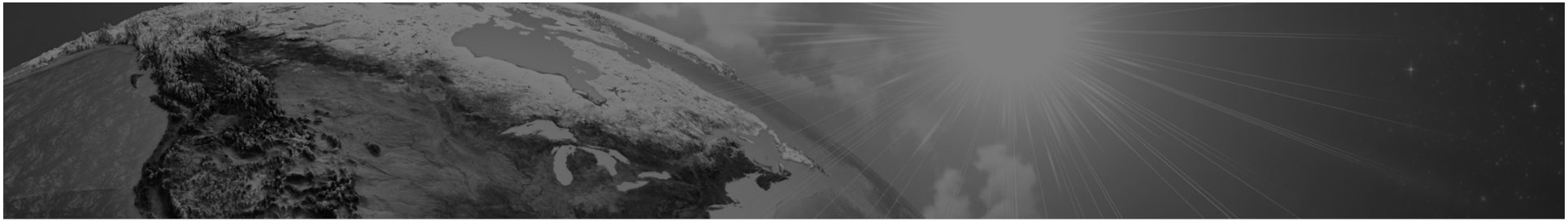
# BLUband and BLUhome Foundations Training



2.8.19



FCC & Industry Canada Compliance
FCC: S5EBHV40318
I.C. 9086A-BHV40318 MODEL
NUMBER: BluHome®

**WARNING:** To assure regulatory compliance please use the provided landline and Network Cables (LAN)

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.

The Cellular and ISM transmitters used in BluHome® are not co-located. The ISM transmitter is operational only when it is required to communicate with the associated equipment. BluHome® is set up automatically to prevent simultaneous transmission between the Cellular and ISM transmitters

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 23cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter."

This device complies with Part 15 of the FCC Rules and Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:
• This device may not cause interference, and
• This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
(1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The Ringer Equivalence Number (REN) indicates the maximum number of devices allowed to be connected to a telephone interface. The termination of an interface may consist of any combination of devices subject only to the requirement that the sum of the RENs of all the devices not exceed five.

The REN Value is 0.1

WARNING – Changes or modifications to these units not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

BATTERY SAFETY
The BluHome® Device contains a non-removable lithium-Ion battery. Do not attempt to remove the battery. Do not dispose of the BluHome® or the lithium-Ion battery in a fire. The lithium-Ion battery might present a fire or chemical burn hazard if mistreated. Do not disassemble, crush, or puncture the lithium-Ion battery or the BluHome® Device. Do not heat the battery or BluHome® Device above 140°F (60°C).

Please return the Device to Satellite Tracking of People LLC, 1212 North Post Oak Road, Suite 100, Houston, Texas 77055 for disposal otherwise only dispose of the battery or BluHome® device in accordance with the laws and regulations in your area governing disposal of this type of battery.

SERVICE
The BluHome® device contains no serviceable parts and provides no user configurable or tunable internal components. Please return to manufacturer for calibration or Maintenance

SÉCURITÉ DES PILES
Les appareils BluHome contiennent une pile au lithium-ion non amovible. Ne pas tenter de retirer la pile. Ne pas jeter BluHome ou la pile au lithium-ion dans un feu. La pile au lithium-ion présente un risque d'incendie ou de brûlure chimique en cas de mauvais traitement. Ne pas désassembler, écraser ni percer la pile au lithium-ion ou l'appareil BluTag. Ne pas chauffer la pile ou l'appareil BluHome à des températures supérieures à 60 °C (140 °F).

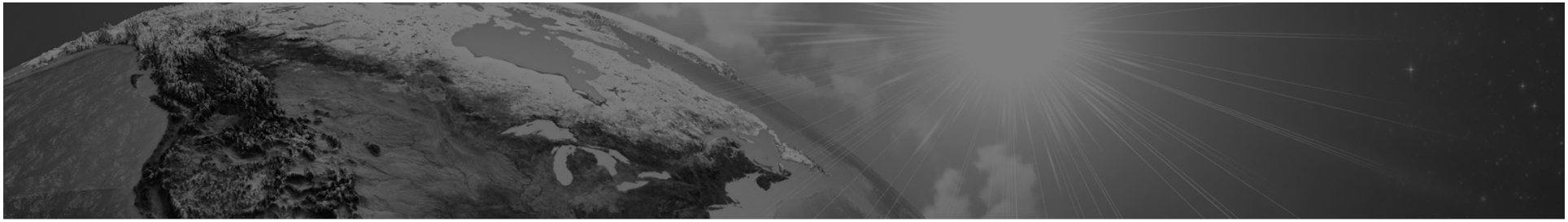
Veuillez renvoyer l'appareil à Satellite Tracking of People LLC, 1212 North Post Oak Road, Suite 100, Houston, Texas 77055 U.S.A. pour élimination, ou si vous voulez vous charger vous-même de l'élimination de la pile ou de l'appareil veuillez vous conformer aux lois et à la réglementation de votre région régissant la mise au rebut de ce type de pile.

"This product meets the applicable Innovation, Science and Economic Development Canada technical specifications".

"The Ringer Equivalence Number (REN) indicates the maximum number of devices allowed to be connected to a telephone interface. The termination of an interface may consist of any combination of devices subject only to the requirement that the sum of the RENs of all the devices not exceed five."

*Le présent produit est conforme aux spécifications techniques applicables d'Innovation, Sciences et Développement économique Canada.*

*L'indice d'équivalence de la sonnerie (IES) sert à indiquer le nombre maximal de dispositifs qui peuvent être raccordés à une interface téléphonique. La terminaison d'une interface peut consister en une combinaison quelconque de dispositifs, à la seule condition que la somme des IES de tous les dispositifs n'excède pas cinq.*



**Input Voltage:** 100-240 VAC 50-60Hz 0.4A
**Output Voltage**: 12VDC 1.25A 15W Max
**Operating Temperature:** 0 to 70ºC

The BluHome is fitted with a cellular modem (Cinterion pls8-us or Cinterion PLS8-E) that supports the following bands and frequencies.

