

An inventory count process can be started through the Main Menu, or the Admin Menu.

#### Main Menu

To start the receiving process through the Main Menu:



#### **Admin Menu**

To start the shipping process through the Admin menu:

Open the Admin menu. See "Using Admin Functions" on page 104.

Cancel

Inventory

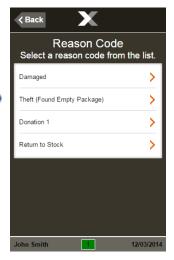
Open/Close Options

Customer Maint nance and Accounts

Customer Maint nance and Accounts

Select
Inventory
Adjustment in
the Inventory menu.

The Inventory Adjustment screen opens.



Continue with "Perform an Inventory Adjustment" on page 168.

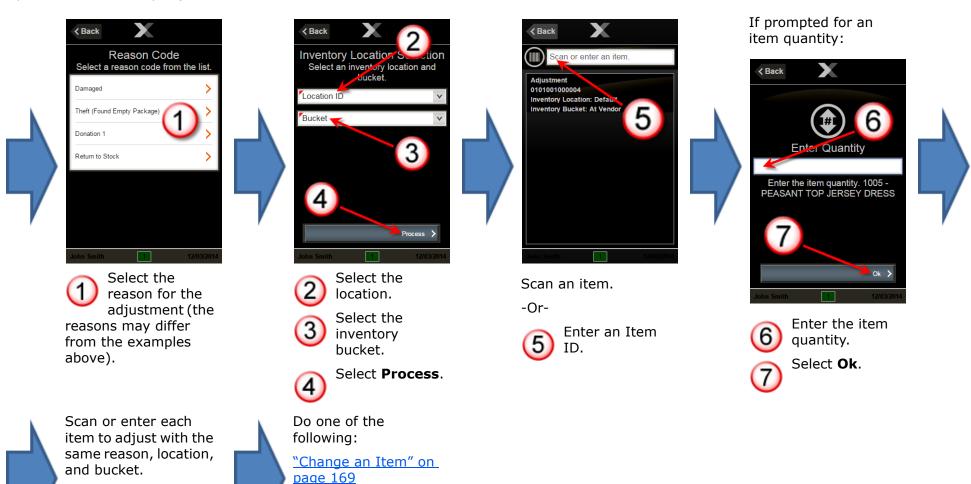
Menu.

Select

**Inventory** in the Admin

# **Perform an Inventory Adjustment**

To perform an inventory adjustment:

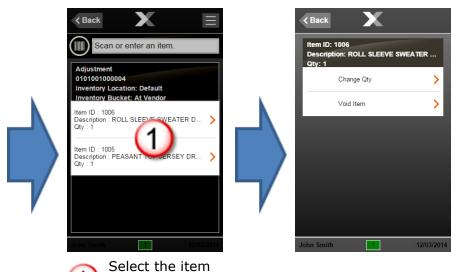


"Save and Exit" on

page 172

# **Change an Item**

To make changes to an inventory item being adjusted:



Do one of the following:

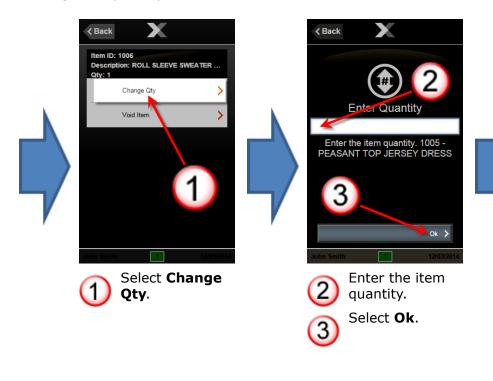
- ■"Change Item Quantity" on page 170
- ■"Void Item" on page 171



to change.

## **Change Item Quantity**

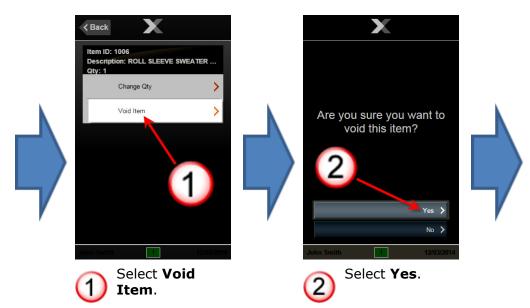
To change the quantity of an item:



Xstore Mobile returns to the item entry screen. The item quantity is updated.

#### **Void Item**

To void an item:



Xstore Mobile returns to the item entry screen. The item is removed.

#### Save and Exit

To save the inventory changes and exit:



The inventory changes are saved and Xstore Mobile returns to the inventory menu.

# CHAPTER 12

# **Item Transfer**

This chapter describes the procedures for transferring items from one inventory bucket to another.

# **About This Chapter**

This chapter contains the following procedures:

- <u>"Start Item Transfer" on page 174</u> Describes how to start an item transfer.
- <u>"Perform Transfer" on page 176</u> Describes the procedure for the item transfer.
- "Adjust Item" on page 179 Describes procedures for adjusting items in the transfer.
- <u>"Additional Options" on page 181</u> Describes additional options available in the item transfer screen.

