

USER GUIDE - REAL TIME VEHICLE TRACKING SYSTEM

The real time vehicle tracking system user's guide explains the various components of the software and how they can be used to assist in managing your fleet. Each component is labeled as a tab.

1. Vehicles – displays the most recent locations of all vehicles in an account
2. Locations – displays the most recent location and all historical data by vehicle
3. Alerts - used to configure and edit alerts (i.e. speed, boundary/geofence, input, etc.)
4. Reports - used to access reports
5. My Account – basic information on account; can also edit/change username and password
6. Landmarks - used to add and manage landmarks associated with account
7. Groups – used to create vehicle groups in account
8. Sub Accounts – used to create another username and password so others can have limited access to account.

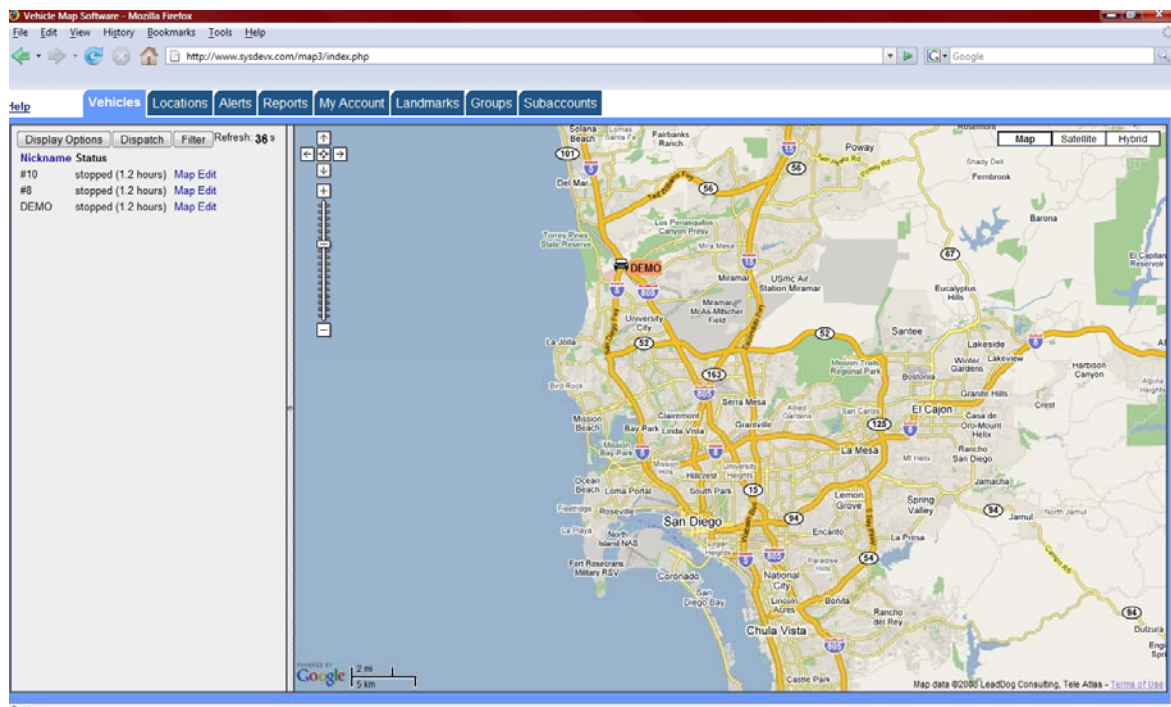
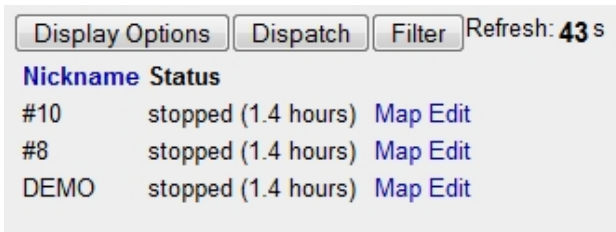


Figure 1 – Vehicle Mapping Software

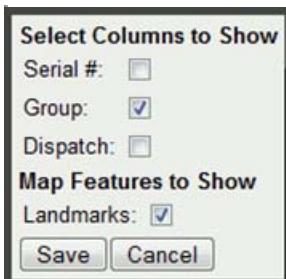
Vehicles Tab Overview

The Vehicles tab provides a view and the status of all the vehicles in your account. It allows you to edit information associated with the vehicles, such as nicknames, and you can enter specific information about the vehicle such as make, model, VIN#, etc. On this tab you can see the status of each vehicle – such as stopped, moving, etc. It also allows searches for specific vehicle(s) and shows you the last location of your vehicles on a map, along with any landmarks and global geofences in your account.