- GSM (850/900/1800/1900 MHz)
- UMTS (850/900/1700//1800/1900/2100MHz)
- LTE (800 (B20)/700(B17)/900 (B8)/900(B7)/2600 (B7)850(B5)/1700(B4)/1800(B1)/1900(B2)MHz)/2100(B1)

The modem is used to communicate data and alarms to the central communications gateway using TCP/IP.
The cellular use two internal embedded antennas (Ethertronics P822602). One is the primary antenna and the second for UMTS/LTE (RX) diversity.
The cellular retry and transmission functionality are controlled by the device and the user cannot change or tune these parameters. A list of RMS target and Tolerances provided by the manufacturer are listed below

| Band | | RMS Target | Tolerance |
|---|---|---|---|
| LTE 1 | QPSK, #RB=1 | 23dBm | -1/ +0,5dB |
| LTE 2 | QPSK, #RB=1 | 23dBm | -1/ +0,5dB |
| LTE 3 | QPSK, #RB=1 | 23dBm | -1/ +0,5dB |
| LTE 4 | QPSK, #RB=1 | 23dBm | -1/ +0,5dB |
| LTE 5 | QPSK, #RB=1 | 23dBm | -1/ +0,5dB |
| LTE 7 | QPSK, #RB=1 | 23dBm | -1/ +0,5dB |
| LTE 8 | QPSK, #RB=1 | 23dBm | -1/ +0,5dB |
| LTE 17 | QPSK, #RB=1 | 23dBm | -1/ +0,5dB |
| LTE 20 | QPSK, #RB=1 | 23dBm | -1/ +0,5dB |
| LTE 1 | 16QAM, #RB=1 | 22dBm | -1/ +0,5dB |
| LTE 2 | 16QAM, #RB=1 | 22dBm | -1/ +0,5dB |
| LTE 3 | 16QAM, #RB=1 | 22dBm | -1/ +0,5dB |
| LTE 4 | 16QAM, #RB=1 | 22dBm | -1/ +0,5dB |
| LTE 5 | 16QAM, #RB=1 | 22dBm | -1/ +0,5dB |
| LTE 7 | 16QAM, #RB=1 | 22dBm | -1/ +0,5dB |
| LTE 8 | 16QAM, #RB=1 | 22dBm | -1/ +0,5dB |
| LTE 17 | 16QAM, #RB=1 | 22dBm | -1/ +0,5dB |
| L TE 20 | 16QAM, #RB=1 | 22dBm | -1/ +0,5dB |
| WCDMA I (2100) | | 24dBm | -1 / +0,5dB |
| WCDMA III (1800) | | 24dBm | -1 / +0,5dB |
| WCDMA IV (AWS) | | 24dBm | -1/ +0,5dB |
| WCDMA V (850) | | 24dBm | -1 / +0,5dB |
| WCDMA VIII (900) | | 24dBm | -1 / +0,5dB |

| Band | | RMS Target | Tolerance |
|---|---|---|---|
| GSM850 (GPRS)* | | 33dBm | -1 / +0,5dB |
| GSM900 (GPRS)* | | 33dBm | -1 / +0,5dB |
| GSM1800(GPRS)* | | 30dBm | -1 / +0,5dB |
| GSM1900 (GPRS)* | | 30dBm | -1 / +0,5dB |
| EGPRS850* | | 27dBm | -1 / +0,5dB |
| EGPRS900* | | 27dBm | -1 / +0,5dB |
| EGPRS1800* | | 26dBm | -1 / +0,5dB |
| EGPRS1900* | | 26dBm | -1 / +0,5dB |
| WLAN (2.412 GHz) | | 17.5dBM | -1 / +0,5dB |
| WLAN (2.437 GHz) | | 18.5Bm | -1 / +0,5dB |
| WLAN (2.462 GHz) | | 17.5dBm | -1 / +0,5dB |
| WLAN (2.472 GHz) | | 16dBm | -1 / +0,5dB |
| LoRa (868MHz) | | 10dBm | -1 / +0,5dB |
| LoRa (915MHz) | | 10dBm | -1 / +0,5dB |
| GPS L1 (1575.43 MHz) | | | |
| GPS L2 (1227.6 MHz) | | | |
| GPS L5 (1176.45 MHz) | | | |

# Index


Overview

Dashboard

Enrollment

Schedules

Installation

Assigning Device

Events

Master Tampers

Notifications

Unassigning Device

# OVERVIEW

# BLUband

- Small, lightweight (2 oz.) one-piece device
- Uses Radio Frequency (RF) technology
- 18-month battery
- Tamper-resistant strap
- Waterproof

# BLUhome

- Provides an RF tether for BLUband
- Greenfield range of 300 feet (open space with no structural constraints)
  - *Certain structural elements may impact the maximum range.*
- Range choices of Low/100 feet, Medium/200 feet, and High/300 feet
- Reports BluBand's presence and status (e.g. tampering, battery level)
- BLUhome movement, power loss, tampering, and low battery reporting.
- 4-day+ backup battery in case of power loss
- Caller ID Verification
- Password-protected LCD panel for easy on-screen enrollment verification

# Key Terms

- **RF** – Radio Frequency
- **Range** – Adjustable area that the enrollee must be within to comply with curfew.
- **Enter** – BLUband is in range of BLUhome. This event will open when in range and close when out of range.
- **Curfews** – Curfews define the time period that an enrollee must be in range of BLUhome. An event is created when an enrollee is late arriving in range of BLUhome or leaves the range of BLUhome during the curfew.

# VeriTracks

- Universal software for all hardware
- Web-based application (nothing to install)
- Phone & Tablet-friendly
- Google maps
- Mobile app

# DASHBOARD

# Dashboard Views

There are four views. Each displays an enrollee's name, Primary ID, and risk level.

**General**:
Enrollee's BLUtag's serial number.

find enrollees | view schedule... | view events... | new note... | View General

Page 1 of 1. 4 items found.

| Last Loc... | Enrollee | ID 1 | Risk | BLUtag # |
|---|---|---|---|---|
| | BOB, BILLY | 1289CBZB | Level One | 12-530687 |
| | JONES, JIMMY | 4646456 | Level One | |

**GPS only:**
Serial number, recent call and GPS dates/times, battery level, critical violation status

find enrollees | view schedule... | view events... | new note... | View GPS Only

Page 1 of 1. 4 items found.

| Last Loc... | Enrollee | ID 1 | Risk | BLUtag # | BT Call Date | Last GPS Date | Batt | BVolt | Bstp | Lbatt | All IZ | All EZ | Other |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | BOB, BILLY | 1289CBZB | Level One | 12-530687 | 03/09/2014 01:57:21 PM | 03/09/2014 01:57:31 PM | | 4.18 | | | | | |
| | JONES, JIMMY | 4646456 | Level One | | | | | | | | | | |

**Events Only:**
Number of notes, critical violation status, zone violation status by category

find enrollees | view schedule... | view events... | new note... | View Events Only

Page 1 of 1. 4 items found.

| Last Loc... | Enrollee | ID 1 | Risk | Notes | Bstp | Lbatt | All IZ | IZ | I911 | IZS | All EZ | EZ | E911 | EZS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | BOB, BILLY | 1289CBZB | Level One | | | | | | | | | | | |
| | JONES, JIMMY | 4646456 | Level One | | | | | | | | | | | |

**RF Only**:
Assigned BLUhome and BLUband number, last BLUhome call, RF Status, and Other (RF) event status

find enrollees | view schedule... | view events... | new note... | View RF Only

Page 1 of 1. 4 items found.

