Version 1.2

LiveScan™ 4.0.10 with LScan1000P Scanner User Guide

COGENT

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Document Revision History

Version	Date	Author	Comment
1.0	04/16/2008	TJB	Initial version
1.1	08/2008	MH/ES	Updated the user guide
1.2	01/2009	MH/ES	Updated the user guide

Contents

Chapter 1

Overview

This chapter provides an overview of the LiveScan™ system and this user guide.

System Description

The Cogent LiveScan system electronically captures and processes forensic-quality fingerprints and demographic data. The software packages data into standard, NIST-format files, sends them to NIST-compatible systems, and optionally receives/processes NIST responses from other systems. LiveScan is also seamlessly integrated with Cogent's Automated Fingerprint Identification System (CAFIS).

With its user-friendly graphical user interface, easy-to-follow menus, and helpful equipment and features, LiveScan minimizes the amount of necessary training, making it possible for both experienced and inexperienced operators to capture fingerprints correctly. LiveScan provides complete control over the fingerprinting process. There is one central station for print capture, data entry, printing of cards, record transmission, and storage of data. Up to 10,000 bookings can be stored locally (depending on the available hard disk at your site).

The software can be configured to meet the needs of your agency. Its customizable data input features support automatic (preformatted) data generation, input validations, and preformatting of standard data codes.

Product Features

LiveScan offers you a wide array of features and functions for capturing a subject's ten-prints. LiveScan's features include, but are not limited to:

- Seamless integration with Cogent's AFIS
- Packaging of data into standard NIST-format files that are sent to NIST-compatible systems
- Instant preview functionality, which allows you to check image quality during scanning
- Automatic fingerprint sequence check
- Ability to store comprehensive personal data records as well as fingerprint images
- FBI-certified optics
- Full-spectrum grayscale for both rolled and flat prints
- A variety of scanning features, including foot pedals for hands-free fingerprint scanning (standard with the LiveScan booking station cabinet and optional with the desktop and laptop systems)

Key Terms

The following table provides definitions of some key terms that are used throughout this guide.

Term	Description
AFIS	Automated Fingerprint Identification System
CAFIS	Cogent's Automated Fingerprint Identification System
Job Status	As transactions are processed (demographic data entered, fingerprints scanned, transaction submitted, etc.), Live-Scan assigns a job status to the transaction indicating the level in the process the transaction is currently at.
Queue	A portion of a window in which a list of items is displayed [For example, in the **Main** window queue, a list of transactions is displayed.]
TOT	Type of transaction

Using the Mouse

Use the mouse to perform various actions within LiveScan. A description of the terminology used throughout this guide is provided in the table below.

Action	Description
click	Position the cursor on an item and click the left mouse button.
click and drag	Position the cursor on an item. Then, click the mouse button and hold it down as you move the mouse.
double-click	Position the cursor on an item and quickly click the left mouse button twice.
middle-click	Position the cursor on an item and click the middle mouse button.
right-click	Position the cursor on an item and click the right mouse button.

Chapter 2

Hardware and Software

Depending on your LiveScan setup, you may have a booking station cabinet, desktop, or laptop system. The following sections describe the standard hardware included with each of these setups.

Standard LiveScan Hardware

The following table describes standard minimum LiveScan hardware for all LiveScan systems:

Component	System
Scanner	All systems
Computer	All systems *[Note: The desktop and booking station systems have a desktop computer, while the laptop system is provided with a laptop]*
Uninterruptible Power Supply (UPS)	Booking station
Steel Rack Cabinet	Booking station

The LiveScan Booking Station

LiveScan comes in a rugged lockable cabinet for physical protection of the equipment under severe conditions, such as those found in booking areas. An example of the LiveScan station is shown in *Figure 2-1*.

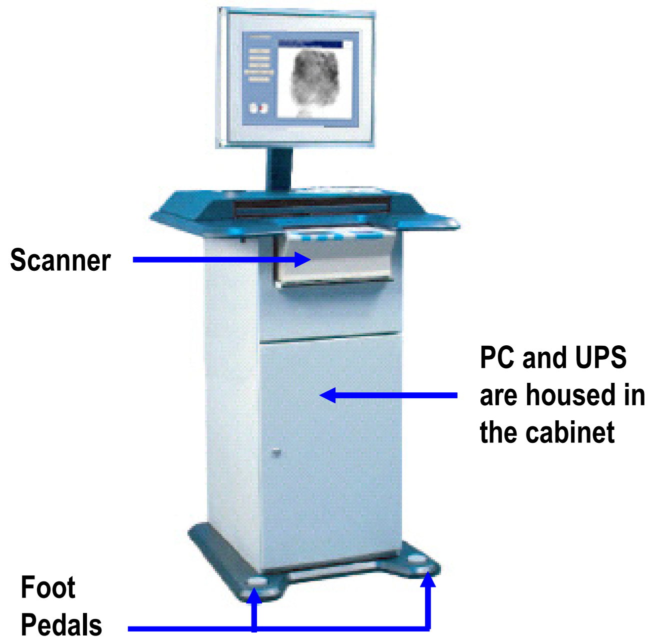

Figure 2-1 LiveScan Station - Side View

The specifications for this cabinet are:

- **Dimensions**:
    - Width (cabinet only): 45 cm (17.7 inches)
    - Width (cabinet plus top plate): 80 cm (31.5 inches)
    - Height (including monitor): 168 cm (66 inches)
    - Height (including optional mugshot camera): 183 cm (72 inches)
    - Depth (cabinet only): 55 cm (21.6 inches)
    - Depth (cabinet plus scanner): 69 cm (27.2 inches)
- **Weight** (including wooden transport palette): 110 kg (242 lbs)
- **Design**: Rugged steel design made with heavy welded sheet metal for protecting LiveScan equipment against impact
- **Lockable cabinet door**: There is a lockable metal door at the front/bottom of the station.

Scanner Surface

When the keyboard is in its locked position, the scanner surface is exposed (*Figure 2-2*).

Figure 2-2 Scanner Surface

On the left side of the scanner surface is the flat prints glass platen. At the right side is the control pad and the rolled prints glass platen. Refer to *Figure 2-3* for details.

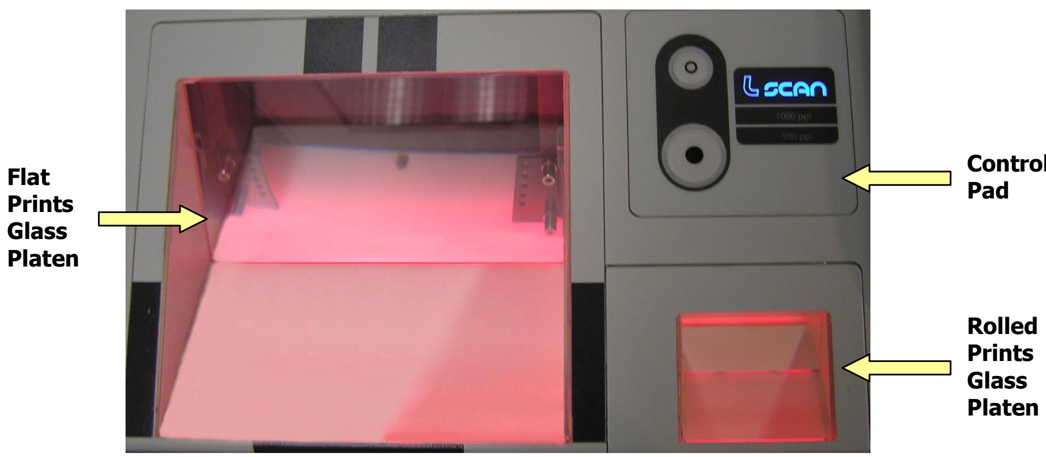

Figure 2-3 Scanner Surface - Top View

Control Pad

The control pad (*Figure 2-4*) contains buttons that allow you to perform fingerprint and palm print capture functions. When the light in the center of the button is on, the button is functional; the button is temporarily disabled when the light is off.

Figure 2-4 Control Pad (In 'Power-Saving' Mode)

Below is a description of the buttons on the control pad:

- The top button corresponds to the Optimize Contrast function.
- The bottom button corresponds to the Start (Capture) function. Press this button to start a print capture. This button can also be used to confirm the captured print images.

UPS

Power is supplied to the LiveScan components through a UPS inside the bottom of the cabinet; you can access it by opening the door on the front of the cabinet. The UPS supplies power to all components except the scanner block and protects your system against power surges.

"Hands-Free" Foot Pedals

The foot pedals allow for hands-free fingerprint capture initiation. In case of an error condition, the foot pedals become inoperable and the scanner or mouse must be used.

Recommended (User-Supplied) Printer

The *Xerox® Phaser 4500 Laser Printer*, an FBI-certified printer, is fully supported by LiveScan. Each LiveScan station can support one laser printer to send high-resolution, single-sided or double-sided fingerprint/palm print data for printing onto a fingerprint or palm print card.

Optional LiveScan Hardware

The following is optional LiveScan hardware:

- Touch screen monitor: With a touch screen monitor, you can use your finger to touch the monitor where a button is displayed in the LiveScan window.
- Digital camera: The *Sony EVID70 digital camera* (*Figure 2-5*) provides powerful zoom capability (18x optical/12x digital) and a wide pan/tilt range in a compact package.

Figure 2-5 Digital Camera

- Signature capture pad: The *Interlink ePad™ signature pad* (*Figure 2-6*), captures standard electronic signatures. It is rugged, reliable, and uses an ordinary tethered stylus.

Figure 2-6 Signature Capture Pad

Standard LiveScan Software

The following software is standard for LiveScan:

- LiveScan standard module (capture-14 NIST fingerprint/palm print images)
- Quality and sequence check
- NIST encoder
- WSQ compression module (FBI-certified)
- SMTP/FTP NIST interface module
- Fingerprint printing module (FBI-certified)
- Palm printing module (if applicable)
- Windows XP® operating system

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Chapter 3

Getting Started

The following sections provide information about getting started on LiveScan.

User Accounts and Privileges

In order to access LiveScan, you must have a valid user name and password. Each LiveScan user has specific user privileges, as assigned by the System Administrator. Therefore, not all of the functions described in this guide may be available to you. For details, contact your System Administrator.

NOTE: Administrators create user accounts and define user privileges using the User Administration utility. For details, contact your System Administrator.

Powering on the Scanner

Before you log into LiveScan, you must first power on the scanner. To power on the scanner, flip the power switch on the back of the scanner to the 'On' position.

Logging in/Logging out

The following subsections describe how to log in and log out of LiveScan:

Logging in

To log in:

1 From your Windows® desktop, double-click the **LiveScan** icon. The **Login** window will be displayed (*Figure 3-1*).

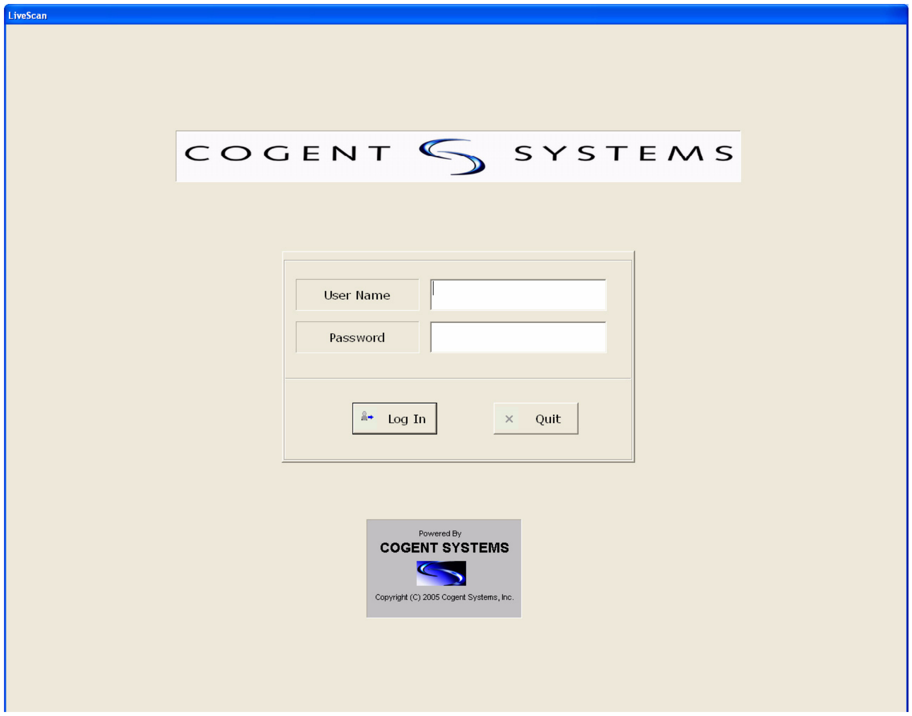

Figure 3-1 Login Window

2 Enter your user name in the **User Name** field.

3 Enter your password in the **Password** field.

> **NOTE:** Passwords are at least eight alphanumeric characters long and are case sensitive. For example, the password **livescan** is recognized as different from the password **LiveScan**.

