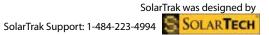


GPS/Online Fleet Management solution to Track, Monitor and Manage your fleet.

If you have any questions, the SolarTrak Support Team is ready and willing to help. Call us at **1-484-223-4994.** 

www.solar-trak.com





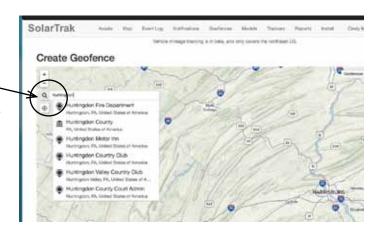
## **General Tips and Hints**



When the compass points in the logo are spinning, SolarTrak is working to load your data.

SPYGLASS QUICK SEARCH:

Click on the spyglass and type in your destination, the choose from the options to quickly move to your destination.





The white label with the serial number is on the bottom of the Tracker and should be installed facing the ground

### Before you begin installing Trackers:

SolarTrak will include the serial numbers of the Trackers you purchased or are renting in your data.

It's helpful if you have the following information ready before proceeding with an instal-

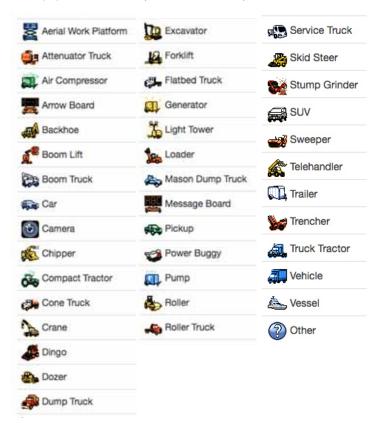
#### YOUR EQUIPMENT LIST

Decide which equipment will get Trackers, and have the following information:

- **Current Engine-Hours**
- Your Inventory Number, and/or the equipment's Serial Number
- Maintenance consider what issues and when you want to be alerted, and have the equipments current maintenance status handy
- Installation Worksheet (PDF available on website Install page)

#### **Equipment Icon Index**

Equipment icons stay the same size as you zoom in or out.

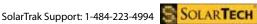


#### YOUR COMPANY"S ORGANIZATION

You use the "Branches" function to organize equipment to match your company's structure.

You can assign users limited access to data. For example, you can send maintenance and battery notifications directly to your service staff. For "View Only" un-check all permission levels.







### **Users Guide**

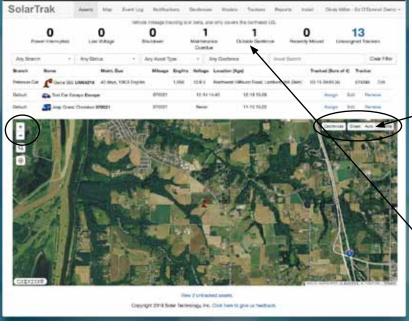


# Welcome to SolarTrak!

This guide is designed to ensure that you make full use of SolarTrak's online features to track, manage and monitor you equipment. Most of the website is pretty self-explanatory, but this Quick Start Guide will help you to use it to its full advantage.

Start going to www.solar-trak.com and logging in (upper right corner), using the User Login link.

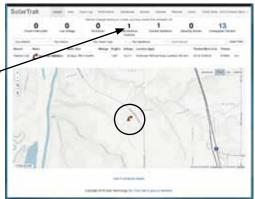
#### Below is the map in Satellite View



Zoom in or out

here

For example, by clicking "Maintenance Overdue", the map zoomed directly to the single asset with Overdue Maintenance status (shown on Street View)



### **Asset View**

The first screen shows any equipment that has already been assigned to SolarTrak trackers and a map. Zoom in or out by clicking the + or - buttons, or hover over the icon and scroll in or out. To change maps by choosing the Geofence, Street or Satellite buttons.

You can click on an Asset icon to go right to the main data page for that asset, or you can choose from the options in the black navigation bar at the top.

At the top of the page is a quick summary of your assets, including the number of units affected by each status. To jump right to the details, click the number.