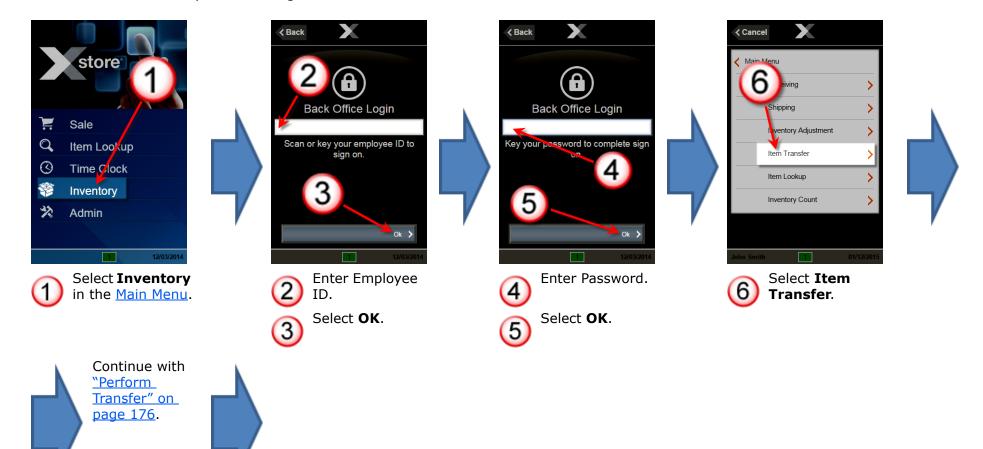
Xstore Mobile User Guide CHAPTER 12: Item Transfer

## **Start Item Transfer**

An item transfer can be performed through the Main Menu, or the Admin Menu.

#### **Main Menu**

To start the item transfer process through the Main Menu:

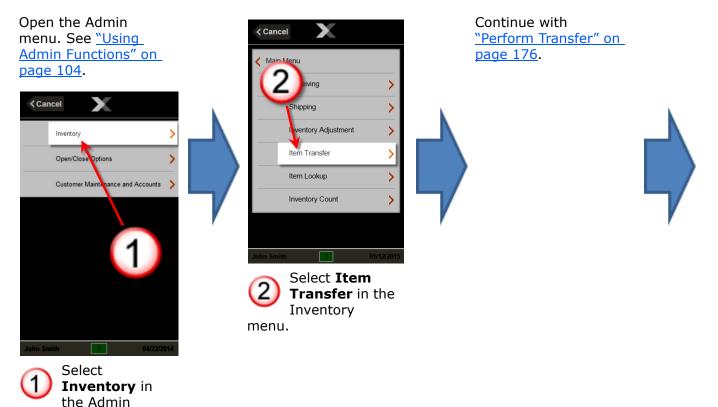


174 Start Item Transfer

#### **Admin Menu**

Menu.

To start the item transfer process through the Admin menu:



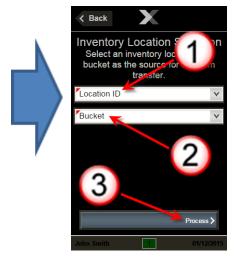
Start Item Transfer 175

Xstore Mobile User Guide CHAPTER 12: Item Transfer

## **Perform Transfer**

To perform an item transfer:

Select the location from which the item will be transferred:

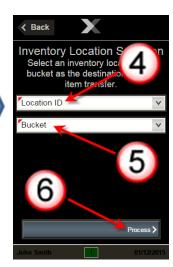


Select the source location for the item.

Select the source bucket for the item.

Select Process.

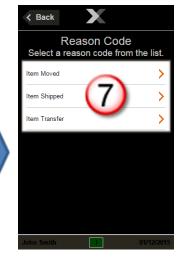
Select the location to which the item will be transferred:



Select the destination location for the item.

Select the destination bucket for the item.

Select Process.



Select the reason for the transfer.

Scan an item.

-Or-



Enter an item ID.

/ -Or-

Select an item to adjust. See "Adjust Item" on page 179.

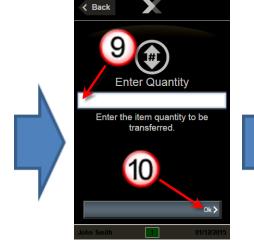
-Or-

Select the context menu for additional options. See

<u>"Change Item</u>

Quantity" on page 179

176 Perform Transfer



Repeat item entry and item adjustment for each item to include in the transfer.

If you are prompted for an item quantity:

Enter the item quantity.

Select **OK**.









Select the context menu when you are finished entering and adjusting items.

Select Save & Exit.

Perform Transfer *177*  Xstore Mobile User Guide CHAPTER 12: Item Transfer



Select Yes.

The item transfer completes. Return to the inventory menu.

178 Perform Transfer

# **Adjust Item**

# **Change Item Quantity**

To change the quantity of an item:

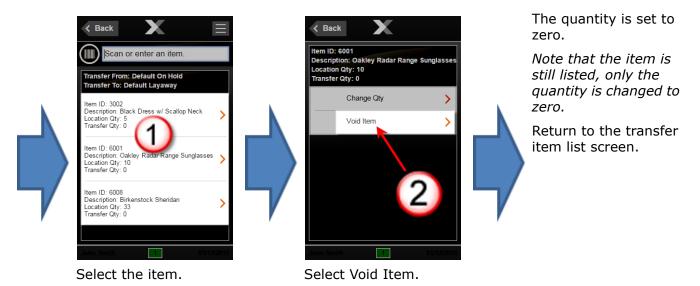


Adjust Item 179

Xstore Mobile User Guide CHAPTER 12: Item Transfer

#### **Void Item**

To remove an item from an item transfer:



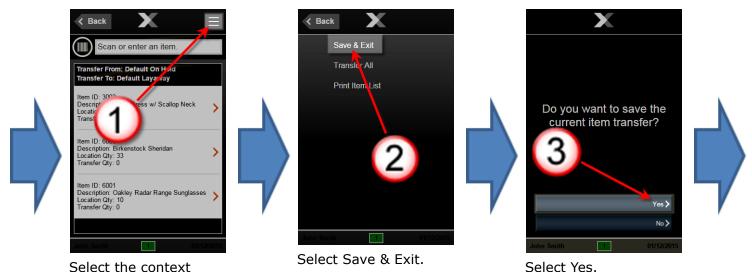
180 Adjust Item

# **Additional Options**

menu button.

