Sp@t Bot
Cellular

PRODUCT MANUAL

CONTENTS

1. INTRODUCTION

Every year more than $12B in goods are lost and over $100B are damaged during transport.

SpotBot is a reliable solution that allows you to keep track of your shipment and how it is being handled.

- Get immediate alerts in case of mishandling with the impact level and location.
- Keep track of your shipment with hourly location updates.
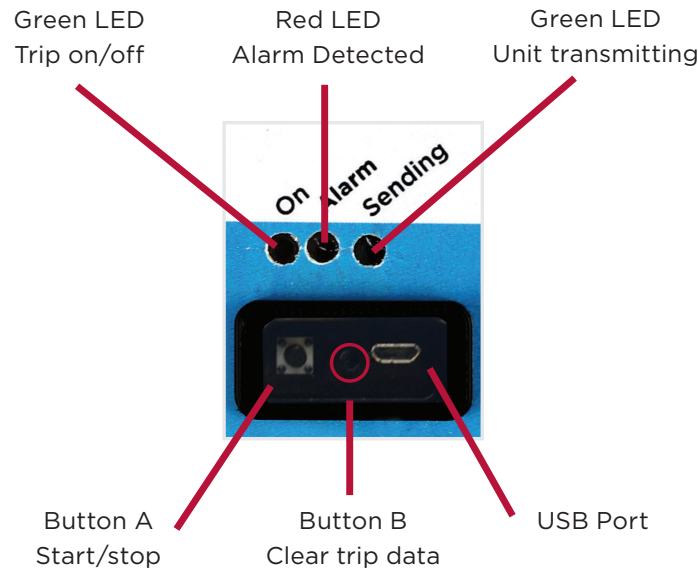- Control your cargo environment with hourly temperature readings.

And, you can access all this information - wherever you are - through our web based SpotSee platform.

SPOTBOT BETA MAIN SPECIFICATIONS

Dimensions	7.000" x 5.250" x 1.375" or 17.78 x 13.335 x 3.5 cm
Weight	1.304 lbs or 590 gr with batteries, 1.104 lbs or 500 gr without batteries
Impact detection	3-Axis, 3200 g Digital MEMS Accelerometer up to 3200 g
Other features	Location information
Temperature range	-40˚C to 85˚C or -40˚ F to 185˚F
Power Supply	Batteries: 6 x 1.5V Lithium AA Batteries (will work with 1.5 Alkaline AA Batteries although they are not recomended)
Battery life in normal cellular coverage conditions	1 (summary / event) per day 243 Days 1 (summary / event) per hour 95 Days (if Alkaline batteries are used a lower battery life is expected)
Communication	Global cellular network

2. INITIAL SETUP

First, familiarize yourself with your new SpotBot. On the front of the device you will see 3 LED indicators, 2 buttons and a USB port.

Green LED
Trip on/off

Red LED
Alarm Detected

Green LED
Unit transmitting

Button A
Start/stop

Button B
Clear trip data

USB Port

Left LED (ON) Indicates if a trip is started/stopped. A trip is started when the LED flashes once per minute. This LED will be yellow when battery power is low.

Middle LED (ALARM) Red LED indicates that an alarm impact has been detected.

Right LED (SENDING) Green LED flashes when the unit is sending data to the SpotSee Cloud.

Button A Enables start and stop of a Trip.

Button B This recessed button will delete all data in the SpotBot (insert a pin in the hole to access the button).

USB Port To connect the SpotBot to a computer for configuration and download, via micro USB cable.

Included with your SpotBot are 5 no tamper stickers for your use.
We recommend you use the stickers over the rubber cover as an added guarantee that no one will tamper with the SpotBot during a trip.

Remove the battery cover at the bottom of the SpotBot. Place the batteries in the correct position. Once the batteries are inserted properly, close the battery compartment and make sure the screws are tight without applying excessive force.

ACTIVATION

Go to activate.spotsee.io to activate the unit. The unit ID and Customer No. are required to complete this task. The Unit ID can be found on your SpotBot label and Customer No. is located on the invoice.

If it is the first time you have activated a unit, follow the prompts to create the admin user.
A valid email is required.
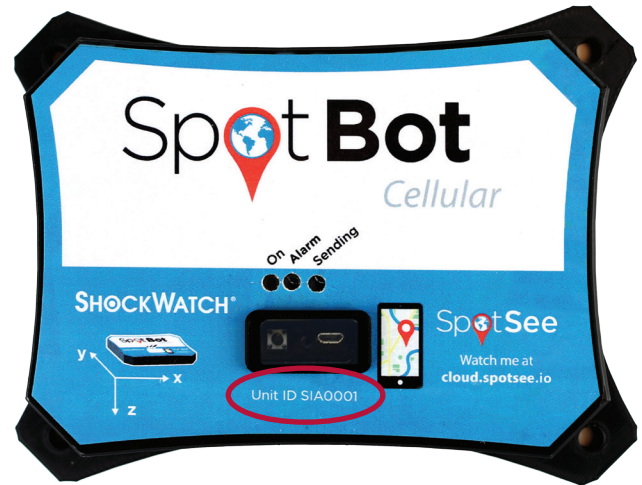
Once completed you will get an email to create your password on the SpotSee Cloud.
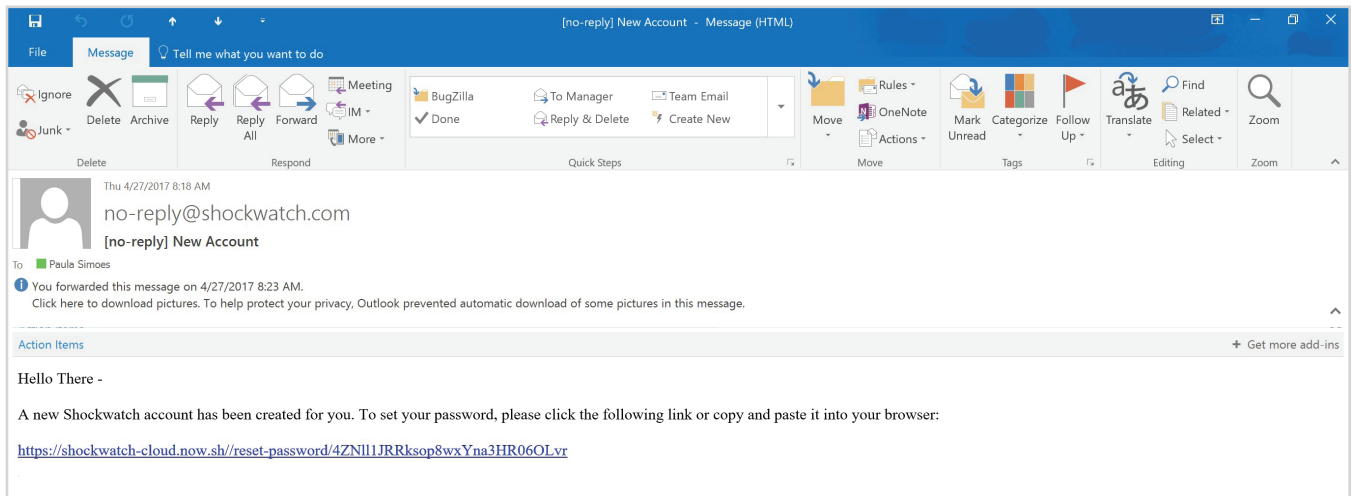
ACCOUNT SETUP