4 Click **Log In**. The **Main** window will be displayed (*Figure 3-2*).

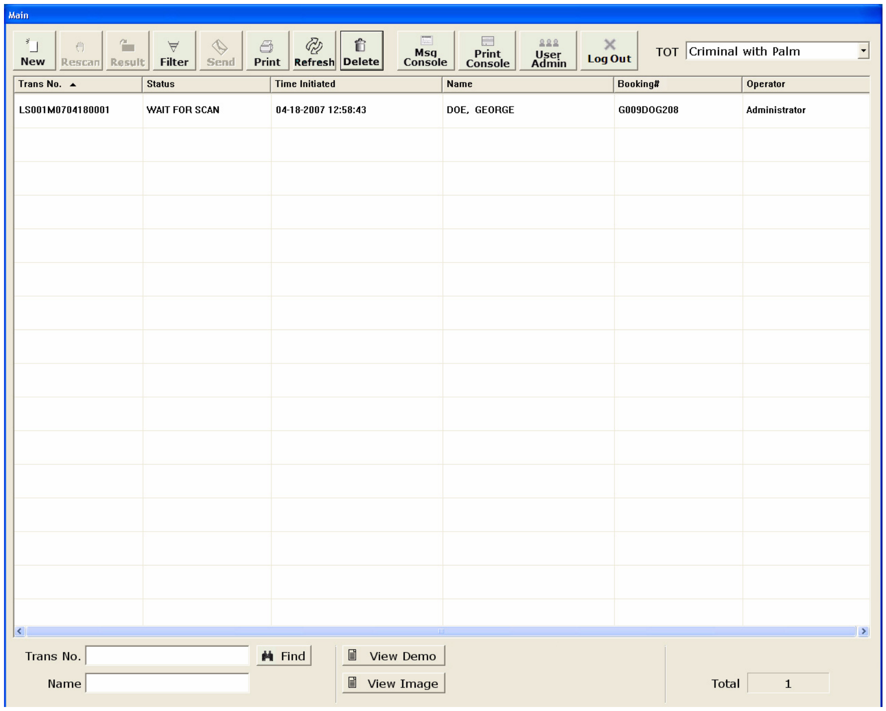

Figure 3-2 Main Window

5 From the **Main** window, you can access LiveScan functions, as described in the following chapters.

> **NOTE:** The **Main** window is the primary window for the entire LiveScan system. For detailed information about the **Main** window, including descriptions of its fields and function buttons, refer to *Appendix B: The Main Window* on page 39.

Logging out

To log out:

1 Click the **Log Out** button. A dialog box will be displayed, asking you to confirm your decision to log out.

2 Click **OK**. The **Login** window will be redisplayed.

3 From the **Login** window, you can:

- log in again, or
- click **Quit** to close LiveScan.

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Chapter 4

Creating a New Transaction

This chapter describes how to create LiveScan transactions. The procedure for creating LiveScan transactions consists of the following tasks:

- *Task 1: Start the Transaction*
- *Task 2: Enter Demographic Data*
- *Task 3: Capture Palm Prints/Slap Prints*
- *Task 4: Capture Plain (Flat) Fingerprints*
- *Task 5: Capture Rolled Fingerprints*
- *Task 6: Wait for the System to Save the Transaction*
- *Task 7: Send the Transaction (If Necessary)*

Task 1: Start the Transaction

1-1 From the **Main** window, select the desired type of transaction from the **TOT** drop-down menu.

> **NOTE:** There are seven types of transactions (TOTs) in this version of LiveScan: Applicant, Criminal with Palm, DNA/Palm Submission, Identification Only, Question of Identity with Palm, Registration, and Registration with Palm. The procedures for creating the transactions are almost identical. The only difference is that you will capture tenprints only when processing Applicant, Identification, Identification Only, and Registration transactions. Additionally, the Demographic Data Entry subwindows which are available to you during the creation process vary depending on the TOT you select. This chapter uses the Criminal TOT as an example.

1-2 Click **New**. The **Begin to scan** box will be displayed (*Figure 4-1*).

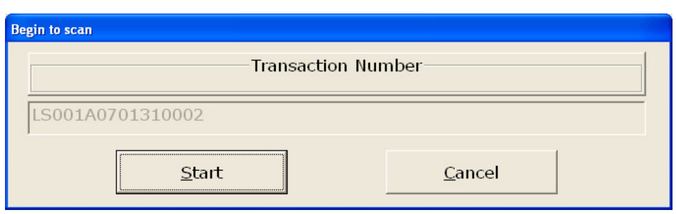


Figure 4-1 Begin to Scan Box

1-3 Click **Start**. The first Demographic Data Entry subwindow will be displayed (*Figure 4-2*).

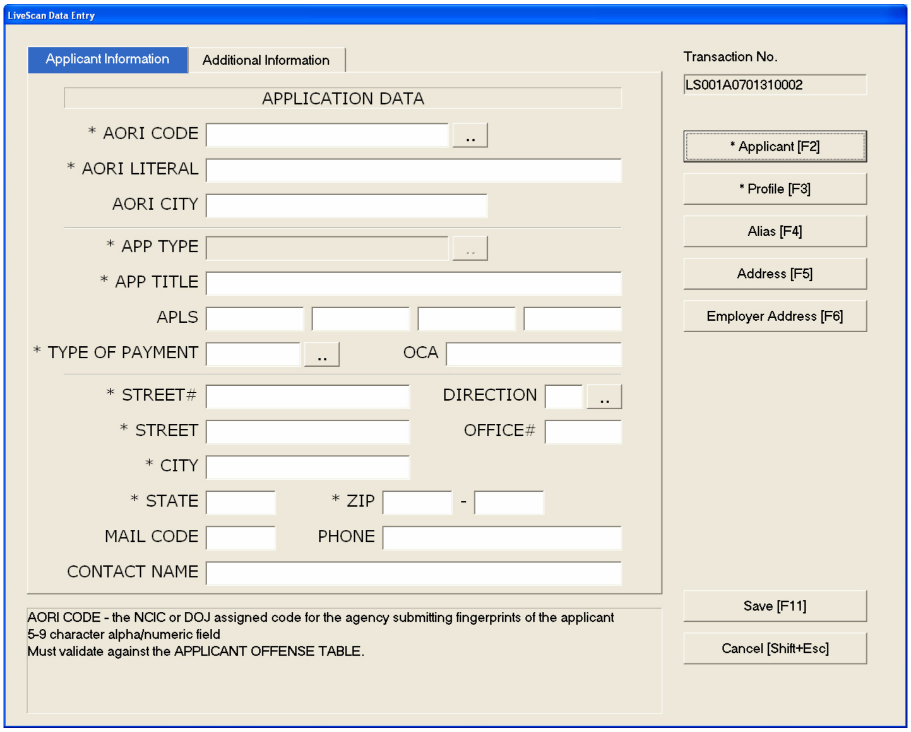


Figure 4-2 Demographic Data Entry Window

> **NOTE:** You may access Demographic Data Entry subwindows by clicking on the function button that corresponds to the desired subwindow; you may also use the keyboard shortcut displayed in the function button label (e.g., to access the **Alias** subwindow, you may either click **Alias** or press the **<F4>** key).

Task 2: Enter Demographic Data

As you enter demographic data, keep the following points in mind:

- When you place the cursor in a field, information about the type of data that is required, as well as the correct format, will be displayed in the bottom of the window.
- Fields marked with an asterisk (*) are required fields.
- Fields that have this button + (on the right-hand side) allow you to add/remove multiple entries. For instructions on adding/removing multiple entries to fields, refer to *Adding/Removing Multiple Data Entries* on page 36.
- Fields that have this button .. (on the right-hand side) contain a drop-down menu of selections. Click on the desired selection to save time when entering information.

To enter demographic data:

2-1 From the first Demographic Data Entry subwindow (*Figure 4-2*), enter data in the fields as appropriate. If additional tabs are displayed, click on the desired tab and enter data in the fields as appropriate.

2-2 When you have finished entering demographic data in the first Demographic Data Entry subwindow, click **Save**. The next subwindow with required data entry fields will be displayed.

> **NOTE:** Button labels marked with an asterisk (*) indicate that the corresponding Demographic Data Entry subwindow contains required fields.

2-3 Enter data in the subwindow as appropriate.

2-4 Repeat steps **2-2** and **2-3** for each Demographic Data Entry subwindow containing required fields.

2-5 When you have finished entering data in all Demographic Data Entry subwindows containing required fields, take one of the following actions:

- If you want to enter data into the available optional subwindows, you must click on their respective buttons *before* you click **Save** on the final subwindow containing required fields. Because these optional subwindows are not required for data entry, they will not be presented to you automatically like the subwindows containing required fields are.
- If you do not want to enter any data into optional subwindows, proceed to step **2-6**.

2-6 When you have finished entering demographic data, click **Save**. The first print capture window will be displayed.

> **NOTE:** If you want to scan the images at a later time, you may stop the transaction at this point by clicking **CANCEL** in the first print capture window. The transaction will be displayed in the transaction queue with the status *WAIT FOR SCAN*. You can scan the prints for that transaction at any time by double-clicking on the transaction in the **Main** window.

Task 3: Capture Palm Prints/Slap Prints

Before you begin capturing palm prints/slap prints, keep the following points in mind:

- Be sure that the subject's hands and the LiveScan glass platens are clean and free from debris. Excessive perspiration has the same effect as too much ink in traditional fingerprinting. If necessary, clean the subject's hands before each print capture. At the same time, if the subject's skin is too dry or too cold, the print will be too light. If this is the case, you may use any oil-free lotion to moisturize the subject's hands. For more information about cleaning and moisturizing the subject's hands, refer to *Appendix A: Operating LiveScan for Maximum Performance* on page 37.
- It is of the utmost importance that prints captured in the plain thumb windows, as well as the upper palm/slap prints windows, be of acceptable quality. This is

because the system performs finger sequence checks later in the scanning process, during the rolled fingerprint capture phase. To check finger sequence, it uses the prints obtained during the flats phase of print capture for comparison. If the prints obtained during the flats capture phase are of poor quality, the system will continually display sequence error messages when you are in the rolled fingerprint capture phase, since there is no useful print for comparison.

- If a print is rejected due to an out of sequence or poor quality error, the system will prompt you to capture the print again.

Task 3a: Capture Palm Prints

3a-1 For capturing palm prints, you will be presented with three capture windows. A sample of the first window presented, the **CAPTURE RIGHT LOWER PALM** window, is shown in *Figure 4-3*.