#### Save & Exit

To save the transfer and return to the inventory screen:



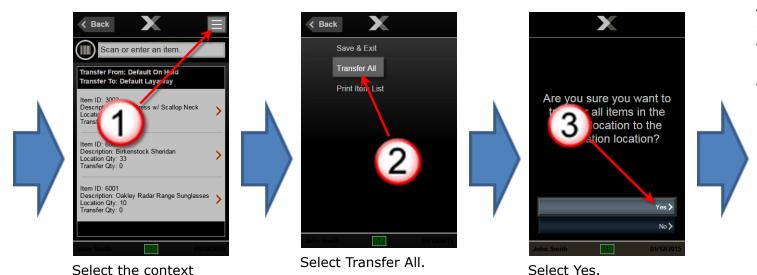
The item transfer completes. Return to the inventory menu.

Xstore Mobile User Guide CHAPTER 12: Item Transfer

#### **Transfer All**

menu button.

To include all the items in the list, setting each item to the maximum quantity:



The quantity of every item in the list is set to its maximum value.

Return to the item transfer list screen.

## **Print Item List**

To print a list of items in the transfer:

menu button.



# APPENDIX

# **Item Adjustment**

After items have been added to a sale transaction, adjustments can be made to the items through the sale screen.

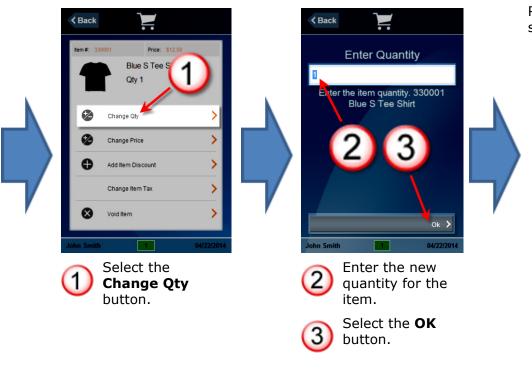
## **About This Chapter**

After selecting an item in the sale screen (see "Adjust an Item" on page 61), the following options are available:

- <u>"Change Item Quantity" on page 186</u> Change the quantity of an item in a transaction.
- <u>"Change Item Price" on page 187</u> Change the price of an item.
- "Discount an Item" on page 188 Add a discount to an item.
- <u>"Change Item Tax" on page 189</u> Change the tax on an item.
- "Void Item" on page 194 Remove an item from a transaction.
- "Modify Discount" on page 195 Modify the discount on an item.
- "Remove Discount" on page 197 Remove the discount on an item.
- <u>"Change Commissioned Associate" on page 198</u> Change the associate who receives the commission on an item.
- "Add a Comment" on page 200 Add a comment to a line item.
- "Remove Comment" on page 201 Remove a comment from a line item.

# **Change Item Quantity**

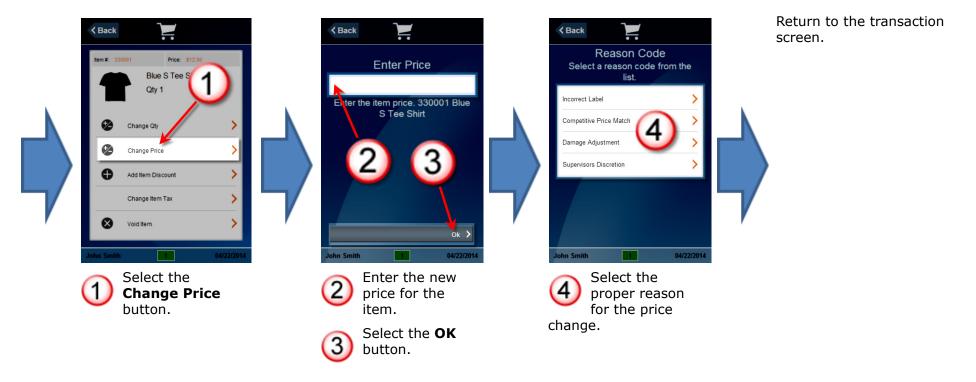
To change the quantity of a selected item (see "Adjust an Item" on page 61):



Return to the transaction screen.

# **Change Item Price**

To change the price of a selected item (see "Adjust an Item" on page 61):



Change Item Price 187

## **Discount an Item**

To add a discount to a selected item (see "Adjust an Item" on page 61):



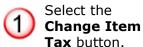
Return to the transaction screen.

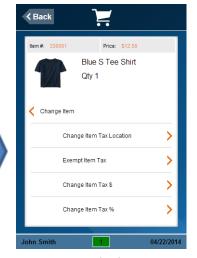
188 Discount an Item

# **Change Item Tax**

To change the tax on a selected item (see "Adjust an Item" on page 61):





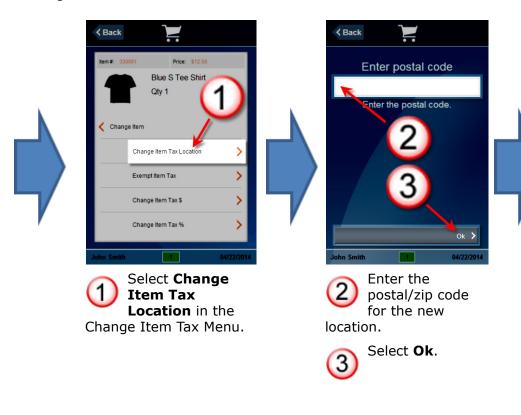


Continue with the proper procedure:

- "Change Item Tax Location" on page 190
- Exempt an Item
  From Tax" on
  page 191
- "Change Item Tax Amount" on page 192
- "Change Item Tax Percentage" on page 193

## **Change Item Tax Location**

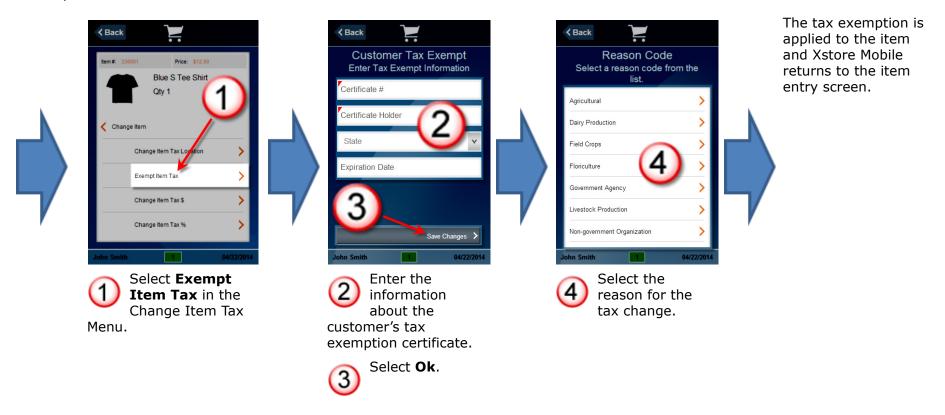
To change the location used to determine the tax on an item:



The tax location for the item is changed and Xstore Mobile returns to the item entry screen.

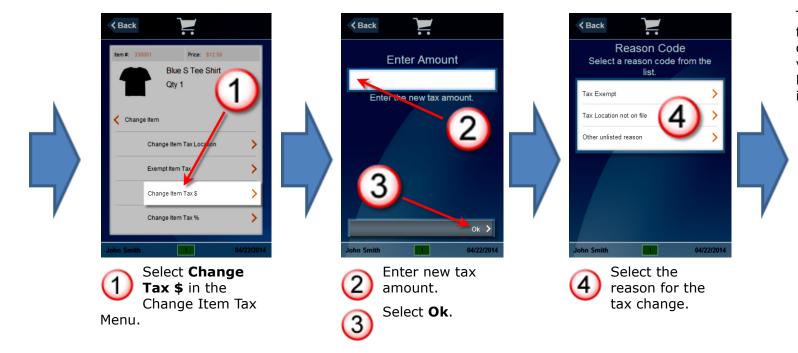
## **Exempt an Item From Tax**

To exempt an item from tax:



## **Change Item Tax Amount**

To change the amount of the item tax:



The amount of the tax for the item is changed to the new value and Xstore Mobile returns to the item entry screen.

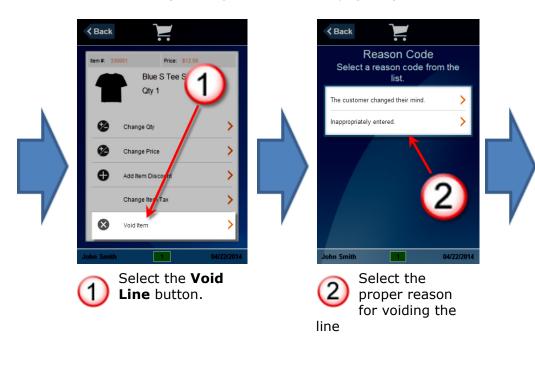
## **Change Item Tax Percentage**

To change the percentage of the item tax:



# **Void Item**

To void a selected item (see "Adjust an Item" on page 61):



Return to the transaction screen.

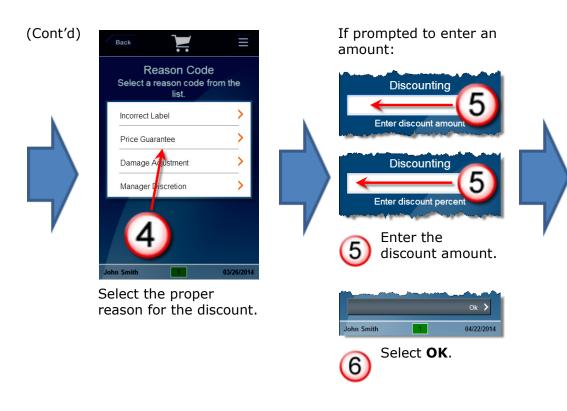
194 Void Item

# **Modify Discount**

To change the discount on a selected item (see "Adjust an Item" on page 61):



Modify Discount 195

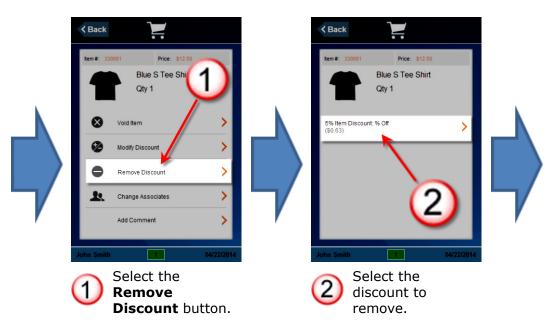


The discount is modified and Xstore Mobile returns to the item entry screen.

196 Modify Discount

# **Remove Discount**

To remove a discount on a selected item (see "Adjust an Item" on page 61):



The discount is removed and Xstore Mobile returns to the sale screen.