To limit what is shown to a particular Branch, Model, Asset Type or Status, click in one of the categories directly below the numbers to access a dropdown menu of choices, and the map will zoom directly to the chosen assets.

To clear your choices, click the "Clear Filter" button

To see details about a single asset, click on the asset's name or icon.





### **Main Data Screen - Timeline View**

#### CLICK ON ANY ASSET TO SEE THE TIMELINE FOR THAT ASSET

This screen contains all the pertinent information for a particular piece of equipment, including movement tracking, maintenance schedule, mileage, voltage and engine hours tabulation (if the asset has an engine).

show the current status Name of Asset shows both Model **Quick Summary Tracker Number** of maintenance for this name (light type) plus your unique of the latest assigned to equipment, and when the Identifier (bold) tracking, voltage this asset. next maintenance item is and engine hours due to be performed. **Current Location** (plus mileage if shown in street address plus GPS You determine what applicable). co-ordinates. routine maintenance should be included (oil Sola Trak changes, inspections, etc.) and how often to receive 083DFD = ubota SVL 95-2S 8332 Notifications when you create a Model. 14.8 V 35,490067 N, 65,406147 W (Croppin, 67ng) **Tabs** to other data. Current view is Timeline. Timeline Voltage Engine Calendar Reports **Location & Operation** (Blue Bar) 10:34 - 11:51 09:54 - 09:55 09:54 - 09:55 09:27 - 09:09 128-148V Data contained with a blue vertical bar includes a map of the current location or past stops, the physical 16:39 - 17:08 18:19 - 16:34 6.7 hours. 13:54 - 18:31 14 hours. 13:24 - 13:50 68 hours. 13:54 - 13:50 68 hours. 10:14 - 12:36 14 hours. address, the dates it has been stationary at this location, a battery voltage range, and a summary of engine starts and 16:34 - 17:18 8.7 hours. 16:10 - 16:29 1.2 hours. 14:19 - 16:29 8.8 hours. 14:14 - 16:15 8.8 hours. 123-14EV 14:14 Amuer stops (run time) for each day. Movements (Pink Bar) Engine Russ 19.7 - 13 E.W 14-14 Doubled to Previous movements of the unit are shown as a continuous line, along with a summary of events (movement starts and stops), and the maximum speed during the trip. 187-185V 12:19 Departor 10:04 Artiset This asset moved for about 45 minutes at an maximum speed of 58 mph. Load More Data. Click here to see more history.



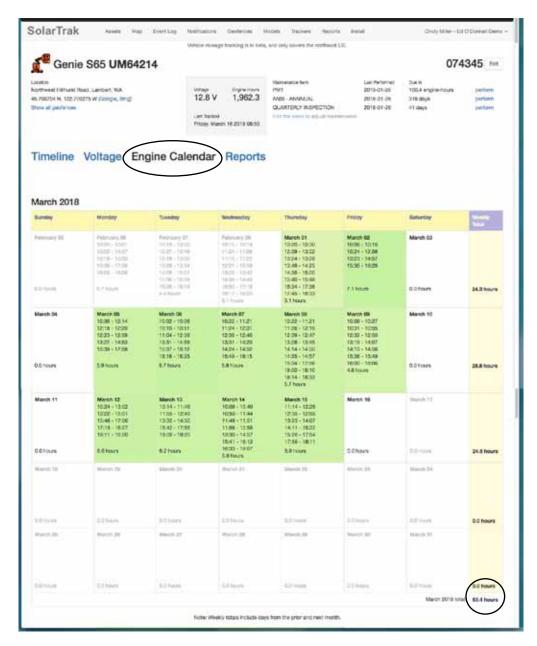


**Maintenance Items** 

# **Engine Hours Calendar**

#### CLICK ON THE ENGINE CALENDAR TAB TO SEE THE DATA

Asset name, current location, the quick summary, tracker number and maintenance schedule are shown at the top of each page.



The Engine Calendar tab contains all the information you or your billing department need to create accurate invoices.

You and your customer will know exactly how long an asset was in operation.