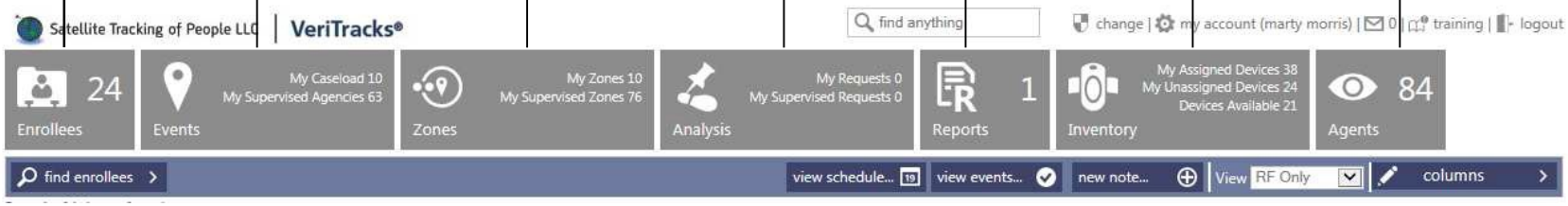
| Last Loc... | Enrollee | ID 1 | Risk | BLUhom... | BLUban... | BH Call Date | BH Last Call | RF Status | Other |
|---|---|---|---|---|---|---|---|---|---|
| | BOB, BILLY | 1289CBZB | Level One | | | | | | |
| | JONES, JIMMY | 4646456 | Level One | 13-500813 | 07-004093 | 02/19/2014 07:35:23 AM | 17d 25m 28s | Out of Range | |

# ENROLLMENT

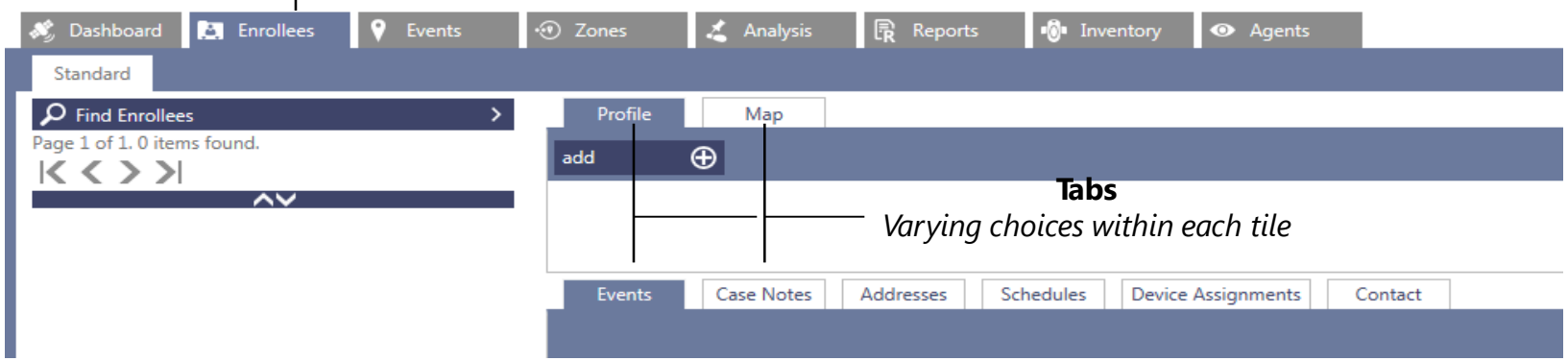
# Navigating VeriTracks

**Tiles**

*Menu Options*




**Tile**




**Tabs**

*Varying choices within each tile*

# Tile Totals

**Enrollee** Number of assigned enrollees for the selected agency

**Events** Number of open events

**Zones** Number of existing zones (assigned & unassigned)

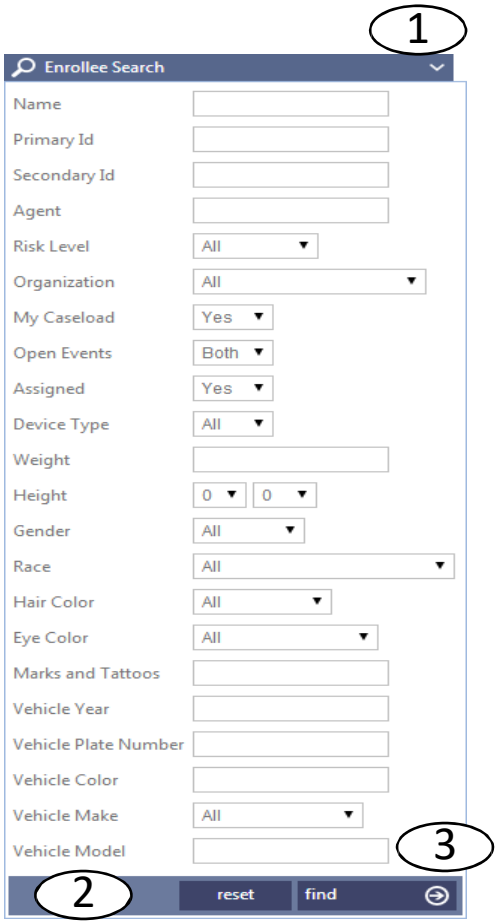
**Reports** Number of processed reports

# Using the Find & Search Menus

*Each Tile has its own Find / Search menu. Each is designed to display results that are based on default search criteria or that chosen by the agent.*

**Find / Search** menus **remember** their settings from session to session. Therefore, to return to the default criteria:

1. Click the **Find** or **Search** menu.
2. Click the **Clear** button to reset the criteria to its defaults.
3. Click **Find**.



# Turn on BLUband and BLUhome

**Turn on BLUband**

1. Open the BLUband pouch.
2. Expose the BLUband to office or home lighting. Exposure to light activates the BLUband.

**Turn on BLUhome**

1. If using an analog/landline BLUhome - plug its phone cord in to the phone jack prior to connecting the power cord.
2. Plug the BLUhome power cord in to the electrical socket.

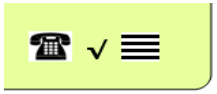
# Turn on BLUband and BLUhome

The BLUhome will take about 30 seconds to initialize and then make the first call into VeriTracks.

While BLUhome is calling VeriTracks, the call status icon in the lower right of the screen will appear as a question mark.