First, locate your user account information that was sent to you via email and follow the instructions to retrieve your password.
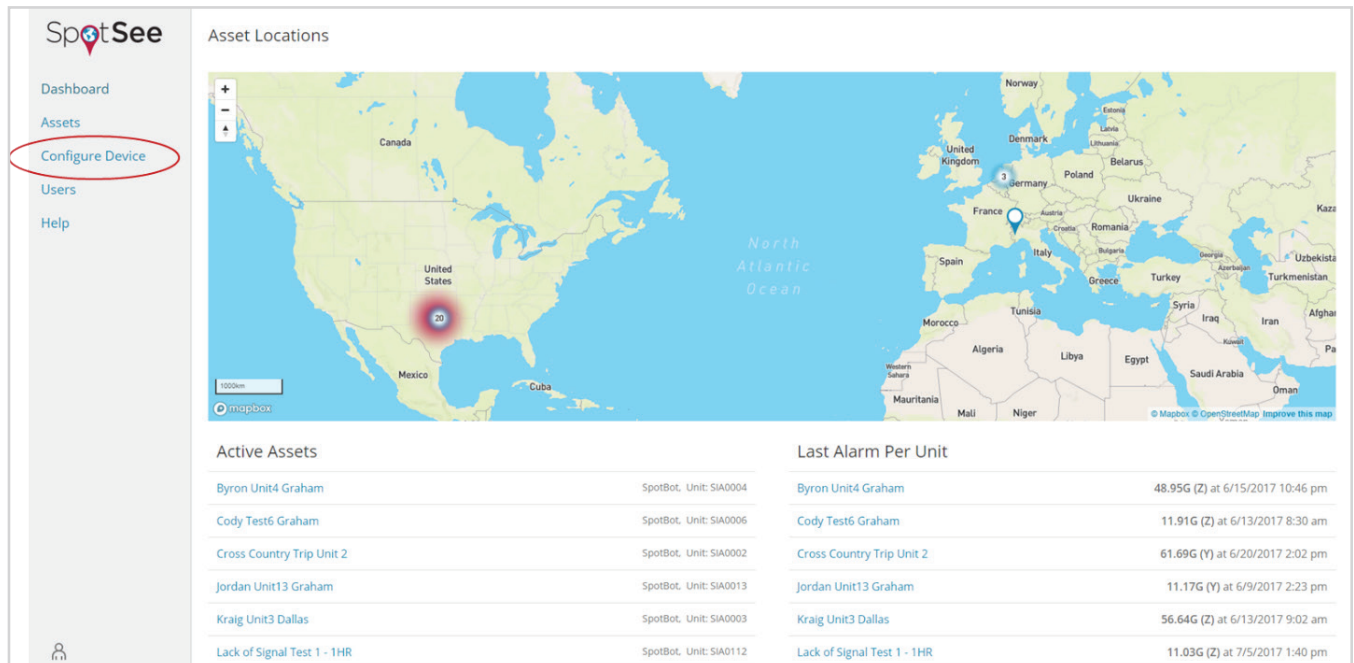

If you can't find the email, please make sure to check your Clutter or Spam folders.

Then, use the password with your email address to login into the SpotSee platform at Cloud.Spotsee.io

INSTALLING DRIVERS

The first time you use the SpotBot portal on your computer, you may need to install some drivers if using Windows 7. Click "Configure Device" from the menu options on the left side of the home screen.

INITIAL SETUP

Then, select "Initial Setup" as indicated below.

Choose the web browser you are using (i.e. IE, Edge, Chrome or Firefox) and follow all the steps in the platform. We do not currently support Safari.
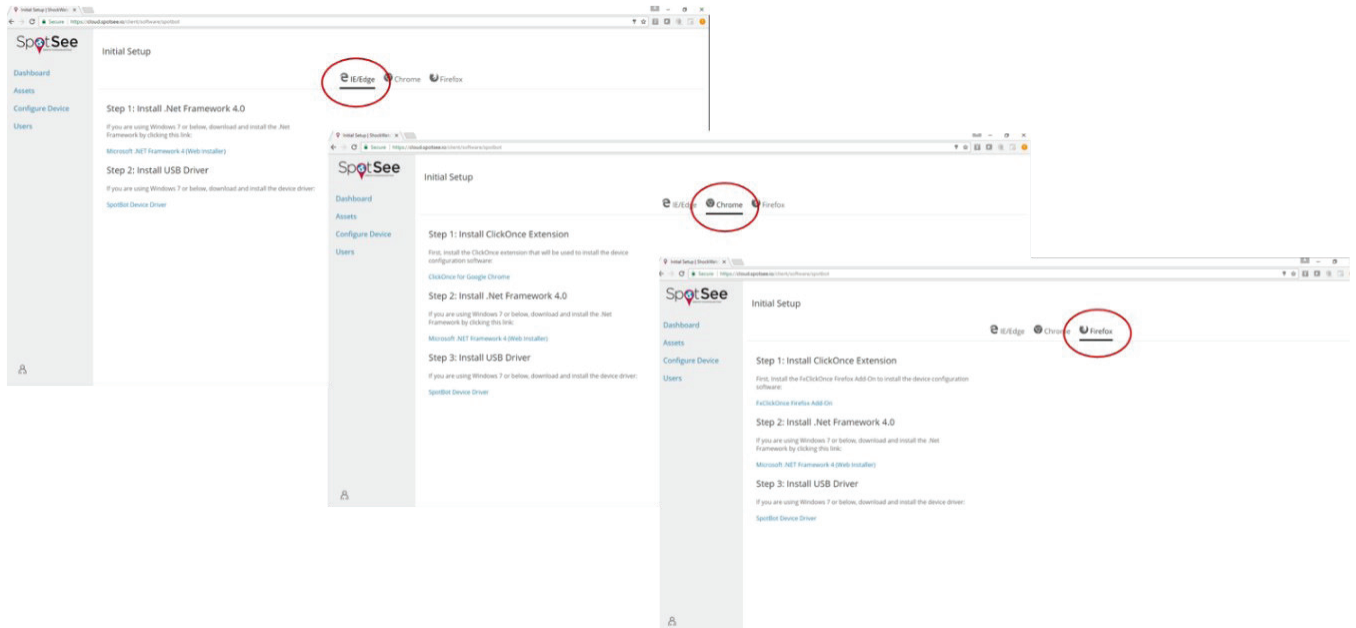
3. CONFIGURE YOUR SPOTBOT

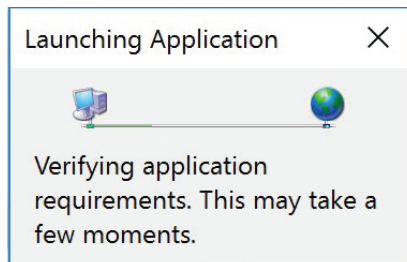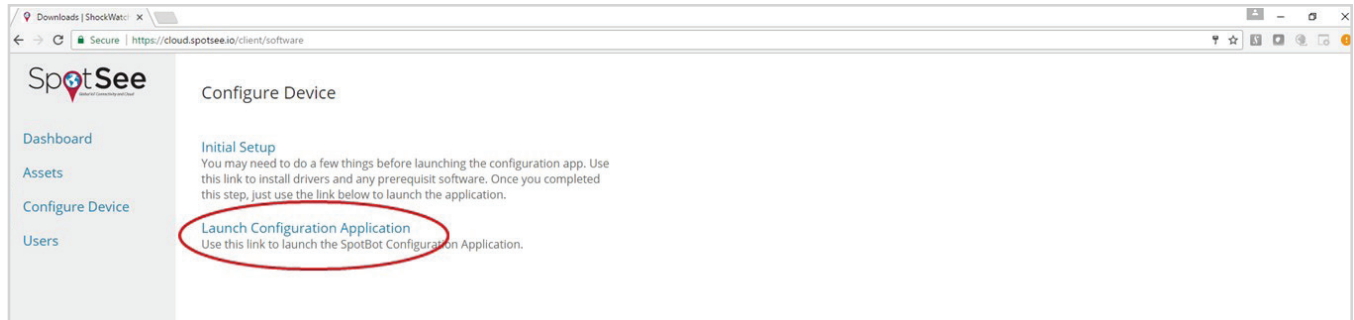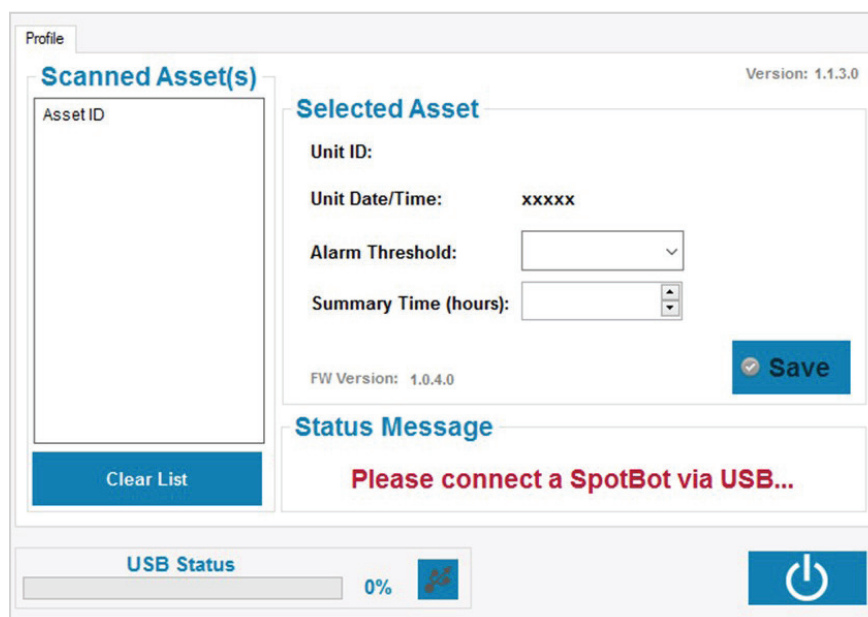## DEVICE SETUP