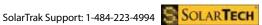
The totalled engine hours also are used to determine when maintenance needs to be scheduled.

#### **Engine Hours (Run Time)** (Green areas)

This calendar contains all the information about when a particular piece of equipment was operational. Data is displayed by engine starts and stops, and is totalled by the day, week and month.

Notice that the shades of green darken the more hours the equipment was running for a quick snapshot of engine use.





# **Battery Voltage**



Battery Voltage is displayed weekly. It may be valuable for your repair crews or maintenance staff to review the voltage before traveling to the asset.

#### NOTE FROM SOLARTRAK SUPPORT:

The SolarTrak tracker draws its energy from the asset's battery. The tracker has small internal batteries that will run for up to 72 hours if the tracker is disconnected (an aid to recover stolen equipment). but its main source of energy is the asset battery.

IT IS IMPORTANT to act quickly when battery levels are low - so both the tracker and the asset will continue to operate.

SolarTrak will send a notification when levels drop to 12 volts (on a 12 V system), again at 11.5 volts, and another when it drops to 11 volts. When these warnings are received, a tech should check the machine promptly to prevent tracker shutdown or power loss.

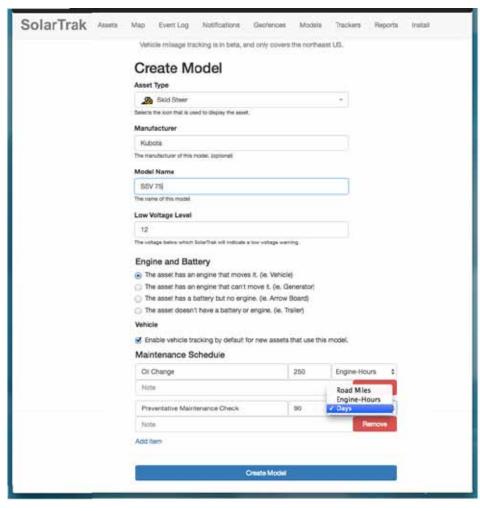
NOTE: The Tracker will shut down once level drops to 10.7 volts.

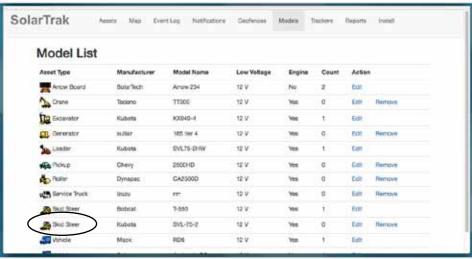




### **Models**

Each Asset shown on the Map or List views has an associated Model - a description of the asset including manufacturer and model number. After creating Models, you can assign a Tracker to each model. Once the Tracker has been installed and assigned, it will begin sending data about that particular equipment.





#### Create a New Model

To create a new Model, start by clicking "Models" in the top navigation bar, then click the "Create a new Model" button.

A Model consists of an **Asset Type** which controls the icon used, a Manufacturer, and Model Name.

Here we entered a Kubota skid steer model SSV75. Later you will be asked to add your equipment's serial or inventory number.

Check how the asset is powered in the Engine and Battery section.

In the Maintenance Schedule area, you can create under what circumstances you should be notified.

In the first field, name the maintenance item. On the right, you can choose from:

> **Road Miles Engine-Hours** Days

then fill in the number in the center field. Continue by clicking Add Item as needed.

When finished, click on the "Create **Model**" button to save your work.

#### **Model List**

Once you've entered your Models, they will appear on the Models List. You can Edit or Remove a Model from this screen.

These Models will appear as Existing Assets when you go to the "Assign Tracker to Asset" screen.

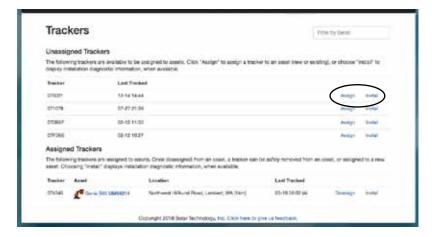
Our Kubota Skid Steer now appears on the list in alphabetical order.