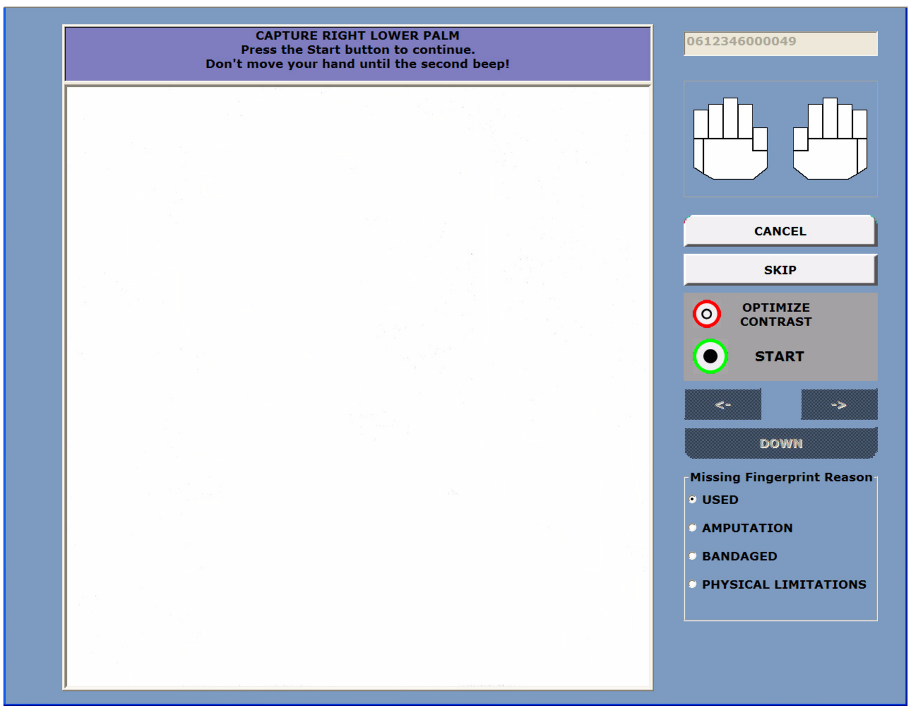


Figure 4-3 CAPTURE RIGHT LOWER PALM Window

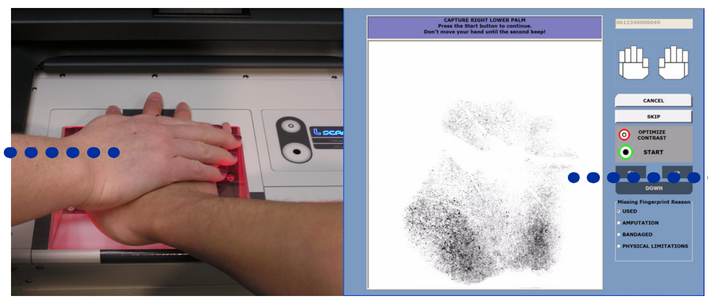
> **NOTE:** A total of three palm print capture windows will be displayed (**RIGHT LOWER PALM**, **RIGHT UPPER PALM**, and **RIGHT WRITER'S PALM**). Scan the palm prints by pressing the subject's hand firmly on the flats glass platen so that the image is displayed within the capture window.

> **NOTE:** The hands diagram displayed in the top right portion of the window shows the capture status of fingers and palm sections by highlighting them according to the following color codes:
>
> - Blinking green - capture in progress
> - Solid green - capture is complete
> - Red - finger exception selected

> **NOTE:** If the subject has any missing, damaged, and/or bandaged palm sections, you may note the exception(s) by selecting the appropriate radio button in the **Missing Fingerprint Reason** area of the capture window.

3a-2 Place the subject's right lower palm flat on the flats glass platen and press down firmly, as shown in *Figure 4-4*.

The system prompts the operator to capture the subject's right lower palm print



Live preview of the subject's right lower palm print image

Figure 4-4 Place the Subject's Lower Palm on the Flats Glass Platen

> **NOTE:** To capture the lower palm print, the interdigital (webbed) area of the palm needs to be near the top of the platen, and the wrist must be at the bottom edge of the platen.

3a-3 To start the capture of the lower palm print, tap the foot pedal once or press the bottom button on the control pad. You can also click the **START** button displayed in the capture window.

3a-4 Click **CONFIRM** to accept the lower palm print. The **CAPTURE RIGHT UPPER PALM** window will be displayed (*Figure 4-5*).

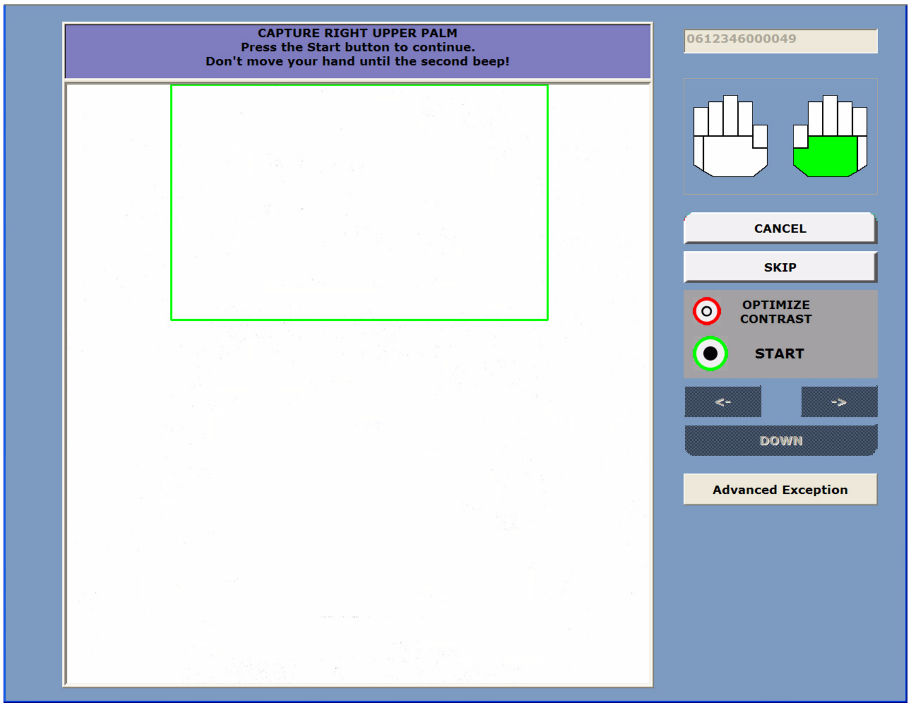


Figure 4-5 CAPTURE RIGHT UPPER PALM Window

3a-5 Place the subject's upper palm flat on the flats glass platen (so that the fingers fall within the green box) and press down firmly, as shown in *Figure 4-6*.

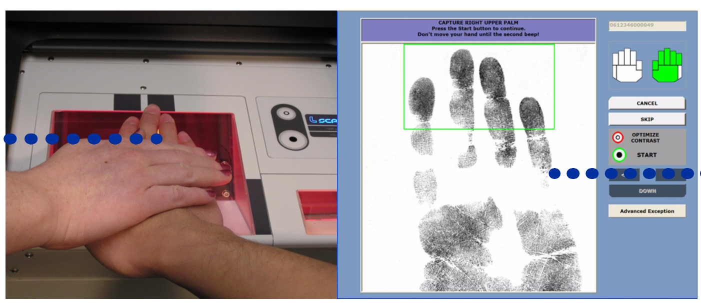


Figure 4-6 Place the Subject's Upper Palm on the Flats Glass Platen

3a-6 To start the capture of the upper palm print, tap the foot pedal once or press the bottom button on the control pad. You can also click the **START** button displayed in the capture window.

> **NOTE:** After you capture the upper palm print, the system will perform a sequence check. The upper and lower palm prints are compared to ensure that the correct hand has been captured.

3a-7 Click **CONFIRM** to accept the upper palm print. The **CAPTURE RIGHT WRITER'S PALM** window will be displayed (*Figure 4-7*).

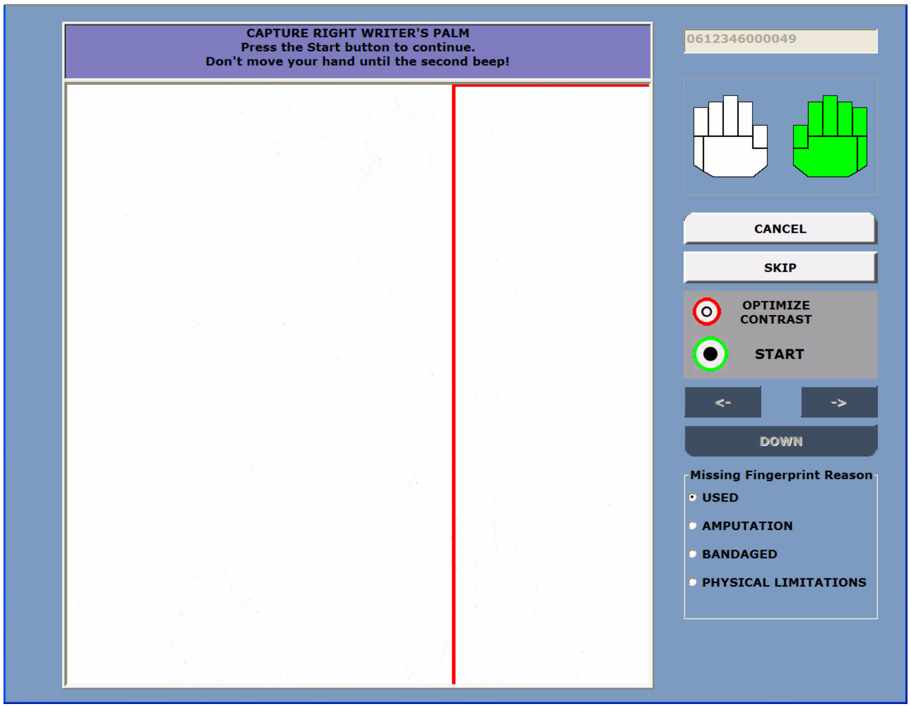
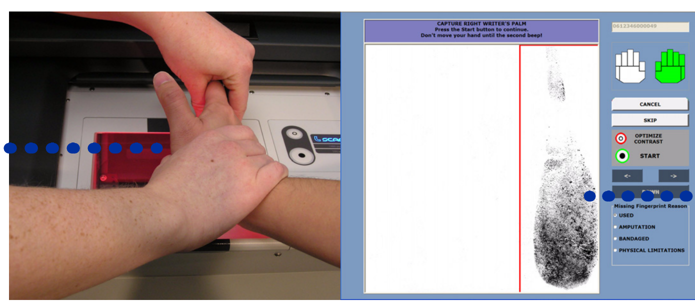


Figure 4-7 CAPTURE RIGHT WRITER'S PALM Window

3a-8 Place the subject's writer's palm flat on the flats glass platen (so that the image is within the red box displayed in the capture window), holding his/her slightly bent hand at a 45 degree angle, and press down firmly, as shown in *Figure 4-8*.

The system prompts the operator to capture the subject's right writer's palm print



Live preview of the subject's right writer's palm print image

Figure 4-8 Place the Subject's Writer's Palm on the Glass Platen

3a-9 To start the capture of the writer's palm print, tap the foot pedal once or press the bottom button on the control pad. You can also click the **START** button displayed in the capture window.

3a-10 Click **CONFIRM** to accept the writer's palm print image. The **CAPTURE LEFT LOWER PALM** window will be displayed.

3a-11 Repeat steps **3a-2** through **3a-10** with the subject's left hand.

3a-12 After clicking **CONFIRM** to accept the left hand writer's palm print image, the **Review Palm Prints** window will be displayed (*Figure 4-9*). In this window, you have an opportunity to review all the palm prints and recapture any prints that are not of acceptable quality.