Remove Discount 197

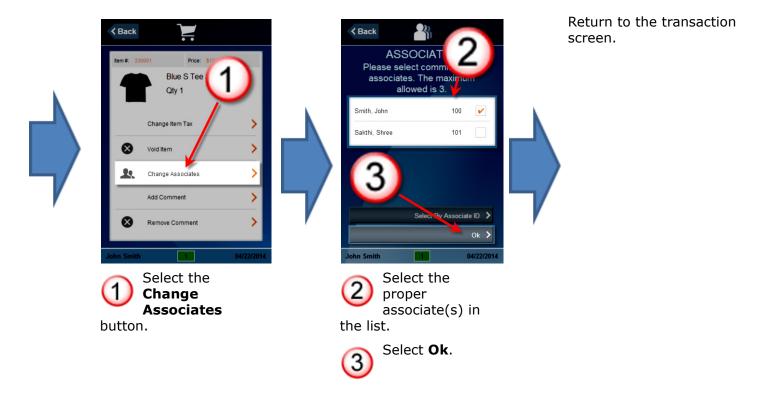
# **Change Commissioned Associate**

To change the associate receiving a commission on a selected item (see "Adjust an Item" on page 61), do one of the following:

- "Select the Associate From a List" on page 198
- "Enter the ID for an Associate" on page 199

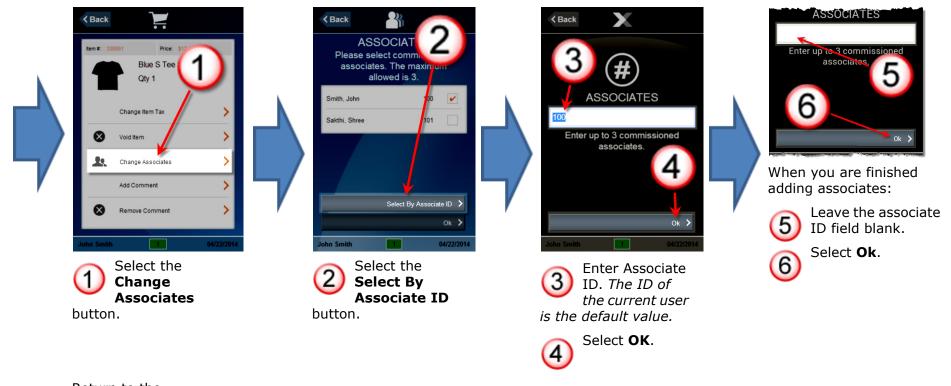
#### **Select the Associate From a List**

To select the new commissioned associate from a list of associates:



#### **Enter the ID for an Associate**

To select the new commissioned associate by entering an associate ID, do the following:



Return to the transaction screen.

# **Add a Comment**



Multiple comments can be entered on one item.

To add a comment to a selected item (see "Adjust an Item" on page 61):



200 Add a Comment

## **Remove Comment**

To remove a comment from a selected item (see "Adjust an Item" on page 61):



remove.

The comment is removed and Xstore Mobile returns to the transaction screen.

Remove Comment 201

202 Remove Comment

B APPENDIX

# **SSL** and Certificates

Xstore Mobile requires SSL certificates to be installed on Xstore and Xstore Mobile to ensure secure communication over a network.



For more information about SSL and certificates, see the <u>Xstore</u> Implementation Guide.

#### **Certificates**

Certificates can be used for a number of purposes:

- **1. Encryption** A piece of sensitive data can be encrypted with a public key. It can then only be decrypted using the private key.
- 2. **Signing** To create a signature on a piece of data using your private key. Others can later use your private key to verify that the piece of data is identical to the data that you signed.
- **3. Authentication** You prove that you are who you say you are by encrypting a known piece of information using the private key. Another party can then decrypt the information using the public key and verify that the result is the same as what was requested to be encrypted. You can also prove that you are who you say you are by being able to decrypt and use a piece of data that was encrypted using the public key.

Of these uses, only encryption is required when Xstore Mobile communicates with external systems. Certificates are used at the beginning of an SSL session to create a secure channel for passing other information.

## **Certificate Signing**

Certificates are signed by a Certificate Authority (CA), or they can be self-signed.

#### **CA-Signed Certificates**

Web browsers include a database of trusted public Certificate Authorities when they are distributed. Additional trusted certificates can typically be imported through a menu within the web browser. Java distributions have a similar database of trusted public Certificate Authorities, but any additional certificates must be managed by a program written in Java. These are typically stored in a truststore that a Java program can reference.

If you already have an internal CA set up with a certificate that was signed by a public CA (VeriSign, Entrust, etc.), any certificates issued by your CA can be used without distributing that public CA's trust information. Only the internal CA's information would need to be distributed.

#### **Self-Signed Certificates**

If you don't already have such a CA set up, you can save yourself the cost of a signed CA certificate without the extra management overhead of self-signed certificates by setting up an internal CA and publishing the trust information in the appropriate locations in your infrastructure. Such a CA is sometimes called a Root Certificate Authority or Root CA.

Once you add a Root CA's certificate to the various Certificate Trust Lists (CTLs), any certificates signed by this Root CA will work the same as those signed by a public CA like VeriSign, Entrust, and many others.

## **About this Chapter**

This chapter contains the following information:

- "OpenSSL & Keytool Utility" on page 205 Describes the installation and configuration of OpenSSL and the keytool utility.
- <u>"Create a CA-Signed Certificate" on page 206</u> Provides the procedure for creating a certificate signed by a Certificate Authority (CA).
- <u>"Create and Deploy a Self-Signed Certificate" on page 211</u> Provides the procedure for creating a self-signed certificate.
- <u>"Create a Certificate Authority" on page 214</u> Describes how to create a certificate authority.

