FleetOutlook® Spring 2012 Release Notes

Version 7.1

Last Updated: April 10, 2012

TABLE OF CONTENTS

Introduction

These release notes contain new features that are available in our Spring 2012 Release (Version 7.1) of FleetOutlook.

Updates to Landmark Features

New landmark capabilities have been added to FleetOutook. These capabilities allow users to use GeoFenced landmarks to help manage their fleet and to create landmarks based on places.

GeoFenced Landmarks

Users can now create a landmark that is a GeoFence. A GeoFence is different from a traditional landmark in that a stop or ignition off is not required inside the landmark to trigger landmark detection. GeoFences are useful for identifying travel to off-limits locations or locations that can be visited but may not require a stop. The traditional landmark should be used to identify locations where you need to verify that the driver stops, for instance at a work site.

For traditional landmarks, arrival is detected when a stop or ignition-on or ignition-off occurs within the boundaries of the landmark. For GeoFenced landmarks, arrival is detected if any event, including a moving event, occurs within the boundaries of the landmark. No stop is required.

Creating a GeoFenced landmark is simple. Follow the normal procedures for creating a landmark, and additionally check the box next to “GeoFence” on the landmark creation screen to make the landmark a GeoFenced landmark.

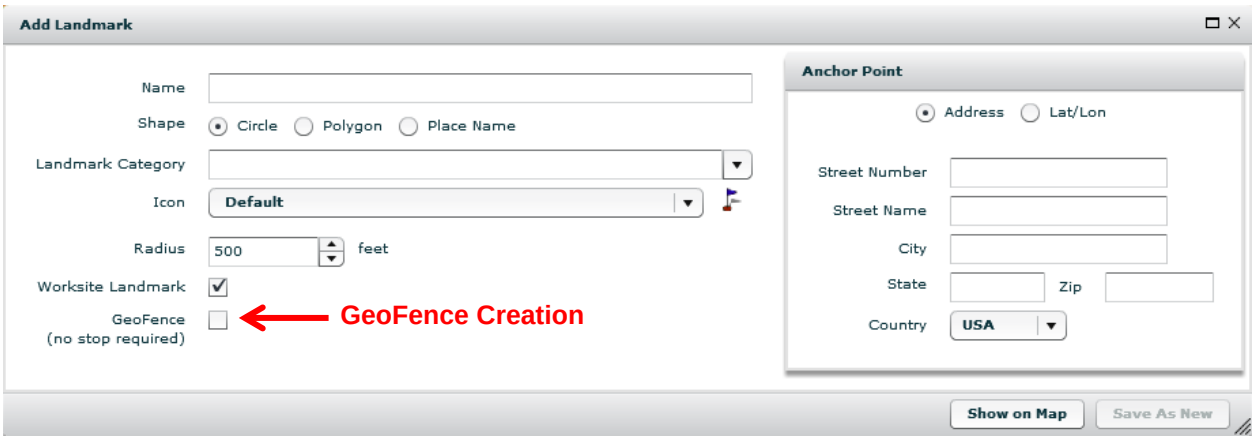

Figure 1: Adding a GeoFence Landmark

Approaching Landmark Alert

With the addition of GeoFenced landmarks, rules for landmark detection have changed to align detection for both non-GeoFenced landmarks and GeoFenced landmarks. Instead of detecting proximity to the landmark, the new logic only looks for actual arrival within the landmark's boundary. This change makes the rules for detection simple:

- GeoFenced Landmark arrival is detected when **any** event occurs inside the landmark.
- Non-GeoFenced landmarks or traditional landmarks are detected only when a Stop or ignition-on or ignition-off occurs within the boundaries of the landmark.

The Approaching Landmark alert has been renamed to reflect this change. It is now the "Arrived at Landmark" alert. Any existing configuration settings using the old alert have been converted to the new alert.