### **Trackers**





#### **Trackers Tab**

Go here for an overview of which Trackers are assigned to equipment, or still waiting to be installed.

### **Assign Tracker to Asset**

From the Tracker tab, choose an Unassigned **Tracker**, then click **Assign** from the right side of the Tracker List.

The **Assign Tracker to Asset** window opens. This is where you tell SolarTrak which piece of equipment to track and what you'd like monitored.

If you did create a Model: Simply choose an Asset from the "Existing Asset" field using the drop down list. By creating the Models first, they will show up in the list of Existing Assets - saving you from creating models here.

If you did NOT create a Model, leave the "Create a new asset" shown in the Existing Asset field, and start by clicking in the Model field. Complete the Model process by choosing a Manufacturer and Model Name.

Continue by filling in the Equipment Identifier (your inventory number works well here) and Serial Number:

Be sure to add either (or both) an Equipment Identifier or a Serial Number. The Equipment Identifier will appear in **BOLD** in the asset's Name. Your Asset must include unique data, so that you can identify it from among the 10 skid steers or 15 delivery trucks in your fleet.

Finish by clicking "Assign Tracker to Asset" button.

#### The Tracker List

This screen is accessible by clicking the **Trackers** text at the top of the page.

Any **Unassigned Trackers** appear at the top of the page.

Once your Tracker has been assigned to an asset, it will show up on the Assigned list.

If any tracker was removed from equipment, or had it's power interrupted, it will appear on a separate list Disconnected Trackers.

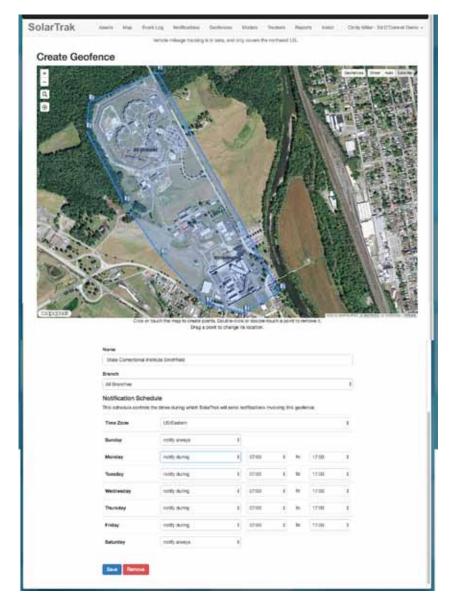
You can Assign a Tracker and check the Install by clicking on the text at the right side of each row.





### Geofences





#### **Geofence List**

A Geofence is a virtual fence to which Assets may be assigned. An event is logged and optionally, a notification sent, whenever an Asset enters or leaves a Geofence. This screen shows your existing geofences.

Click "Remove" to delete a geofence. To create new, click on the "Create a new Geofence" button at the bottom of the list.

#### **Geofence Edit and Create**

To create a new geofence, navigate to the map of the area, then click on the map. Each time you click, a dot will be added. On the third click, a shape is created. To further refine your area, click on the shape's border to add more dots, and move them to create the boundaries.

To edit an existing geofence, or to add additional points to the Geofence, click on the border of the map. To move an existing point, drag it. To remove a point from the Geofence, double-click the point.

When you are satisfied with the Geofence, name it and click in the Branches field to select the applicable branch.

Click on "Edit Notification Schedule" to select when you want to be notified about movements in and out of the geofence. You can set times by days of the week.