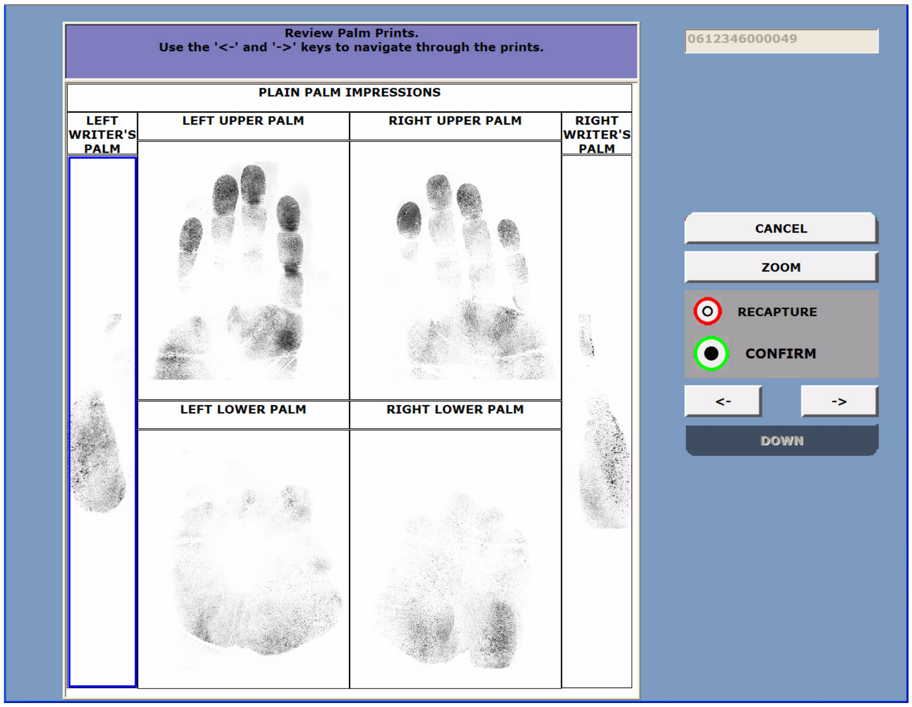


Figure 4-9 Review Palm Prints Window

3a-13 To recapture a print, click on the image, and then click the **RECAPTURE** button. The capture window for that print will be displayed. Rescan the print and repeat as necessary.

3a-14 Note that you can zoom in and zoom out of individual images by clicking on top of the respective image and then clicking **ZOOM/ZOOM OUT**. Within the **Zoom** window, you can click the **UP** and **DOWN** buttons, as well as the **<-** and **->** buttons, to view different areas of the image. You can also click and drag the blue zoom box to view different areas of the image.

3a-15 Repeat steps **3a-13** and **3a-14** for each print as appropriate.

Task 3b: Capture Slap Prints

3b-1 For capturing slap prints, you will be presented the **CAPTURE RIGHT SLAP** window. An example is shown in *Figure 4-10*.

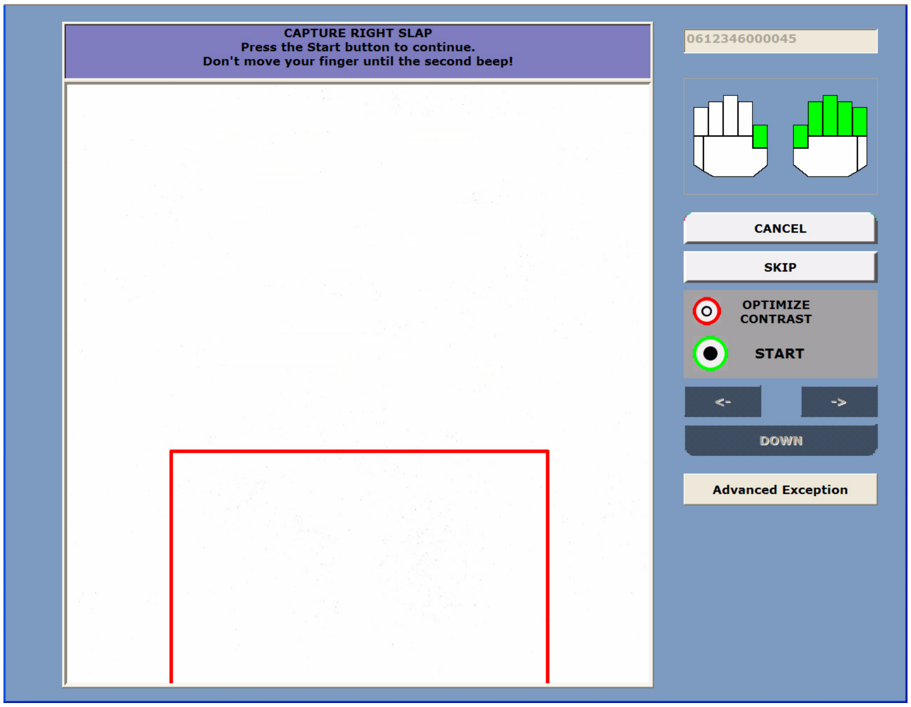
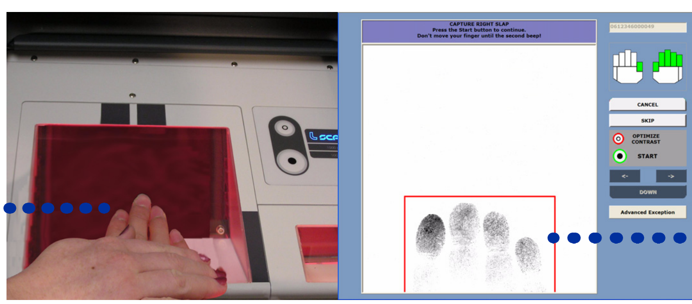


Figure 4-10 CAPTURE RIGHT SLAP Window

> **NOTE:** If the subject has any missing, damaged, and/or bandaged fingers, you may note the exception(s) by clicking the **Advanced Exception** button. The **Advanced Exception** window will be displayed, from which you can select radio buttons corresponding to the appropriate exception(s).

3b-2 Place the subject's right hand flat on the flats glass platen (so that the fingers fall within the red box) and press down firmly, as shown in *Figure 4-11*.

The system prompts the operator to capture the subject's right hand slap prints



Live pre-view of the subject's right slap prints image

Figure 4-11 Place the Subject's Right Hand on the Glass Platen

3b-3 To start the capture of the right hand slap prints, tap the foot pedal once or press the bottom button the control pad. You can also click the **START** button displayed in the capture window.

3b-4 Click **CONFIRM** to accept the right hand slap prints. The **CAPTURE LEFT SLAP** window will be displayed.

3b-5 Repeat steps **3b-2** through **3b-4** with the subject's left hand.

Task 4: Capture Plain (Flat) Fingerprints

4-1 The system will now present the **CAPTURE PLAIN RIGHT THUMB** window (*Figure 4-12*).

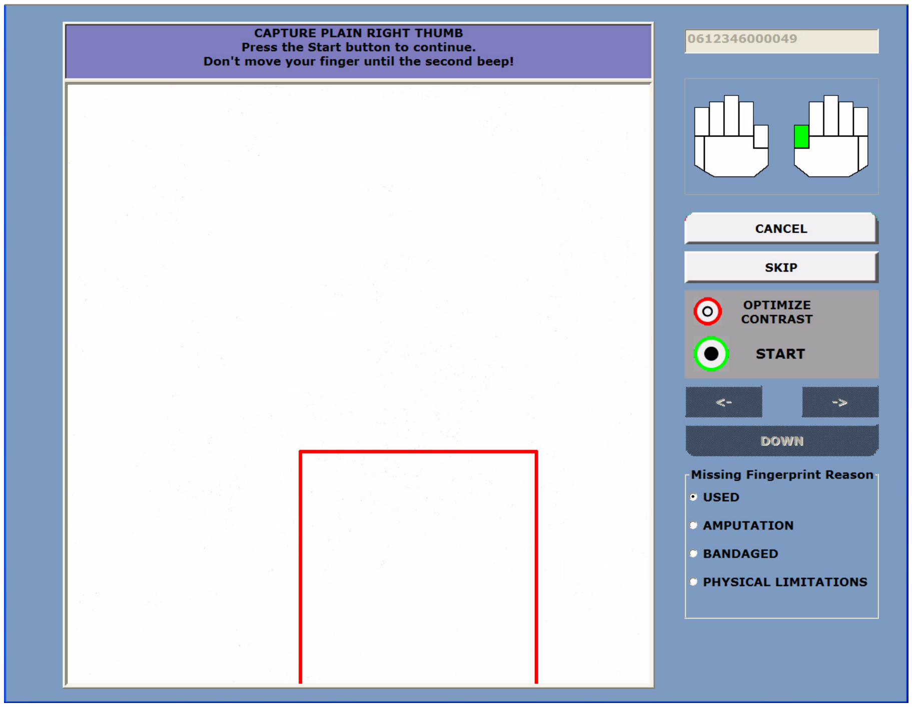


Figure 4-12 CAPTURE PLAIN RIGHT THUMB Window

4-2 Place the subject's right thumb on the flats glass platen (so that the image is within the red box in the capture window) and press down firmly, as shown in *Figure 4-13*.

> **NOTE:** When scanning prints, be careful not to press too hard, as this will result in images that have darker ridges or black spots.

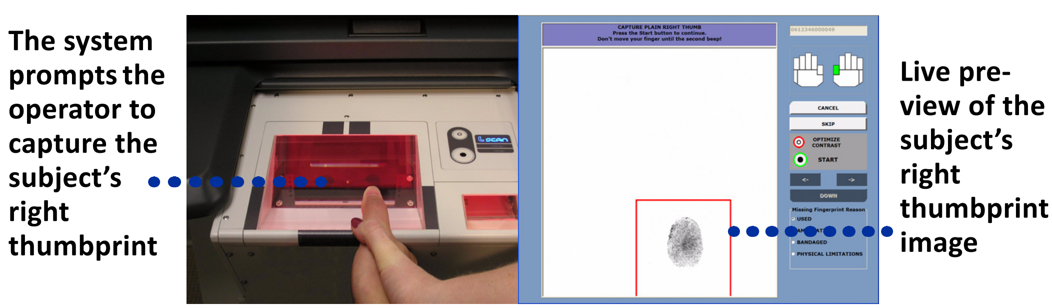


Figure 4-13 Place Subject's Right Hand on Glass Platen

4-3 To start the print capture, tap the foot pedal once or press the bottom button on the control pad. You can also click the **START** button displayed in the capture window.

4-4 Click **CONFIRM** to accept the plain right thumbprint. The **CAPTURE PLAIN LEFT THUMB** window will be displayed.

4-5 Repeat steps **4-2** through **4-4** with the subject's left thumb.

> **NOTE:** It is not necessary to capture individual plain (flat) impressions of the index (fore), middle, ring, and little fingers, as these images are automatically "cut" from the flat print images.

Task 5: Capture Rolled Fingerprints

5-1 LiveScan will now present one rolled fingerprint capture window for each finger. During this phase, the system will not only perform a quality check on the images, but will also check the images against the existing flat fingerprint images to ensure that they are in the correct sequence. An example of a rolled fingerprint capture window is shown in *Figure 4-14*.

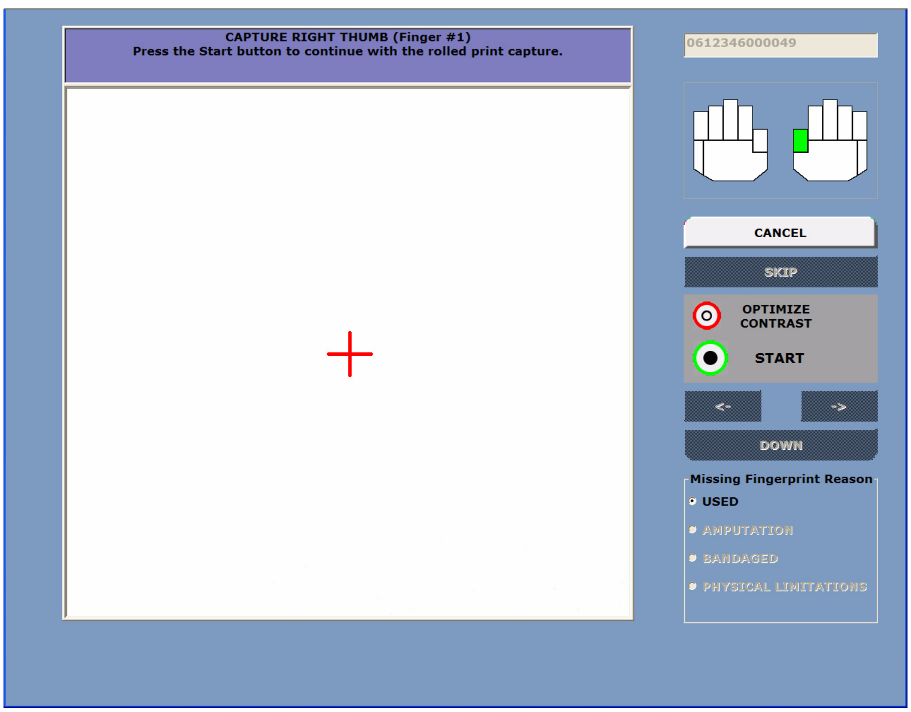


Figure 4-14 Sample Rolled Fingerprint Capture Window

> **NOTE:** If you have captured a fingerprint during the flats capture phase, you cannot set an exception that prevents capture; consequently, the **AMPUTATION**, **BANDAGED**, and **PHYSICAL LIMITATIONS** radio buttons will be disabled in the bottom right portion of the capture window.