There are three buttons located at the top left corner of the screen. They are used to adjust your display options, assist with vehicle dispatching or map display/vehicle search features. They are the display options button, dispatch button and filter button. Each is described below.



Display Option Button – This button is used to select the vehicle information you would like displayed in columns next to the map. You have the ability to display (or not display) the unit serial number, group, closest distance (dispatch) and landmarks. The nickname and vehicle status are always displayed. To change the display options, click the Display Options button and a dialog box will appear. You can select which columns you would like displayed.



Dispatch Button – The Global Dispatcher lets you determine the distance to a specific address from all of your vehicles. Use this feature if you want to quickly find the closest vehicle to an address. All vehicles are sorted in proximity to address. The distance for this feature is measured 'as the crow flies,' or in straight lines from vehicle to address. It does not take into account route distance. For route distance, use the Dispatch link/button associated with each device and enter an address.



Filter Button

Sometimes you need to find particular vehicles based upon certain search criteria. This feature

allows you to search for vehicles based on their Serial number, Nickname and Group (for more info on Groups see the Group tab). To use this feature, simply fill in the fields you wish to use for filtering purposes. Partial field values count as matching strings. For example: if you enter an N in the Nickname field, all vehicles that have a nickname starting with N will be returned. The search is not case sensitive.

There are various data types displayed on the right side next to the map. They are described below.

Nickname	Serial #	Status	Group	Distance	
#10	1031007181	stopped (1.4 hours)	none	NA	Map Edit Dispatch
#8	1031028750	stopped (1.4 hours)	GROUP1	NA	Map Edit Dispatch
DEMO	1031005408	stopped (1.5 hours)	GROUP1	NA	Map Edit Dispatch

Nickname – The Nickname is assigned by the end user. This can be changed by selecting the Edit link. It is recommended that short, descriptive names are used. This will make it easier to read on the map.

Serial # - This is typically hidden and is primarily used when troubleshooting is required. Should you need troubleshooting assistance, you will need to refer to this Serial number when asking for assistance about a specific vehicle.

Status - This will display the status of a vehicle. You will see 'moving' when a vehicle is in motion and 'stopped' when the vehicle stops for a period of greater than six minutes. The length of the stop (time) will be also be displayed.

Group – If you assign vehicles to a Group, a Group name will display. See the Group tab for more details.

Distance – If you use the Global Dispatch feature, the distance will be displayed. This distance is measured 'as the crow flies,' or in straight lines from vehicle to address. It does not take into account route distance.

Map Button- Opens the Location tab with the vehicle you selected as the current vehicle and shows the current days tracking data. See the Locations tab for more details.

Edit Button - Pops up a dialog box where you can change information associated with your device.

Dispatch - Displays a dialog box where you can enter an address to dispatch a specific vehicle. The directions are shown on the dialog and you can choose to have them emailed to you. This feature is useful for giving driving instructions. The distance shown by this feature is the actual distance a vehicle must travel on roads to get to the specified address.

The screenshot shows a web application interface. On the left, there is a table with columns: Nickname, Status, Group, and Distance. The table contains three rows of data for vehicles #1, #8, and #10. Above the table are buttons for 'Display Options', 'Dispatch', and 'Filter', and a 'Refresh: 31 s' indicator. On the right, there is a map showing a vehicle icon labeled '#10' near a landmark. A 'Dispatch Device' dialog box is overlaid on the map, containing the following fields: Landmarks (a dropdown menu), Street (a text input), City (a text input), State/Province (a text input), Zip/Postal (a text input), Country (a dropdown menu set to 'United States'), Directions (a text area with instructions), and Email (a text input with a 'Send' button). At the bottom of the dialog are 'Get Directions' and 'Close' buttons.