Defining Landmarks by Place Name

Defining large areas as landmarks is now very easy. With place names, landmarks can be defined without drawing polygon vertices or adding an exact address. A place name relates to a jurisdiction or ZIP code. Valid place names are:

- a City, State combination
- a County, State combination
- a State (with no city or county specified)
- a ZIP Code

When setting up a landmark using a place name, choose the option for “Place Name” and add information that defines the place: City, State, County, Zip.

An example using a zip code for a place name: Create the place name with the zip code. As each event is reported by the GPS device the zip code for the address of the event is matched to the place name zipcode. If the zip codes match, an arrived at landmark event is created. If the zip code does not match, no landmark event is opened.

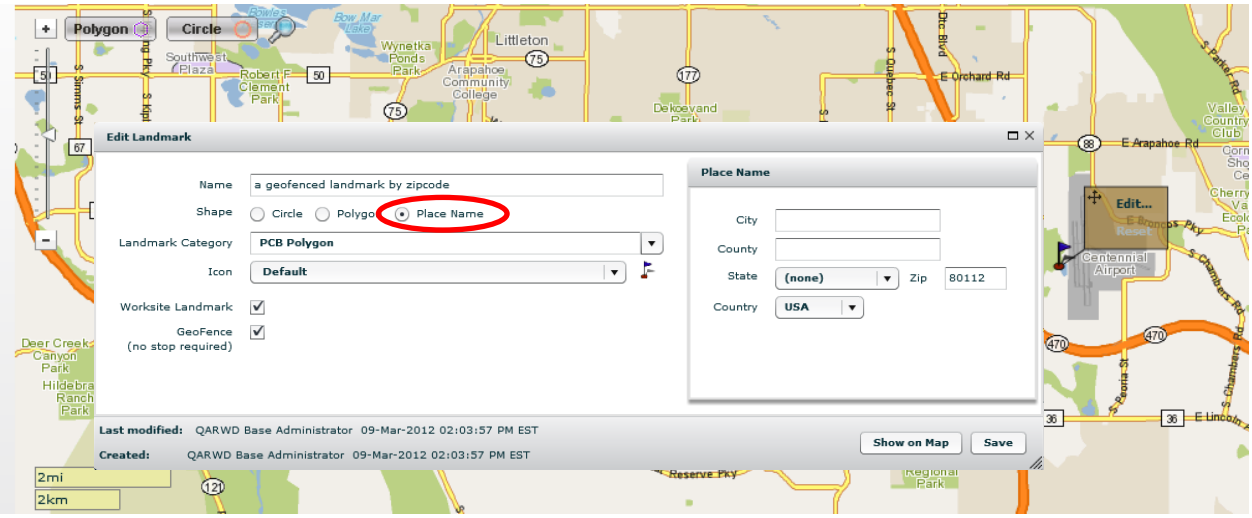

Figure 2: Creating a Landmark Using Place Names

Worksite Landmarks

FleetOutlook has always had worksite landmarks. A worksite landmark is shown on the Gantt chart in TechDirect. In this release, the option to make a landmark or GeoFence a worksite is defaulted to "On". For customers that use TechDirect, this reduces errors caused by forgetting to make a landmark a worksite. For customers that don’t use TechDirect, there is no impact.

