

CAPSS

Reference Configuration



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1 Overview

1.1 Why CAPSS?

In accordance with AB391, which was passed on August 17, 2012, new procedures for California Pawnbrokers (PBs) and Secondhand Dealers (SHDs) when reporting property transactions to their Local Law Enforcement Agencies were established. PBs and SHDs will be required to use a single, statewide, electronic reporting system, which the California Department of Justice (CalDOJ) is responsible for implementing.

1.2 CAPSS submission requirements

1.2.1 Image Files

In order to submit property transaction reports electronically, each PB and SHD will need to acquire hardware and software to capture electronic images of the following:

- Customer's thumbprint
- Customer's signature
- Optional photo of property item(s) being submitted

NOTE: The maximum file size for each image is 75k

Smaller file sizes are acceptable and may improve performance of uploads.

1.2.2 Internet Connection

The CAPSS application is a web application that is accessed via the Internet. **It is recommended that the Internet connection speed be at least 768Kbps.**

1.3 Reference Configuration

This document is intended to document a conforming reference configuration that has been configured and tested by DOJ. The configuration documented is not intended to be a recommendation, but rather proof that the requirements can be met with readily available hardware and software. In fact, there are countless possible configurations that will meet the requirements – this document only describes one that has been configured and tested by DOJ. All prices were accurate at the time of this document's creation.

1.4 Considerations

Generally, larger institutions that have internal IT staff (such as chains, etc.) are not as likely to need technical assistance with meeting the requirements. The selection of hardware and software was based on meeting the following criteria:

- Reasonable quality
- Ease of use
- Ease of setup
- Reasonable cost

2 Reference Configuration

The following reference configuration was setup and tested at DOJ the week of February 9, 2015. The total cost (not including taxes and shipping) was under \$400.

2.1 Thumbprint Images

2.1.1 Hardware Device

Item: **Futronic FS88 PIV**
Description: **FS88 FIPS201/PIV Compliant USB 2.0 Desktop Fingerprint Scanner**
Cost: **\$88**

Item: **SecuTech USB Dongle Key**
Description: **USB dongle key for software copy protection (serialized) – metal case**
Cost: **\$23**

2.1.2 Software

Item: **Futronic Fingerprint Scanner Driver**
Description: **Device driver for Futronic FS88 Fingerprint Scanner**
Cost: **Included with device**

Item: **Fulcrum Biometrics FbF Listener (Client Only)**
Description: **Software to capture images from the fingerprint scanner and signature capture pad**
Cost: **\$99**
Annual Support: **\$19.80**

Item: **NEUROtechnology Activation Wizard**
Description: **Software activate the license for the FbF Listener (using the SecuTech USB Dongle Key)**
Cost: **Included**

2.2 Signature Images

2.2.1 Hardware Device

Item:	Topaz Signature Pad T-S460-HSB-R
Description:	Topaz Signature LITE Capture Pad – 1x5 USB
Cost:	\$96.99

Software

Item:	Fulcrum Biometrics FbF Listener (Client Only)
Description:	Software to capture images from the fingerprint scanner and signature capture pad
Cost:	N/A (same software for fingerprint scanner)

2.3 Property Item Images

NOTE: Property item images are optional

Hardware Device

Item: **Logitech c310 HD Webcam**
Description: **Logitech c310 5MP HD Webcam**
Cost: **\$44.99**

Software

Item: **Logitech Webcam Software**
Description: **Software to capture images from the webcam**
Cost: **Free download** (Logitech.com/support/c310)

3 Installation Process

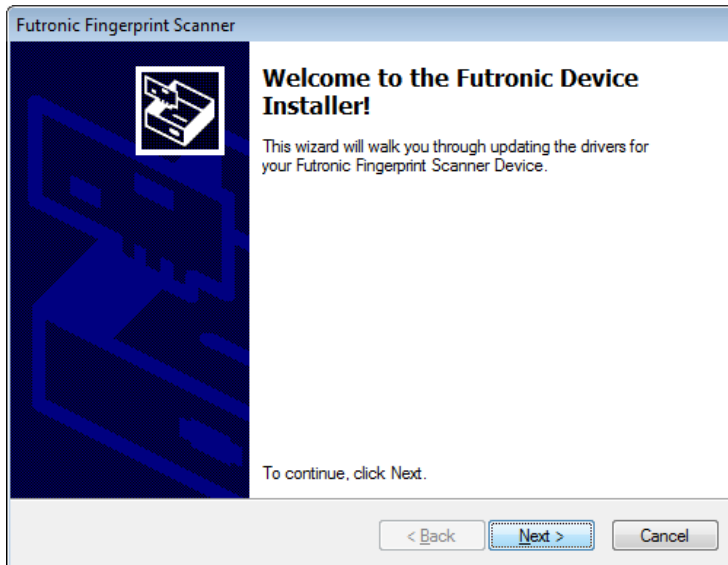
The installation process is outlined below. This document is intended to be used with the supplied software installation media prepared by DOJ.

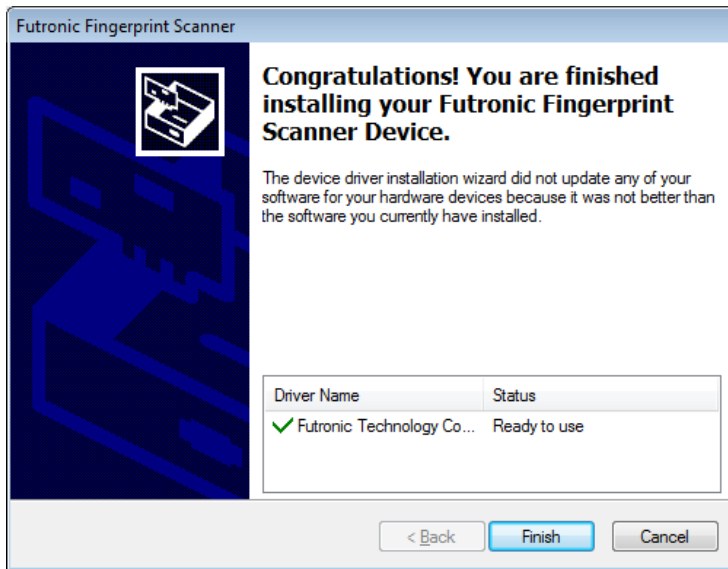
NOTE: All software was up-to-date as of the date of this document's creation. The individual drivers and software packages have been organized to make the installation process simpler. However, newer versions of the drivers may be necessary. Please consult with the hardware vendor for the latest drivers.