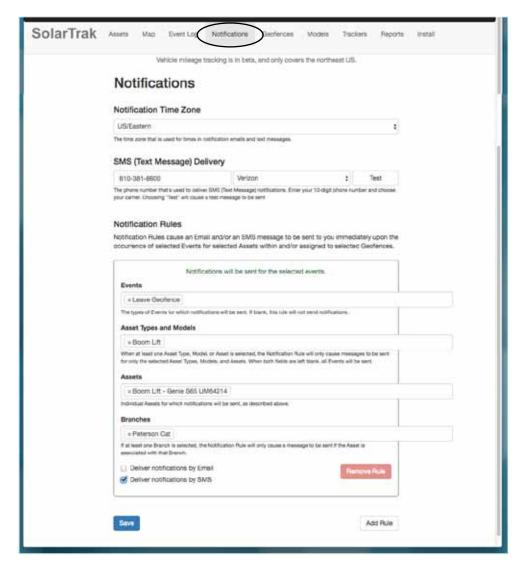
When finished, click "Save", and your geofence will appear in your list.

If you'd like to alter the Notifications or the shape of the geofence, click on "Edit" from the Geofence List screen.





# **Creating Notifications**



#### **Event Choices**

Leave Geofence **Tracker Power Interrupted** Maintenance Performed **Assigned Tracker Enter Geofence** Maintenance Undone **Deassigned Tracker** Move Start **Engine Start** Communication Lost Move End' **Engine Stop** Communication Recovery Input Voltage Low

Input Voltage Normal

Maintenance Overdue

Notifications related to geofences can be created when you create a new Geofence, or edited by going to the Geofence List and choosing "Edit" to access the notification rule.

#### **Notifications**

Create a rule here that will notify you by email or text when a specific event happens. You can choose the Event, the Assets affected, and the Delivery method by using the dropdown menus.

Notification rules can be applied to a category of equipment, or to a specific piece.

**General Rules** 

IF you want to apply a rule to all assets - leave the Asset Type and Model and the Asset areas blank.

Specific Rules Once you choose the Event, the rules gets more specific by adding Asset Types and Moela, Assets and Branches.

Asset Types and Models choose from this list to apply as rule to a broad category of equipment (i.e., "Boom Lift") or narrow the rule by choosing an asset type and model ("Boom Lift Genie S65")

Click Save to add the rule. Once your rule has been saved, you can create more by clicking the Add Rule button.

Notification rules can also be edited or removed from this screen.

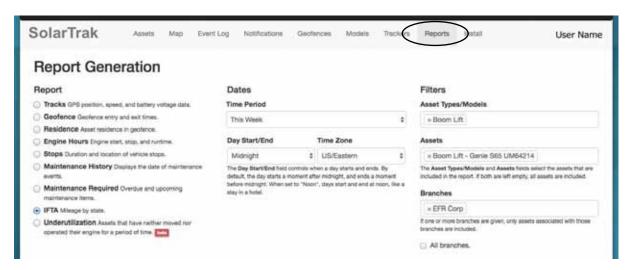


**GPS Fix Lost** 

**GPS Fix Regained** 



### Reports



#### **Reports-Dates-Filters**

You can create pre-set reports, then either view the results on screen or download a .csv file to view in Excel for any of these topics:

**TRACKS** - GPS position, speed, and battery voltage data.

**GEOFENCE** - Geofence entry and exit times.

**RESIDENCE** - Assets within a specific geofence.

**ENGINE HOURS** - Engine start, stop, and runtime.

**STOPS** - Duration and location of vehicle stops.

**MAINTENANCE HISTORY** - Displays the date of maintenance events.

**MAINTENANCE REQUIRED** - Overdue and upcoming maintenance items.

IFTA - Mileage by state for Fuel Tax Reports

User Guide

**UNDERUTILIZATION** - Assets that have not moved or operated for a period of time.

Chose the Report, then (under Dates) enter the Time Period. You can use the pre-set timed, or select the Start and End dates and the Time Zone for the Report. You can also choose to filter the results by using the Filters fields. The Filters shown will change depending on the type of report you select:

**Asset Types or Models** - If you want to include all the assets in an Asset Type, choose the broad category (such as "Backhoe" and/or "Excavator" - you can select multiple categories). If you want to include all Assets AND all Types - leave the field blank.