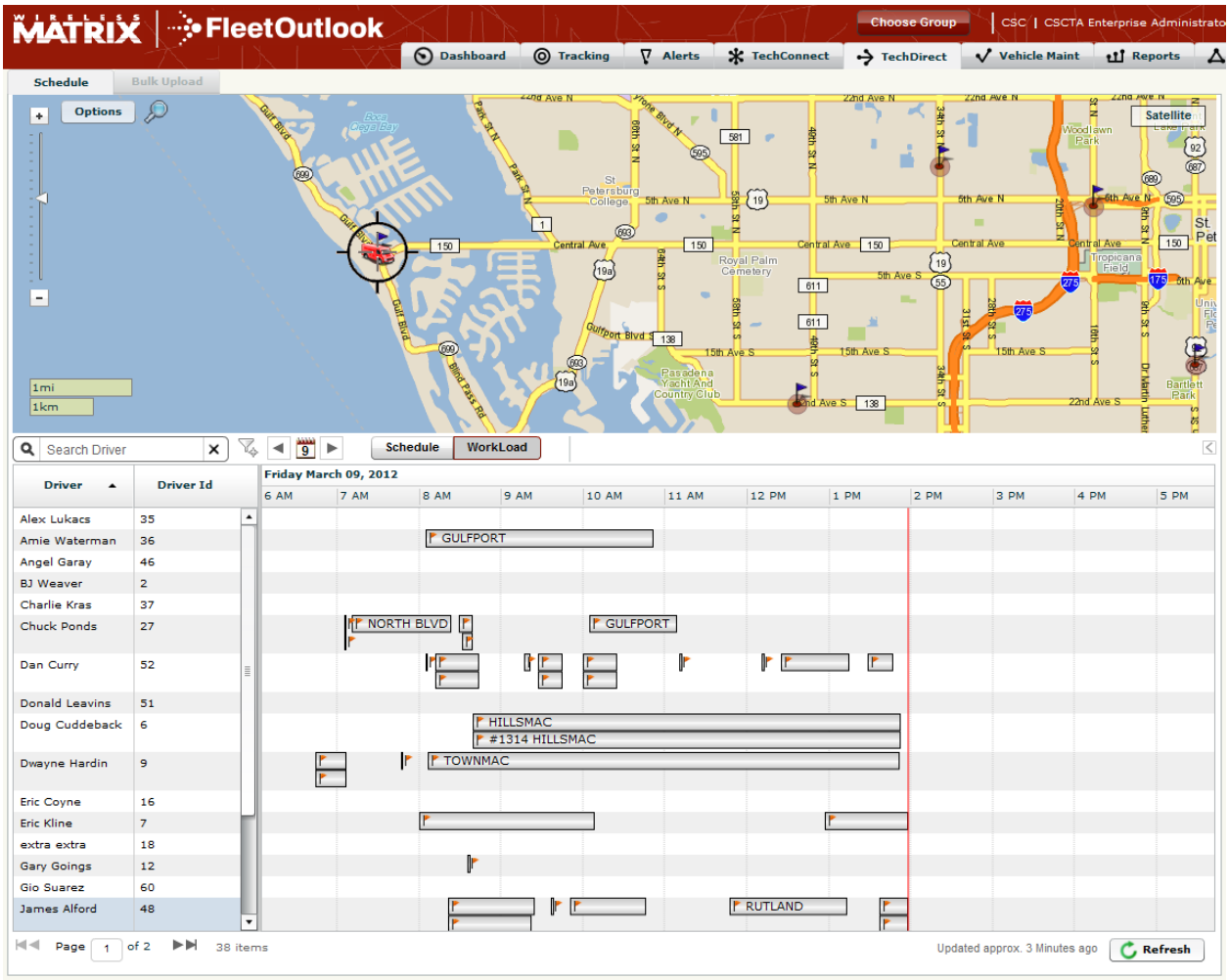

Figure 3: TechDirect Displaying Worksite Landmarks Instead of Jobs

Landmark Report Update

The Landmark Report has been updated with new columns and a group and driver summary.

Group Summary

Selection Filters:

Date Range: Variety of date ranges including today and a custom date range.
Stop Time: filter by Stop time in minutes
Landmark Category: Select landmarks by assigned category

Columns include:

Group: The group at the selected level of the hierarchy.