3.1 Thumbprint Images

1. Install the device driver for FS88 Fingerprint Scanner:

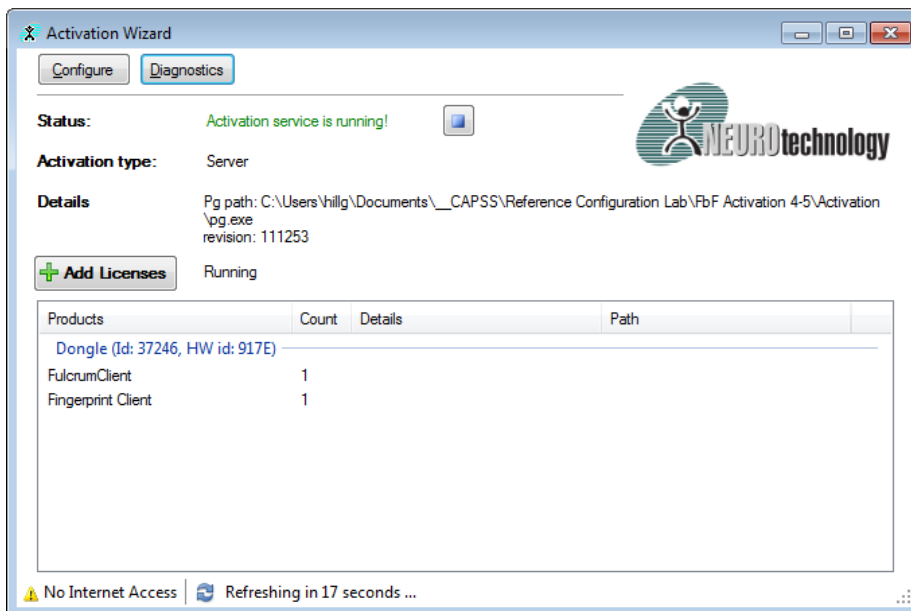
Run the **setup.exe** in the **STEP-1-THUMBPRINT-SCANNER_SETUP\STEP-1A-FUTRONIC-DEVICE-INSTALLER** folder)



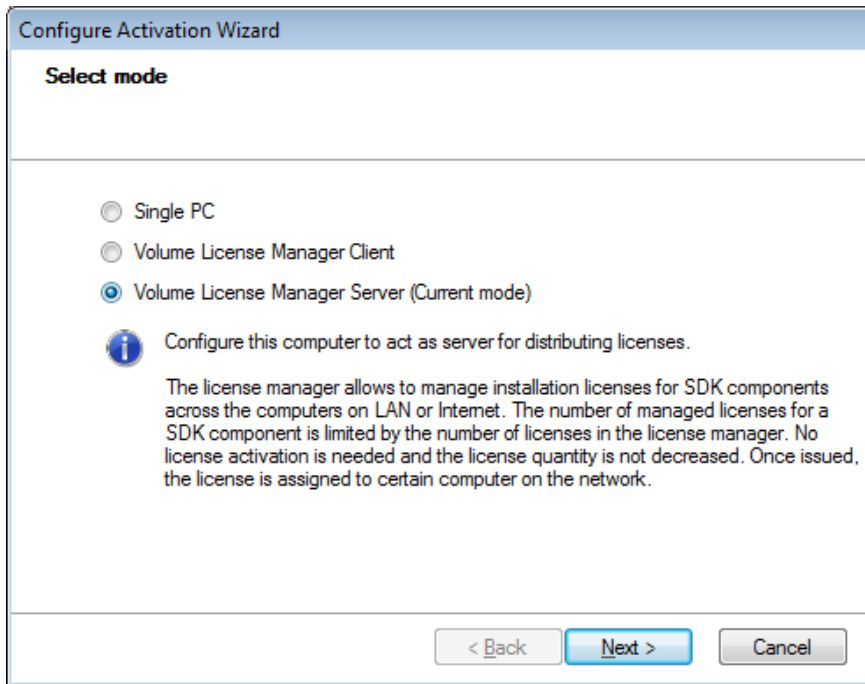


2. Insert the FS88 Fingerprint Scanner
3. Insert the SecuTech USB Dongle Key
4. Wait for device drivers to install. There will be notifications in the System Tray area.
5. Run the NEUROtechnology Activation Wizard:

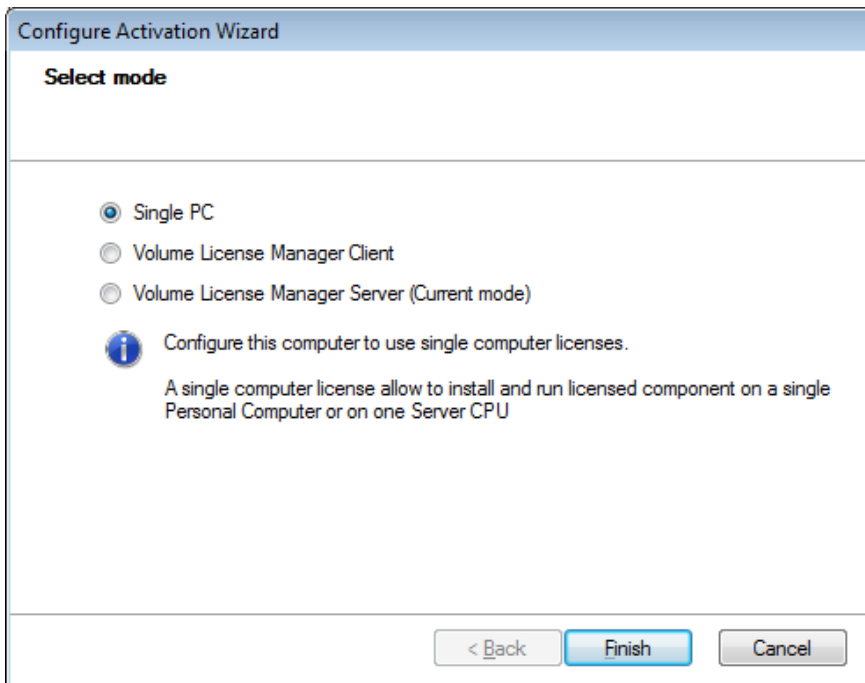
Run **ActivationWizard.exe** in the **STEP-1-THUMBPRINT-SCANNER_SETUP\STEP-1B-NEUROTECHNOLOGY-ACTIVATION-WIZARD** folder.



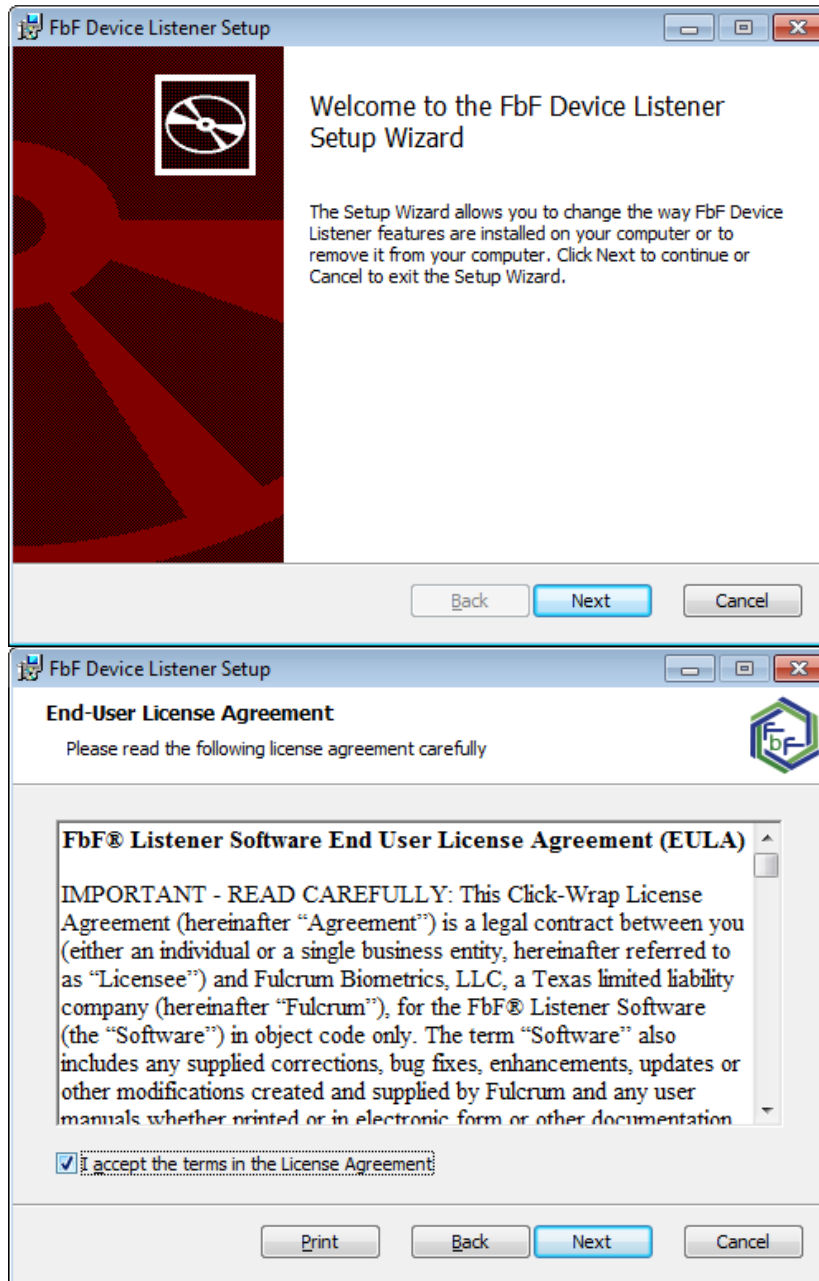
- a. Click the **Configure** button

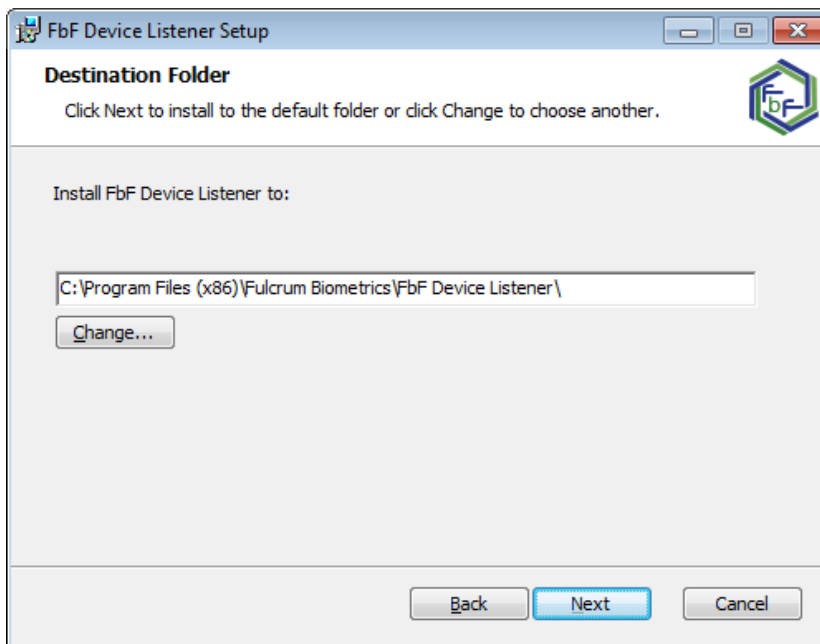


b. Change the mode to **Single PC**

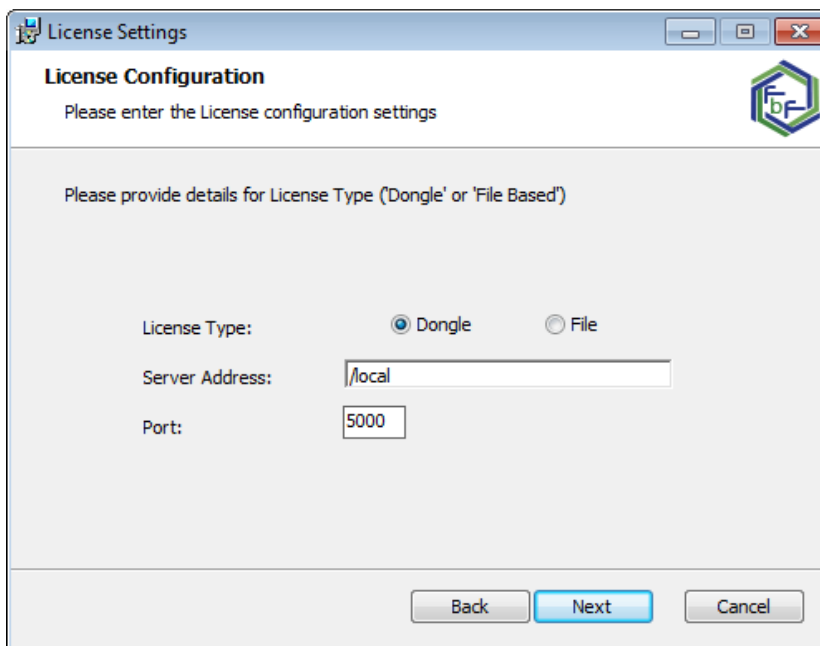


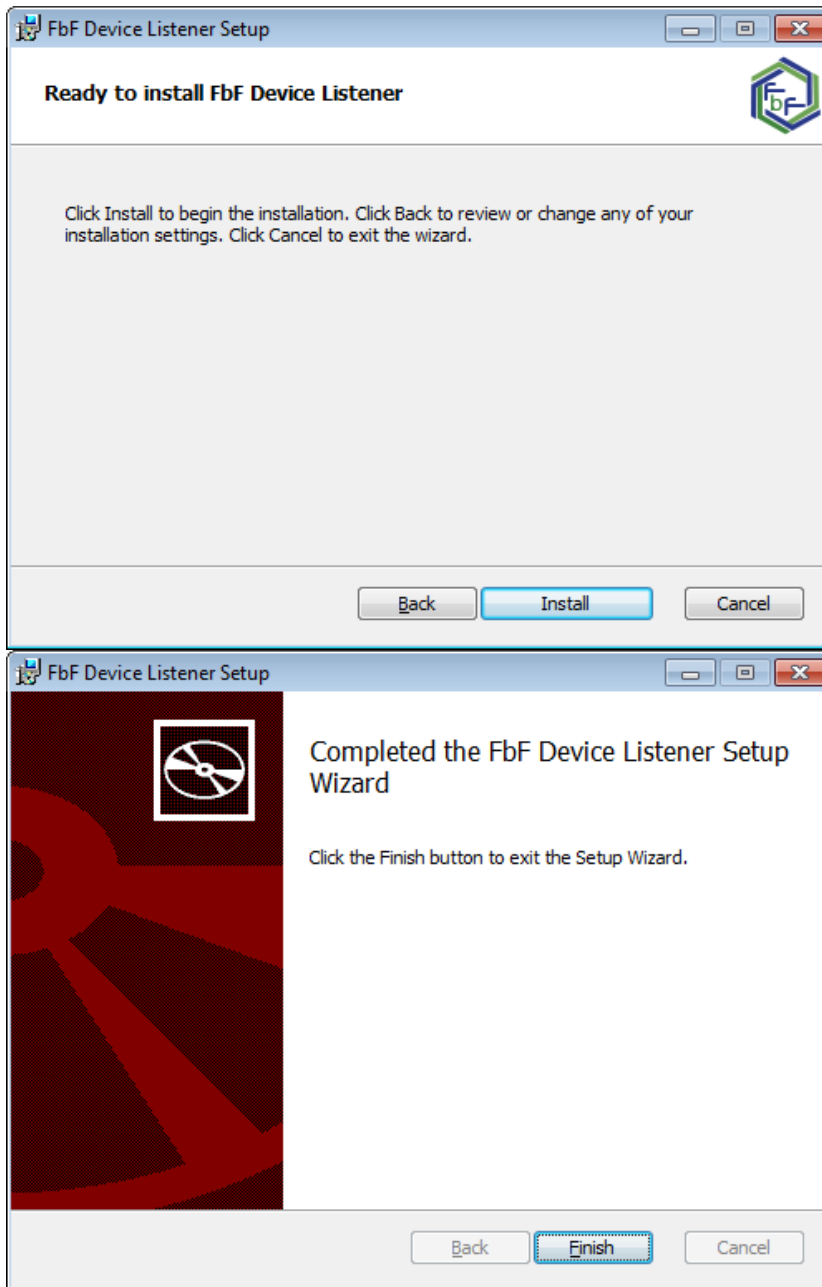
6. Install the FbF Listener software:
 - a. Run **FbF.Listener.Setup.WIX.msi** in the **STEP-1-THUMBPRINT-SCANNER_SETUP\STEP-1C-FbF-DEVICE-LISTENER-SETUP-WIZARD** folder.





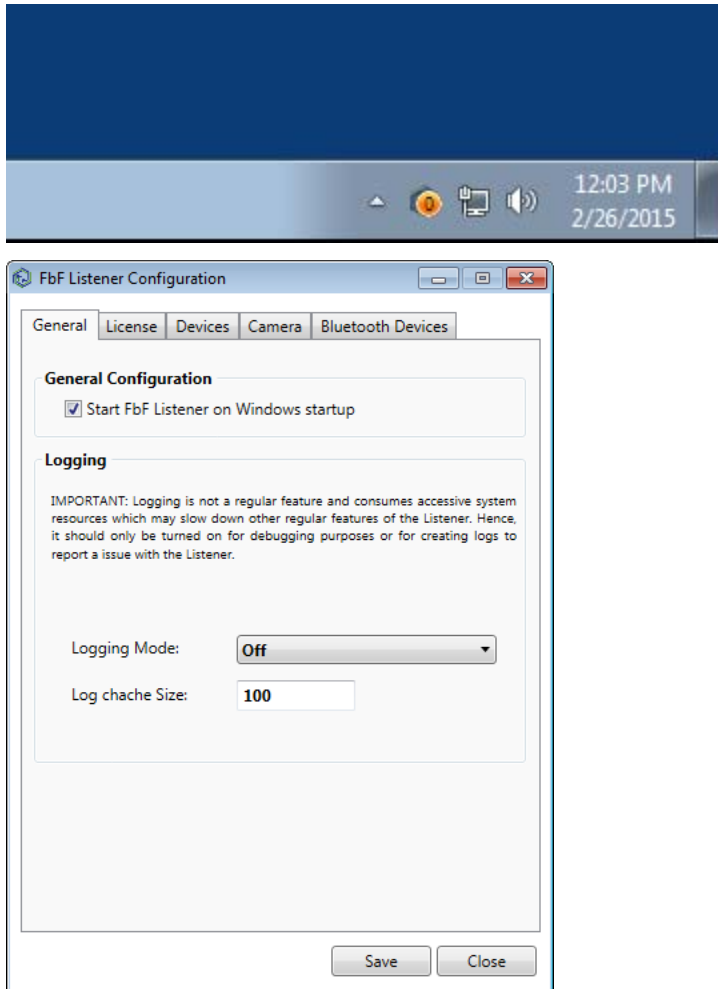
b. Set the Server Address to **/local** and the port to **5000**



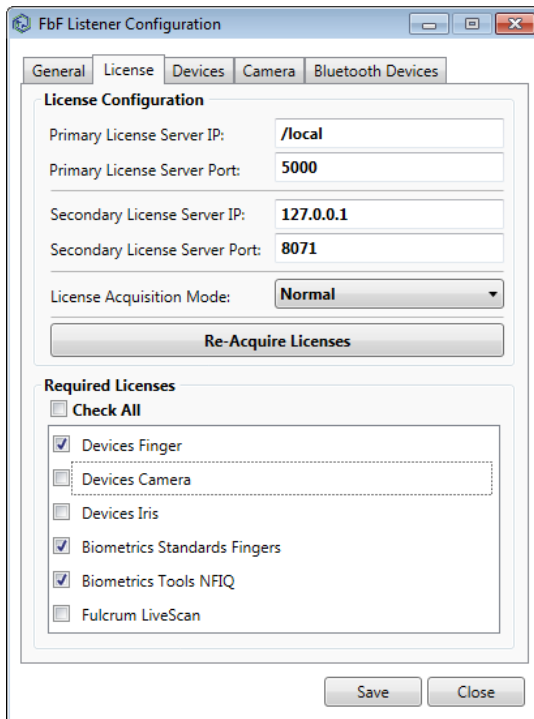


7. Configure the FbF Listener software
 - a. Find the icon in the system tray* and right-click, then select **Configuration**

*NOTE: The system tray is usually at the bottom right of the desktop window. The FbF icon is the yellow circle shown below:



- b. Select the **License** tab



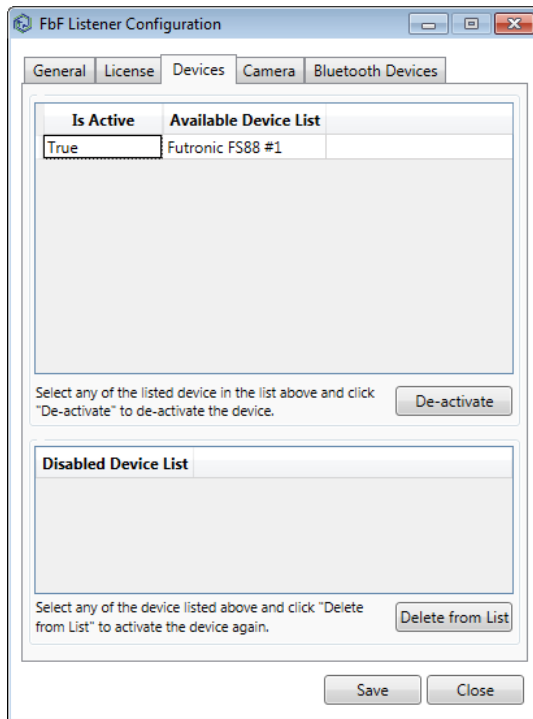
IMPORTANT NOTE:

If the Licenses displayed above (**Devices Finger, Biometrics Standards Fingers, and Biometrics Tools NFIQ**) are not checked (or if any others are), you may need to do the following:

- Uncheck all licenses and click **Save**
- Restart the Listener (right-click on tray icon and click **Restart**)
- Open up the configuration again and select the **License** tab again
- Check the following licenses and then click **Save**:

- **Devices Finger**
- **Biometrics Standards Fingers**
- **Biometrics Tools NFIQ**

c. Select the **Devices** tab and verify the Futronic FS88 is listed and active



8. Verify the FbF Listener software sees the appropriate licenses
 - a. Right-click on the tray icon and select **Statistics**

The screenshot shows the 'Listener Statistics' application window. It is divided into three main sections: General, License Details, and Available Scanners.

General

Status	Online
License Validity	Valid
Available Scanner Count	1
Active Connection Count	0
Active Subscription Count	0
Number of Requests received	0
Number of Response sent	0
Up Time	00:00:11.7690000

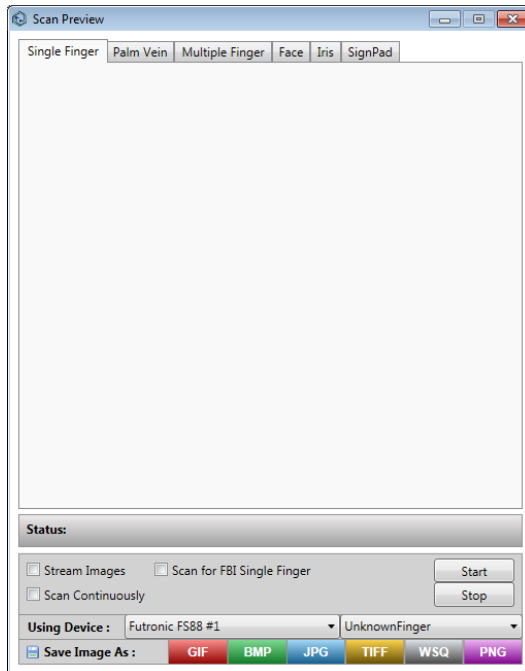
License Details

License Type	Availability
Fulcrum Client	✓ Available
Fulcrum Device Finger	✓ Available
Fulcrum Biometrics Standard Fingers	✓ Available
Fulcrum Biometrics Tools NFIQ	✓ Available

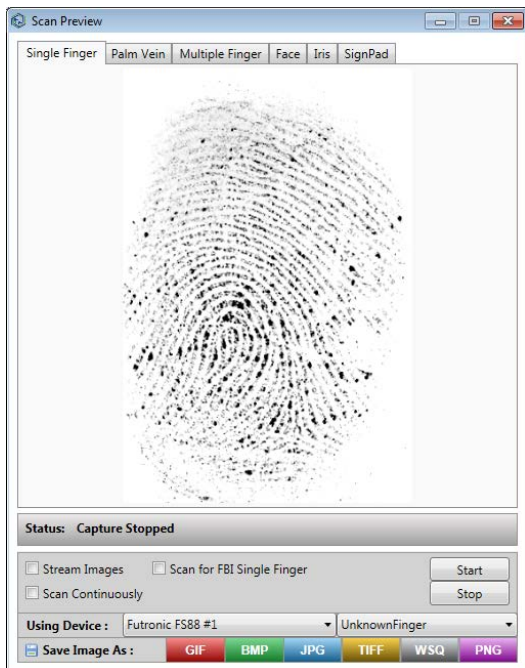
Available Scanners

Name	Is Active	Biometric Type	Liveness Detection	LiveScan Support	Device State	Make	Model	Serial Number	Device Id
Futronic FS88 #1	True	Fingerprint	True	False	Ready	Futronic	FS88	00314294	Futronic FS88 {00314294}

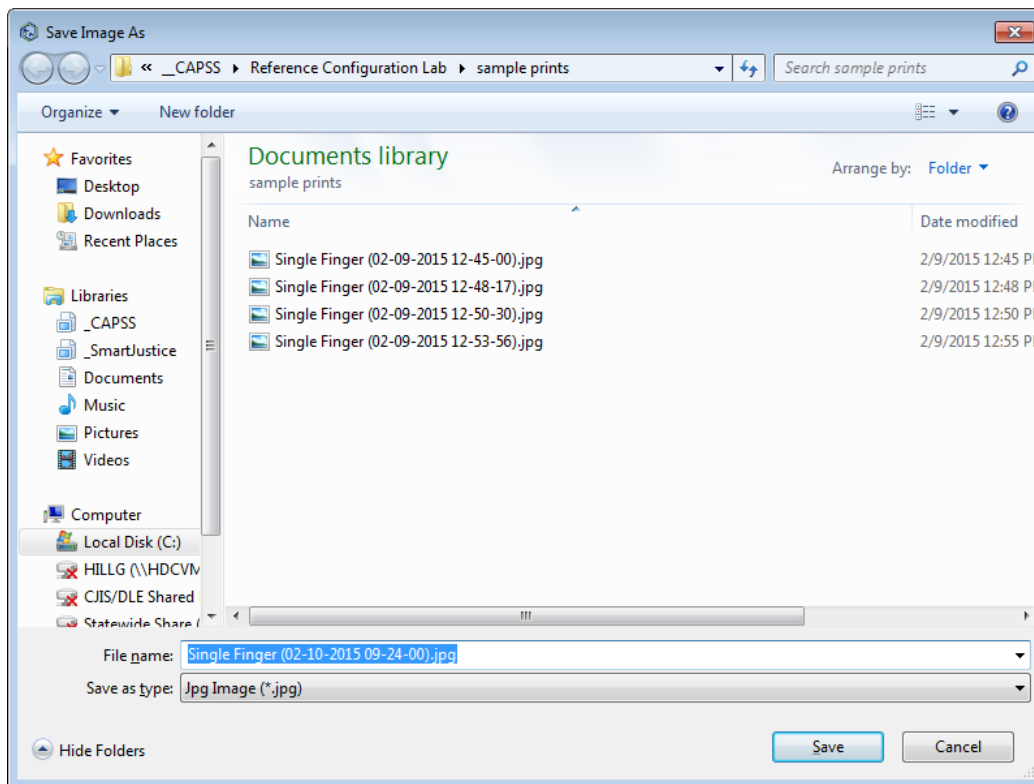
9. Test the Fingerprint scanner
 - a. Right-click on the tray icon and select **Scan Preview**



- b. Select the **Single Finger** tab and click the **Start** button
 - c. Place a finger or thumb on the scanner



- d. Save the image by selecting one of the file format buttons at the bottom



NOTE:

To meet the requirement of images being sized at 75k or smaller, it is recommended to select JPG.

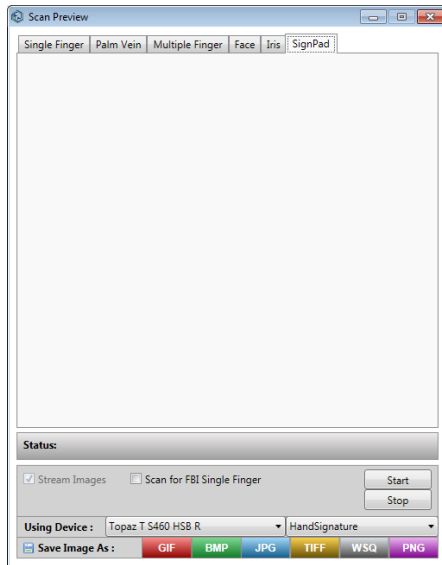
It is also possible to use image conversion software to reduce the size of the file, but that is not covered by this document.

3.2 Signature Images

1. Install the Signature pad
 - a. Plug in the signature pad (a driver will be automatically installed)

NOTE: You will NOT need to install any extra software or drivers for the signature

2. Test the Signature pad
 - a. Right-click on the tray icon and select **Scan Preview**

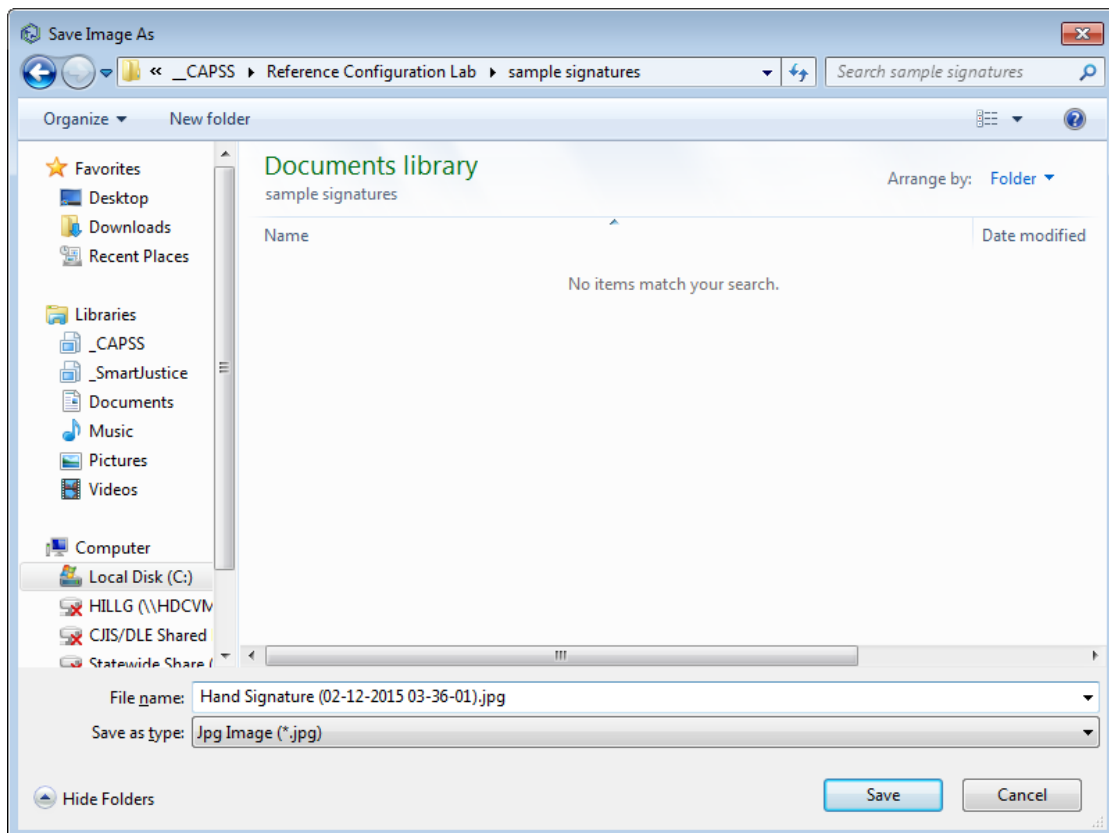


- b. Select the **SignPad** tab and click the **Start** button
 - c. Sign the signature pad

NOTE: The signature pad we tested did not display the signature ON THE SIGNATURE PAD. Some versions do, but typically cost more.



d. Save the image by selecting one of the file format buttons at the bottom



NOTE:

To meet the requirement of images being sized at 75k or smaller, it is recommended to select JPG.

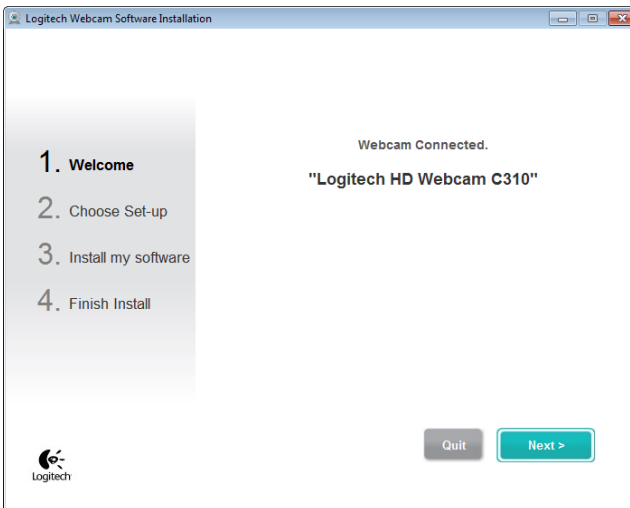
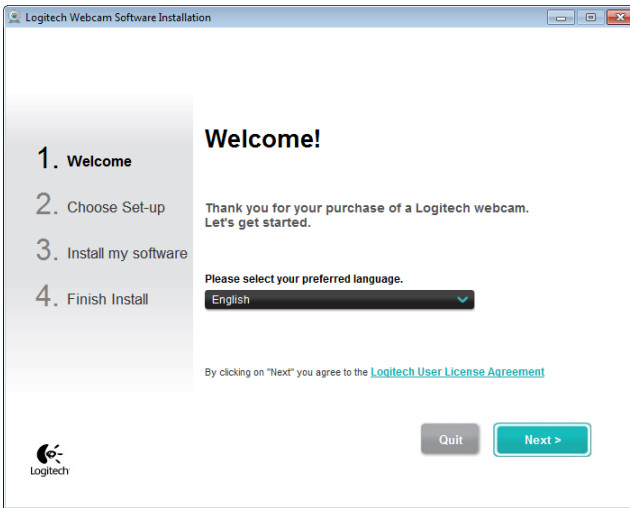
3.3 Property Item Images

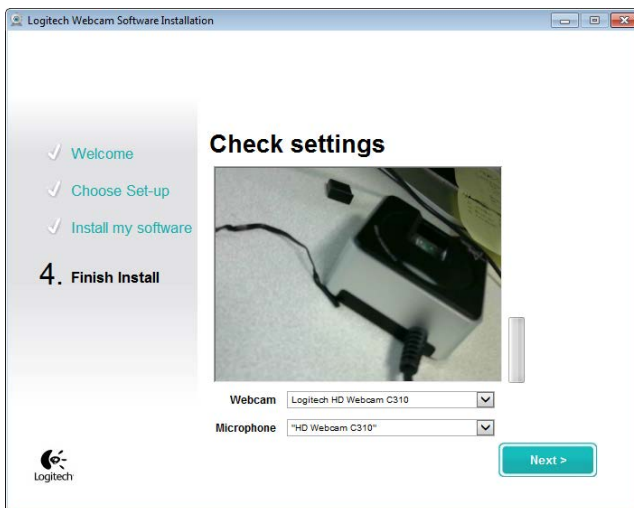
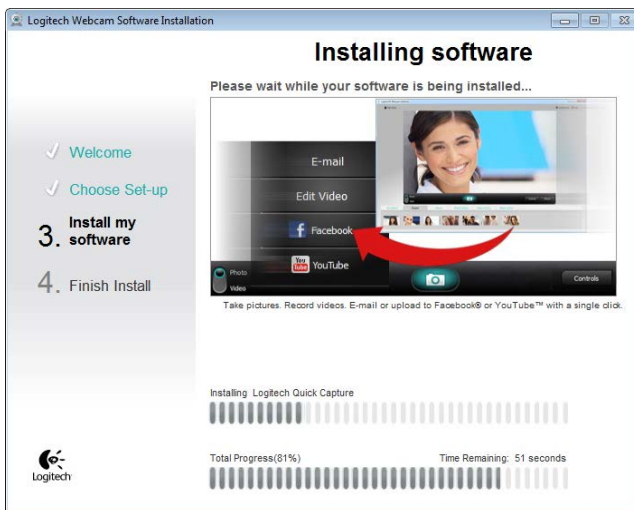
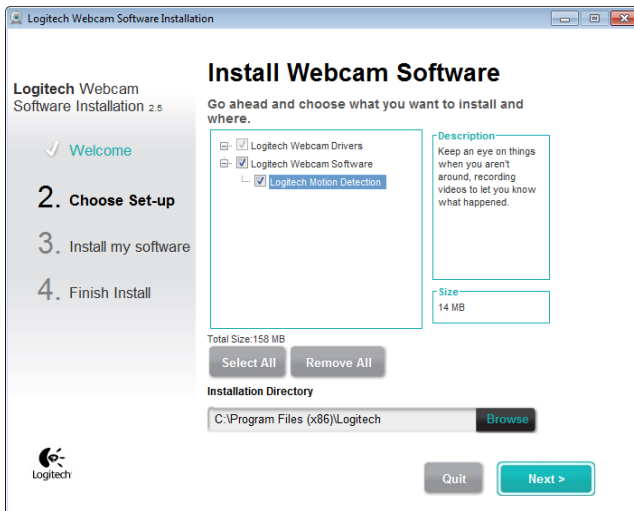
NOTE: Property item images are optional

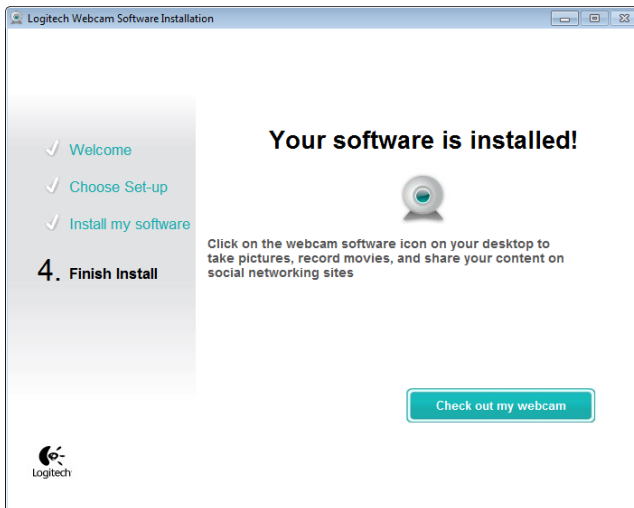
1. Connect the Logitech Webcam (device driver will install automatically)
2. Install the Logitech webcam software:

Run **lws251.exe** in the **STEP-3-WEBCAM_SETUP** folder.

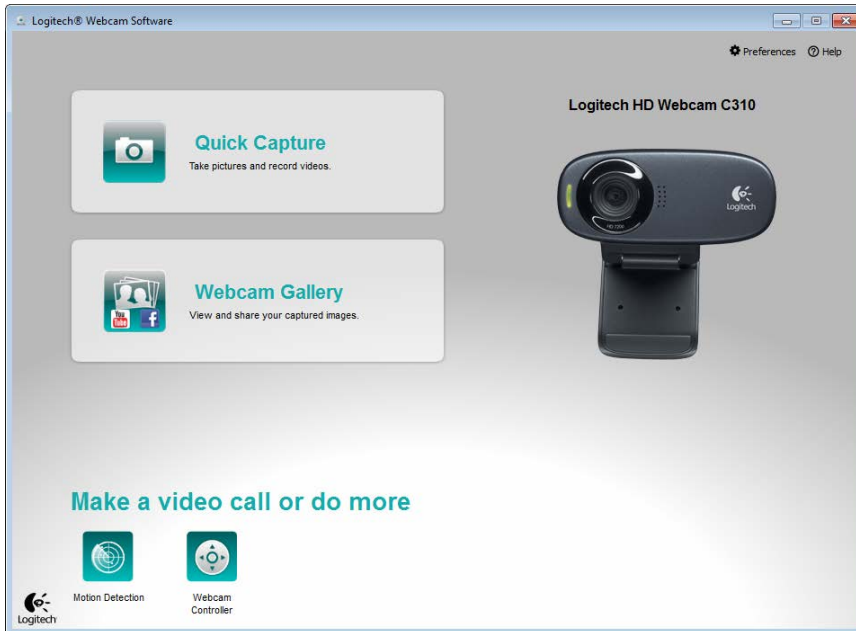
(You can also download the latest version from Logitech.com/support/c310)