Next, go to cloud.spotsee.io -> configure device and select "Launch Configuration Application."

You should see a small application launcher window popup.

Once the requirements are verified, the "SpotBot Settings App" should open.*

If your app fails to open, please go back to Initial Setup and repeat those steps carefully.

Next, plug the SpotBot into your computer using the
USB cable provided with your SpotBot.

Your SpotBot should show up under *Scanned Assets*
(if it does not automatically show
press the Start/Stop - Button A on the SpotBot).

Select your SpotBot device from the left column.

1. Select the alarm threshold (minimum G level in which the SpotBot will start sending alerts)

2. Select the summary time (frequency in which the SpotBot will communicate its location and alarm count)

3. Press Save
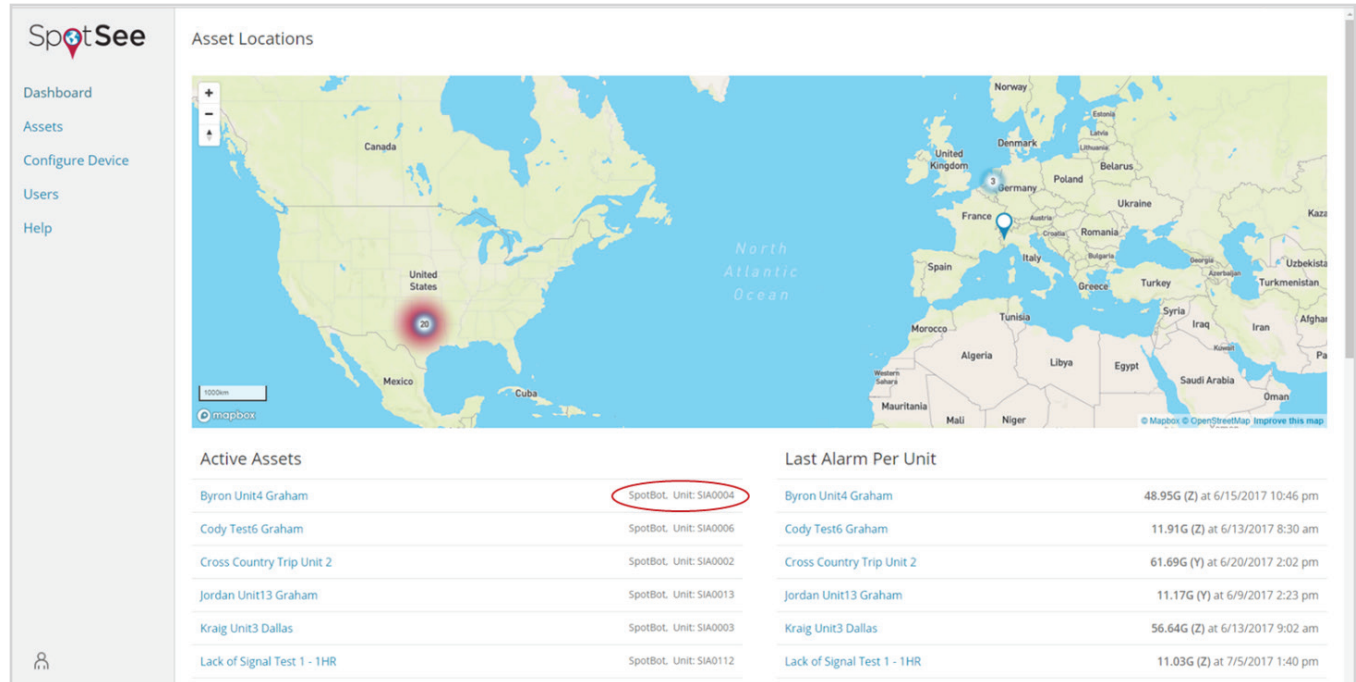
There is a tradeoff between the battery life and the summary time, if you need longer battery life the summary time should be set to higher values. Please refer to the SpotBot main features for an indication of expected battery life.

After you press Save the SpotBot will send a summary message with the new settings to the Spotsee platform, via the cellular network

Finally, unplug the USB cable. Your SpotBot is ready to start a Trip.

Before you start a Trip, check to make sure you can see your SpotBot in the SpotSee platform.

Login to your account at cloud.spotsee.io and you should be able to identify your SpotBot within the dashboard.

4. HOW TO USE YOUR SPOTBOT

A. START A TRIP

Now that your SpotBot is configured, you can begin a Trip by holding Button A (Start/Stop) down for 1 sec.

You should see 2 green LEDs (On and Sending) light up. The Left LED indicates the Trip is ON, while the Right LED indicates the device is transmitting information.

The SpotBot will send a message (Sending green LED flashing) to inform the SpotSee platform that a Trip has started.

A new Trip fails to start if:

• **You see a red LED when trying to start a Trip.**
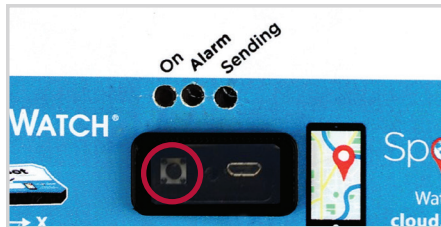 (This means something is wrong with the device configuration. Please refer to *Configure your SpotBot* section and follow the steps carefully.)

–OR –

• **You see only one green LED (On) or green and red (Alarm)** if an alarm was issued on a previous Trip. (this means a Trip is already started, you can choose to stop it or leave it on)

TIP

A good way to verify if the Trip is active is to produce an alarm. Place a notepad on your desk and drop the SpotBot from 2-3" above the notepad. You will see all 3 LEDs flash if the Trip is started and no LEDs if the Trip is not started.

B. STOP A TRIP
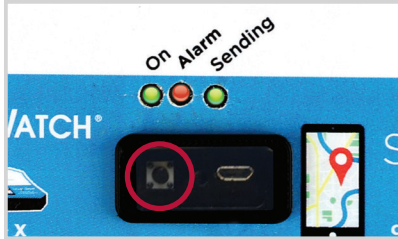
Stop a trip by pressing and holding Button A until the all three LEDs are solid then release Button A. The On and Alarm LEDs will flash multiple times while Button A is held. After Button A is released, the sending LED will illuminate solid or flash as the device sends a trip stop message to the SpotSee platform.