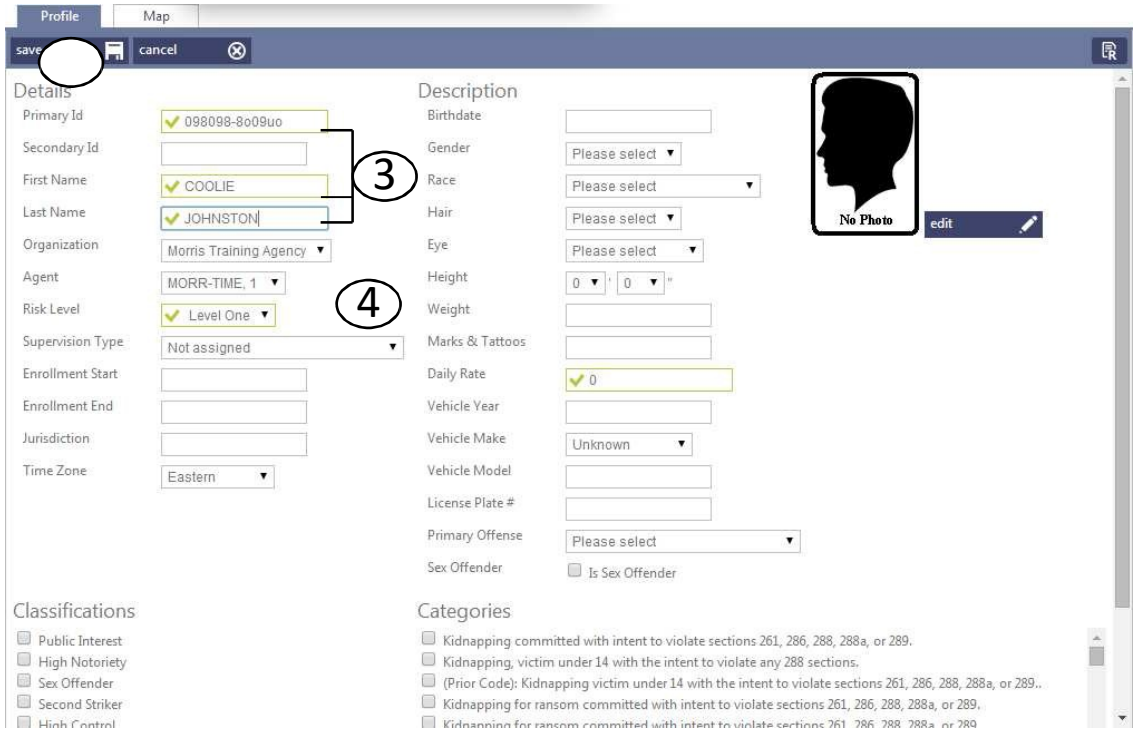
When BLUhome has successfully completed its initial call, the call status icon in the lower right of the screen will appear as a check mark.

If the BLUhome is a cellular BLUhome, it will have a signal strength indicator to the right of the call status icon.



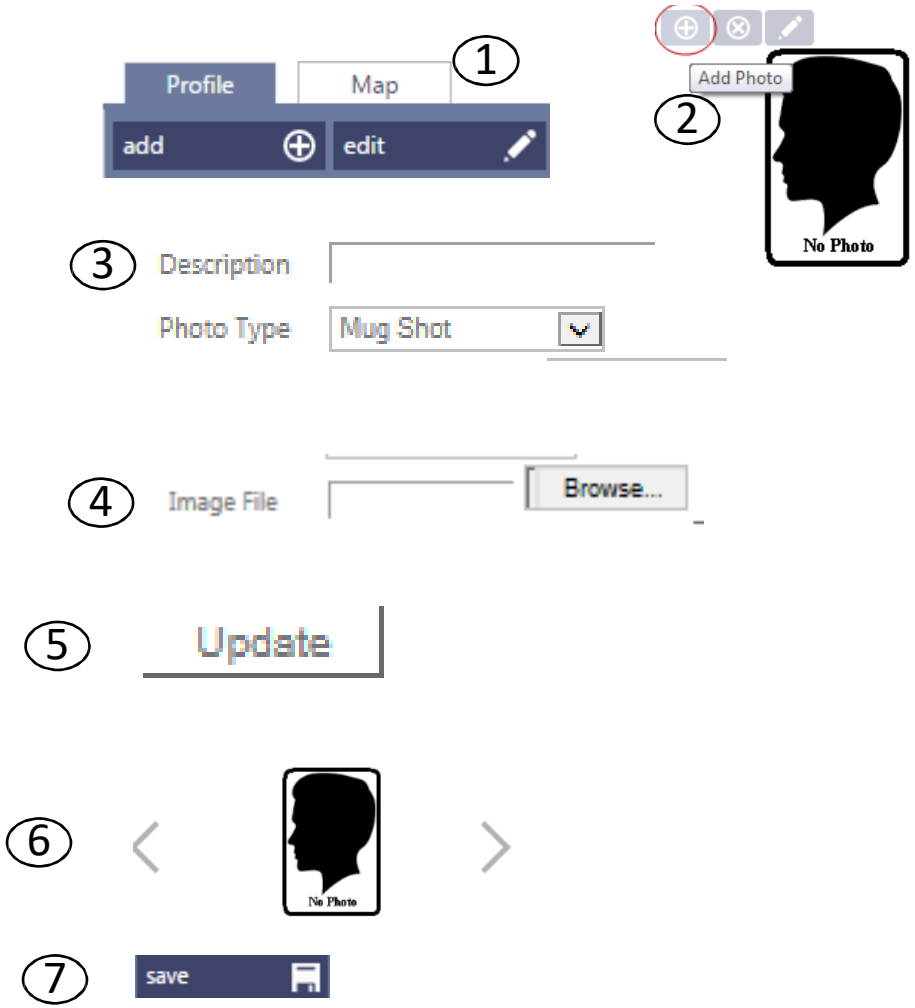
# Creating an Enrollee Profile

1. Click the **Enrollees** tile.
2. Click **Add**.
3. Fill in the required fields: **Primary ID, First Name,** and **Last Name.**
4. Confirm or change the **Organization**, **Agent**, and **Risk Level**.
5. Click **Save**.



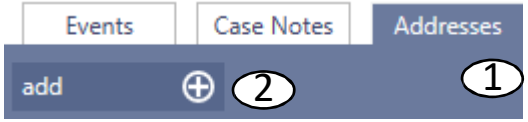
# Adding Multiple Enrollee Photos

1. In the enrollee's **Profile**, click the **Edit** button.
2. Above the photo, click the
   - **(+) Add Photo** button.
3. Type a **Description** and choose a **Photo Type**.
4. Click **Browse** to search for your picture.
5. Once selected, click **Update**.
6. Use the **Arrows** to toggle through the pictures.
7. Click **Save**.



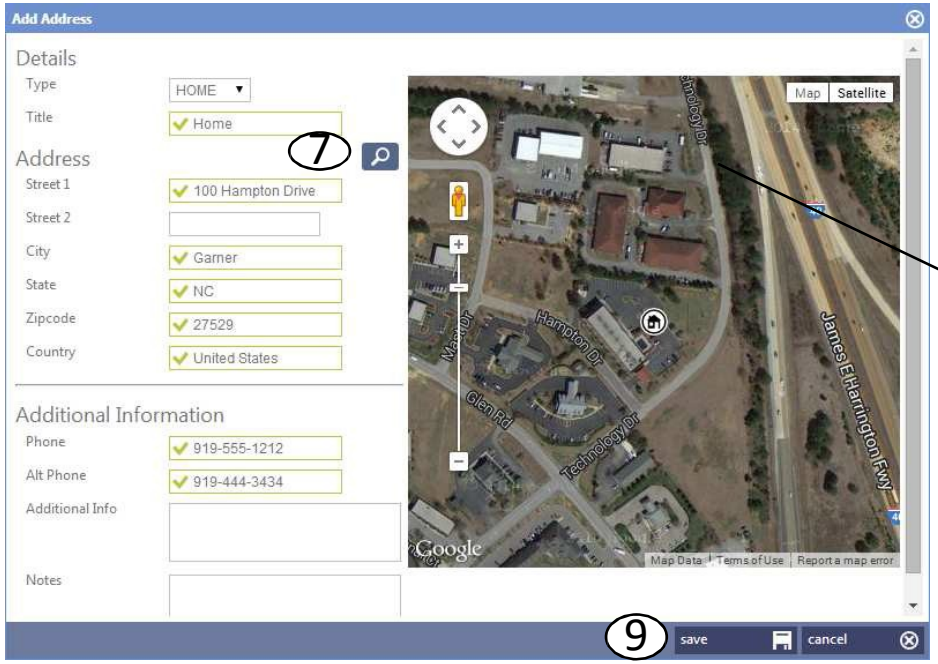
# Adding Enrollee Addresses

1. Under the profile, click **Addresses**.
2. Click **Add**.
3. In the **Type** list, choose ***Home***, ***Work*** or ***Other***.
4. Enter a **Title** for the address (e.g. *Home*, *Work*, etc.).
5. Fill in the **Street 1** box.
6. Type the **City**, **State**, and **Zip Code**.
7. In Additional Information, add **Phone**

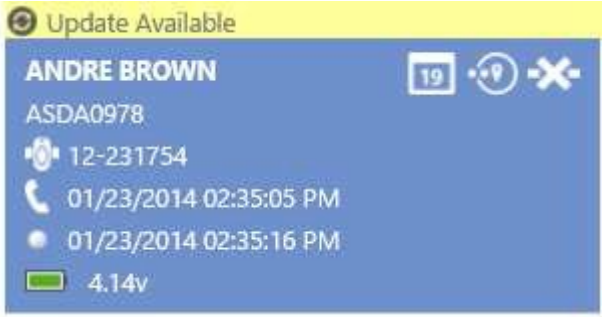


# Adding Enrollee Addresses

8. Click the **Geocode** button to view the approximate address.
9. To adjust the address placement, drag its icon.
10. Click **Save**.



# Update Available Bar




The **Update Available** bar displays above enrollee cards when an update is available for an enrollee listed on the current page of cards.

Clicking the bar is **optional**, as updated enrollee data will display upon navigating between tabs and tiles.

Do **not** click the **Update Available** bar while viewing unsaved data. By doing so, unsaved data will be lost.

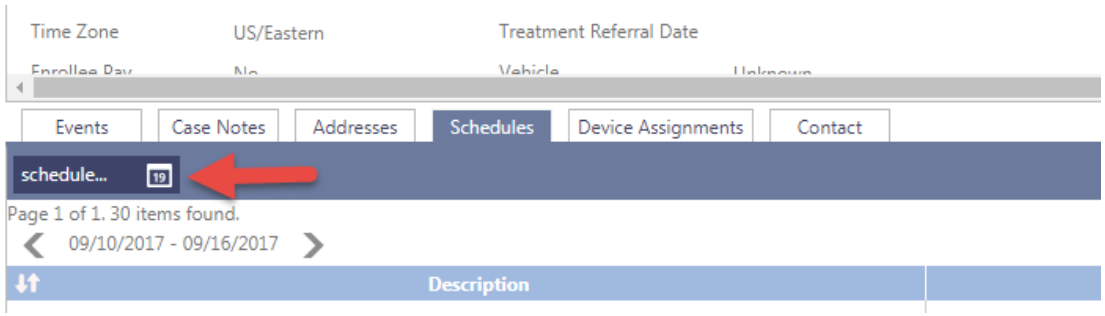
# SCHEDULES

# Definitions

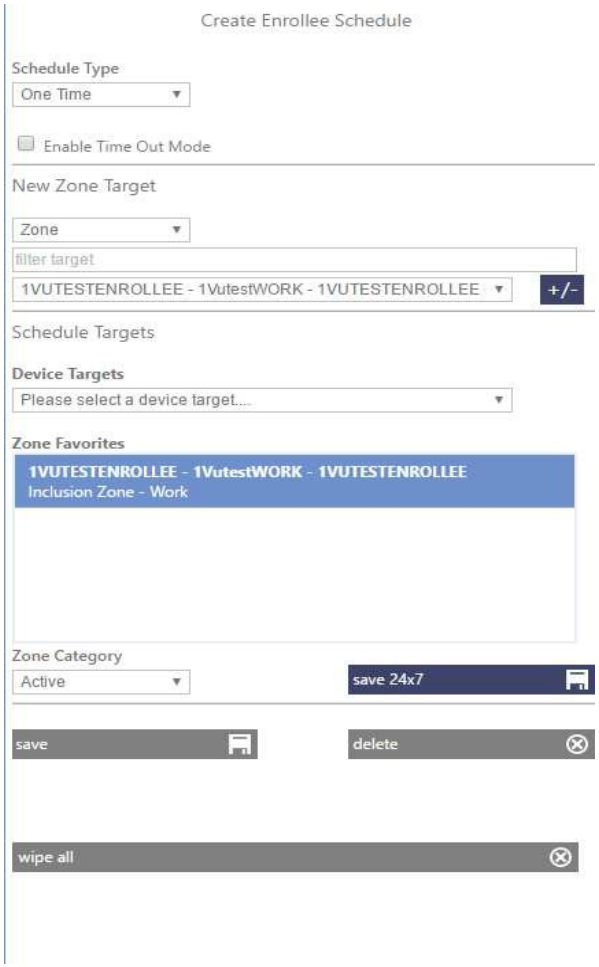
**Time In –** The start time of when the enrollee is to be in the Inclusion Zone or the start time of when the enrollee is not allowed within the Exclusion Zone.

**Time Out –** The start time of when the enrollee is allowed out of the Inclusion Zone or the start time of when the enrollee is allowed within the Exclusion Zone.

# Access Schedules Panel




- From the Schedules tab in Enrollee profile, click the Schedule button to access the schedules calendar.