Nickname	Status	Group	Distance	
# 1	stopped (1.5 hours)	GROUP1	8.0 mi	Map Edit Dispatch
# 8	stopped (1.5 hours)	GROUP1	8.0 mi	Map Edit Dispatch
#10	stopped (1.5 hours)	none	8.0 mi	Map Edit Dispatch

Map Legend



This is a vehicle symbol. It represents the last known position for that vehicle. Vehicle positions on the map are automatically updated every five minutes.



This is a landmark symbol. See the Landmark tab for more details on Landmarks.



This is a geofence symbol. See the alerts tab for more details on geofences.

Location Tab Overview

Displays all of the locations associated with a particular vehicle. You can change the vehicle on display and the date of the locates you are looking at. You can also disable tracking so that no more locates for a vehicle will be stored in the database.

Vehicle Field

Allows you to change the vehicle you have selected for viewing. Whatever vehicle you select as current in this field will become the current vehicle for the other tabs.

Range Field

Allows you to choose the date of the locations you are interested in viewing. Up to six months of data is available for your viewing. Or, you can choose to see the last 10 or 50 locates for your vehicle.

Tracking Field

Select tracking for this vehicle to be enabled or disabled. If you choose disabled, then all location information from this vehicle is ignored and will not be stored in the database. You will not be able to view information about a vehicle while its tracking is disabled.

Edit Button

Opens a dialog box that allows you to change information about the device.

Print Map Button

Sends the current map to your printer. Please be aware that the printout created by this button will vary in quality depending on your printer and may or may not be an accurate representation of what you see on the screen.

History Button

Opens a dialog box that allows you to view your vehicle's location history in HTML or download the history as a CSV file that you can import into Excel or any spreadsheet. You have the option of viewing/downloading one day, one week or one month of data. It can take some time to create these history views/downloads since each location must have its address verified. A one month report could take up to 15 minutes, depending on the number of locations.

Map Legend



Current Location - Vehicle's last reported location.



Short Stop - Vehicle stopped for less than one minute.



Stopped - Vehicle stopped (or parked) greater than six minutes.



Moving - Vehicle moving with speed and direction in pointed arrow.



Input Alert -The unit received an input alarm. You can change the name of an input alarm on a per unit basis by going into the Edit feature for each vehicle. The renaming can be useful when you receive alerts from the vehicle and you need to know what functionality the input is hooked up to. For example: you might have the input on one of your vehicles hooked up to a car alarm.



Geofence Alert - Vehicle has entered or exited a specified geofence. The accuracy of the geofence alarms depends on your tracking interval. The detection of geofence alerts is calculated when your periodic locates are received.



Speed Alert - Vehicle exceeded a specified speed limit. The speed limit can be the one specific to this vehicle or a global one that is the same across all your vehicles. Please see the help section in the Alerts tab for more information.



This is a landmark symbol. See the Landmark tab for more details on Landmarks.



This is a geofence symbol. See the Alerts tab for more details on geofences.

Subaccounts Tab Overview

The Subaccounts feature allows the master account holder to create a separate subaccount for another user. The subaccount user is provided their own username and password which allows the subaccount user to login and view the vehicles, locations and alerts tabs only. The subaccount user will not see any other tabs when logging into that account.

To add a subaccount, click the button labeled Add a New Subaccount. After you click the button, a dialog box will pop up, requesting the following information:

First Name: Enter first name of subaccount user

Last Name: Enter last name of subaccount user

Login: Enter the login name of the subaccount user. This should be the subaccount user's email address

Password: Enter the password the subaccount user will use to access their account

Phone: If the subaccount user will be using their phone to hear the locations of vehicles from the Interactive Voice Recognition (IVR) system, then enter the subaccount user's phone number.

IVR: Enter the password you would like the subaccount user to use. This is used to hear the locations of the vehicles using a touch tone phone.

Group: Enter the Group of vehicles you would like the subaccount end user to view. The subaccount user can view all vehicles or one other group. If you have not created a Group, you can do this by going to the Groups tab.

After you have entered the data needed to create a subaccount, click the add button to save the subaccount. After you have added the subaccount you will see the new subaccount displayed below the Add a New Subaccount button.

Groups Tab Overview

You can create Groups and assign your vehicles to a specific Group. Groups are useful for organizing vehicles for viewing or reporting. To add a new Group, enter the name of the new Group and then click the Add button. After you click the Add button the name of the new Group will appear below the text reading 'Modify an existing group'.