The reason you need to hold the button to stop the trip is to prevent people from stopping the trip while in transit with a simple push of the button. This way, stopping the trip is a deliberate action. Also, as long as there is cellular coverage notice will be sent to the SpotSee user if the trip has been stopped or the device has been reset, so you know immediately if someone has tampered with the device.

If you stop a trip while the Spotbot is transmitting a message, both On and Alarm LEDs will go solid and Sending will keep flashing.

C. OTHER INFORMATION ABOUT BATTERIES AND SETTINGS

• When replacing the batteries make sure you have all you need on hand. The SpotBot will keep settings for 5 min without batteries so you can swap batteries.

• If the device goes longer than 5 min without batteries, or if the SpotBot's batteries become depleted during a trip, you must repeat step *3. Configure your SpotBot.*

• The SpotBot will not start a Trip without the correct settings, please refer to step *4. How to use your SpotBot, a. Start a Trip,* for more information.

• If you want to change SpotBot settings for a new Trip please refer to step *3. Configure your SpotBot.*
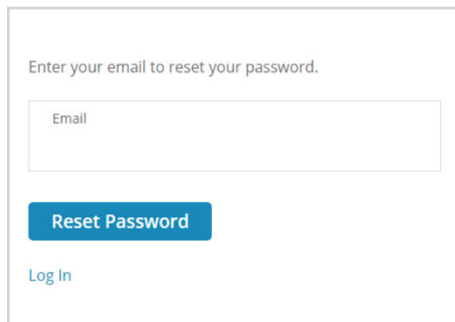
The SpotSee Platform enables you to monitor and control your assets from any location.

D. LOGIN AND PASSWORD RECOVERY

Go to cloud.spotsee.io and enter your user and password.

If you forgot your password, click Forgot Password to receive a password reset email.

Enter your email and click reset password.

Follow the link provided in the email to reset your password. If you can't find the email please check in the Spam or clutter folders.
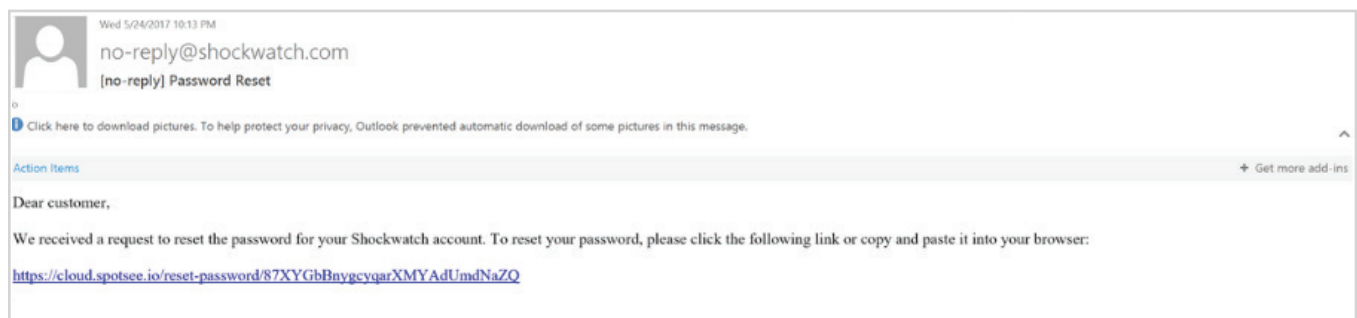
E. THE DASHBOARD

Upon logging into the platform you will first see your dashboard. This page will show the last known location of all your SpotBot units (referred to as Assets), a list of all your active Assets and the most recent alarm for each one.
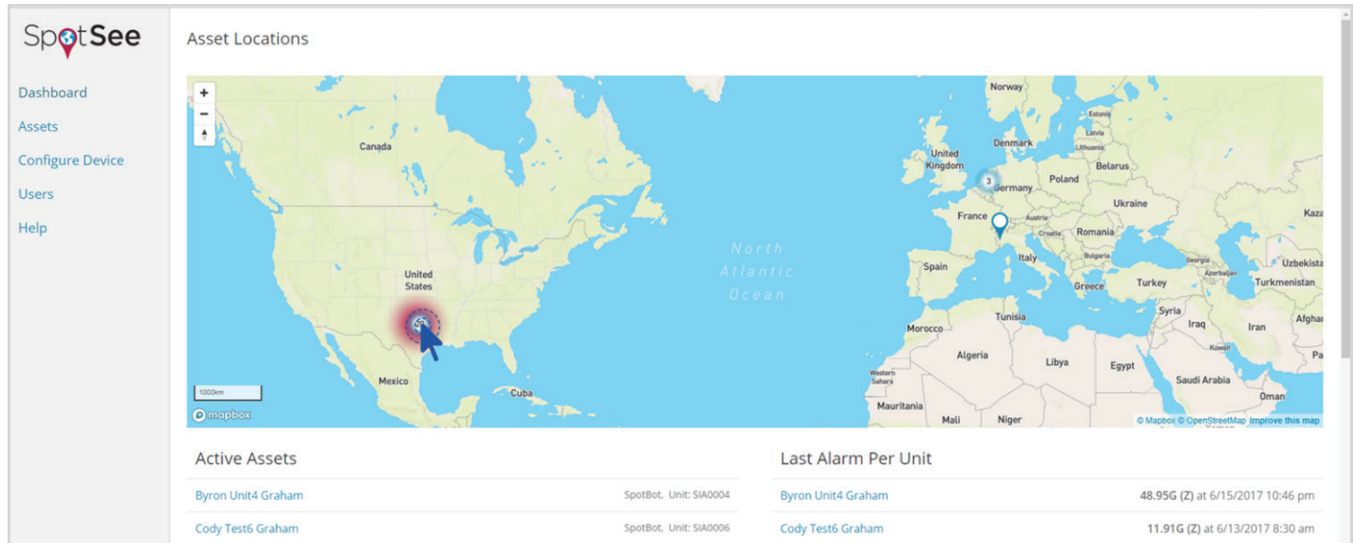
By clicking in the units on a specific area it will zoom in until you can see individual units.
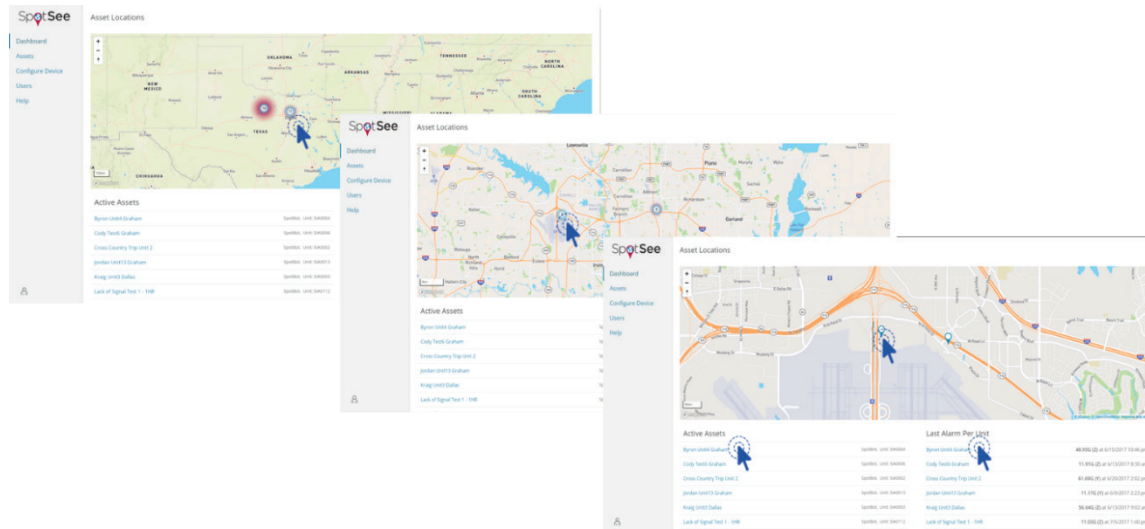
You can access each individual SpotBot by clicking on the location icon or on the Asset Name in any of the lists. If units are positioned in the same exact location, it will show the number of units in that location.