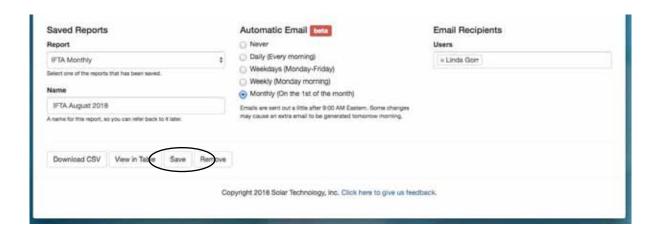
Assets - Here you can narrow your choice to a single asset by selecting the assigned name

**Branches** - Branches are created in the Admin function. Choose one or multiple branches, or click the "all branches" button to include all.

Last - choose to View in a Table or Download CSV. The table with the results will appear on the Reports page (scroll down).



### Reports



#### Saved Reports - Automatic Email - Email Recipient

All users do not have the right to save and email reports. Your Administrator assigns this ability.

If you have this right, you can save reports and rename them, and have them created automatically and emailed to yourself or other SolarTrak users.

Start by creating a new report. Choose one of the pre-set Reports, then select the dates and filters.

Chose how often you'd like the report to be run under the **Automatic Email** heading.

Be sure to add the SolarTrak users who should be sent the saved report under the heading Email **Recipients.** You can chose more than one person. The drop down menu will contain all the SolarTrak users in your company.

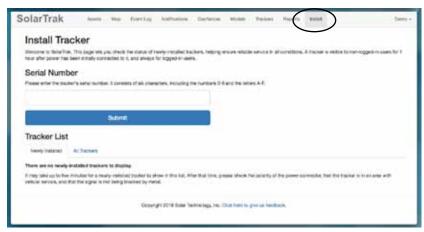
Instead of selecting "Download CSV" or "View in Table", chose the "Save" button. Your saved report will now appear in the top drop-down field under Saved Reports. Once you select and open the saved report, you can rename it and click Save to keep a history of the reports.



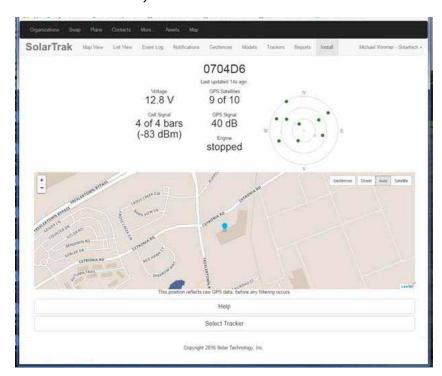


# **After Installing Trackers**

### SolarTrak users: Check your installation using the Install button



The "All Trackers" tab includes the serial numbers of all the trackers you own.



Need Installation Ideas? Download our Complete Installation Guide – with photos of actual installs on common construction equipment. Available on the www.Solar-Trak/Info/Downloads page

Or call us for advice: 484-223-4994. Or if you have questions. We're happy to help.

SolarTrak users can double-check that the installations are correct by clicking on the **Install** link, entering the six character tracker serial number, then clicking Submit.

This check must be done within 30 minutes for a newly installed equipment, and the equipment must be running within thet time

If the newly installed tracker is installed correctly and communicating, it will show up in the "Newly Installed" tab.

Once the installation is verified, you'll see the location of the equipment on a map, battery voltage, and the strength of the cellular connection and GPS connections. You're ready to go!

#### Non-SolarTrak Users: Download the 'Check Install App' to check your installation

SolarTrak makes it easy for installers working in the field to check their work - using the free Check Install App.

The app can be downloaded at app.solartrak.com/install.

To check their work, the installer simply enters the serial number of the tracker, and the app tells the installer if the tracker has power and if the cellular connection is

NOTE: This check must be done while the equipment is running and before 30 minutes has elapsed.

Once the installation is verified, the app will show the location of the equipment on a map, battery voltage, and the strength of the cellular connection and GPS connections. You're ready to go!





