

i-STAT TECHNICAL BULLETIN

NETWORK OPTIONS FOR UPDATING THE i-STAT 1 HANDHELD

OVERVIEW

This Technical Bulletin has been created specifically to guide you through the process of updating the software on the i-STAT 1 handheld(s) using one of three network options:

1. Using a Network Downloader, Downloader/Recharger, or DRC-300 and the JammLite process with TCP/IP
2. Using a Serial Downloader or a serially connected DRC-300 and the JammLite process for accounts with RALS-Plus and i-STAT/DE
3. Using the i-STAT/DE Customization Workspace and a Network Downloader, Downloader/Recharger, or DRC-300

Before beginning, check the Analyzer Status page and verify that the i-STAT 1 handheld has enough battery power (7.5 volts or higher).

WHY DO i-STAT HANDHELDS NEED SOFTWARE UPDATES?

The i-STAT System is designed to eliminate operator influence on delivered results.

Due to continuous manufacturing process improvements to the i-STAT System, it is necessary to update standardization values from time to time to maintain long-term consistency of performance. These updates are equivalent to manually adjusting calibration on a traditional laboratory analyzer.

New CLEW software -- delivered twice a year -- re-establishes these standardization values and incorporates refinements to the internal quality monitoring system. New JAMS application software allows the i-STAT handheld to recognize any newly launched cartridge types and to perform any newly launched features.

i-STAT is for *in vitro* diagnostic use.



1. UPDATE PROCEDURE USING A NETWORK DOWNLOADER AND THE JammLite PROCESS WITH TCP/IP

1.1: Before starting the process, make sure all the required equipment / information is available.

- **Computer with:**
 - Windows 2000, XP, or Windows 7
 - A CD-ROM drive
- **i-STAT System Equipment**
 - (1) Network Downloader, Downloader / Recharger, or DRC-300

Note: These instructions assume that the Network Downloader types used for the update process are already installed and in-use on the customer's network.

- (2) i-STAT 1 handheld
 - (3) The latest i-STAT Software and Documentation CD
 - (4) Electronic Simulator
- **List of the IP Address(es) for the network downloader(s) to be used for the software update process**

1.2: Close all open programs on the computer.

1.3: Before inserting the i-STAT 1 Software and Documentation CD, check that the JAMS application and CLEW match the Product Update.

1.4: Insert the Software and Documentation CD into the CD-ROM drive.


- Wait 30 seconds, and then close any windows that may appear
- To access the files on the Software and Documentation CD-ROM:
 - Double click the icon




- Double click **CD-ROM Drive**





- The following window will appear:

 Analyzer_Software_(No_Data_Management_OR_DE_Versions_2.8.0.1_and_greater)

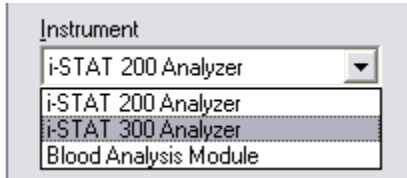
1.5: To open the JammLite Utility, double click

 Analyzer_Software_(No_Data_Management_OR_DE_Versions_2.8.0.1_and_greater)

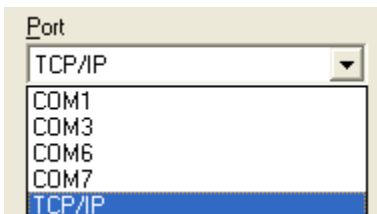
Double click  Unpacked_AXI_i-STAT_Analyzer_Software and then double click  JAMMLITE.EXE

- If the JammLite program does not launch or you receive an error message, contact APOC Technical Support and tell the support specialist you are unable to complete step **1.5** of this document.

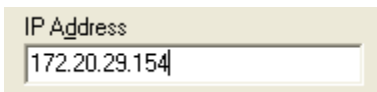
1.6: In the JammLite utility, select the **i-STAT 300 Analyzer** within the Instrument dropdown menu.



1.7: Select **TCP/IP** within the Port dropdown menu.



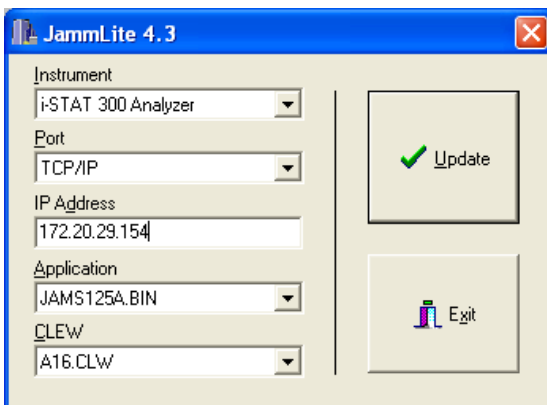
1.8: Type the IP Address of the Network Downloader being used for the software update in the **IP Address** box.



Note: the address used above is for example only.

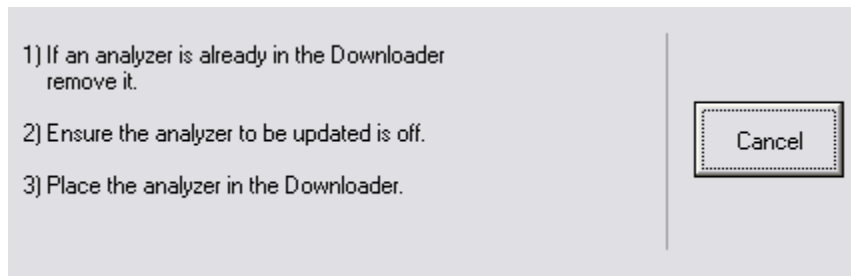
1.9: Check that the **Application** and **CLEW** listings match those in the Product Update.

Click the **Update** button.

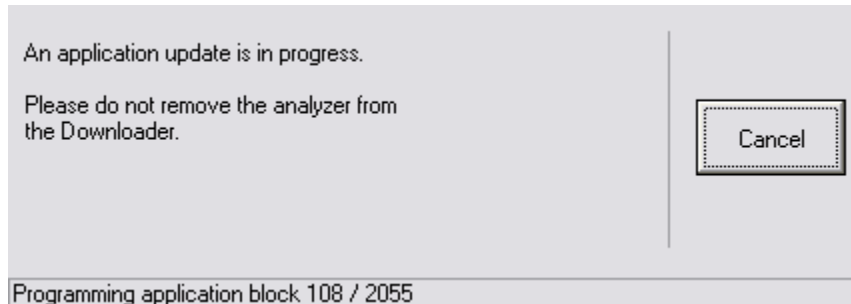


Note: Application and CLEW numbers are for example only.

1.10: Follow the onscreen instructions.

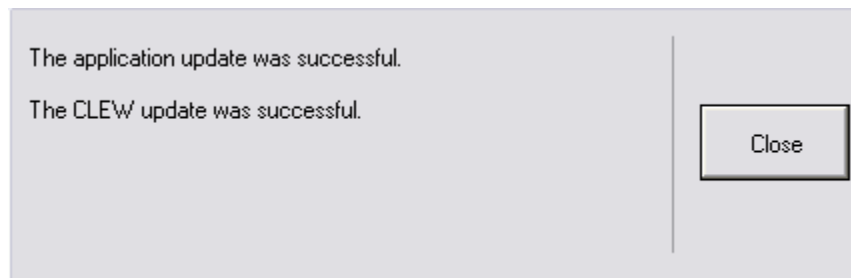


1.11: When the update is in progress, the following screen will appear:



The handheld will have 1's and 0's streaming across the screen signifying that it is receiving the software.

Do not move the handheld until the success screen is displayed.




1.12: Run the Electronic Simulator in the handheld. When the simulator finishes, PASS should be displayed.

Note: If PASS is not displayed, re-run the Electronic Simulator. If the repeated Electronic Simulator attempt fails, contact APOC Technical Support. For additional information on running the electronic simulator, see Section 14 of the i-STAT 1 System Manual.

***Congratulations.* The process for updating the first i-STAT 1 Handheld is complete.**

Review the options below for additional instructions.

If there are no additional handhelds to update, the process is complete:

- Click the  button in the upper right corner of the software screen.
- Close all other open boxes.
- Confirm all messages.

If there are additional handhelds to update via the same Network Downloader address:

- Click **Close**.
- Repeat steps **1.9 through 1.12**.

If there are additional handhelds to update via a different Network Downloader address:

- Click **Close**.
- Repeat steps **1.8 through 1.12**.

2. UPDATING THE i-STAT 1 HANDHELD USING A SERIAL DOWNLOADER OR SERIALY CONNECTED DRC-300 AND THE JammLite PROCESS FOR ACCOUNTS WITH RALS-Plus AND i-STAT/DE

2.1: Before starting the process, make sure all the necessary required equipment is available.

- Computer with:
 - RALS-Plus IMS
 - Applicable ports, depending on the type of downloader being used
 - A CD-ROM drive
- i-STAT System Equipment
 - (1) i-STAT 1 handheld
 - (2) Serial Downloader, Downloader / Recharger, or DRC-300

Note: These instructions assume that the Serial Downloader types being used for the update process are already installed and in use at the customer's facility.

- (3) All supplied downloader cables
- (4) Electronic Simulator
- (5) The latest i-STAT Software and Documentation CD

2.2: Using the supplied downloader cables, connect the i-STAT 1 serial Downloader, Downloader/Recharger, or DRC-300 to an accessible port on the back of the computer, and connect the power supply to a wall outlet or power strip.

2.3: Close all open programs on the computer.

2.4: Before inserting the i-STAT Software and Documentation CD, check that the JAMS application and CLEW match the Product Update.

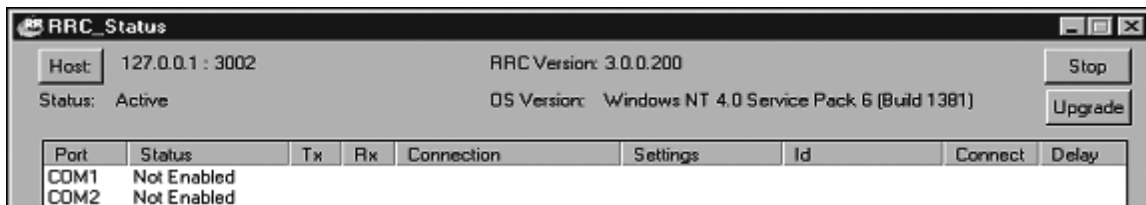
2.5: Disable the RALS remote connections.

- Right click on the red RRC dot in the lower right corner of the display next to the clock and go to “Administrator Settings.”
- Enter the RRC Password of the Day. Call 877-627-7257 to obtain the password, or go to <https://www.rals.com/us/home/rals/rals-password.html> and type “richmond” as the key code.

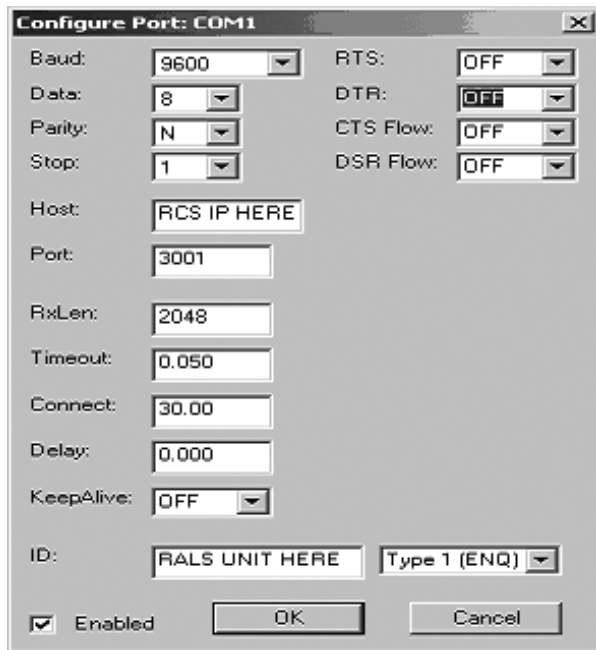
Note: Abbott Point of Care Inc. recommends changing the default password.



- Double click on “COM1”.



- Record “Host” and “ID” entry.
- Uncheck the “Enabled” box. Click **OK**.



- If not enabled, minimize the window and proceed to the next step.

2.6: Insert the Software and Documentation CD into the CD-ROM drive on the computer being used for the update.

- Wait 30 seconds and close any windows that may appear.
- To access the files on the Software and Documentation CD-ROM:

- Double click the icon



- Double click **CD-ROM Drive**

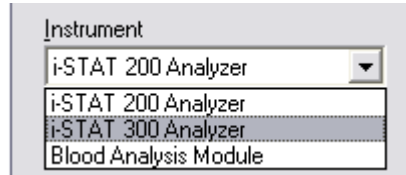


- The following window will appear:
 - Analyzer_Software_(No_Data_Management_OR_DE_Versions_2.8.0.1_and_greater)

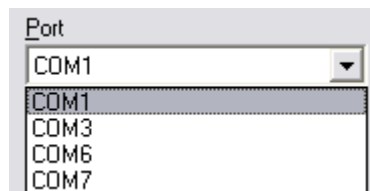
2.7: To open the JammLite utility:

If you use i-STAT/DE Version 2.8.0.1 and greater:	
Double click	■ Analyzer_Software_(No_Data_Management_OR_DE_Versions_2.8.0.1_and_greater)
Double click	■ Unpacked_AXI_i-STAT_Analyzer_Software
Double click	■ JAMMLITE.EXE
If the JammLite program does not launch, or you receive an error message, contact your Support Services representative and tell the Support Specialist you are unable to complete Step 2.7 of this document.	

2.8: In the JammLite utility, select the **i-STAT 300 Analyzer** within the Instrument dropdown menu.



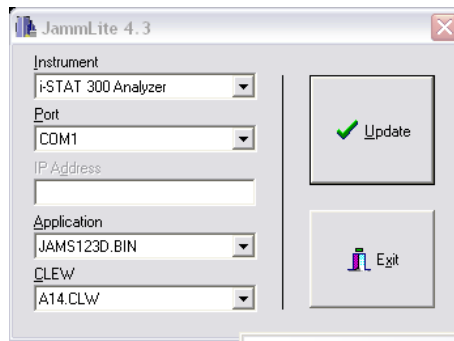
2.9: Make sure there is at least one port number listed under the Port Drop-Down List.



Note: If the Port drop-down list says “None,” make certain the connection from the Serial Downloader to the computer is tight. Then reboot the computer and return to step 2.3.

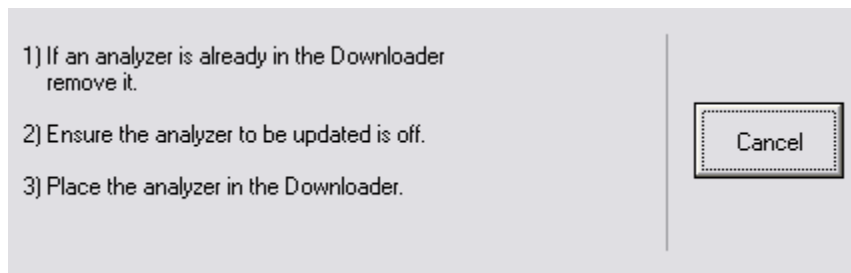
2.10: Check that the **Application** and **CLEW** listings match those in the **Product Update** for the current software release.

2.11: Click on the “Update” button.

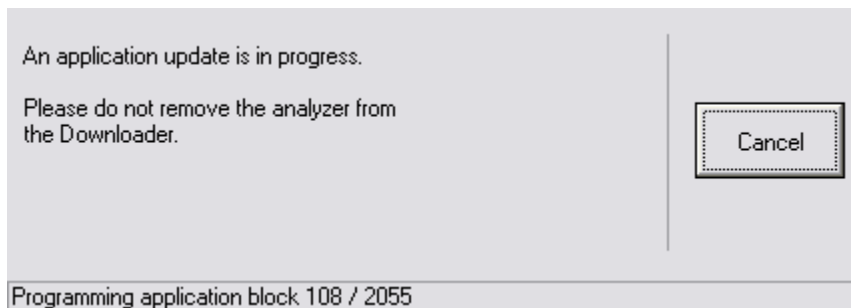


Note: Application and CLEW numbers are for example only.

2.12: Follow the onscreen instructions.

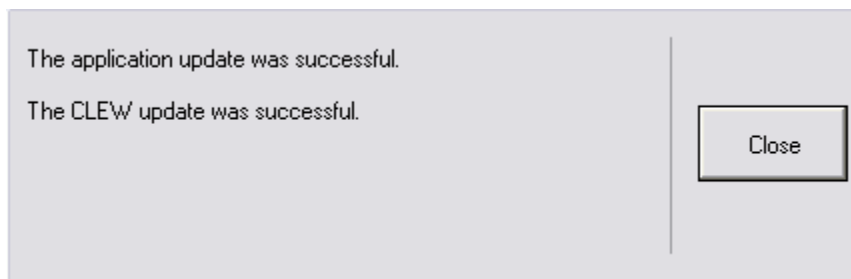


2.13: When the update is in progress, the following screen will appear:



The handheld will have 1's and 0's streaming across the screen signifying that it is receiving the software.

Do not move the handheld until the success screen is displayed.



2.14: Run the Electronic Simulator in the handheld. When the simulator finishes, PASS should be displayed.


Note: If PASS is not displayed, re-run the Electronic Simulator. If the repeated Electronic Simulator attempt fails, contact APOC Technical Support. For additional information on running the electronic simulator, see Section 14 of the i-STAT 1 System Manual.

Congratulations. The process for updating the first i-STAT 1 handheld is complete.

If there are additional handhelds to be updated via JammLite:

- Click **Close**
- Repeat steps **2.11 through 2.14**

If there are no additional handhelds to update, the process is complete:




- Click the  button in the upper right corner of the software screen
- Proceed to step 2.15 to restart the RRC if it was disabled in Step 2.5
- Proceed to step 2.15 to update the RALS-Plus i-STAT/DE with the latest CLEW and JAMS software files

2.15: Restart the RALS remote connection.

- Maximize the RRC Status window.
- Double click on Com1.
- Check the “Enabled” box.
- Enter the recorded “Host” and “ID” entry from step **2.5**.
- Click “OK”.

2.16: Update the CLEW version in the Customization Workspace.

- Transfer the files.
 - Access the main Customization Workspace page.
 - Click **Update i-STAT/DE** → **Upload Update File**.
 - Insert the i-STAT Software and Documentation CD-ROM into the CD-ROM drive of the computer you are using. (Note: this computer does **not** need to be the i-STAT/DE Server.)

If you use i-STAT/DE Version 2.8.0.1 and greater:	
Double click	 Analyzer_Software_(No_Data_Management_OR_DE_Versions_2.8.0.1_and_greater)
Double click	 AXX_i-STAT_Analyzer_Software
Click	 SUXXXXXX.EXE and click Upload . (Note: The XXXXXX is the JAMS and CLEW version that you are updating.)
Immediately after uploading the CLEW/JAMS to the i-STAT/DE server, i-STAT/DE will unpack the files and make them available for use in the handheld's Customization Workspace.	

- In the Customization Workspace, under the “Default customization profile:” column, click on the “**i-STAT Analyzer CLEW**” button.

Note: Customization screens may vary depending upon the i-STAT/DE version in use.

Default customization profile:

Language:
English

Unit Set:
UNITSET00

i-STAT Analyzer CLEW:
A16

Philips BAM CLEW:
[None]

i-STAT 1 Software:
JAMS125A.BIN

Preferences:
DEFAULT0

STATNotes:
CHART0

Use Operator List

- Check the box next to the new version of **CLEW** and click **OK**.

Institution: Inst1

Location: Default customization profile

OK

Cancel

i-STAT Analyzer CLEW:

Selected CLEW	Name	Expiration Date
<input checked="" type="checkbox"/>	A16	6/24/2009 8:00:00 AM

Answer OK to the question that appears.

- If “Uses Default” is not checked beside any Location-based customization profile: click the box under the “**i-STAT Analyzer CLEW**” column.

Location-based customization profiles:

Location	Enabled	Uses Default	Update CLEW	i-STAT Analyzer CLEW	Philips BAM CLEW	Preferences	STATNotes	
ER	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	A16	[None]	DEFAULT0	CHART0	<input type="checkbox"/>
ICU	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	A16	[None]	DEFAULT0	CHART0	<input type="checkbox"/>
Lab	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	A16	[None]	DEFAULT0	CHART0	<input type="checkbox"/>
OR	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	A16	[None]	DEFAULT0	CHART0	<input type="checkbox"/>

- Click the new version of **CLEW**, and then click **OK**.

Selected CLEW	Name	Expiration Date
<input checked="" type="checkbox"/>	A16	6/24/2009 8:00:00 AM

Answer OK to the question that appears.

- Under the “Default Customization profile:” column, click on the **i-STAT 1 Software** drop-down list. Select the JAMS version that matches the Product Update and click **OK**.

3. UPDATING THE i-STAT 1 HANDHELD USING THE i-STAT/DE CUSTOMIZATION WORKSPACE AND A NETWORK DOWNLOADER, DOWNLOADER/RECHARGER, or DRC-300

3.1: Before starting the process, make sure all the required equipment / information is available.

- **Computer which can access the Customization Workspace**
- **i-STAT System Equipment**

- (1) i-STAT 1 handheld
- (2) Network Downloader, Downloader/Recharger, or DRC-300




Note: These instructions assume that the Network Downloader types being used for the update process are already installed and in use on the customer's network.

- (3) The latest i-STAT Software and Documentation CD
- (4) Electronic Simulator

3.2: Before inserting the i-STAT Software and Documentation CD, check that the JAMS application and CLEW match the Product Update.

3.3: Update the CLEW and JAMS versions in the Customization Workspace.

- Transfer the files.
 - Access the main Customization Workspace page.
 - Click **Update i-STAT/DE** → **Upload Update File**.
 - Insert the i-STAT Software and Documentation CD-ROM into the CD-ROM drive of the computer you are using. (Note: this computer does **not** need to be the i-STAT/DE Server.)

If you use i-STAT/DE Version 2.8.0.1 and greater:	
Double click	 Analyzer_Software_(No_Data_Management_OR_DE_Versions_2.8.0.1_and_greater)
Double click	 AXX_i-STAT_Analyzer_Software
Click	 SUXXXXXX.EXE and click Upload . (Note: The XXXXXX is the JAMS and CLEW version that you are updating.)
Immediately after uploading the CLEW/JAMS to the i-STAT/DE server, i-STAT/DE will unpack the files and make them available for use in the handheld's Customization Workspace.	

3.4: Close Windows Explorer by clicking on the  in the upper right corner.

3.5: Access the Customization Workspace.

- RALS-Plus Users:
 - From the RALS-Plus Application, pick i-STAT from the drop-down menu
 - Click on **Device Customization**
- PrecisionWeb Users:
 - Double click on the desktop shortcut or Internet Explorer Favorites for **i-STAT Customization**

3.6: Update the CLEW and JAMS versions in the Customization Workspace.

- Under the “Default customization profile:” column, click on the “i-STAT Analyzer CLEW” button.

Note: Customization screens may vary depending upon i-STAT/DE version in use.

Default customization profile:

Language:
English

Unit Set:
UNITSET00

i-STAT Analyzer CLEW:
A16

Philips BAM CLEW:
[None]

i-STAT 1 Software:
JAMS125A.BIN

Preferences:
DEFAULT0

STATNotes:
CHART0

Use Operator List

- Check the box next to the new version of **CLEW** and click **OK**.

Institution: Inst1

Location: Default customization profile

OK

Cancel

i-STAT Analyzer CLEW:

Selected CLEW	Name	Expiration Date
<input checked="" type="checkbox"/>	A16	6/24/2009 8:00:00 AM

Answer OK to the question that appears.

- If “Uses Default” is not checked beside any Location-based customization profile: click the box under the “i-STAT Analyzer CLEW” column.

Location-based customization profiles:

Location	Enabled	Uses Default	Update CLEW	i-STAT Analyzer CLEW	Philips BAM CLEW	Preferences	STATNotes	
ER	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	A16	[None]	DEFAULT0	CHART0	<input type="checkbox"/>
ICU	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	A16	[None]	DEFAULT0	CHART0	<input type="checkbox"/>
Lab	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	A16	[None]	DEFAULT0	CHART0	<input type="checkbox"/>
OR	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	A16	[None]	DEFAULT0	CHART0	<input type="checkbox"/>

- Click the new version of **CLEW**, and then click **OK**.

Selected CLEW	Name	Expiration Date
<input checked="" type="checkbox"/>	A16	6/24/2009 8:00:00 AM

Answer OK to the question that appears.

- Under the “Default Customization profile:” column, click on the **i-STAT 1 Software** drop-down list. Select the JAMS version that matches the Product Update and click **OK**.

3.7: Enable Customization

- If the **Enable Customization** box is not already checked, click the box next to this listing.
- Under the “Location-based customization profile:” section, make sure **Enabled** is checked for every location from which you wish to perform software updates on your i-STAT 1 handhelds.

3.8: Update the software in the i-STAT 1 handheld.

- Go to the location where the i-STAT 1 handheld(s) you wish to update are located or contact someone at that location who can assist in updating the handheld(s).
- Press the **On/Off** button on the handheld.
- Press the **Menu** key to bring up the Administration Menu.
- Press **7 – Utility**. When prompted for a password, press **ENT**. If that did not work, a password is needed. Enter the password defined by your facility and press **ENT**.
Note: Abbott Point of Care Inc. recommends changing the default password.

- From the Utility menu, press **3 – Receive Software**. A “Waiting to Send” message will appear on the handheld display.
- Place the handheld in the downloader or downloader / recharger. **Do NOT move the handheld until step 3.9**. A **Communication in Progress** message will appear on the screen. After this disappears, the handheld display will stay blank for approximately 5-10 seconds.
- The handheld will then display 1’s and 0’s streaming across the screen signifying that it is receiving the software. Once the 1’s and 0’s disappear, the handheld display will again go blank for approximately 5-10 seconds.
- A **Waiting to Send** message following by a **Communication in Progress** message will then appear on the handheld display. After these messages disappear, the handheld display will go blank, and the update process is complete.

3.9: Run the Electronic Simulator in the handheld. When the simulator finishes, PASS should be displayed.

Note: If PASS is not displayed, re-run the Electronic Simulator. If the repeated Electronic Simulator attempt fails, contact APOC Technical Support. For additional information on running the electronic simulator, see Section 14 of the i-STAT 1 System Manual.

***Congratulations.* The process for updating the first i-STAT 1 handheld is complete.**

Review the options below for additional instructions.

- If there are no additional handhelds to update, the process is complete.
- If there are additional handhelds to update, return to step **3.8**.

i-STAT is a trademark of Abbott.

This page intentionally left blank.