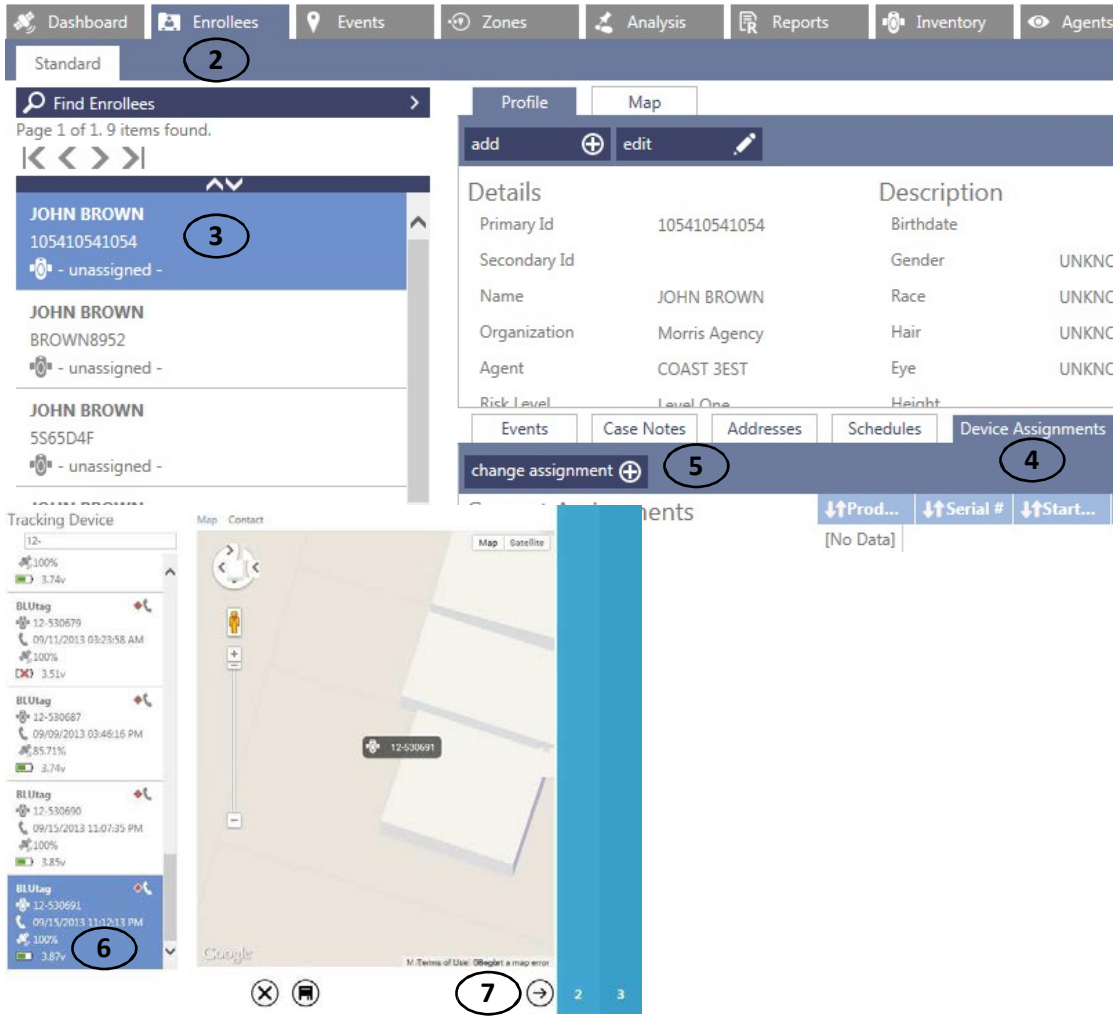


# Attach BLUband to Enrollee

# ASSIGNING DEVICES

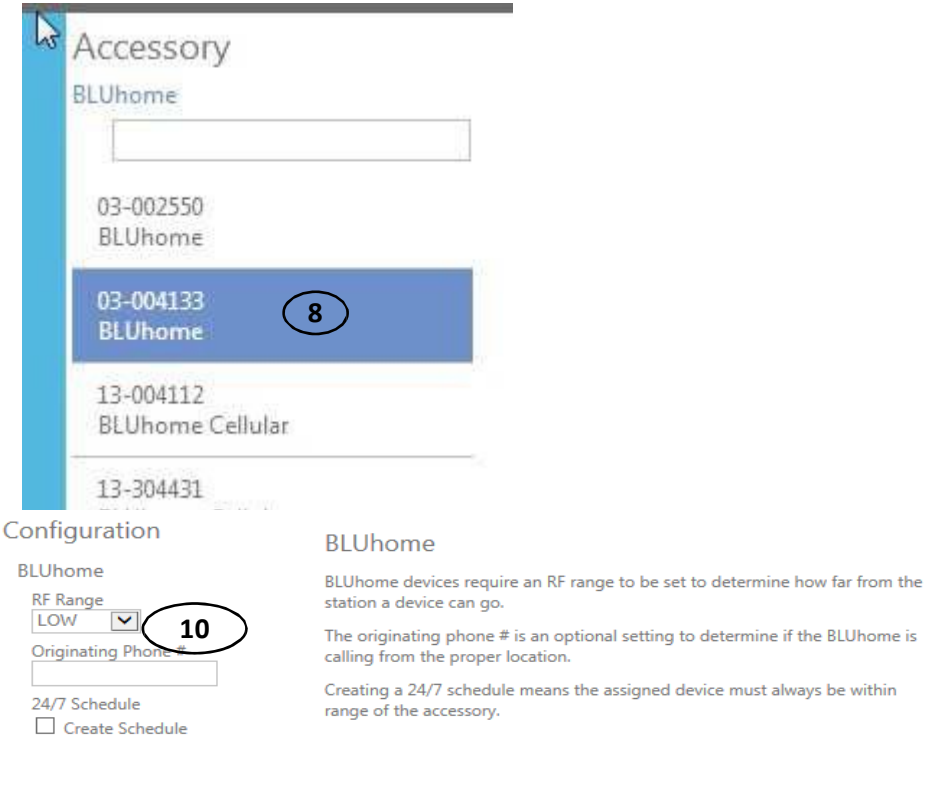
# Assigning the BLUband and BLUhome

1. Secure the device to the enrollee's leg.
2. In VeriTracks, click the **Enrollees** tile.
3. Select the enrollee's profile.
4. Click the **Device Assignments** tab.
5. Click **Change Assignment**.
6. Type or select the desired BLUband.
7. Click the **Arrow** to proceed to the next set of options.



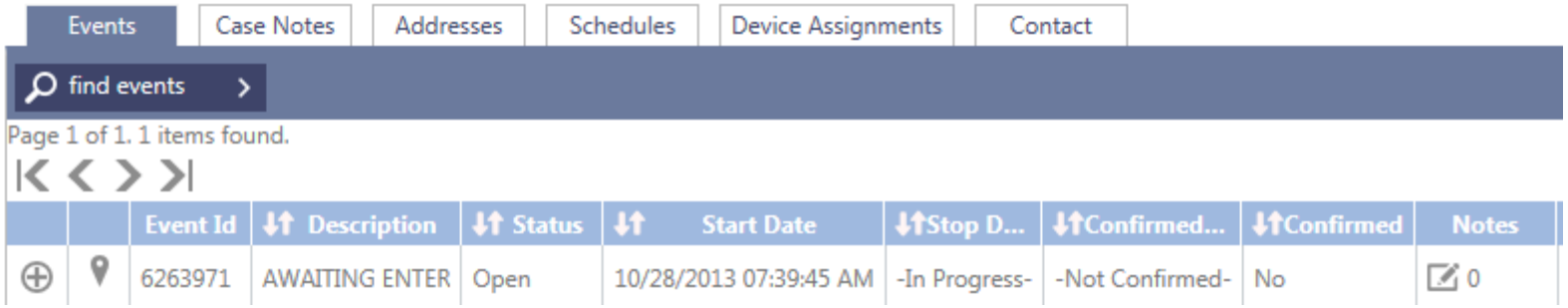
# Assigning the BLUband and BLUhome

8. Select the **BLUhome**.
9. Click the **Arrow** to proceed to the next set of options.
10. Confirm or change the **RF range**.
11. If creating an absence schedule, under 24/7 Schedule, click **Create Schedule** and **Add Absences**.
12. Click **Save**.