# **Enjoy using SolarTrak!**

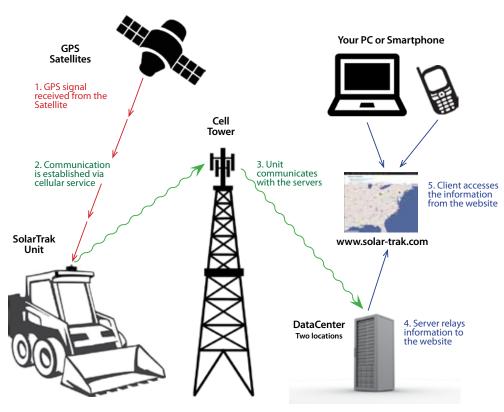
Once your tracker has been successfully installed, simply login to the website to begin tracking and monitoring your fleet. If you have any questions, issues or suggestions, we'd love to hear from you. If you need more help - call our Support Team.

Call Mike Wimmer at 484-223-4994 or contact your Sales Rep

#### **Next pages: ADMIN FUNCTIONS**

SolarTrak users must have Admin rights to see the options available under the Admin menu

### **How SolarTrak Works:**



### **Additional Resources**

**COMPLETE INSTALLATION GUIDE** 

Available as a PDF on the Installation page of the website: solar-trak.com

FREQUENTLY ASKED QUESTIONS page of the website.

Includes additional information on how SolarTrak works and answers to other technical questions.

TRAINING VIDEOS https://www.solar-trak.com/training-videos/

SUPPORT BLOGS in the Info/News section of the website. Includes topics such as:

Deciding between using Internal or External Antenna

Disconnecting Trackers from Battery terminals

Ways to Improve your Tracker's GPS Reception

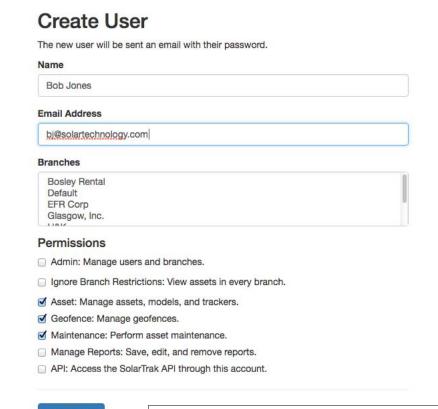
SolarTrak Tech Support: 484-223-4994

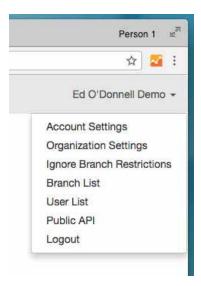




### **Admin Functions: Create User**

SolarTrak reserves some functions for the Fleet Manager or SolarTrak Administrator. Users only see "Account Settings" and "Logout". The other options shown at right are Admin functions and do not appear unless you've given the user the right to view and use them.





#### To Create a New User

Start by clicking on the User List in the Admin menu, then click on the Create User button. The screen at left will open.

You can then add the name and email, assign branches, and choose which permissions to assign.

Click on Create User, and the new user will appear in alphabetical order by first name, along with a summary of his or her rights.

User List is also where you can Delete a user or Edit their profile.

Create User

Name	Email	Access	Branches	Actions		
Cindy Miller	cmiller@solartechnology.com	admin	Default EFR Corp Peterson Cat Wizard Manufacturing	Edit		
Ed O'Donnell	eodonnel@solartechnology.com	admin (Sysop)	(all branches) Bosley Rental Default EFR Corp Glasgow, Inc. H&K Peterson Cat Wizard Manufacturing	Edit	Switch to	Remove
Linda Gorr	igorr@solartechnology.com	user (Sysop)	Default Glasgow, Inc. Peterson Cat	Edit	Switch to	Remove
Zach Bailey	zbailey ill solartechnology.com	üser	HBK	Edit	Switch to	Remove





### **Admin Functions: Branches**

#### **Branches**

A branch can be removed when it has no tracked assets associated with it. Doing so removes all users from the branch (but not the organization), and deletes any associated assets and geofences.