F. ASSET (SPOTBOT) PAGE

THE MAP

When you drill down into an individual SpotBot page, you will be able to access more detailed information about the specific SpotBot. On the Map at the top left, you will see all the locations your SpotBot reported to the platform.
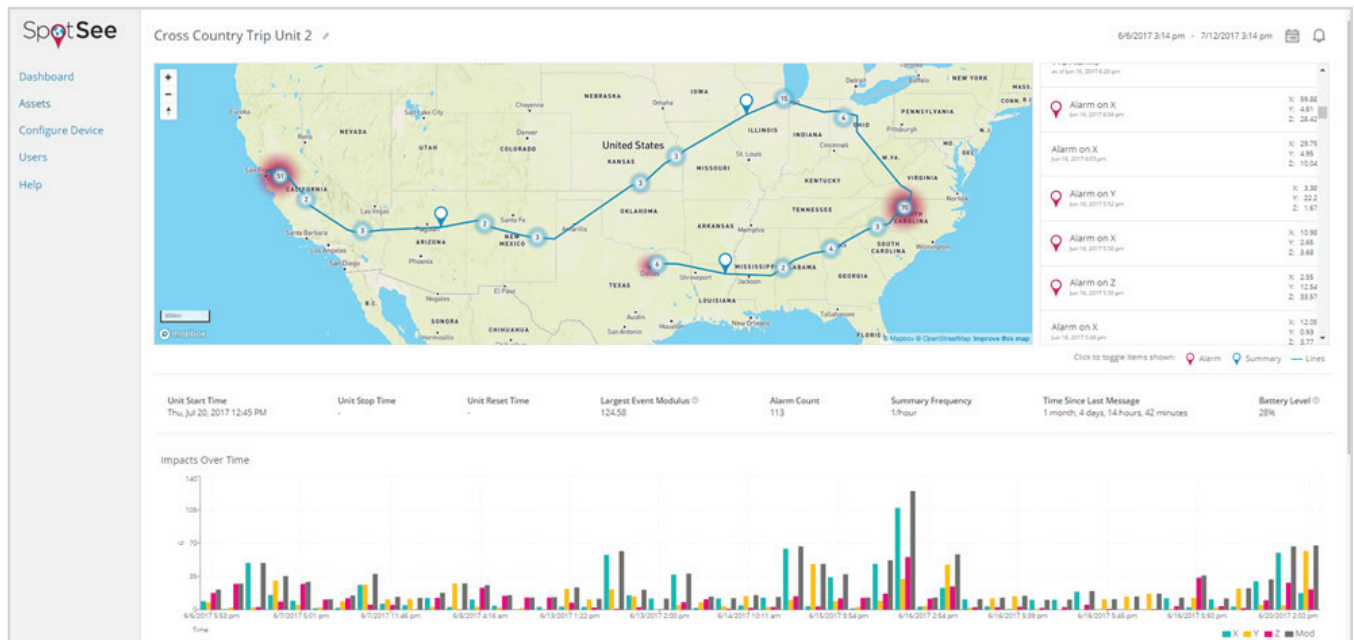
The map with show the location pin (alarms and summaries) clustered by proximity. By clicking the numbers on the map will zoom in until you can see individual Pins.
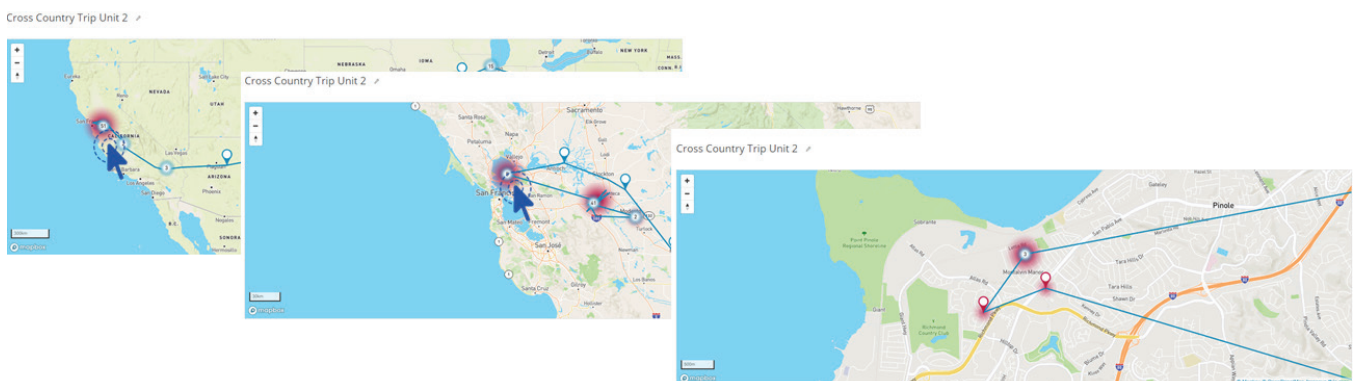
The red heat map around the numbers indicates there is at least one alarm within that cluster, the heat map grows with the number of alarms in that location or area.

A Blue pin represents a summary (with location and count of all alarms registered by the unit since last data reset).
A Red pin represents an alarm issued by the SpotBot. The SpotBot will issue an alarm if the G level is higher than the alarm threshold defined in step 3. Configure your SpotBot.
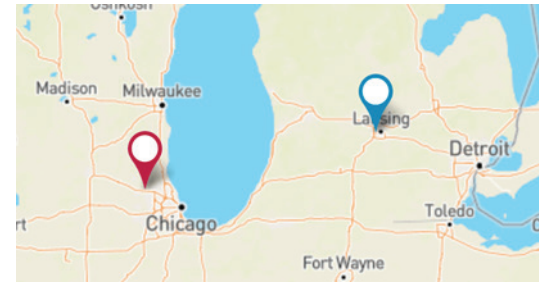
If you prefer to see only the alarms, click on the summary label (under the list).

The summaries will be removed from that map and from the list and only the alarms will show
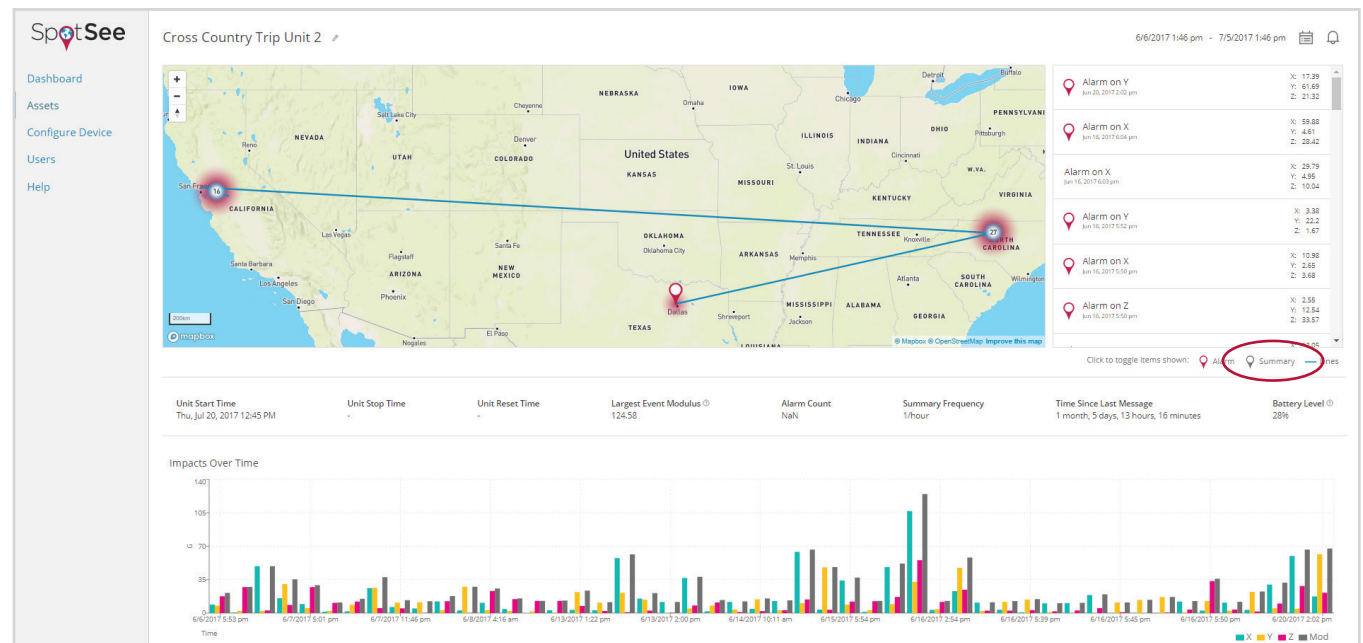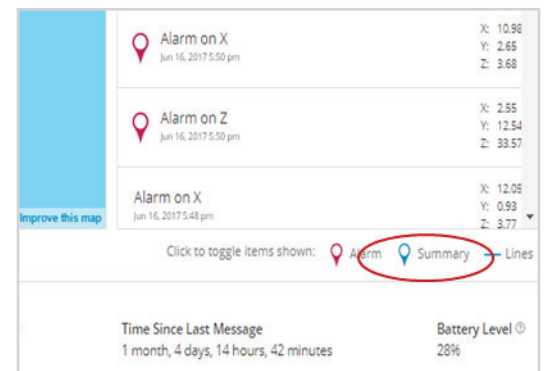
You can also do the same to the alarm label if you wish to only see summaries.