# Verifying Device Pairing

1. Within the **Enrollees** tile, select the enrollee's profile.
2. Click their **Events** tab.
3. An ***Awaiting Enter*** event is generated upon assignment of the devices. Once the devices are paired, the event will close and an ***Enter*** event will be generated.



# Enrollment Complete

- Force BLUhome to call VeriTracks by disconnecting and reconnecting its power cord from/to the outlet.
  - A ***Power On*** event will be recorded, forcing BLUhome to immediately dial VeriTracks (a question mark will appear on the screen). This call also allows BLUhome to download its new assignment from VeriTracks.
  - Over the next two minutes, the BLUhome screen will show a progression of status messages as it acknowledges its BLUband assignment, confirms that it hears the BLUband, and confirms that BLUband's tamper has cleared.

1. BLUhome received the BluBand assignment

   Enroll: 07000123
   RF ? TP ?

2. BLUhome hears the BluBand RF signal

   Enroll: 07000123
   RF √ TP ?

3. BLUhome hears the BluBand tamper clear

   Enroll: 07000123
   RF √ TP √

4. BLUhome has completed its enrollment work

   Enroll: 07000123
   Complete

# Transporting the Assigned BLUhome to the Residence

If this enrollment was performed at your office and the enrollee must travel home, you can shut down the BLUhome to prepare for transport (this will prevent movement alarms).

**Make sure the enrollee does not see these steps performed:**

1. Press and hold the center button on the BLUhome.
2. While holding the center button on the BLUhome, unplug the BLUhome from the electrical outlet.
3. The BLUhome display will ask you if you are sure you want to shut down the BLUhome.
4. Release the center button.
5. Press the left-pointing button to confirm ***Yes*** and the BLUhome will shut down.

# Enrollee Instructions

***Discuss or perform the following with the enrollee:***

- BLUband is hypoallergenic and cannot overheat.
- A sock can be worn over and/or under BLUband.
- Do not tamper with BLUband (no pulling, striking, attempt to open).
- Do not force a boot over BLUband.
- Do not expose equipment to extreme temperatures.
- Do not take BLUband into an MRI.
- Do not submerge BLUband in water (baths, pools, large bodies of water).
- Place BLUhome 3 feet off the floor.
- Place BLUhome on a flat, steady surface (i.e. wooden table) that will not be disturbed or vibrated.
- Do not place BLUhome near appliances (avoid top of refrigerator, microwave, speakers, etc.).
- Do not place BLUhome near mirrors.
- Do not to place any items on top of BLUhome.
- Immediately plug in BLUhome's power cord and phone line upon arriving home.
- If it is perceived that service is needed, contact the agency immediately.

# EVENTS

# BLUhome Events

| Event | Description |
|---|---|
| BLUHOME: DEVICE BRACELET STRAP | BluBand's strap may have been tampered with. |
| AWAITING ENTER | BluBand has been assigned to BluHome but BluBand has not registered its first arrival event. |
| ENTER | BluBand has entered BluHome's area. |
| BluHome CALLER ID FAILED | BluHome has called from a number other than that listed in the enrollee's assignment tab. |
| BluHome CURFEW START | The start and end time of the enrollee's curfew |
| BluHome CURFEW VIOLATION (LATE ARRIVAL) | The enrollee failed to arrive during curfew. |
| BluHome CURFEW VIOLATION (LEFT EARLY) | The enrollee left during curfew. |
| BluHome LOW BATTERY | BluHome's battery is low and needs to be plugged into a working AC power outlet. |

| Event | Description |
|---|---|
| BluHome NO DIAL TONE | BluHome could not find a dial tone to call out. |
| BluHome UNABLE TO CONNECT | BluHome was able to dial out but did not reach the Data Center. |
| BluHome MESSAGE GAP | Unit failed to call in for a duration of time exceeding the agency's limit (default is 4.5 hours). |
| BluHome CALL SUCCESSFUL | The status of the last call. |
| BluHome LID TAMPER | BluHome has been opened. |
| BluHome MOVEMENT | BluHome has been moved. |
| BluHome POWER LOSS | BluHome no longer has AC power and is now running on battery. |
| BluHome POWER ON | BluHome had lost battery and AC power. As a result it had shut down and has been restarted. |
| BluHome SETUP DEVICE ASSIGNED | A BluBand has been manually assigned to BluHome. |
| BluHome SETUP RSSI CHANGED | The range on BluBand has been changed. |

# Text Notification List

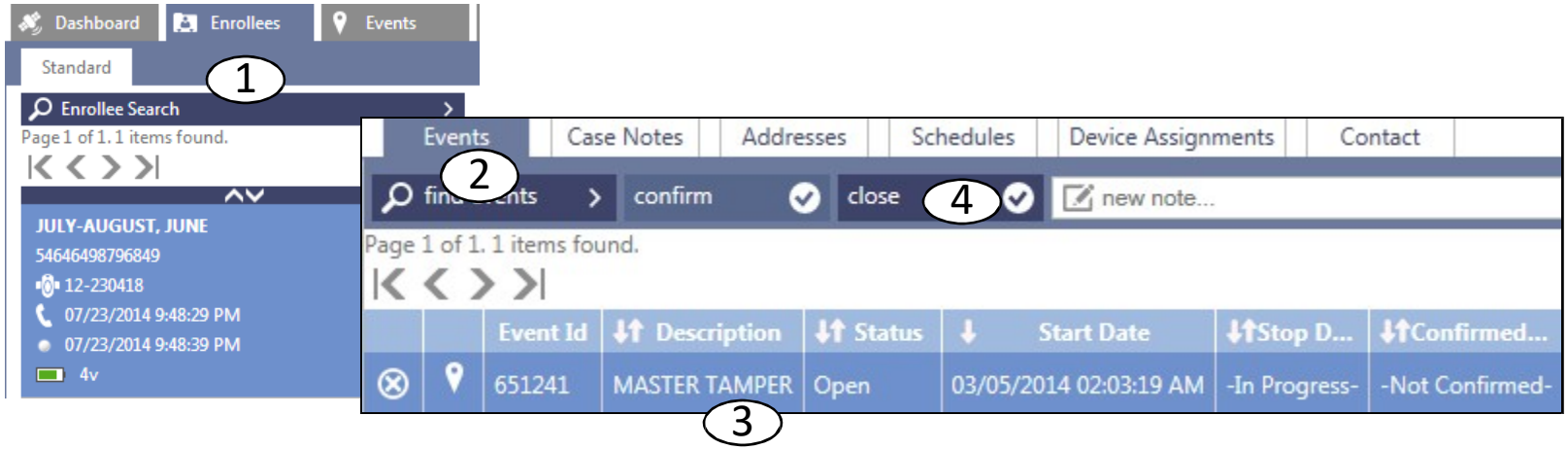
| | |
|---|---|
| BluHome: DEVICE BRACELET STRAP | **+/-BSTP** |
| BluHome: CURFEW VIOLATION (LATE ARRIVAL) | **+/-BHCUR** |
| BluHome: CURFEW ALARM (LEFT EARLY) | **+/-BHCUR** |
| BluHome: MESSAGE GAP | **+/-BHMGAP** |
| BluHome: POWER LOSS | **+/-BHPOW** |
| BluHome: LID TAMPER | **+/-BHLID** |
| BluHome CALLER ID FAILED | **+/-BHCALLID** |
| ENTER (BLUHOME) | **+/-ENTBH** |