Name	Users	Tracked Assets	Inactive Assets	Geofences	Actions	
Bosley Rental	ĩ	0	2	0	Edit	Remove
Default	3	0	2	2	Edit	Remove
EFR Corp	2	0	1	2	Edit	Remove
Glasgow, Inc.	2	0	3	0	Edit	Remove
H&K	3	3	0	0	Edit	
Peterson Cat	4	1	0	0	Edit	
Wizard Manufacturing	2	0	1	0	Edit	Remove

Create Branch

#### **How to Use Branches**

Branches enable you to watch assets in a particular geographic area. They are particularly useful for companies with multiple locations - to allow the staff to only track the assets of their branch.

We have customers that create a Branch for a regular customer.

We also have customers who resell their equipment with Trackers attached in order to provide Maintenance Services. By creating a Branch, they can monitor the health of the asset, be alerted to maintenance issues and schedule repairs.

#### Create Branch

SolarTrak uses Branches to represent divisions, locations, stores, or other organizational units of an organization. Each branch has a name and a set of users that are associated with that branch.

Assets and Geofences are associated with a single branch. This branch can be changed by editing the asset or geofence. By default, a user can only see the assets and geofences associated with the branches he or she is associated with.

Administrators are allowed to override these branch restrictions by choosing "Ignore Branch Restrictions" from the user menu in the upper-right corner of SolarTrak. When ignoring branch restrictions, the administrator will be able to see assets and geofences associated with all branches. Choosing "Restore Branch Restrictions" will return to the default branch limits.

#### Name

Huntingdon PA Branch

× Cindy Miller × Ed O'Donnell × Linda Gorr

Save

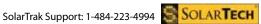
#### To Create a Branch

Start by clicking on the Branch List in the Admin menu, then click on the Create Branch button. The screen at left will open.

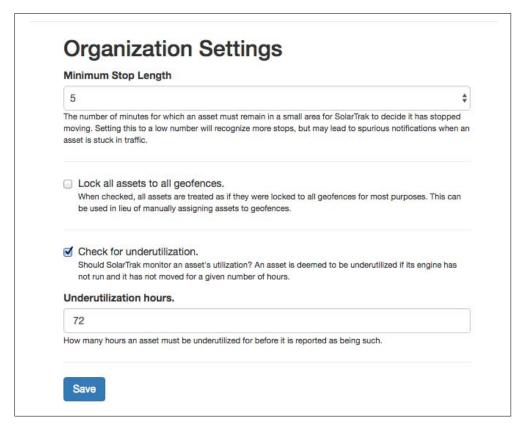
You can then name the branch and assign multiple users. Click

Delete or edit a Branch from the Branch list screen.





# **Admin Functions: Organization Settings and Public API**



#### Public API

To allow for integration with other system, SolarTrak supports the following documented Application Programming interfaces (APIs). Access to the APIs are controlled by a user-specific key embedded in the URLs below. Please ensure that the URLs (and hence the keys) remain secret.

#### **AEMP Telematics Standard**

The AEMP Telematics Standard, produced by the Association of Equipment Management Professionals, allows information about Assets to be retrieved in XML form. To retrieve this information for your Assets, access the following URL:

click to show

For each Asset, we report the complete Equipment Header, and (if available) the Last Known Location. Location information is limited to Latitude and Longitude, as SolarTrak does not currently record a unit's Altitude.

#### API Key

click to show

The API key can be used to integrate with our JSON API. This API includes support for more advanced features, such as geofences. Documentation for our JSON API can be found here. For more information and support, please contact support@solar-trak.com

#### **Organization Settings**

This screen enables you to set your preferences for three functions:

Minimum Stop Length - You can determine the number of minutes that an asset will be reported by SolarTrak as "stopped".

#### **Lock all Assets to all Geofences**

- Quick way to lock all assets assigned to geofences.

Check for Underutilization - You can determine the number of hours that pass if an asset's engine has not run and it has not moved.

#### **Public API**

SolarTrak can be integrated with the software you use to run your company, if your software follows the AEMP Telematics Standards. Details about what data is shared and how to access it are on this screen.

If you have questions about integrating SolarTrak data with your operating software, please call us directly: 484-223-4994.