The platform will trace the trip path by default when you open the unit page, if you do not wish to see the path you can remove it by clicking the lines icon.

The map will then show all the location points without the path.

Below the map is a tab with relevant current information about the unit.

Unit Start Time	Unit Stop Time	Unit Reset Time	Largest Event Modulus ⓘ	Alarm Count	Summary Frequency	Time Since Last Message	Battery Level ⓘ
Thu, Jul 13, 2017 4:55 PM	-	Fri, Jun 30, 2017 3:20 PM	50.9	4	24/hour	1 hour, 8 minutes	87%

Unit start time – indicates last time a trip was started in a unit (as described in 4.a.).

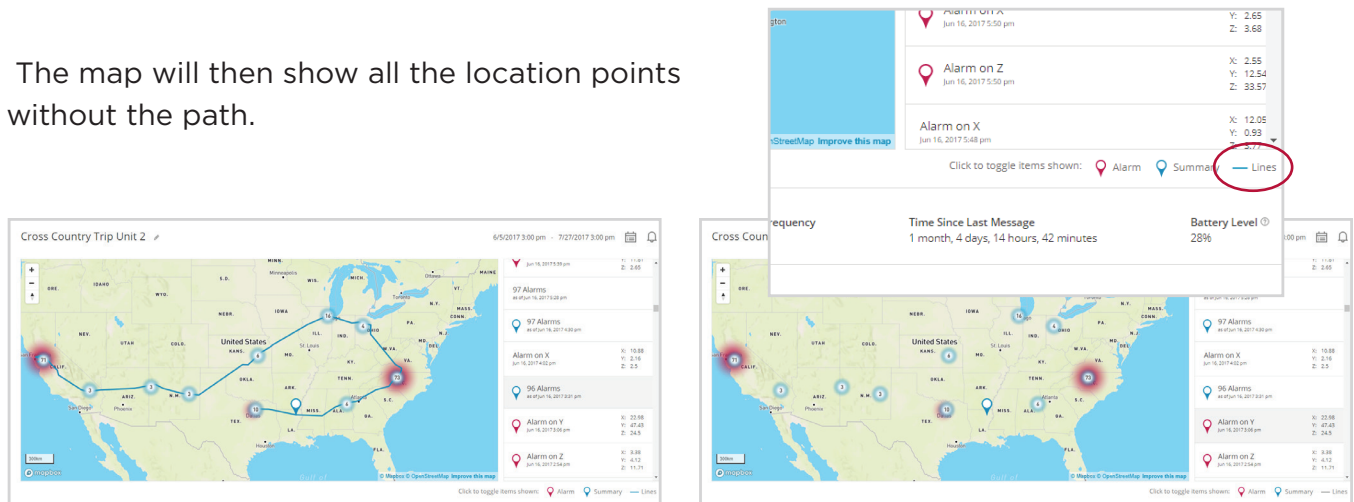*Unit Stop Time* – indicates the last time a unit was stopped (as described in 4.b.)

Unit reset time – indicates last time the unit's data was reset (see more in chapter 7)

Largest event module – largest impact module received by the platform since the unit was reset.

Alarm count – number of alarms recorded by the unit since it was reset.

Summary frequency – the frequency in which the unit will send the alarm (as described in step 3)

Time since last message – this field indicates the last time a message was received from the Spotbot. In case this value is larger than the summary frequency, this field works as warning of lack of cellular coverage or mishandling of the Spotbot.

Battery level – indicates the battery level of your unit, when this level reaches lower percentages it is advised to change batteries before sending the unit on a trip (please refer to the main specifications for a reference to battery life)

To guarantee data integrity, the SpotBot has a batteries preservation feature that will turn off the radio at 25% battery life but will still record the events in the unit (please refer to chapter 7 for more information). At 15% battery, the unit will stop the trip but the data will remain stored in the unit.

Bellow the tab you can find a graph of impacts over time with X,Y,Z and Modulus, representing the G levels of all the alarms issued by the SpotBot. X,Y and Z axes directions can be found in the front label of the unit:
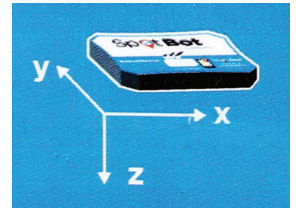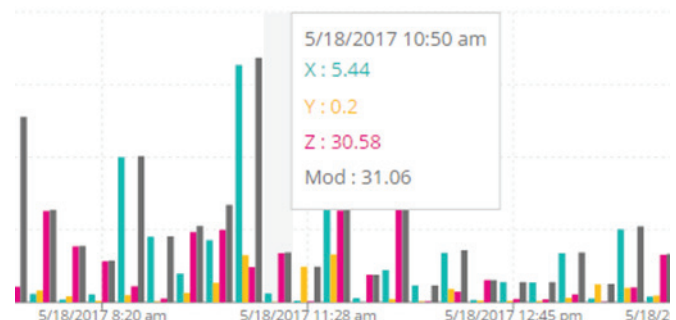

Modulus takes the X, Y and Z directional impacts into consideration and summarizes the combined result of all 3 impacts.

Modulus =
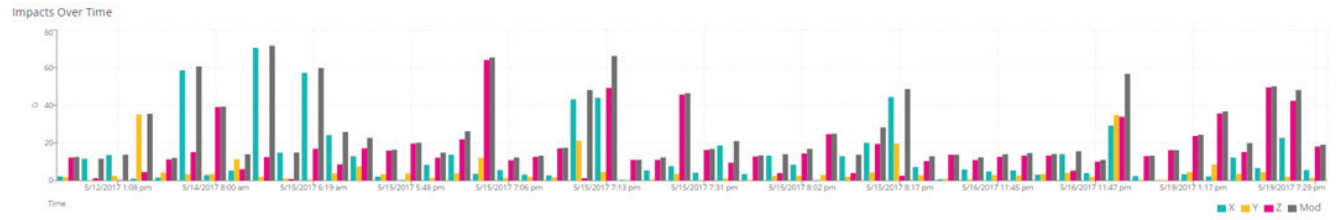
 Hovering the cursor over the bars in the chart will allow you to see the individual values for each impact over time.

This is true for all the graphs represented on the web page.