# **OpenSSL & Keytool Utility**

The steps in this guide assume that both OpenSSL and Sun's keytool utility have been installed and added to the system path. A JRE must exist on the secured system before you can create the SSL certificates.

## Where To Find OpenSSL & Sun's Keytool Utility

OpenSSL can be obtained from: http://www.slproweb.com/products/Win32OpenSSL.html

Use latest release version for your operating system.

The keytool utility comes with Java.

OpenSSL requires the 2008 SP1 Redistributable package of Microsoft Visual C++.

If needed, go to:

http://www.microsoft.com

and perform a search for "Microsoft Visual C++ 2008 SP1 Redistributable".

## How to Add OpenSSL & Keytool Utility to the System Path



The example shown below assumes a 32-bit Operating System. If you have a 64-bit Operating System be sure to use the correct version!

- 1. Click Control Panel.
- **2.** Double-click the **System** icon in the Control Panel.
- **3.** Click the **Advanced** tab (or **Advanced system settings** on Windows Vista or Windows 7, or **Advanced System Settings** link using Windows Server 2008 R2 Std).
- **4.** In the System properties window, click the **Environment Variables** button. (Within the properties screen, click the **Advanced** tab-->**Find Environment Variables**.)
- 5. In System variables, click the variable named Path, then click Edit.
- **6.** Add the target directory to the value of the variable (Variable value field), using a semicolon as a separator.

#### **Examples**

For example, if you want to add the path to OPENSSL/bin to your system, which is located at c:\OpenSSL-Win32\bin, you would enter the following at the end of the Path:

;c:\OpenSSL-Win32\bin

For a 64-bit OS, add:

;c:\OpenSSL-Win64\bin

# **Create a CA-Signed Certificate**

## What You Need to Know Before Creating Certificates

- The steps in this section assume that both OpenSSL and Sun's keytool utility have been installed <u>and added to the system path</u>. See <u>"OpenSSL & Keytool Utility" on page 205</u>.
- While following the steps outlined in this section, you will be prompted to enter information that will be embedded into the new certificate. Ensure that the information conforms to the requirements defined in each procedure.
- The provided commands include xstoremobile-YYYYMMDD, representing the alias of the key. This alias can be any unique value. Including the date in the alias allows you to more easily identify the key and track when the keys should be rotated.
- Be sure to replace "YYYYMMDD" with a current date string throughout this procedure.



## **Create And Deploy a CA-Signed Certificate**

Perform the following procedure to create and deploy a CA-Signed Certificate for Xstore Mobile:

**1.** To create a directory structure for key creation, type the following commands:

C:\>md C:\cert\xstoremobile
C:\>cd C:\cert\xstoremobile

**2.** To create a Keystore, Key, and Certificate Signing Request, type the following command:

C:\cert\xstoremobile>keytool -genkey -keystore keystore -alias xstoremobile-YYYYMMDD -keyalg RSA -keysize 2048 -validity 395



The number following the -validity switch in the keytool commands represents the validity timeframe for the key. PCI requirements mandate that encryption keys are rotated annually.

Speak with your Oracle Product Representative for more information.

**a.** When prompted, enter and confirm the keystore password.



The password will also need to be entered in later sections. When prompted for a **key** password, press [Enter] to use the same password as the keystore. Oracle recommends using the same password for both the keystore password and the key password.

**b.** Answer the questions when prompted. (**Note:** The questions may appear in a different order than shown in the table below. Answer each question appropriately using the table below as a quide).

Name Field	Explanation	Example
First and Last Name (aka Common Name)	The hostname or IP address that will be used to access the server.	10.0.1.1

Name Field	Explanation	Example
Organizational Unit	Use this field to remind you what the certificate is used for.	xstoremobile-YYYYMMDD
	The OU must be different on each key. (One option is to add a date to make it unique).	
Organization Name	The exact legal name of your organization.	Oracle
City or Locality	The city where your organization is located.	Cleveland
State or Province Name	The state or province where your organization is located. Cannot be abbreviated.	Ohio
Two-letter country code	The two-letter ISO abbreviation for your country	US

- **c.** When prompted if the information is correct, type **y** or **yes**.
- **d.** When prompted, press [Enter] to use the same password as the keystore. [RECOMMENDED]
- **e.** Type the following command:

```
C:\cert\xstoremobile>keytool -certreq -keystore keystore -alias
xstoremobile-YYYYMMDD -file xstoremobile-YYYYMMDD.req
```

- **f.** When prompted, enter the keystore password.
- **3.** Submit the resulting req file to the certificate assigning authority to be signed. Secure channels are not required for sending the request because no private key information is included in the request file.

#### The instructions in steps 4 and 5 should be followed by the Certificate Authority.

- **4.** Perform the applicable step to create a Root Certificate Authority:
  - ☐ **If you have already created a certificate authority** while following this guide for another product, skip to step 5 below and use the certificate authority that was created at that time.
  - If you have not created a certificate authority, go to "Create a Certificate Authority" on page 214 and follow the instructions to create a certificate authority. After creating a certificate authority, continue with step 5 below.

#### The instructions in this step should be followed by the Certificate Authority.

**5.** Sign the Certificate Signing Request with the Root Certificate.

Before proceeding with this step, you should have your certificate request file ready. For this example, we will assume that we were given xstoremobile-YYYYMMDD.req to work with. **Note:** Details on creating certification requests are outlined in <u>step 2 on page 207</u>.