Modifying an existing group

To modify an existing Group, simply change the name of the Group in the text box and, once complete, select the Modify button. You will see a dialog box pop up stating that there was a modification.

Assigning vehicles to a group

Near the bottom of the Groups tab you will see a list of each vehicle in your fleet and their current Group assignment. In cases where a vehicle was not assigned a Group, you will see it listed as 'none'. To change a Group, click the check box next to the vehicle you would like to add to a Group. Once checked, use the drop down menu to move the checked vehicles to a new Group.

Landmarks Tab Overview

Landmarks are used to mark a 250 foot radius on the map, which is then displayed on the reports in place of the address. There are two ways to use Landmarks. You can use Landmarks to make it easier to read your reports (i.e. instead of the address and street showing in your report, the name of the Landmark will be displayed). This is useful if you would like to know how often and how long a vehicle has been at a Landmark. The second use of Landmarks is to have the ability to quickly dispatch vehicles to that Landmark location.

Create a Landmark by selecting the Add Landmark button. Once you select that button, you will be prompted for the Landmark name, phone number and address. After you enter the data, hit the preview button and you will see the location on the map. Click Save to save the Landmark or click Cancel to cancel.

My Account Tab Overview

The 'My Accounts' page displays your account details, credit card info. and billing statement.

The Account Info. is used to display the details of your account. You can edit anything in this section. For example, If you need to change your password or username, you would go to the Account Info. section and select the Edit button. This allows you to modify your user name and password.

The Credit Card Info. On this tab allows you to enter your credit card information that is used for monthly billing purposes. If you need to use another credit card to pay for monthly billing, you can use the Edit button to change the credit card information.

The Billing Statements on this tab displays the last five transactions only.

Alerts Tab Overview

There are a number of alerts that can be configured. There are speed alerts, geofence alerts and input alerts. Alerts can be sent to an email address and/or to a cell phone via an SMS text

message. An alert recipient must be set for global and vehicle specific alerts. Alerts are assigned as either global alerts or vehicle specific alerts.

Global alerts are applied to all vehicle tracking units in your account. Vehicle specific alerts are assigned to a single vehicle.

Alerts

Speed - Use the drop down menu to configure the speed alert. The alert can be disabled, or set at any 5 MPH interval between 50 and 100 MPH.

Geofence – Geographic boundaries can be created based on an address and sized between 1/10 of a mile up to 600 square miles.

Input2 Alerts – Input alerts are set specific to a vehicle and are triggered by a 3 volt rise or fall in the leading edge.

Reports Tab Overview

14 different reports can be generated. They are described below. Reports can be generated for immediate viewing or sent via email for viewing at a later date. In addition, reports can be set to automatically generate and send to an email address on a weekly or monthly basis.

Report Descriptions

1. **Daily Details** Shows the stop time, move time, distance, # of stops, # of geofences, # of input2 alerts and # of speed alerts of each vehicle by day.
2. **Summary** Shows the stop time, move time, distance, # of stops, # of geofences, # of input2 alerts and # of speed alerts for each vehicle for an entire report period.
3. **After Hours** Shows all of the movements for each vehicle between the start and end dates and between the hours specified in the report period.
4. **All Geofences** Shows all of the geofence alerts that occurred for each vehicle between the start and end date and within the hours specified in a report period.
5. **All Input Alerts** Shows all of the input alerts that occurred for each vehicle between the start and end date and within the hours specified in a report period.
6. **All Speed Alerts** Shows all of the speed alerts that occurred for each vehicle between the start and end date and within the hours specified in a report period.
7. **All Stops** Show all of the stops that occurred for each vehicle between the start and end date and within the hours specified in a report period.
8. **Landmarks** Show all of the current landmarks for this account, with the times each vehicle entered and exited the landmark, in order by date.
9. **Landmarks By Vehicle** Shows when each vehicle entered and exited any of the account's landmarks.
10. **First/Last Trip By Day** Shows the start and stop times of the first and last trips of each of the days in the start/end date range.

11. **All Trips By Day** Shows the start and stop times of all the trips of each of the days in the start/end date range.
12. **First/Last Location By Day** Shows the first movement and last movement of each vehicle on each day.
13. **Idle Time** Displays vehicle idle time incidents that exceed five minutes (ignition on without movement).
14. **State Mileage** Distance each vehicle travels in each state.