5-2 To capture a rolled fingerprint, first center the core over the cross hairs, as shown in *Figure 4-15*.

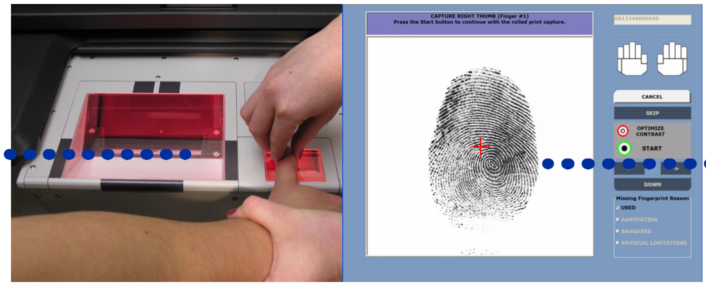


Figure 4-15 Center the Right Thumb on the Glass Platen

5-3 Roll the finger to the right, maintaining its position so that it will be centered.

5-4 To start the capture of the rolled fingerprint, tap the foot pedal once or press the bottom button on the control pad. You can also click the **START** button displayed in the capture window.

5-5 Slowly roll the finger from the right to the left until a full print is obtained. *Figure 4-16* is a sample of a rolled fingerprint image.

> **NOTE:** For rolling *left*-hand fingerprints, roll from left to right, nail to nail.

.

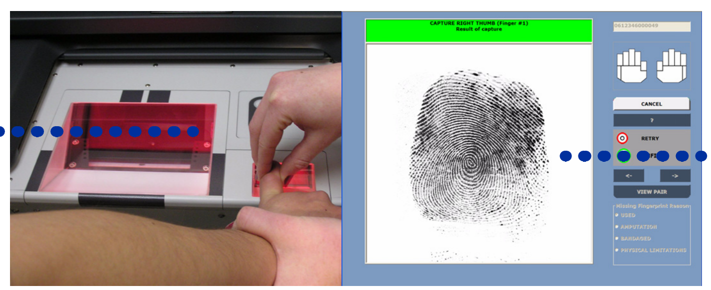


Figure 4-16 Rolled Fingerprint Image

5-6 Lift the finger up and off the glass to end the capture.

5-7 The system will present nine additional windows for rolled fingerprint capture (fewer, if finger exceptions were set). Repeat steps **5-2** through **5-6** to capture the rolled fingerprints for each remaining finger.

5-8 The **Review Tenprints** window will be displayed (*Figure 4-17*). In this window, you have the opportunity to review all the tenprints and recapture any prints that are not of acceptable quality.

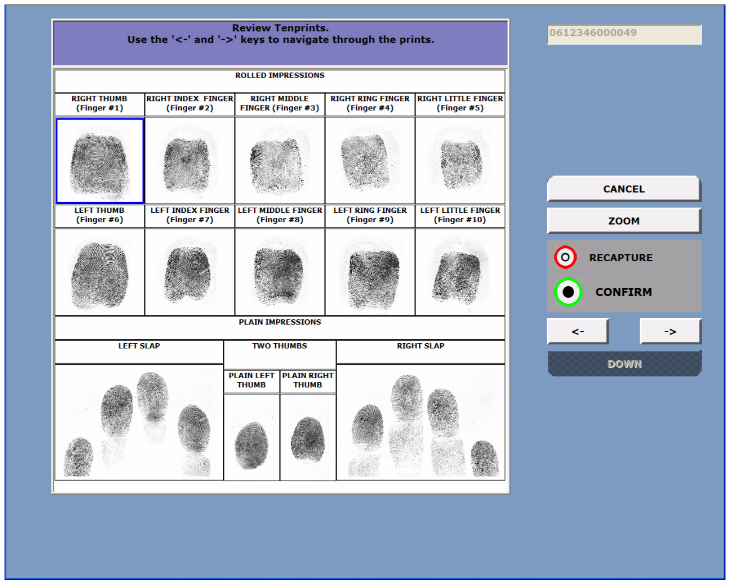


Figure 4-17 Review Tenprints Window

5-9 To recapture a print, click on the image and then click the **RECAPTURE** button. The capture window for that print will be displayed. Rescan the print and repeat as necessary.

5-10 Note that you can zoom in and zoom out of individual images by clicking on top of the respective image and then clicking **ZOOM/ZOOM OUT**. Within the **Zoom** window, you can click the **UP** and **DOWN** buttons, as well as the **<-** and **->** buttons, to view different areas of the image. You can also click and drag the blue zoom box to view different areas of the image.

5-11 Repeat steps **5-9** and **5-10** for each print, as appropriate.

5-12 When you are satisfied with the quality of all tenprints, click **CONFIRM** to save the transaction.

Task 6: Wait for the System to Save the Transaction

When you click **CONFIRM** in the **Review Tenprints** window, the system will display a message box indicating that the transaction is being saved. When the system is finished saving the transaction, the **Main** window will be displayed. The transaction for which you just scanned images will have a status of *SCANNED*.

Task 7: Send the Transaction (If Necessary)

If your system configuration requires that you manually send transactions, you may send the transaction now by highlighting the transaction in the **Main** window and clicking the **Send** button.

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Chapter 5

Using Other LiveScan Features

This chapter provides instructions on using the following LiveScan features:

- Rescanning Transaction Images
- Viewing Results
- Filtering Transactions
- Sending Transactions
- Printing Transactions
- Manually Refreshing the Queue
- Deleting Transactions from the Queue
- Finding a Specific Transaction
- Viewing/Modifying Demographics
- Viewing Images
- Adding/Removing Multiple Data Entries

Rescanning Transaction Images

If you click **CANCEL** at any time during the scanning process, the transaction will be closed, and any scanned prints will be discarded. The transaction will have a status of *WAIT FOR SCAN*.

To rescan transaction images:

1 From the **Main** window, select the transaction for which you want to rescan images.

2 Click **Rescan**. The Demographic Data Entry window will be displayed.

3 When you are satisfied with the data contained in the Demographic Data Entry sub-windows, click **Save**. The first print capture window will be displayed.

4 Rescan the subject's prints. Refer to the following sections for details:

- *Task 3: Capture Palm Prints/Slap Prints* on page 15
- *Task 4: Capture Plain (Flat) Fingerprints* on page 22
- *Task 5: Capture Rolled Fingerprints* on page 23

Viewing Results

After LiveScan receives a response from the agency, you can view the results for the sumitted transaction.

To view results:

1 From the **Main** window, select the transaction that you want to view results for.

2 Click **Result**. The **View Result** window will be displayed (*Figure 5-2*).

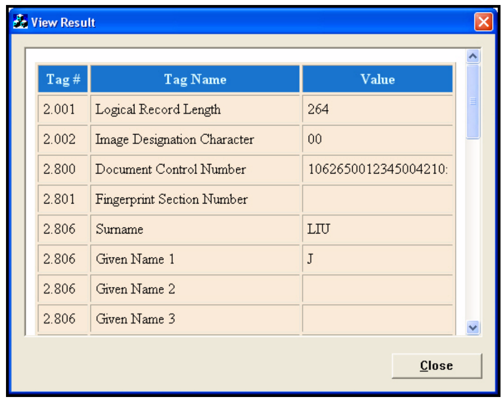

Figure 5-1 View Result Box

Filtering Transactions

LiveScan allows you to filter the queue in order to view a group of transactions that meet one or more criteria.

To filter transactions:

1 From the **Main** window, click **Filter**. The **Queue Filter** box will be displayed (*Figure 5-2*).

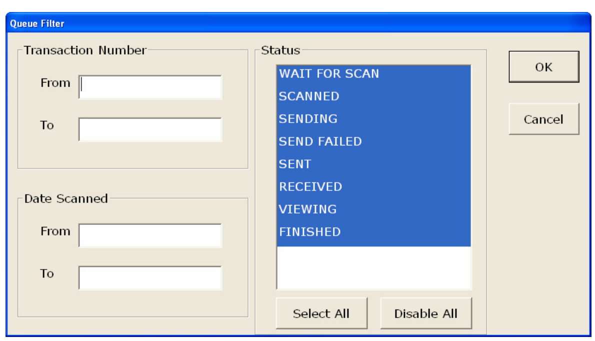

Figure 5-2 Queue Filter Box

2 From the **Queue Filter** box, you can choose to filter the queue by transaction number, transaction creation date, and/or transaction status, as described below:

- **Filtering by Transaction Number**: If you want to view all transactions between two transaction numbers, enter the beginning number in the **From** field and ending number in the **To** field.
- **Filtering by Date Scanned**: If you want to view transactions that were created between specific dates, enter dates in the **From** and **To** fields in the valid format (**MMDDYYYY**), with no hyphens or spaces between the digits.

> **TIP:** To view all transactions from a specific date to the current day, leave the **To** field blank.

- **Filtering by Status**: When the **Queue Filter** box is first displayed, all of the **Status** messages will be selected by default, as shown in *Figure 5-2*. You can deselect them all by clicking on the **Disable All** button. You can select them all again by clicking **Select All**, or you can click on them one at a time to select or deselect them as desired.

3 After you have made your filtering criteria selections, click **OK**. The **Main** window will be displayed with only those transactions that meet your criteria displayed in the queue.

4 If desired, double-click on a transaction to open it.

> **NOTE:** Even if you log out and then log back into LiveScan, the queue filter settings you have selected will persist. To make changes to the filter settings, repeat steps **1** through **3**.

Sending Transactions

To send a transaction, highlight the transaction in the **Main** window and click the **Send** button.

> **NOTE:** If you have several transactions to send, click and drag to select more than one transaction. You can also press and hold the **<Ctrl>** key and individually select non-contiguous transactions (i.e., transactions that are not next to each other in the list) in order to send them all in one pass.

Printing Transactions

To print transactions:

1 From the **Main** window, select the transaction(s) you want to print.

> **NOTE:** If you have several transactions to print, click and drag to select more than one transaction. You can also press and hold the **<Ctrl>** key and individually select non-contiguous transactions (i.e., transactions that are not next to each other in the list) in order to print them all in one pass.

2 After you have selected the transaction(s) you want to print, click **Print**. A dialog box will be displayed (*Figure 5-3*).

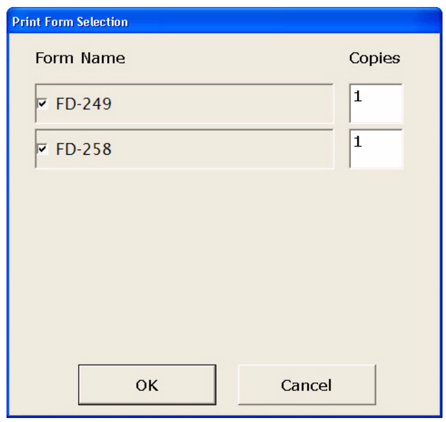

Figure 5-3 Print Form Selection Box

3 Select the form (card) you would like to print onto by selecting the appropriate check box to the left of the desired form (card).

4 Enter the number of desired copies in the **Copies** field.

5 Click **OK**. The transaction(s) will be printed.

> **NOTE:** If you print a transaction for which no prints have been scanned, only the demographic data will be printed on the form (card).