Scrolling down a little further, you will find the Impact Histogram. This chart tells you how many impacts you had over a certain G Level.This graph divides the G values into intervals called bins, each bar on the histogram represents the number of observations falling within a bin.
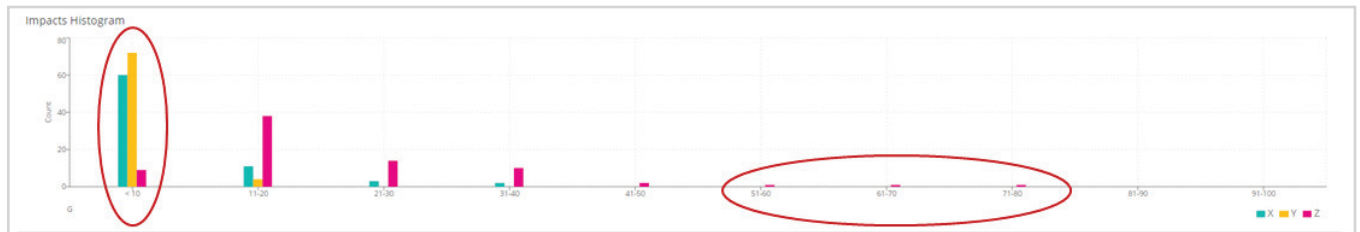
In this example, most impacts fall within the <10 G we can also see the unit had one impact in each of the higher G.
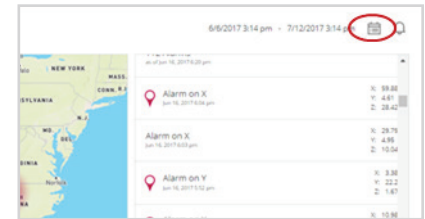
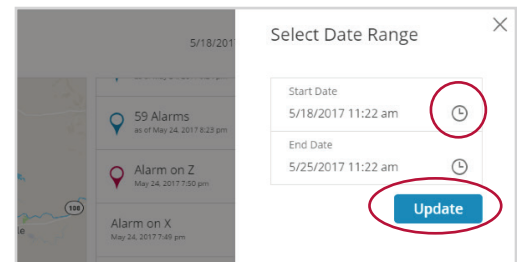Also on this page, the temperature is recorded by the SpotBot.

G. CHANGE DATE RANGE

By selecting the calendar icon positioned on the Top right of the page you can select to view data for a different date range.
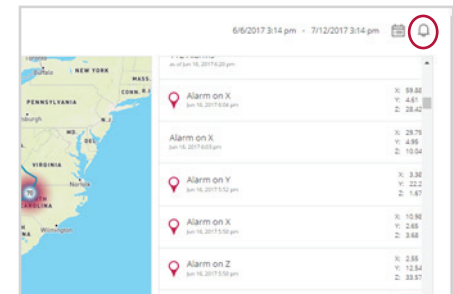
The default date range is the last 7 days.

Select the desired Start and End dates and then click Update. New data might take a few moments to load.
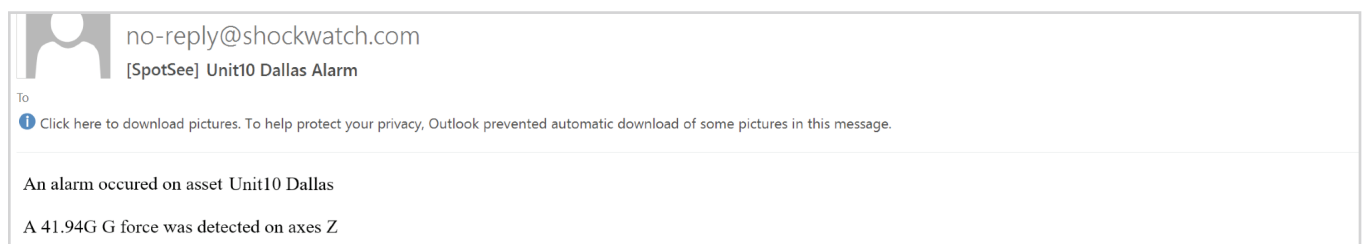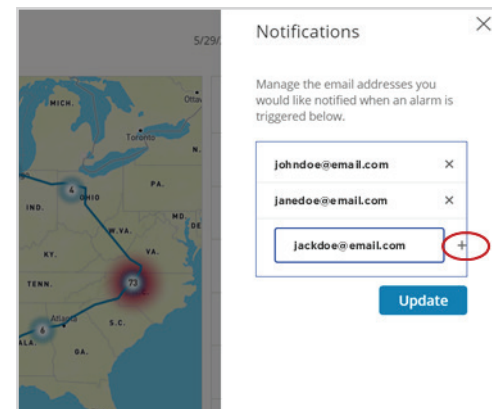
H. SET NOTIFICATION EMAILS

You can set multiple emails to receive alarm notifications. Click on the notification icon to set the emails.

SpotSee allows you to define multiple emails to receive notifications.

Write the new email address and click the + sign to add it to the list, you can add several emails, once you are done listing the emails click update to save the list.

The emails you choose to receive notifications will receive an email every time the platform receives an alarm from that specific SpotBot. Please make sure to check the Spam and Clutter folders and add no-reply@shockwatch.com to avoid the Spam and clutter folders.

no-reply@shockwatch.com
[SpotSee] Unit10 Dallas Alarm
To
ⓘ Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

An alarm occured on asset Unit10 Dallas

A 41.94G G force was detected on axes Z

I. CHANGE ASSET NAME

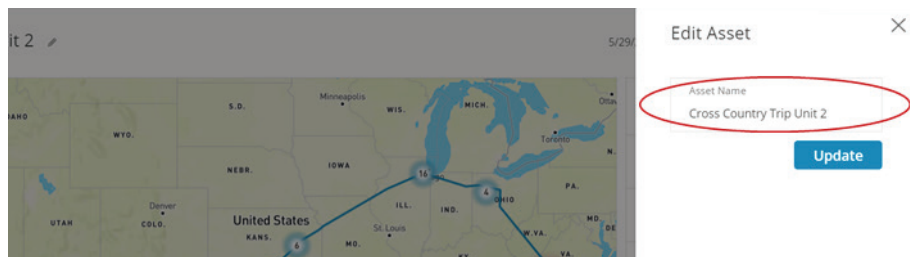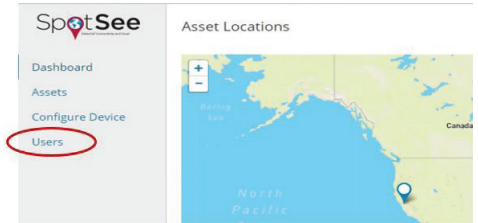While on the Asset page you can edit the Asset's Name by clicking the pencil icon close to the unit name.
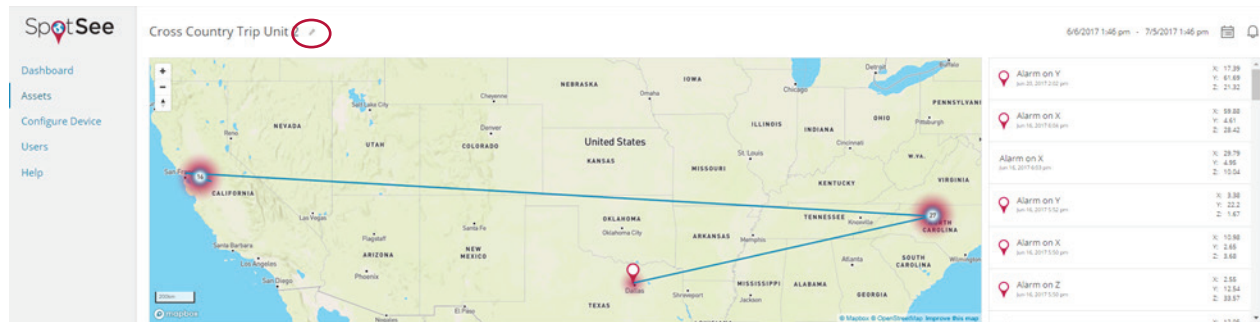
Write the chosen name and click update.
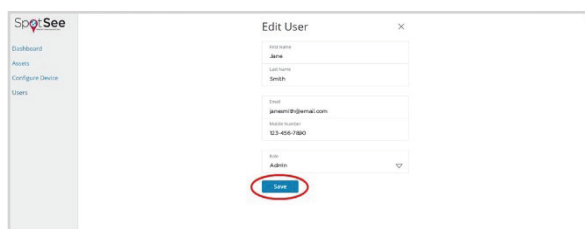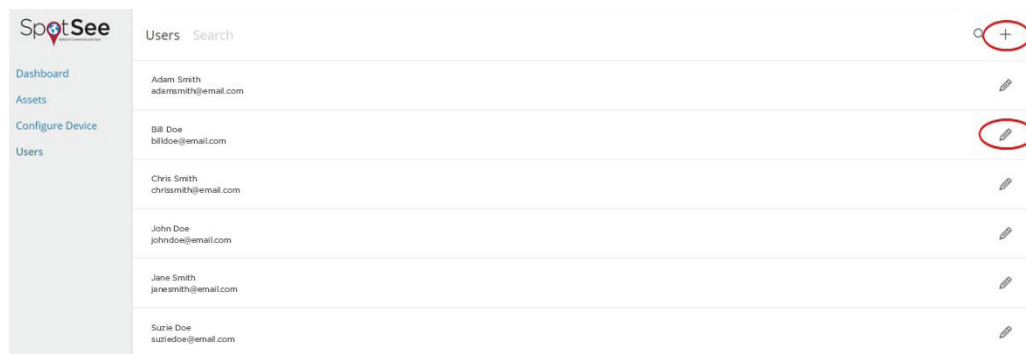
5. USER MANAGEMENT