Active Vehicles: The number of active vehicles in the group during the period sampled
Landmark Stops: The count of stops in landmarks during the period sampled
Time Spent in Landmarks: The total time (hours and minutes) spent in landmarks during the period sampled
Time Spent in Landmarks % Time: The percentage of time spent in landmarks as a function of the total active time during the period sampled
Landmark Idle Time: Time (hours and minutes) idling inside landmarks during the period sampled

Driver Summary

Selection Filters:

Date Range: Variety of date ranges including today and a custom date range.
Stop Time: filter by Stop time in minutes
Landmark Category: Select landmarks by assigned category

Columns include:

Group: The group at the selected level of the hierarchy.
Driver-Vehicle Name: Display name in the format chosen for the Enterprise, typically a combination of vehicle and driver
Landmark Stops: The count of stops in landmarks during the period sampled
Time Spent in Landmarks: The total time (hours and minutes) spent in landmarks during the period sampled
Time Spent in Landmarks % Time: The percentage of time spent in landmarks as a function of the total active time during the period sampled
Landmark Idle Time: Time (hours and minutes) idling inside landmarks during the period sampled

The Detail Report has not changed.

Dashboard Updates

Updates to the dashboard include the addition of several new dashlets and new features for existing dashlets. Procedures for setting up the new dashlets is the same as for existing dashlets, except where described below.

Alert Count Dashlet

The alert count dashlet provides a quick view of a single alert type over time, making it easy to monitor changes in the volume of speeding incidents, late arrivals, or other alerts. The Alert types supported are:

- Acceleration
- Arrived at Landmark
- Deceleration
- Device Condition Change
- Diagnostic Information
- Late Arrival
- Late Departure
- Late Departure - Driver Schedule
- Leaving Landmark
- Long Idle Alert
- Long Stop
- Max. Drive Without Break
- Moving With Switched Input
- Panic Notification
- Speeding
- Stopped At Landmark
- Unauthorized Use
- Vehicle Status Alert

Note: not all alert types are available on all devices.

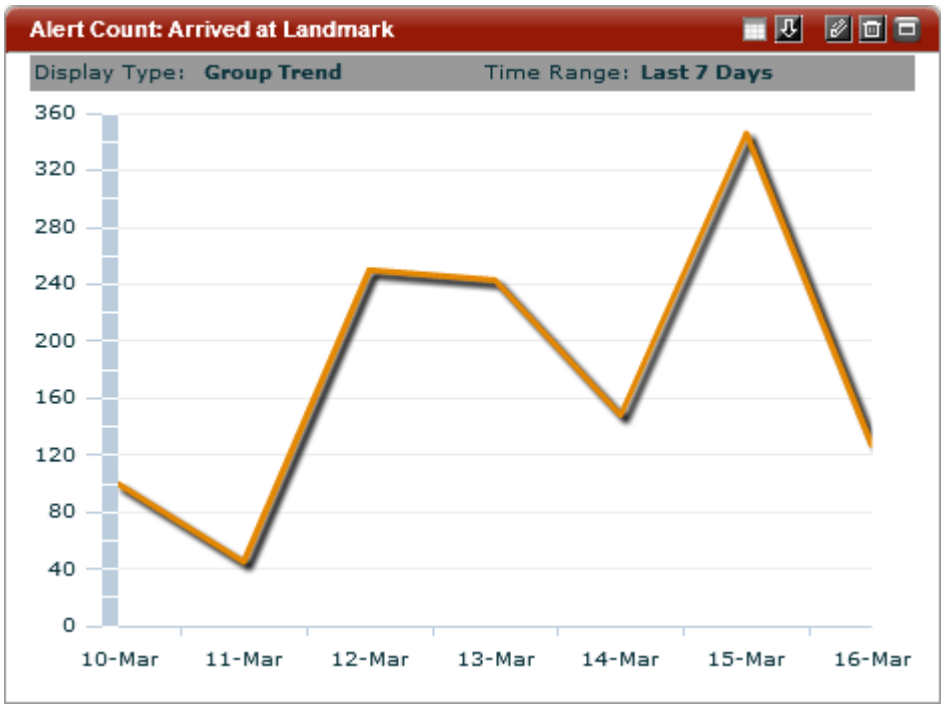

Figure 4: Sample Alert Count Dashlet

Fleet Status Chart

The Fleet Status chart provides a snapshot of the fleet or group in terms of the number of active vehicles, the number of vehicles inside a landmark, or the number of vehicles outside a landmark.