Manually Refreshing the Queue

LiveScan automatically refreshes the queue at set intervals of time (e.g., every thirty seconds). However, you can manually refresh the queue by clicking the **Refresh** button. The transactions will be updated to display their current status.

Deleting Transactions from the Queue

NOTE: Depending on your user privileges, you may not have access to the function which allows you to delete transactions from the queue.

WARNING: Use care when deleting transactions. Transactions that have been deleted from the queue cannot be restored.

To delete transactions from the queue:

1 From the **Main** window, select the transaction(s) you want to delete. The transaction(s) will be highlighted.

> **NOTE:** If you have several transactions to delete, click and drag to highlight more than one transaction. You can also press and hold the **<Ctrl>** key and individually highlight non-contiguous transactions (transactions that are not next to each other in the list) in order to delete them all in one pass.

2 After you have selected the transaction(s) you want to delete, click **Delete**. A dialog box will be displayed, asking you to confirm your decision to delete the transaction(s).

3 Click **OK**. The **Main** window will be redisplayed, reflecting the deletion(s) you have made.

Finding a Specific Transaction

You can locate a specific transaction by its transaction number or its associated subject name.

NOTE: If you have previously filtered the transactions in the queue, only some of the available transactions will be displayed. A given transaction may exist, but it will not be retrieved if it is being filtered out of the queue.

Before using the **Find** function, it is a good idea to use the **Filter** function to select and load all available transactions to the queue. For details, refer to *Filtering Transactions* on page 28.

Finding a Transaction by Transaction Number

To find a transaction by transaction number:

1 From the **Main** window, delete the name from the **Name** field (bottom left portion of the window).

2 Enter the transaction number in the **Trans No.** field.

3 Click **Find**. If the system:

- **Finds the transaction**, it will highlight that transaction in the queue so that the transaction is readily visible.
- **Does not find the transaction**, a dialog box will be displayed, indicating that no transaction was found.

4 Once you have found the desired transaction, you can double-click on it to open it.

Finding a Transaction by Subject Name

To find a transaction by subject name:

1 From the **Main** window, delete the transaction number from the **Trans No.** field (bottom left portion of the window).

2 Enter the subject's name in the **Name** field.

> **NOTE:** Data must be entered in the following format: **LAST, FIRST MIDDLE SUFFIX** (e.g., **DOE, KEVIN TIMOTHY III**); however, you may enter as much or little of the name as desired, as long as the data entered adheres to the format described above. For example, you could enter the last name only to search for a transaction (e.g., **DOE**). If you wanted to find a transaction using the first name, you would have to enter both the last name and the first name separated by a comma (e.g., **DOE, KEVIN**).

3 Click **Find**. If the system:

- **Finds the transaction**, it will highlight that transaction in the queue so that the transaction is readily visible.
- **Does not find the transaction**, a dialog box will be displayed, indicating that no transaction was found.

4 Once you have found the desired transaction, you can double-click on it to open it.

Viewing/Modifying Demographics

You can view/modify a subject's demographic data for any transaction in the **Main** window by clicking on the transaction in the queue and then clicking the **View Demo** button. When you do so, the corresponding Demographic Data Entry subwindow will be displayed for that transaction.

Viewing Images

You can view tenprints for any transaction in the **Main** window by double-clicking on the transaction in the queue. When you do so, the **Image Viewer** window will be displayed with tenprint images for that transaction (*Figure 5-4*).

> **NOTE:** If the status of the transaction is *WAIT FOR SCAN*, double-clicking on the transaction will cause the Demographic Data Entry subwindows to be displayed; after you click **Save**, the first print capture window will be displayed.

Figure 5-4 Image Viewer Window

From the **Image Viewer** window, you can:

- Perform a query by clicking the **Query** button
- View all tenprint images by clicking the **Tenprints** button
- View all palm images (if applicable) by clicking the **Palms** button
- Return to the **Main** window by clicking on the **Close** window

‘Image Viewer’ Window - Function Button Descriptions

The following table provides descriptions of the function buttons that are available in the **Image Viewer** window:

Button	Description
Numbers 1 through 14	These numbered buttons correspond to each of the fingerprint images (**R. Thumb** through **L. Slaps**). Click the button for the finger whose print you want to display. The individual image will be displayed.
Zoom In	Select an image, and then click this button to zoom in on the image.
Zoom Out	Click this button to zoom out of the image.
Query	Click this button to perform a query of other transactions.
Tenprints	Click on this button to display tenprint images.
Palms	Click on this button to display palm print images (if applicable).
Close	Click this button to exit the **Image Viewer** window and return to the **Main** window.

‘Image Viewer’ Window - Field Descriptions

The following table provides descriptions of the fields that are displayed in the **Image Viewer** window:

Field	Description
Image	Displays the name of the currently selected print image (e.g., **R. Thumb**)
Sequence	Displays the sequence number of the currently selected print image
Width	Displays the width of the currently selected print image
Height	Displays the height of the currently selected print image
Trans. No.	Displays the transaction number
Booking#	Displays the subject’s booking number [**Note**: The **Name** field will be displayed, instead of the **Booking#** field, when viewing a non-criminal transaction.]
Transaction List	Displays all of the transactions for which you have performed a query (for this session)

Performing a Query

To view transactions other than the transaction currently displayed in the **Image Viewer** window, you can perform a query of transactions that meet your specified criteria.

NOTE: LiveScan only searches the transactions that are currently in the **Main** window queue. If some transactions have been filtered out of the **Main** window queue, and you want all transactions to be searched against in the query, you must adjust the filter before performing the query. For details, refer to *Filtering Transactions* on page 28.

To perform a query:

1 Click on the **Query** button located in the right portion of the **Image Viewer** window. The **Transaction Query** box will be displayed (*Figure 5-5*).

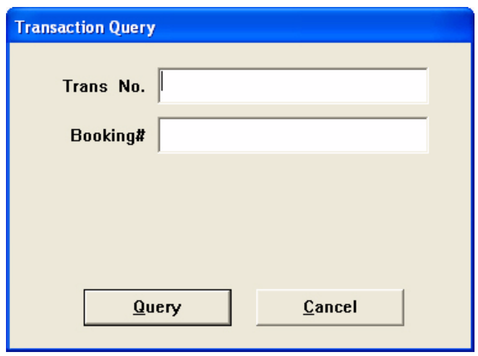

Figure 5-5 Transaction Query Box

2 Enter as much or as little criteria as desired. The more criteria you enter, the narrower your search will be (i.e., fewer transactions will be returned). The fewer criteria you enter, the broader your search will be (i.e., many transactions will be returned).

3 After you have entered the desired criteria, click **Query**. The **Image Viewer** window will be redisplayed with a list of transactions in the **Transaction List** queue that match the criteria you have specified.

4 Select a transaction from the **Transaction List** queue.

5 Press **<Enter>**. The fingerprint images for the transaction you selected will be displayed in the **Image Viewer** window.

Adding/Removing Multiple Data Entries

Some of the fields in the Demographic Data Entry subwindows give you the option of adding multiple entries. A field in which you can enter multiple entries is indicated by a button on the right-hand side of the field (refer to step **1**). You can add or remove entries as desired.

To add/remove multiple data entries:

1 Click on the

button on the right-hand side of the field. A multiple entry box will be displayed. *Figure 5-6* shows a sample multiple entry box (DOB (Date of Birth)).

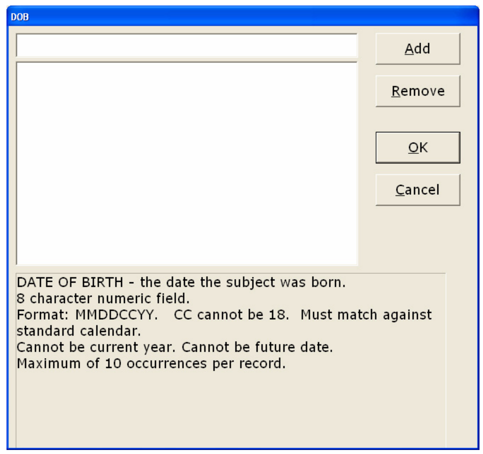

Figure 5-6 Sample Multiple Entry Box

2 To add an entry:

2a Enter data into the field provided. The correct format is described in the bottom portion of the box.

2b Click **Add**. The entry will be added to the list.

3 To remove an entry:

3a Highlight the entry in the list.

3b Click **Remove**. The entry will be removed and displayed in the field in the upper portion of the box.

3c After you have added/removed the desired entries, click **OK**. The Demographic Data Entry subwindow will be redisplayed, and the first entry you added to the list will be displayed in the field.

Appendix A

Operating LiveScan for Maximum Performance

General Guidelines

Cogent recommends that you observe the following guidelines for operation of your LiveScan system:

- **Warm up the LiveScan system**: The scanner contains a built-in scanner platen control, which ensures that the glass platens remain at the optimum temperature for fingerprint capture. The temperature control helps prevent condensation from forming on the glass, and also causes increased smoothness of the skin, both of which aid in maximizing fingerprint image quality. When you power on the scanner, you must allow the scanner to warm up. The glass platens should be slightly warm to the touch before you begin use.
- **Avoid having hard objects (e.g., handcuffs, watches, rings, etc.) come into contact with the glass platen**: Sharp objects, particularly metals, may scratch the glass platen. Be very careful when capturing fingerprints of subjects who are wearing handcuffs or jewelry.
- **Log out of LiveScan if you plan to be away from the system for four (4) hours or more**: If you know you will not use the LiveScan system for more than a few hours, it is best to log out of the system. [**Note**: Do not turn off the workstation; simply log out of the software.]
- **Leave the power on at all times**: It is recommended that you leave the main LiveScan station power on at all times. This helps prevent network communication errors. If it is necessary to turn off the power, please consult your System Administrator for assistance.

Cleaning Guidelines

Before each use of the LiveScan system, ensure that the glass capture platen, as well as the subject's fingers, are free from debris and bacteria.

Moisturizing and Cleaning the Subject's Hands

It is recommended that applicants wash their hands before the scanning process. If the applicant's hands are too dry, the print image will be too light in the display. You can have the applicant moisturize his/her hands using a baby wipe free of lotion, scent, and alcohol. Baby wipes are sold in a pop-up container which helps avoid infection, as the used wipes can be easily discarded. Cogent recommends *CVS Unscented Baby Wipes (80-pack)*, which can be ordered at:

Web Address: www.cvs.com
(Enter “CVS Unscented Baby Wipes” into the search engine on this page, and follow the directions for online ordering.)
Phone: 1.888.607.4287

Excessive perspiration has the same effect as too much ink in traditional fingerprinting. Applicants should dry their hands if there is perspiration.

Cleaning Scanner Block Metal Surfaces

Cogent recommends that you periodically clean the metal surfaces of the scanner with a mild cleaning agent. Use cleaners that are not oil-based, vinegar-based, or abrasive.

Cleaning the Glass Capture Platen

Cogent recommends that you clean the glass capture platen before each use in order to clear it of debris. You may use baby wipes to clean the platen.

Appendix B

The Main Window

Description of the Main Window

When you log into LiveScan, the **Main** window will be displayed by default. This is the main window for processing LiveScan transactions. An example of the **Main** window is shown in *Figure B-1*.