# MASTER TAMPER

# Closing a Master Tamper via the Enrollee Profile

*Master Tamper requires the agent/officer to rectify the original cause of the violation by thoroughly inspecting and/or replacing the strap. The event can then be closed in VeriTracks.*

1. In the **Enrollees** tile, locate the enrollee's profile.
2. Click the **Events** tab below their profile.
3. Locate and select their ***Master Tamper*** event.
4. Click the **Close** button that appears above to end the event.



# Closing a Master Tamper via the Events Tile

*Master Tamper requires the agent/officer to rectify the original cause of the violation by thoroughly inspecting and/or replacing the strap. The event can then be closed in VeriTracks.*

1. Click the **Events** tile.
2. Locate and select the ***Master Tamper*** event.
3. Click the **Close** button that appears above the map of the event.

# NOTIFICATIONS

# Notification Preferences

There are two standard notification methods, **Daily Reports** and **Immediate Notifications**.

The **Daily Report** arrives each morning, typically at **6:30 am**, displaying **36 hours of data**, per enrollee.

**Immediate Notifications** can be received via **email** or **text** messaging upon the **start** and **end** of an event.

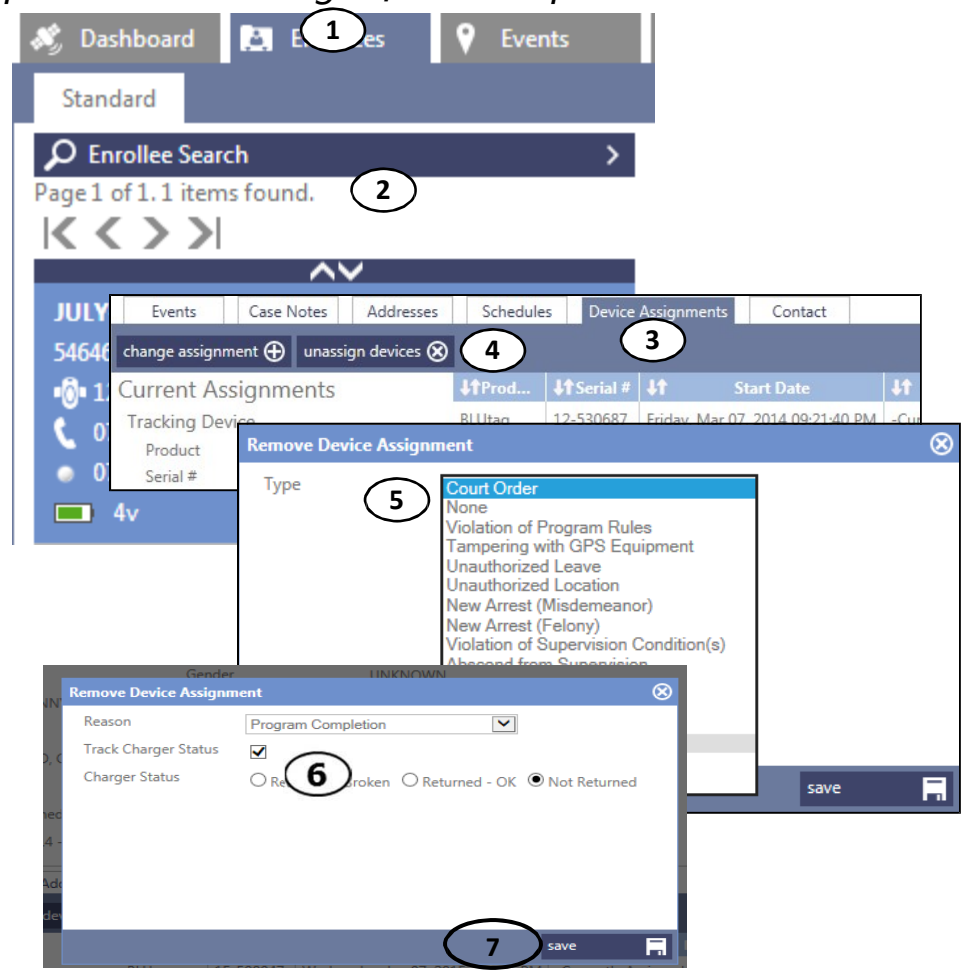
**Enhanced Notifications** (optional) are a text rich method of receiving immediate notifications via **email** or **text.**

# UNASSIGNING DEVICES

# Unassigning BLUband

*Unassign BLUband prior to cutting the strap to avoid causing a false tamper event.*

1. Click the **Enrollees** tile.
2. Select the enrollee's profile.
3. Click the **Device Assignments** tab.
4. Click **Unassign Devices**.
5. In the **Type** list, click the arrow to view and choose the appropriate reason for unassigning the device.
6. Check **Track Charger Status** box (as needed).
7. Click **Save**. *BLUband/BLUhome will now shut off.*



# Shutdown BLUhome

**Make sure the enrollee does not see these steps performed:**

1. Press and hold the center button on the BLUhome.
2. While holding the center button on the BLUhome, unplug the BLUhome from the electrical outlet.
3. The BLUhome display will ask you if you are sure you want to shut down the BLUhome.
4. Release the center button.
5. Press the left-pointing button to confirm ***Yes*** and the BLUhome will shut down.

# Additional Resources

| Source | Content |
|---|---|
| Wistia (online knowledge-base) | Videos and pdf's |
| Analysis Tile | Crime Scene Correlation and training |
| Advanced features | Informatics (Timeline and Associations) |
| Reports | Advanced training |
| Mobile VeriTracks | Case management |
| Sobertrack | Alcohol monitoring device |

SECURUS Technologies™

# Satellite Tracking of People LLC

## Monitoring Solutions

1210 N. Post Oak Rd., Houston, TX 77055
(832)-5539500