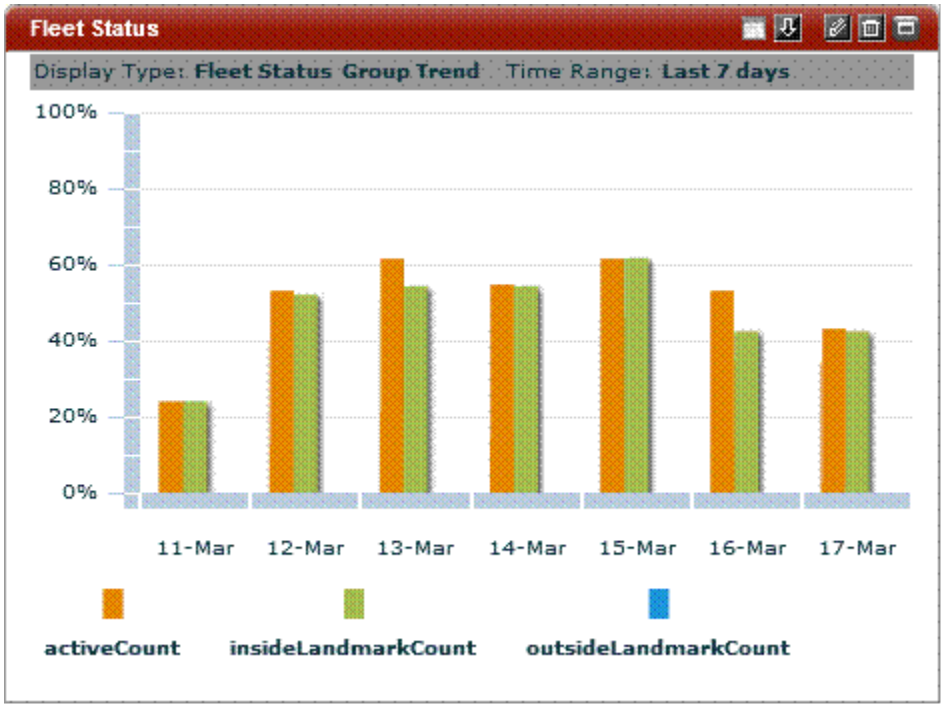

Figure 5: Fleet Status Dashlet Showing % of Vehicles Active and % that Visited a Landmark

Depending on how you use landmarks, you might choose to show just active vehicles, or vehicles inside or outside landmarks. Sometimes it is useful to select the active count option and either inside **or** outside the landmark counts, but it is rarely useful to select all three. For the example shown above, landmarks are used to identify worksites. Showing vehicles active and inside landmarks on a daily basis provides an indication of how many vehicles are in use (active) and have visited a worksite during the day.

Fleet Utilization Dashlet

The fleet utilization dashlet provides a snapshot of vehicle use. The four different statuses are:

- **Active Devices** - devices that have reported an Ignition On and moving events that day
- **Stationary Devices** - devices that have reported an Ignition On but no moving events that day

- **Inactive Devices** - devices that have not reported any Ignition On or moving events that day, but have reported other events
- **Non Communicating Devices** - devices that have not reported any events or messages of any kind)