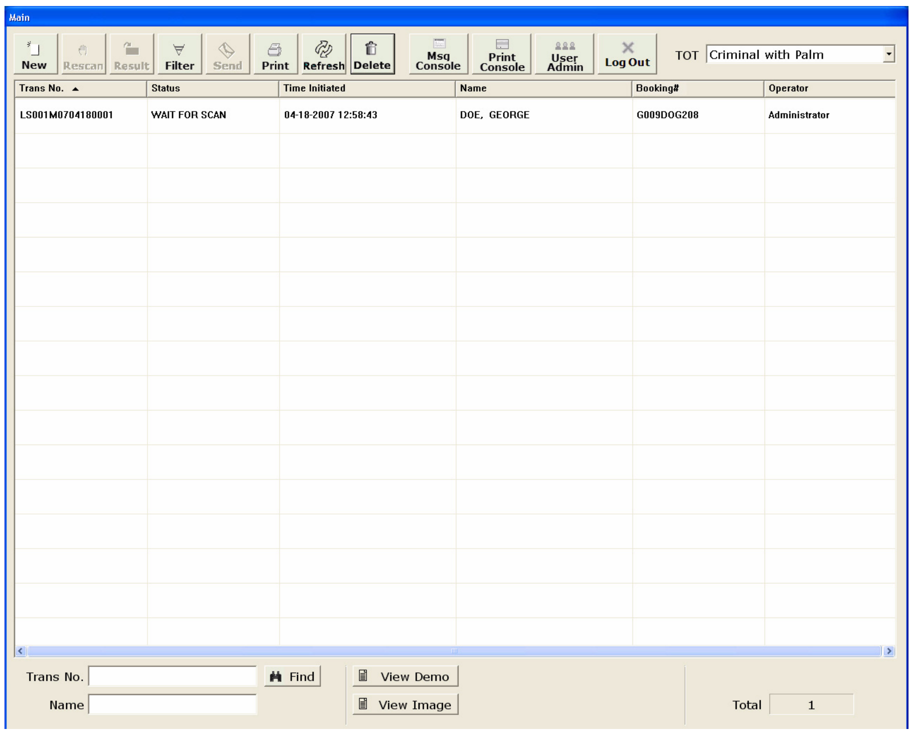

Figure B-1 Main Window

Column Descriptions

The **Main** window queue is divided into six columns, in which important information is displayed for each transaction. The six columns are shown in *Figure B-2*.

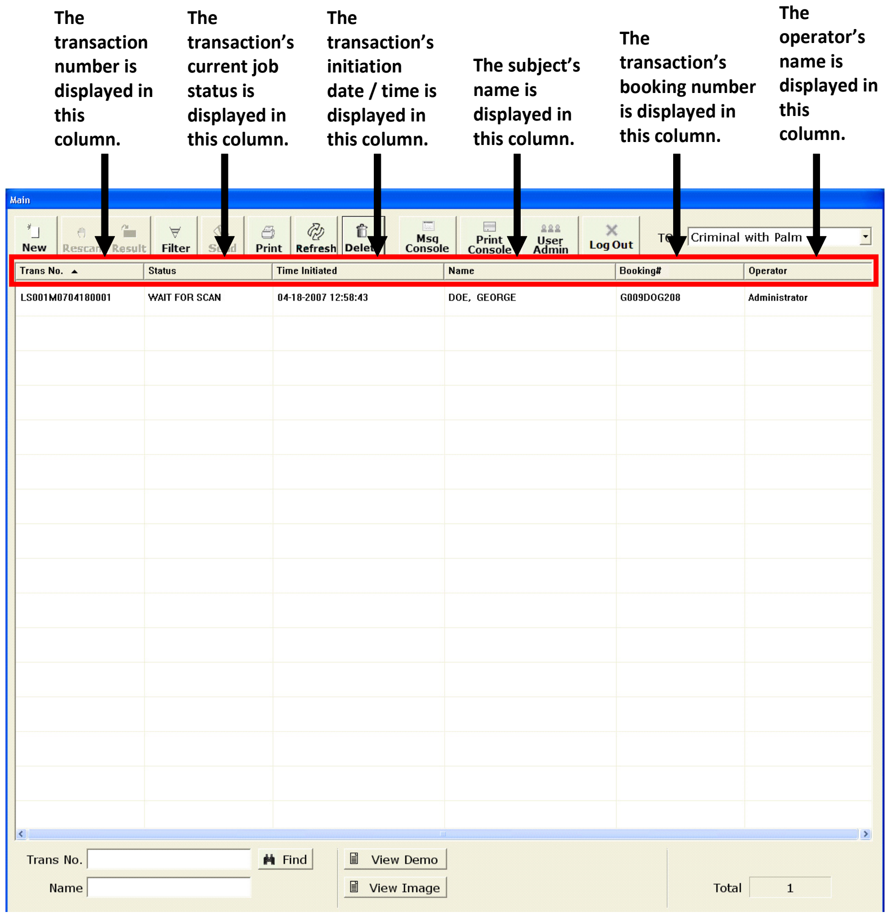

Figure B-2 Main Window - Column Descriptions

The following table provides descriptions of the columns that are displayed in the **Main** window:

Column	Description
Trans No.	Transaction numbers are displayed in this column.
Status	The status of each transaction is displayed in this column.
Time Initiated	The date/time each transaction was initiated is displayed in this column.
Name	Subject names are displayed in this column.
Booking#	Booking numbers are displayed in this column.
Operator	The name of the operator that created each transaction is displayed in this column.

Field Descriptions

The following table provides descriptions of the fields that are displayed in the **Main** window:

Field	Description
Trans No.	The transaction number of the currently selected transaction is displayed in this field. This field can also be used in conjunction with the **Find** button to locate a specific transaction, as described in *Finding a Specific Transaction* on page 31.
Name	The subject name for the currently selected transaction is displayed in this field. This field can also be used in conjunction with the **Find** button to locate a specific transaction, as described in *Finding a Specific Transaction* on page 31. The format of this field is **LAST, FIRST MIDDLE SUFFIX** (e.g., **DOE, KEVIN TIMOTHY II**).
Total (Transactions)	The total number of transactions currently displayed in the queue.

Function Button Descriptions

The various function buttons in the **Main** window allow you to manage the transactions displayed in the queue, as well as access the major functions of the system, as described in *Figure B-3*.

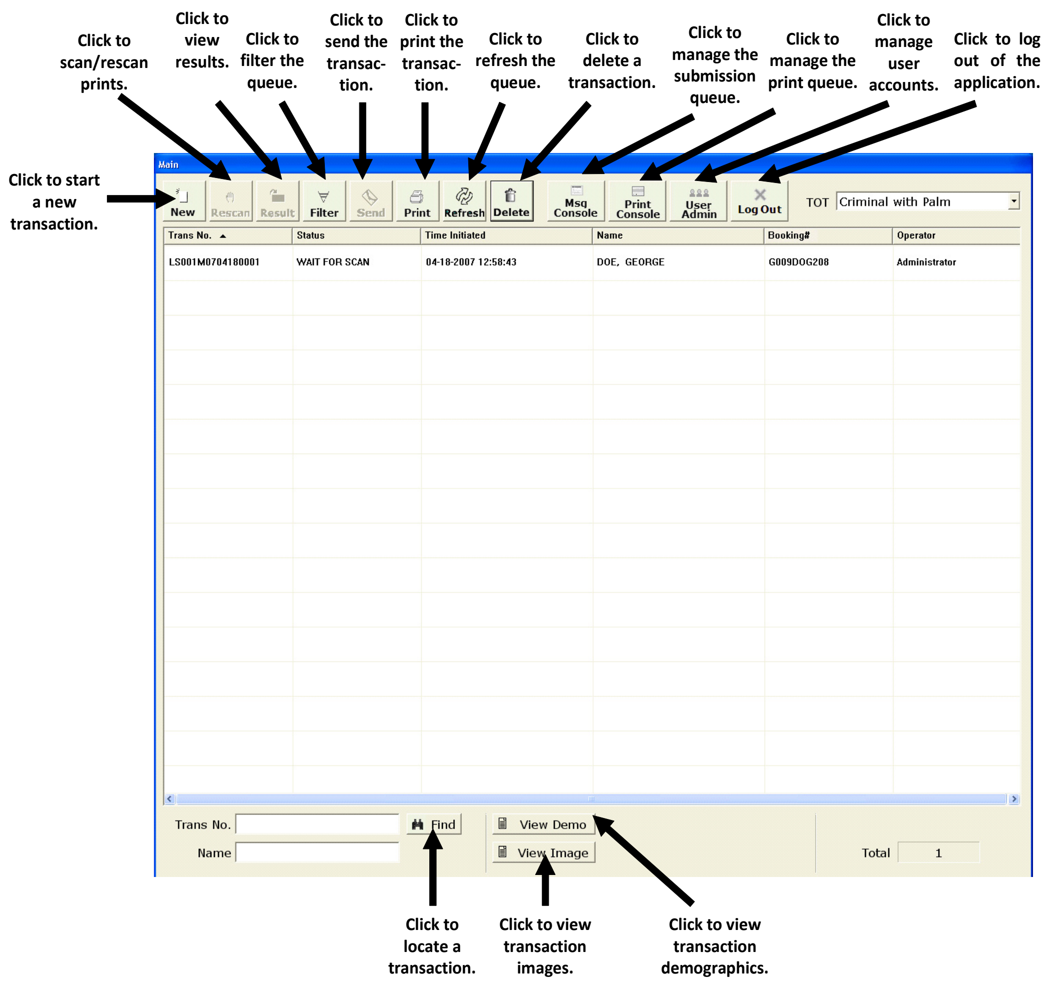

Figure B-3 Main Window - Function Button Descriptions

> **NOTE:** Depending on your system configuration and your account privileges, you may or may not be able to access all of the functions described above. For example, only an administrator would be able to access the **User Admin** button and manage user accounts.

The following table provides descriptions of the function buttons that are displayed in the **Main** window:

Button	Description
New	Click this button to begin creating a new transaction.
Rescan	Select a transaction with a status of *WAIT FOR SCAN* from the queue, and then click this button to capture the prints for that transaction.
Result	Select a transaction and click this button to view results returned from the agency to which LiveScan has submitted the transaction.
Filter	Click this button to access the **Queue Filter** window.
Send	Select one or more transactions from the queue, and then click this button to send the transaction(s).
Print	Select one or more transactions from the queue, and then click this button to print the transaction(s).
Refresh	Click this button to manually refresh the queue.
Delete	Select one or more transactions from the queue, and then click this button to delete the transaction(s).
Msg Console	Click this button to access the **Submission Queue** window. [**Note**: This button is only available for Administrators. Refer to *Viewing the Status of Sent Transactions in the Submission Queue* on page 46 for details.]
Print Console	Click this button to access the **Print Queue** window. [**Note**: This button is only available for Administrators. Refer to *Viewing the Status of Sent Transactions in the Submission Queue* on page 46 for details.]
User Admin	Click this button to access the **User Administration** utility. [**Note**: This button is only available for Administrators. Refer to *Instructions for Administrators* on page 45 for details.]
Log Out	Click this button to log out of the LiveScan program.
Find	Enter a number in the **Trans No.** and/or a name in the **Name** field, and then click this button to locate a specific transaction within the queue that matches your criteria.
View Demo	Select a transaction from the queue, and then click this button to view and/or modify the demographic data associated with the selected transaction.

Button	Description
View Image	Select a transaction from the queue, and then click this button to view the fingerprint images associated with the selected transaction.

Appendix C

Instructions for Administrators

This appendix provides instructions for performing the following system administration functions:

- *Powering LiveScan*
- *Viewing the Status of Sent Transactions in the Submission Queue*
- *Viewing the Status of Printed Transactions in the Print Queue*
- *Managing Users in the User Administration Utility*

> **NOTE:** Depending on your LiveScan privileges, you may not have access to the functions described in this appendix.

Powering LiveScan

This section outlines general information on powering LiveScan systems. These procedures should only be performed by System Administrators.

Modes of Operation

LiveScan has three modes of operation:

- Power-Saving
- Active
- Power-Off

Power-Saving Mode

When the LiveScan system is powered on, it is automatically set to Power-Saving mode. Power-Saving mode minimizes the power consumed by the scanner.

To power on the LiveScan system:

1 Turn on the computer.

2 Turn on the scanner.

3 Log into the Windows® operating system. [**Note**: The default user name is **livescan** and the default password is **livescan**.]

Active Mode

To change from Power-Saving mode to Active mode, simply double-click the LiveScan software icon on the desktop. The scanner platen will be illuminated, and LiveScan will go into Active mode. This is the mode in which you can access the LiveScan program.

If the LiveScan system is not going to be in constant use, it is best to return to Power-Saving mode by logging out of the LiveScan application. In this mode, the LiveScan system is conserving power and is not ready for use.

To return the LiveScan system from Active mode to Power-Saving mode:

1 From the **Main** window, click the **Log Out** button. A dialog box will be displayed, asking you to confirm your decision to log out.