- **a.** Copy xstoremobile-YYYYMMDD.req to the c:\cert\sslcert folder on the Certificate Authority system. Secure channels are not required for receiving the request because no private key is included in the request file.
- **b.** Type the following command:

```
C:\cert\sslcert>openssl ca -out xstoremobile-YYYYMMDD.cer -config
./openssl.cnf -infiles xstoremobile-YYYYMMDD.req
```

- **c.** When prompted, enter the password for ./private/cakey.pem.
- **d.** When prompted to sign the certificate, type **y** or **yes**.
- **e.** When prompted to commit the certificate, type **y** or **yes**.
- **f.** Run the following lines to find the config file. This assumes you used the base path names.

```
C:\cert\sslcert>set OPENSSL_CONF=c:\cert\sslcert\openssl.cnf
C:\cert\sslcert>openssl x509 -in xstoremobile-YYYYMMDD.cer -out
xstoremobile-YYYYMMDD.der.cer -outform DER
```

**g.** Return the resulting .der.cer file to the party that submitted the request file along with the cacert.pem file. Secure channels are not required because the signed certificate file does not contain any private key information.

**6.** Import the Root Certificate into the Keystore.



Including the date in the aliases will help avoid someone removing an old CA certificate too soon when rolling out a new CA certificate. It is recommended that you have an overlapping period when certificates issued with both the old and the new CA certificates are acceptable.

For this example, we will assume that we were given a cacert.pem file.

- **a.** Copy the cacert.pem file to the c:\cert\xstoremobile folder. Secure channels are not required for receiving the root certificate because no private key information is included in the file.
- **b.** Type the following command:

C:\cert\xstoremobile>keytool -import -file cacert.pem -keystore keystore -alias myrootca-YYYYMMDD

- **c.** When prompted, enter the keystore password.
- **d.** When prompted, type **y** or **yes** to trust the certificate.
- **7.** Import the Signed Request into the Keystore.

For this example, we will assume that we were given xstoremobile-YYYYMMDD.der.cer to work with.

- **a.** Copy xstoremobile-YYYYMMDD.der.cer to the c:\cert\xstoremobile folder. Secure channels are not required for receiving the signed certificate request file because no private key is included in the file.
- **b.** Type the following command:

C:\cert\xstoremobile>keytool -import -trustcacerts -file xstoremobile-YYYYMMDD.der.cer -keystore keystore -alias xstoremobile-YYYYMMDD

- **c.** When prompted, enter the keystore password.
- **8.** Change the name of the keystore file to xstore mobile.keystore.

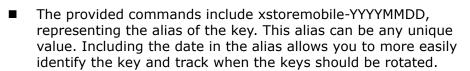
#### **Install the Certificate on Android**

- **9.** Copy the provided cacert.pem file to the storage of the Android device.
- **10.** Change the extension of the file from .pem to .cer.
- **11.** Open the device's security menu.
- **12.** In the security menu of the Android device, enable a face unlock, pattern, PIN, or password lock screen.
- **13.** In security menu of the Android device, select the **Install from storage** option and, when prompted for the name, select the file that was copied to the device's storage.

## **Create and Deploy a Self-Signed Certificate**

## What You Need to Know Before Creating Certificates

- The steps in this section assume that both OpenSSL and Sun's keytool utility have been installed <u>and added to the system path</u>. See "OpenSSL & Keytool Utility" on page 205.
- While following the steps outlined in this section, you will be prompted to enter information that will be embedded into the new certificate. Ensure that the information conforms to the requirements defined in each procedure.



■ Be sure to replace "YYYYMMDD" with a current date string throughout this procedure.



#### **Suggested Certificate Rotation Strategy**



With self-signed certificates you should be sure to create and distribute a new key for your servers before the old one expires. If you rotate annually, consider a validity of 1 year+30 days to allow for a rollout period.

- **1)** Create a new key.
- **2)** Modify the Xstore Mobile server to use the new key by delivering a new keystore that no longer includes the previous key.

Perform the following procedure to create and deploy a Self-Signed Certificate for Xstore Mobile.

1. To create a directory structure for key creation, type the following commands:

C:\>md C:\cert\xstoremobile
C:\>cd C:\cert\xstoremobile

**2.** To create a Keystore and Key, type the following command:

C:\cert\xstoremobile>keytool -genkey -keystore keystore -alias xstoremobile-YYYYMMDD -keyalg RSA -keysize 2048 -validity 395



The number following the -validity switch in the keytool commands represents the validity timeframe for the key. PCI requirements mandate that encryption keys are rotated annually.

Speak with your Oracle Product Representative for more information.

**a.** When prompted, enter and confirm the keystore password.



The password will also need to be entered in later sections. When prompted for a **key** password, press [Enter] to use the same password as the keystore. Oracle recommends using the same password for both the keystore password and the key password.

**b.** Answer the questions when prompted. (**Note:** The questions may appear in a different order than shown in the table below. Answer each question appropriately using the table below as a guide).

Name Field	Explanation	Example
First and Last Name (aka Common Name)	The hostname or IP address that will be used to access the server.	10.0.1.1
Organizational Unit	Use this field to remind you what the certificate is used for.	xstoremobile-YYYYMMDD
	The OU must be different on each key. (One option is to add a date to make it unique).	
Organization Name	The exact legal name of your organization.	Micros Retail
City or Locality	The city where your organization is located.	Cleveland
State or Province Name	The state or province where your organization is located. Cannot be abbreviated.	Ohio
Two-letter country code	The two-letter ISO abbreviation for your country	US

- **c.** When prompted, type **y** or **yes** to confirm your entries.
- **d.** When prompted, press [Enter] to use the same password as the keystore. [RECOMMENDED]
- **3.** To self-sign the Certificate, type the following command:

C:\cert\xstoremobile> keytool -selfcert -alias xstoremobile-YYYYMMDD -keystore keystore -validity 395

- **4.** When prompted, enter the keystore password.
- **5.** Change the name of the keystore file to xstore\_mobile.keystore.