The Admin will be able to view and manage other users and assets inside your company.

Clicking *Users* on the left side of the screen brings up a list of all the existing users for your account.

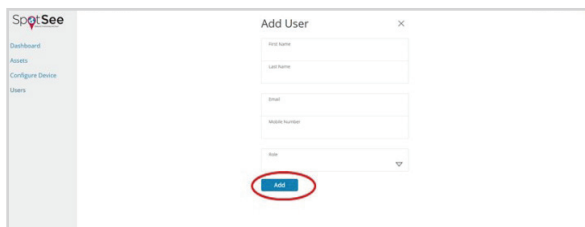## EDITING OR ADDING USERS

You can edit a user by clicking on the pencil icon or add a user by clicking the Plus (+) sign.

Once you are finished making changes to an existing user, be sure to click the save button.

Once you are finished inputting all the fields for a new user, click the add button.

6. MANAGING DATA RECORDED IN YOUR SPOTBOT

A. ACCESS A PDF OR CSV REPORT IN YOUR SPOTBOT

In addition to the SpotSee platform you can download a PDF report of the Trip directly from the device using the USB port. This report is saved on the unit in case cellular transmission is poor or there is no network when an impact occurs. This way, you never miss an event.

To retrieve this report, simply plug the SpotBot into the computer with the USB cable provided.

A drive will open on your computer (if the drive doesn't open automatically, press Button A).
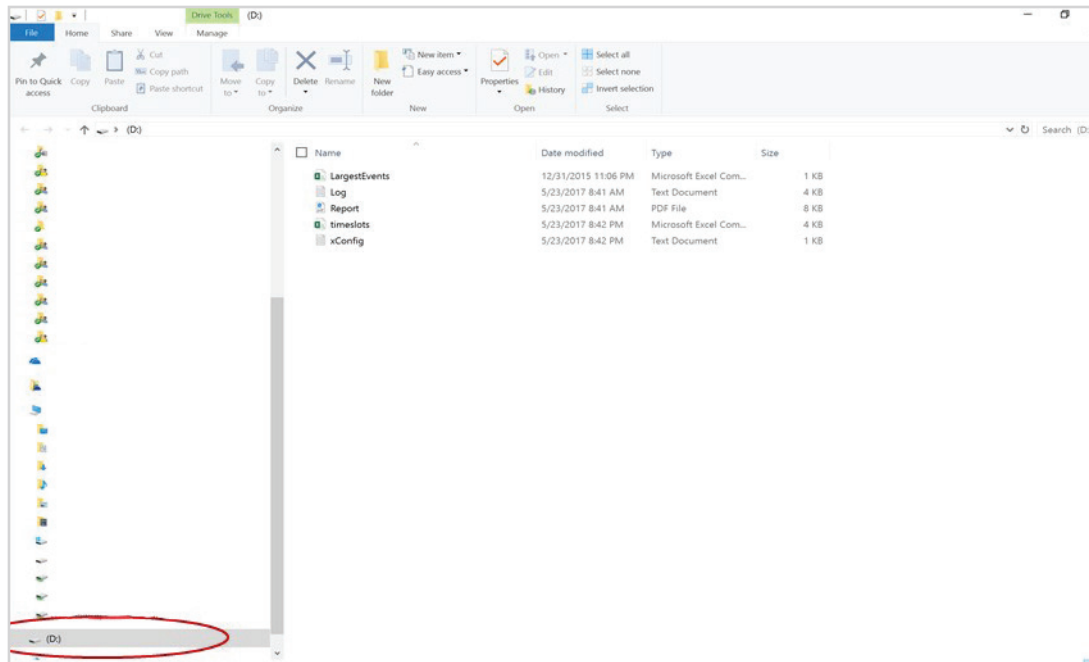
Open the new drive and copy the PDF file called "Report." The events are also available on the Excel or CSV files as well.

The PDF report will summarize the entire Trip - including a list of the 10 highest events recorded as well as a histogram of all the alerts recorded by the SpotBot - even if cellular transmission was not available or was limited during any part of the journey. In the report, you will notice that events above alarm threshold will show in red.

The file LargestEvents.xls will have the 50 largest recorded impacts, this can also be a good source of information.

The remaining files are system files and have no Trip related information.

We recommend downloading the PDF report from the device directly after each Trip. If damage occurs to your asset during the Trip but there is no alert showing in the SpotSee Platform, the device may have recorded an impact that it was unable to send due to limited cellular reception (i.e. on a ship or in a rural area) and will be included in this PDF report direct from the device.

B. CLEAR THE TRIP DATA

Once you have downloaded the PDF Report and before starting a new Trip, you can clear the Trip data by pressing Button B (recessed button). You may need a pen or pencil to press this button. It is designed to be recessed so the button is not pressed during transit.
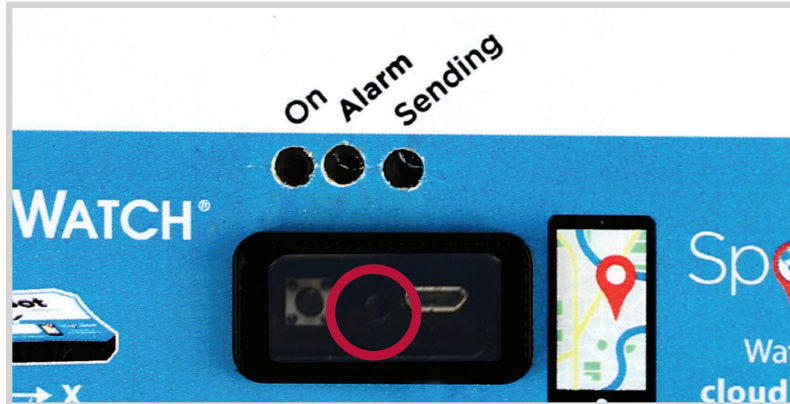
This action will clean all the data on the device and in the report tables, allowing you to start monitoring a new Trip from the beginning. NOTE: All cellular data from the trip will still be stored in the cloud.

7. REGULATORY COMPLIANCE

Federal Communication Commission Interference Statement

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.

U.S./Canada Regulatory Compliance Information

To satisfy FCC RF exposure requirements for mobile and base station transmission devices, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during operation. To ensure compliance, operation at closer than this distance is not recommended. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Industry Canada Statements

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication.