(APSS





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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 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		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 Onl		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		\$19.80
		NEUROtechnology Activation Wizard
	Description:	Software activate the license for the FbF Listener (using the SecuTech USB Dongle Key)
	Cost:	Included



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2.2 Signature Images

2.2.1 Hardware Device

ltem:	Topaz Signature Pad T-S460-HSB-R		
Description:	on: 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)

Futronic Fingerprint Scanner			
Welcome to the Futronic Device Inits wizard will walk you through updating the drivers for your Futronic Fingerprint Scanner Device. To continue, click Next.			
< Back Cancel			



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Futronic Fingerprint Scanner			
	Congratulations! You are finished installing your Futronic Fingerprint Scanner Device. The device driver installation wizard did not update any of your software for your hardware devices because it was not better than the software you currently have installed.		
	Driver Name	Status	
	✓ Futronic Technology Co	Ready to use	
	< <u>B</u> ack	Finish Cancel	

- 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.

X Activation Wizard			- • •	
<u>C</u> onfigure <u>D</u> iagnostics				
Status:	Activation service is runni	ing!	XNEURDtechnology	
Activation type:	Server			
Details	Pg path: C:\Users\hillg\D \pg.exe revision: 111253	locuments\CAPSS\Reference Conf	iguration Lab\FbF Activation 4-5\Activation	
+ Add Licenses	Running			
Products	Count D	Details	Path	
Dongle (Id: 37246, H	HW id: 917E)			
FulcrumClient	1			
Fingerprint Client	1			
A No Internet Access	Refreshing in 17 sec	onds	.::	

a. Click the **Configure** button



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Configure Activation Wizard			
Select mode			
Single PC			
Volume License Manager Client			
 Volume License Manager Server (Current mode) 			
Configure this computer to act as server for distributing licenses.			
The license manager allows to manage installation licenses for SDK components across the computers on LAN or Internet. The number of managed licenses for a SDK component is limited by the number of licenses in the license manager. No license activation is needed and the license quantity is not decreased. Once issued, the license is assigned to certain computer on the network.			
< <u>B</u> ack Cancel			

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

Configure Activation Wizard
Select mode
Single PC
Volume License Manager Client
Volume License Manager Server (Current mode)
Configure this computer to use single computer licenses.
A single computer license allow to install and run licensed component on a single Personal Computer or on one Server CPU
< Back Finish Cancel

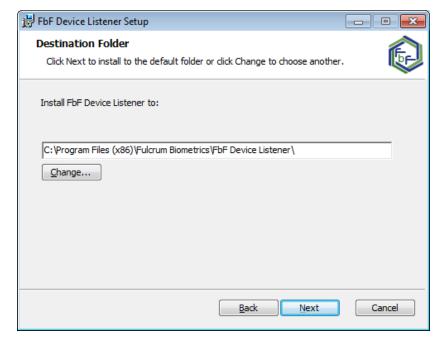


- 6. Install the FbF Listener software:
 - a. Run FBF.Listener.Setup.WIX.msi in the STEP-1-THUMBPRINT-SCANNER_SETUP\ STEP-1C-FbF-DEVICE-LISTENER-SETUP-WIZARD folder.

😸 FbF Device Listener Setur				
Ð	Welcome to the FbF Device Listener Setup Wizard			
	The Setup Wizard allows you to change the way FbF Device Listener features are installed on your computer or to remove it from your computer. Click Next to continue or Cancel to exit the Setup Wizard.			
	Back Next Cancel			
😸 FbF Device Listener Setur				
End-User License Agre	ement license agreement carefully			
Flease read the following				
FbF® Listener Software End User License Agreement (EULA) IMPORTANT - READ CAREFULLY: This Click-Wrap License Agreement (hereinafter "Agreement") is a legal contract between you (either an individual or a single business entity, hereinafter referred to as "Licensee") and Fulcrum Biometrics, LLC, a Texas limited liability company (hereinafter "Fulcrum"), for the FbF® Listener Software (the "Software") in object code only. The term "Software" also includes any supplied corrections, bug fixes, enhancements, updates or other modifications created and supplied by Fulcrum and any user manuals whether printed or in electronic form or other documentation				
(Print Back Next Cancel			



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

🛃 License Settings			- • •
License Configuration Please enter the License configu	uration settings		¢
Please provide details for Licens	e Type ('Dongle' or 'File	Based')	
License Type:	Oongle	🔿 File	
Server Address:	/local		1
Port:	5000		
	Back	Next	Cancel



😸 FbF Device Listener Setup				
Ready to install FbF Dev	ice Listener	¢		
Click Install to begin the installation. Click Back to review or change any of your installation settings. Click Cancel to exit the wizard.				
	Back Install	Cancel		
😸 FbF Device Listener Setup				
	Completed the FbF Device Li Wizard Click the Finish button to exit the Setup W	istener Setup		
	<u>B</u> ack Einish	Cancel		



- 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:

	· 🧿 📮 🕩	12:03 PM 2/26/2015
😥 FbF Listener Configuratio	n 🗖 🖬 💌	
General License Device	es Camera Bluetooth Devices	
General Configuration	on Windows startup	
resources which may slow d	a regular feature and consumes accessive system lown other regular features of the Listener. Hence, n for debugging purposes or for creating logs to ter.	
Logging Mode:	Off •	
Log chache Size:	100	
	Save Close	

b. Select the License tab



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BFbF Listener Configuration					
General License Devices Camera Bluetooth Devices					
License Configuration					
Primary License Server IP:	/local				
Primary License Server Port:	Primary License Server Port: 5000				
Secondary License Server IP:	127.0.0.1				
Secondary License Server Port:	8071				
License Acquisition Mode:	Normal 🔹				
Re-Acqui	re Licenses				
Required Licenses					
Devices Finger					
Devices Camera					
Devices Iris					
Biometrics Standards Finger	's				
Biometrics Tools NFIQ					
Fulcrum LiveScan					
Save Close					

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



FbF Listener Conf	iguration	
General License	Devices Camera Bluetoo	th Devices
Is Active	Available Device List	
True	Futronic FS88 #1	
L		
Select any of the list "De-activate" to de-	ed device in the list above and clic activate the device	De-activate
be-beinate to be-		
Disabled Device	List	
Select any of the de	ice listed shows and click "Delete	
Select any of the de from List" to activate	/ice listed above and click "Delete the device again.	Delete from List
		Delete from List
	e the device again.	Delete from List



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

ount	Online Valid				ense Type			Availability	
ount						License Type		Availability	
ount	1			Fulcrum Client 🧹			🖌 Availab	le	
	vailable Scanner Count 1			Fulcrum Device Finger 🚽 Ava			🧹 Availab	Available	
ctive Connection Count 0			Fulcrum Biometrie	cs Standa	rd Finger	s 🖌 🖌 Availab	le		
Count	0					-	🧹 Availab	le	
received	0					-			
e sent	0								
	00:00:1	1.7690000							
Active Bio	ometric Type	Liveness Detection	LiveScan Suppor	t Device State	Make	Model	Serial Number	Device Id	
ue Fin	gerprint	True	False	Ready	Futronic	FS88	00314294	Futronic FS88 {00314294	
	received sent Active Bi	received 0 sent 0 00:00:1	received 0 sent 0 00:00:11.7690000	iount 0 received 0 sent 0 00:00:11.7690000 Active Biometric Type Liveness Detection LiveScan Support	iount 0 received 0 sent 0 00:00:11.7690000 Active Biometric Type Liveness Detection LiveScan Support Device State	iount 0 received 0 sent 0 00:00:11.7690000 Active Biometric Type Liveness Detection LiveScan Support Device State Make	iount 0 received 0 sent 0 00:00:11.7690000 Active Biometric Type Liveness Detection LiveScan Support Device State Make Model	iount 0 received 0 sent 0 00:00:11.7690000 Active Biometric Type Liveness Detection LiveScan Support Device State Make Model Serial Number	



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

🕄 Scan Preview	- • •
Single Finger Palm Vein Multiple Finger Face Iris SignPad	
Status:	
Scan for FBI Single Finger	Start
Scan Continuously	Stop
Using Device : Futronic FS88 #1 VinknownFinge	
	VSQ PNG

- 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



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	Reference Configuration Lab sample prints	✓ Search sample prin	ts 🔎
Organize 🔻 🛛 New folde	er		
☆ Favorites ■ Desktop	Documents library sample prints	Arrange by:	Folder 🔻
\rm Downloads	Name		Date modified
🖳 Recent Places	🔊 Single Finger (02-09-2015 12-45-00).jpg		2/9/2015 12:45 PI
🗃 Libraries	Single Finger (02-09-2015 12-48-17).jpg		2/9/2015 12:48 Pf
CAPSS	Single Finger (02-09-2015 12-50-30).jpg		2/9/2015 12:50 PM
SmartJustice	🔄 Single Finger (02-09-2015 12-53-56).jpg		2/9/2015 12:55 Pt
Documents			
J Music			
Pictures			
🛃 Videos			
Somputer			
🚢 Local Disk (C:)			
🙀 HILLG (\\HDCVN			
🙀 CJIS/DLE Shared			
🗔 Statewide Share (🔻	•		*
File <u>n</u> ame: Single	e Finger (02-10-2015 09-24-00).jpg		-
	nage (*.ing)		•
Save as <u>t</u> ype: Jpg In	-9-()-9/		

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

Scan Preview	-	۰	×
Single Finger Palm Vein Multiple Finger Face Iris SignPad			
Status:			
Stream Images Scan for FBI Single Finger		Start	
		Stop	
Using Device : Topaz T S460 HSB R HandSignature	e		
Save Image As : GIF BMP JPG TIFF	WSQ	PI	IG

- 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.



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😡 Scan Preview	- 0 🔀
Single Finger Palm Vein Multiple Finger Face Iris SignF	'ad
man count	
Sample Signat	ure
Stature Cantors Standard	
Status: Capture Stopped	
Stream Images Scan for FBI Single Finger	Start Stop
Using Device : Topaz T S460 HSB R	ignature 👻
E Save Image As : GIF BMP JPG TI	F WSQ PNG

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

Save Image As			×
🕽 🔾 🗢 📙 « _CAPSS	 Reference Configuration Lab sample signatures 	✓ ← Search sample sign	natures 🔎
Organize 🔻 New fold	r		
★ Favorites ■ Desktop	Documents library sample signatures	Arrange by:	Folder 🔻
Downloads	Name		Date modified
🖳 Recent Places	No items match your sear	ch	
📜 Libraries	Ho items initeli your sea		
CAPSS			
and a state and a state and a state a stat			
Documents			
J Music			
Pictures			
🛃 Videos			
🖳 Computer			
Local Disk (C:)			
🙀 HILLG (\\HDCVIv			
🙀 CJIS/DLE Shared			
🗔 Statewide Share (🍸	< III		•
File <u>n</u> ame: Hand	Signature (02-12-2015 03-36-01).jpg		•
Save as <u>t</u> ype: Jpg In	nage (*.jpg)		-
Hide Folders		Save	Cancel
OTE:			

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)

	ion		×
	Welcome!		
1. Welcome	weicome:		
2. Choose Set-up	Thank you for your purchase of a Logitech webcam. Let's get started.		
3. Install my software	Please select your preferred language.		
4. Finish Install	English		
	By clicking on "Next" you agree to the Logitech User License Agreement		
C Logitedy	Quit	:t >	
🧝 Logitech Webcam Software Installat	ion		×
Cogitech Webcam Software Installat	ion		×
	webcam Connected.		×
1. Welcome			×
 Welcome Choose Set-up 	Webcam Connected.		×
1. Welcome	Webcam Connected.		×
 Welcome Choose Set-up Install my software 	Webcam Connected.		×







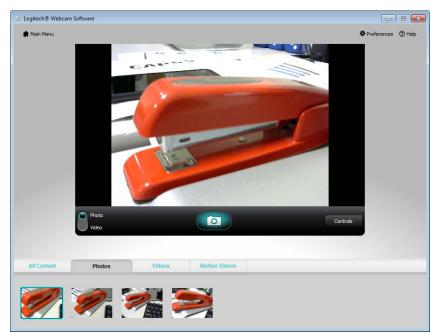
▲ Logitech Webcam Software Installation ✓ Welcome ✓ Choose Sot-up ✓ Install my software 4. Finish Install ✓ Click on the webcam software icon on your desktop to take pictures, record movies, and share your content on social networking sites Check out my webcam

3. Click Check out my webcam

🚊 Logitech® Webcam Software	
	Preferences ⑦ Help
Quick Capture Take pictures and record videos.	Logitech HD Webcam C310
Webcam Gallery Wew and share your captured images.	
Make a video call or do more	
Kotion Detection Webcam Logitech Controller	

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

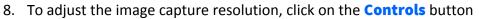


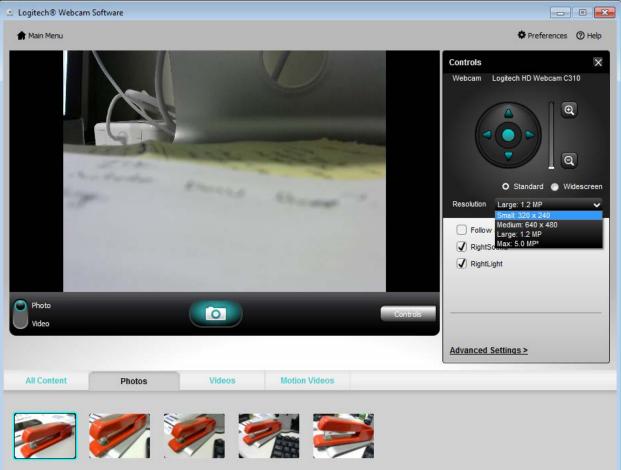


- 5. Click on the camera icon (center) to capture the image
- 6. The image will display at the bottom on the thumbnail strip
- 7. Open the **Preferences** to see/change where the images are stored

🧕 Logitech Webcam Softw	vare Settings	×
Logitech Wel	ocam Software	
General Qui	ck Capture Gallery Updates	About Logitech Webcam Software >
Videos folder:	C:/Users/hillg/Videos/Logitech Webcam	Browse
Photos folder:	C:/Users/hillg/Pictures/Logitech Webcam	Browse
Motion Detection folder:	C:/Users/hillg/Videos/Logitech Webcam/Motion Detection	Browse
E-mail application:	Microsoft Outlook 🗸	
	☑ Show E-mail button	
Photo editing application:		
Video editing application:		
Sharing		
Facebook	teset account	
Twitter	teset account	
VouTube	teset account	
Logitech		Save Cancel







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



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- 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.