## **Installing the Certificate on Android**

**6.** Export the certificate from the keystore file by typing the following command:

```
C:\cert\xstoremobile> keytool -export -alias xstoremobile-YYYYMMDD
-keystore xstoremobile.keystore -rfc -file xstoremobile-YYYYMMDD.cer
```

- 7. Copy the xstoremobile-YYYYMMDD.cer file that was exported to the storage of the Android device.
- **8.** Open the device's security menu.
- **9.** In the security menu of the Android device, enable a face unlock, pattern, PIN, or password lock screen.
- **10.** In security menu of the Android device, select the **Install from storage** option and, when prompted for the name, select the file that was copied to the device's storage.

# **Create a Certificate Authority**

Perform these steps to create a Certificate Authority <u>only when instructed to do so</u> in a specific CA-Signed Certificate procedure. *This is not a stand-alone procedure.* 

**1.** Type the following commands:

```
C:\>md C:\cert\sslcert
C:\>cd C:\cert\sslcert
C:\>cd C:\cert\sslcert
C:\cert\sslcert>md certs private
C:\cert\sslcert>echo 100001>serial

***Using a text editor such as Notepad, create an empty file named certindex.txt in C:\cert\sslcert. (This file must be empty, carriage returns are not allowed).

C:\cert\sslcert>notepad openssl.cnf
```



If prompted the openssl.cnf cannot be found, answer **yes** to create one.

2. Paste the following text into the document that is being created (adjusting the highlighted entries where necessary), then save the file:

```
# OpenSSL configuration file.
# Establish working directory.
dir
                         = .
[ ca ]
default ca
                         = CA default
[ CA default ]
                         = $dir/serial
serial
                        = $dir/certindex.txt
database
certificate
                         = $dir/cacert.pem
                         = $dir/private/cakey.pem
private key
default days
                         = 395
default md
                         = sha1
preserve
                         = no
email in dn
                         = no
                         = default ca
nameopt
                         = default ca
certopt
                         = policy match
policy
```

```
[ policy match ]
countryName
                      = match
stateOrProvinceName = match
organizationName
                    = match
organizationalUnitName = optional
                   = supplied
commonName
                      = optional
emailAddress
[req]
                    = 2048  # Size of keys
default bits
default keyfile = key.pem # name of generated keys
string mask = nombstr # permitted characters
                  = req distinguished name
distinguished name
req extensions
                   = v3 req
[ req distinguished name ]
# Variable name
                      Prompt string
0.organizationName = Organization Name (company)
organizationalUnitName = Organizational Unit Name (department, division)
emailAddress
             = Email Address
emailAddress max
                    = 40
                    = Locality Name (city, district)
localityName
stateOrProvinceName = State or Province Name (full name)
countryName
                      = Country Name (2 letter code)
```

```
countryName min
                   = 2
countryName max
                     = 2
commonName
                     = Common Name (hostname, IP, or your name)
                     = 64
commonName max
# Default values for the above, for consistency and less typing.
# Variable name
                      Value
 -----
0.organizationName default = My Company
stateOrProvinceName default = State or Province
[ v3 ca ]
basicConstraints = CA:TRUE
subjectKeyIdentifier = hash
authorityKeyIdentifier = keyid:always,issuer:always
[ v3 req ]
basicConstraints = CA:FALSE
```



For maximum encryption, two key settings above have been changed from the defaults seen in most OpenSSL distributions:

- ☐ default\_bits is set to 2048 instead of 512 or 1024
- □ default\_md is set to sha1 instead of md5

subjectKeyIdentifier = hash

**3.** Type the following command:

C:\cert\sslcert>openssl req -new -x509 -extensions v3\_ca -keyout
private/cakey.pem -out cacert.pem -days 3653 -config ./openssl.cnf



-days 3653 option - This value (ten years until expiration) would typically only be used on a root certificate so that you do not have to reissue it so often. At eight or nine years, you could generate an additional root certificate and distribute both for one-two years.

- **a.** When prompted enter and confirm the PEM password.
- **b.** Answer the questions when prompted. This information will be incorporated into the certificate request. (**Note:** The questions may appear in a different order than shown in the table below. Answer each question appropriately using the table below as a guide).

Name Field	Explanation	Example
Organization Name	The exact legal name of your organization. Do not abbreviate.	Oracle
(Must match name entered previously for Organization Name).		
Organizational Unit Name	Optional for additional organization information. The OU must be different on each key. (One option is to add a date to make it unique).	Operations-YYYYMMDD
Email Address	The email address of the person to be contacted about this certificate.	myname@company.com
Locality Name	The city or district where your organization is located.	Cleveland

Name Field	Explanation	Example
State or Province Name (Must match name entered previously for State or Province Name).	The state or province where your organization is located. Cannot be abbreviated.	Ohio
Country Name (Must match code entered previously for Country Name).	The two-letter ISO abbreviation for your country.	US
Common Name	The name of your root certificate.	Company_Name Certificate Authority

- **c.** Back up the two files that are created: cacert.pem located in the sslcert directory and cakey.pem located in the sslcert/private directory.
  - O The cacert.pem in the sslcert directory is the file containing the "public" information on this new root certificate authority. You will import this public certificate to the various Java truststores as well as the server's keystore.
  - O The cakey.pem file in the sslcert/private directory will be used to sign the certificates that will be used.
- **4.** Complete the rest of the steps in the procedure.