2 Click **OK**. The **Login** window will be displayed.

3 Click **Quit** to close the LiveScan application.

Power-Off Mode

If the LiveScan system is going to be inactive for more than a few days, it is best to turn the power off. This function should only be handled by a System Administrator.

To power off the LiveScan system:

1 If you have not already done so, log out of the LiveScan application.

2 Turn off the scanner.

3 Shut down the computer.

Viewing the Status of Sent Transactions in the Submission Queue

Administrators can use the **Submission Queue** to view the status of sent transactions. To access the **Submission Queue**, from the **Main** window, click **Msg Console**. A window similar to the one shown in *Figure C-1* will be displayed.

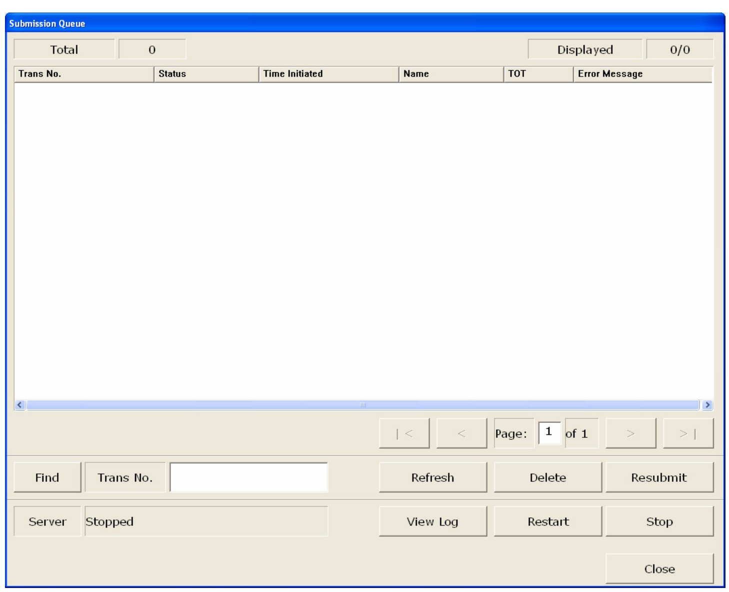

Figure C-1 Submission Queue Window

From the **Submission Queue** window, Administrators can:

- Find a specific transaction in the **Submission Queue** by entering a transaction number in the **Trans No.** field and clicking the **Find** button
- Refresh the **Submission Queue** by clicking the **Refresh** button
- Delete transactions from the **Submission Queue**, using the **Delete** button
- Resend transactions, using the **Resubmit** button
- View the log by clicking the **View Log** button
- Restart the server by clicking the **Restart** button
- Stop the server by clicking the **Stop** button
- Close the **Submission Queue** window by clicking the **Close** button

Viewing the Status of Printed Transactions in the Print Queue

Administrators can check the status of transactions that were sent to the printer using the **Print Queue**. To access the **Print Queue**, from the **Main** window, click **Print Console**. A window similar to the one shown in *Figure C-2* will be displayed.

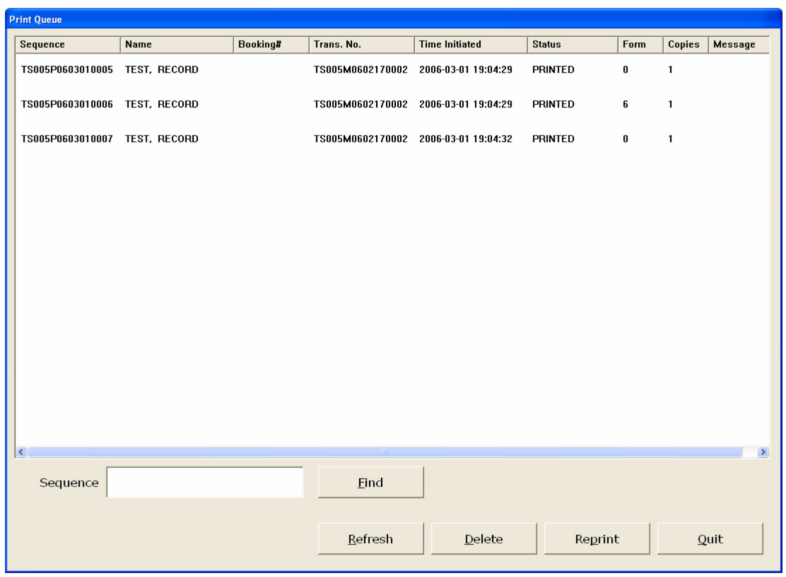

Figure C-2 Print Queue Window

From this window, Administrators can:

- Find a specific transaction in the **Print Queue** by entering a transaction number in the **Sequence** field and clicking the **Find** button
- Refresh the **Print Queue** by clicking the **Refresh** button
- Delete transactions from the **Print Queue**, using the **Delete** button
- Reprint transactions, using the **Reprint** button
- Close the **Print Queue** window by clicking the **Quit** button

Managing Users in the User Administration Utility

Administrators can use the **User Administration** utility to add, modify, and delete users, as described in the following subsections.

Accessing the User Administration Utility

To access the User Administration utility:

1 From the **Main** window, click the **User Admin** button. The **LiveScan User Administration** (Login) box will be displayed (*Figure C-3*).

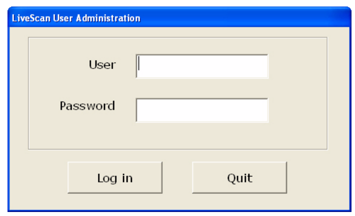

Figure C-3 LiveScan User Administration (Login) Box

2 Enter your administrator name and password and click **Log in**. The **User Administration** window will be displayed (*Figure C-4*).

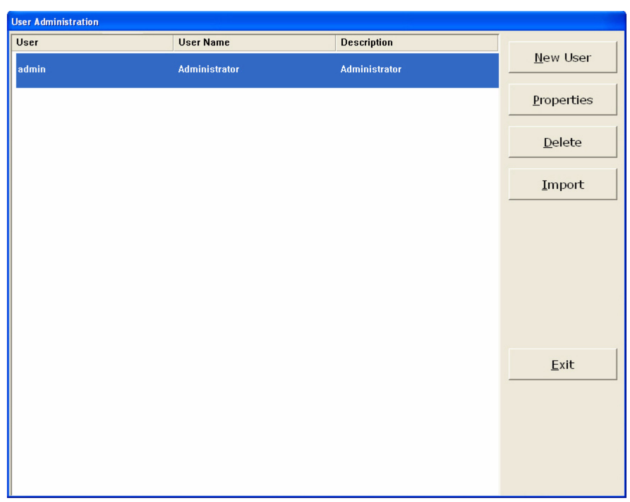

Figure C-4 User Administration Window

Adding a User Account

To add a user account:

1 Access the **User Administration** window, as described in *Accessing the User Administration Utility* on page 48.

2 Click **New User**. The **New User** window will be displayed (*Figure C-5*).

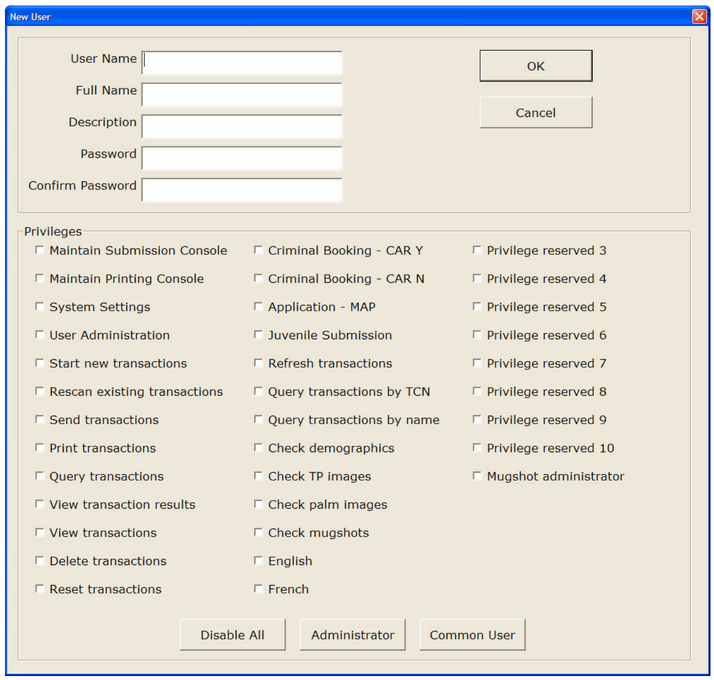

Figure C-5 New User Window

3 Enter the user name in the **User Name** field.

4 Enter the user's full name in the **Full Name** field.

5 If desired, enter a description of the user in the **Description** field.

6 Enter the user's password in the **Password** field.

NOTE: The password is case-sensitive and must be at least 8 characters long.

7 Re-enter the user's password in the **Confirm Password** field.

8 Select the user privileges as follows:

- If this user is to have standard user-level privileges, click **Common User**.
- If this user is to have administrator-level privileges, click **Administrator**.
- If you would like to manually select the privileges for this user, select the desired privilege check boxes.

9 Click **OK**. The user account will be created.

Modifying a User Account

To modify user account information:

1 Access the **User Administration** window, as described in *Accessing the User Administration Utility* on page 48.

2 Select the user account in the queue whose data you want to modify.

3 Click **Properties**. The **User Properties** window for the selected user account will be displayed (*Figure C-6*).

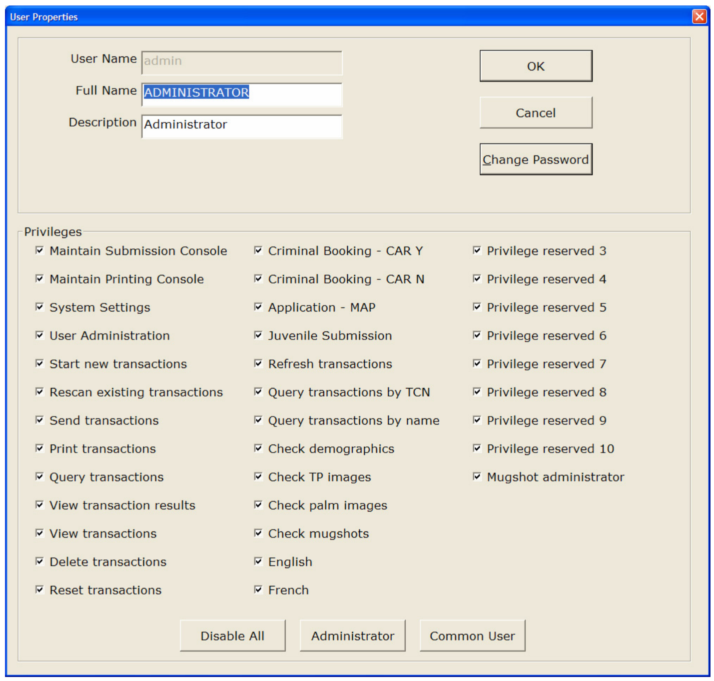

Figure C-6 User Properties Window

4 Modify the data and/or privileges as desired.

5 When you are finished, click **OK**. Your changes will be saved, and the **User Administration** window will be displayed.

> **NOTE:** If you want to change the user's password, click the **Change Password** button. A box will be displayed in which you can change the user's password.

6 If you would like to modify information for an additional user account, repeat steps **2** through **5**; otherwise, click **Exit** to return to the **Main** window.

Deleting a User Account

WARNING: Use care when deleting user accounts. User accounts that have been deleted cannot be restored. If you accidentally delete a user account, you must create a new account for the user.

To delete a user account:

1. Access the **User Administration** window, as described *Accessing the User Administration Utility* on page 48.
2. Select the user account you want to delete.
3. Click **Delete**. A dialog box will be displayed asking you to confirm your decision.
4. Click **OK**. The user account will be deleted and will no longer be displayed in the queue of the **User Administration** window.
5. If you would like to delete an additional user account, repeat steps **2** through **4**; otherwise, click **Exit** to return to the **Main** window.

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