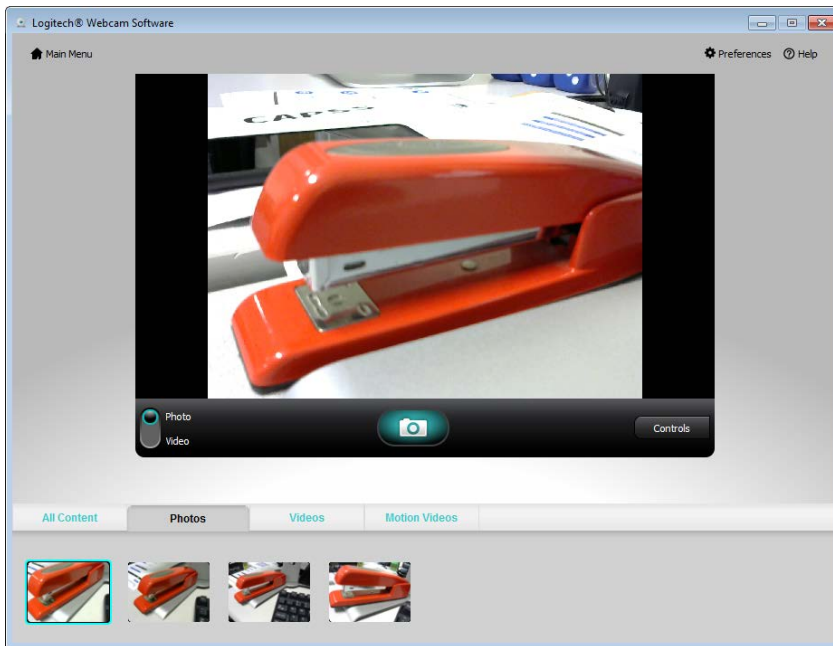




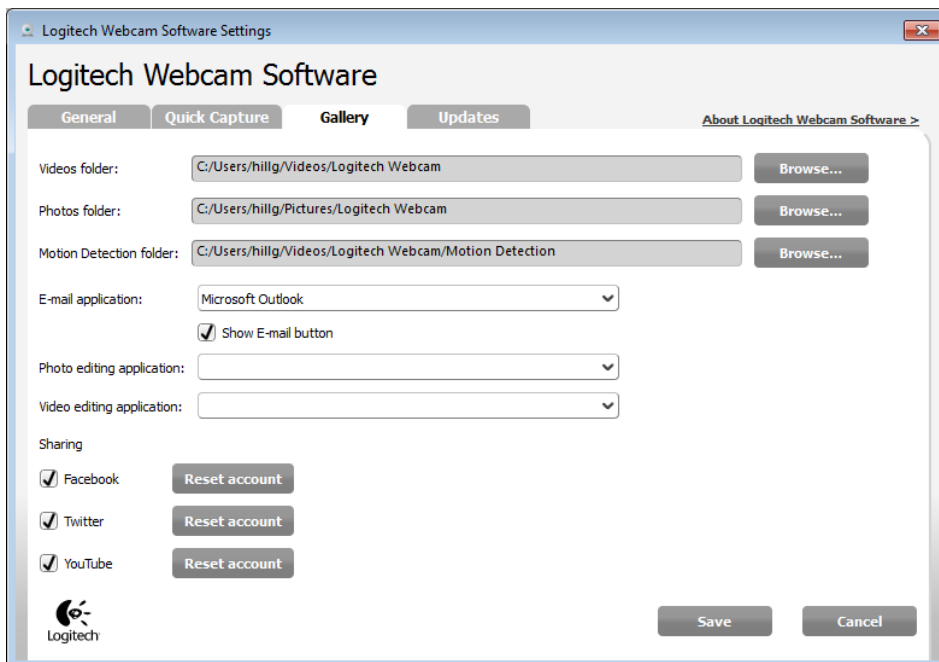
3. Click **Check out my webcam**



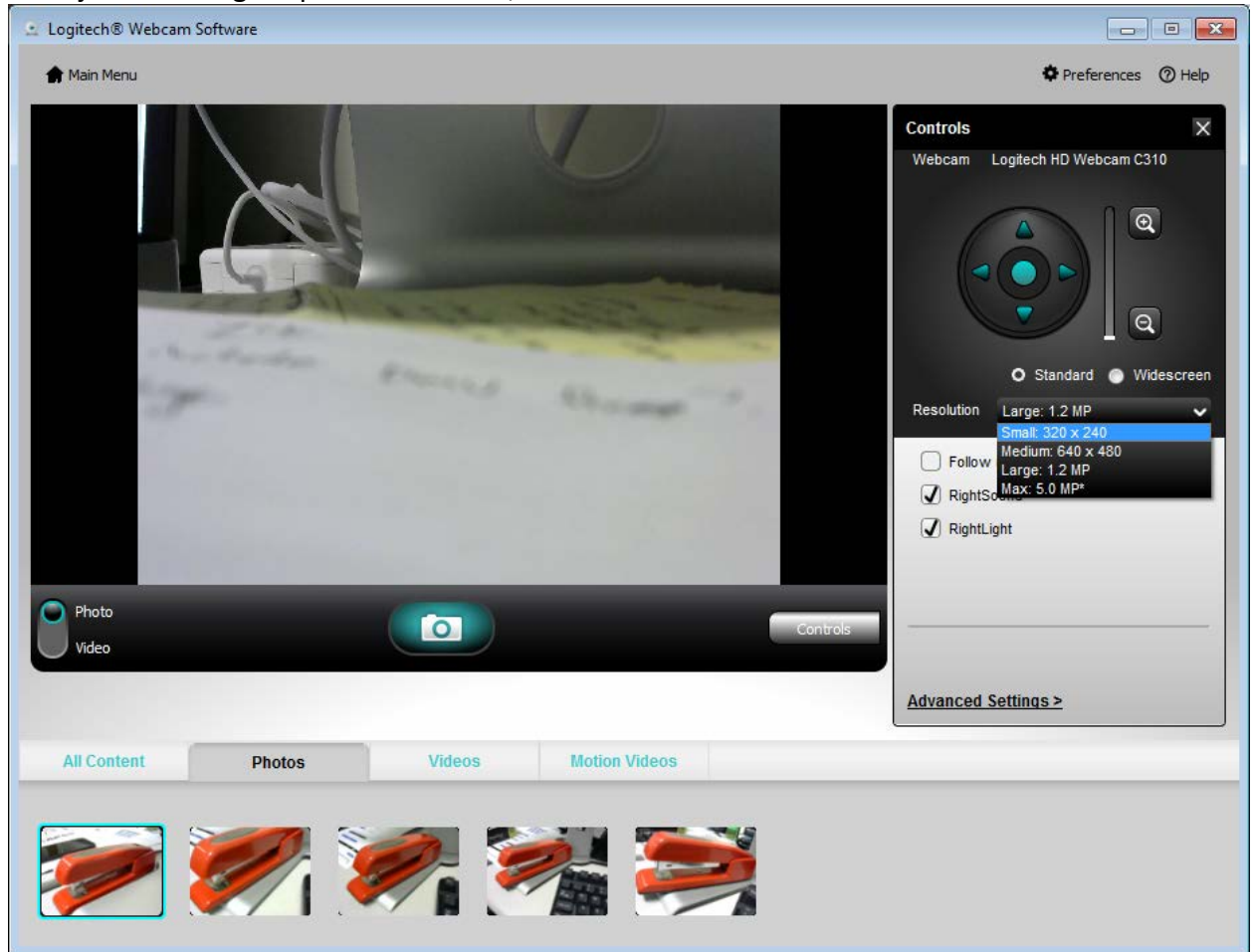
4. Click **Quick Capture** and point camera at an item



5. Click on the camera icon (center) to capture the image
6. The image will display at the bottom on the thumbnail strip
7. Open the **Preferences** to see/change where the images are stored



8. To adjust the image capture resolution, click on the **Controls** button



9. In order to meet the 75k file size limit, it is recommended to select **Small 320 x 240**

4 Sample Workflows

The following is a sample workflow that is intended to show two possible workflows for capturing and submitting JUS-123 data. Workflow design and implementation is the responsibility of the store owner.

IMPORTANT NOTE: DOJ recommends thumbprints and signatures not be retained, unless they are kept in an encrypted file system or some other secured method. This is necessary to ensure privacy and confidentiality.

4.1 Submission at time of transaction (real-time)

This is probably more suited for low-volume transaction scenarios.

Repeat for each customer at time of transaction:

- Enter JUS-123 data
- Capture Thumbprint
 - Save the thumbprint image file to the PC
 - Upload thumbprint image file onto the JUS-123 form using the **UPLOAD CUSTOMER THUMB PRINT FILE...** button, and select the thumbprint image file just saved.
- Capture Signature
 - Save the signature image file to the PC
 - Upload signature image file onto the JUS-123 form using the **UPLOAD CUSTOMER SIGNATURE FILE...** button, and select the signature image file just saved.
- Capture Photo of item (optional)
 - Save the item photo image file to the PC
 - Upload item photo image file onto the JUS-123 form using the **UPLOAD ITEM IMAGE FILE...** button, and select the item photo image file just saved.
- Submit the JUS-123 form.

4.2 Submission at end of business day (batched)

This may make more sense for higher-volume transaction scenarios.

Repeat for each customer at time of transaction:

- Capture JUS-123 data on paper or other medium (to be keyed into JUS-123 web form later)
- Capture Thumbprint
 - Save the thumbprint image file to the PC in a manner that easily identifies the image with the customer (e.g. **lastname-firstname-thumb.jpg**) – perhaps stored in a folder for the customer
- Capture Signature

- Save the signature image file to the PC in a manner that easily identifies the image with the customer (e.g. **lastname-firstname-signature.jpg**) – perhaps stored in a folder for the customer
- Capture Photo of item (optional)
 - Save the item photo image file to the PC in a manner that easily identifies the image with the customer (e.g. **lastname-firstname-item-1.jpg**) – perhaps stored in a folder for the customer

At the end of the day:

- Repeat for each customer:
 - Submit a JUS-123 form by:
 - Entering the JUS-123 data
 - Upload thumbprint image file onto the JUS-123 form using the **UPLOAD CUSTOMER THUMB PRINT FILE...** button, and select the thumbprint image for the customer.
 - Upload signature image file onto the JUS-123 form using the **UPLOAD CUSTOMER SIGNATURE FILE...** button, and select the signature image for the customer.
 - Upload item photo image file onto the JUS-123 form using the **UPLOAD ITEM IMAGE FILE...** button, and select the item photo image file just saved.
 - Submit the JUS-123 form.