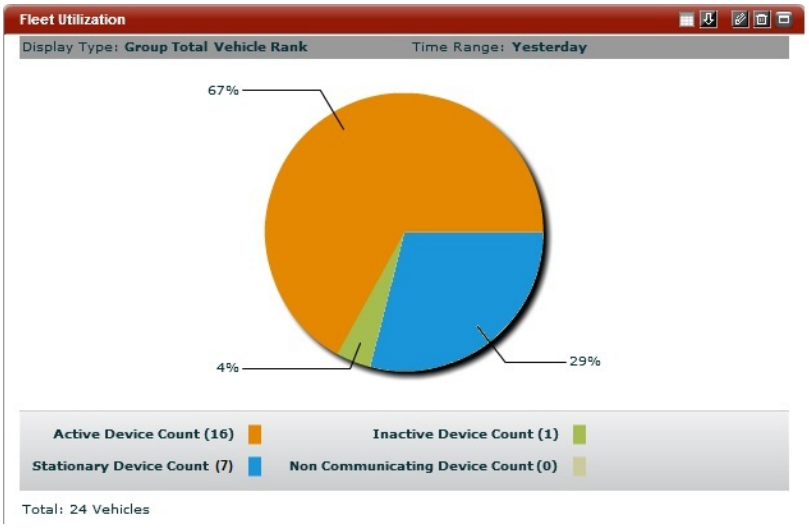

Figure 6: Sample Fleet Utilization Dashlet

In the example shown above, most (67%) of the fleet was active this day; 4% of the vehicles were not active, not used, and 29% were stationary and had been started, but not moved. Note that none of the vehicles were in a non-communicating status (which could indicate a problem with the vehicle or the GPS device.)

Vehicle KPIs Dashlet (HOS, Miles, Trips, Idle time)

This dashlet shows several key metrics for a single vehicle. The four metrics are:

- Idle Time
- Stops
- Distance
- Engine Hours

The user can pick a benchmark for each gauge. The benchmark is the dividing line between the green and red portion of the gauge. If no benchmark is selected, the benchmark is the average of the fleet or group.

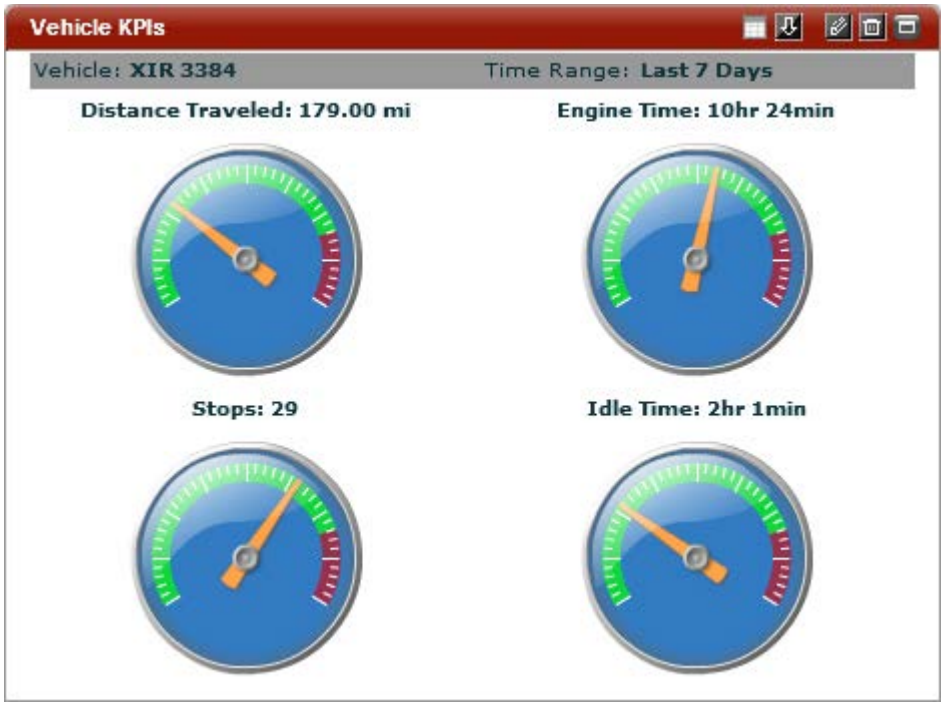

Figure 7: KPIs Dashlet for an example vehicle

When setting up this dashlet, the user must pick a single vehicle on which to report. This is different from all other dashlets that display data across a fleet or a group of vehicles in a fleet.

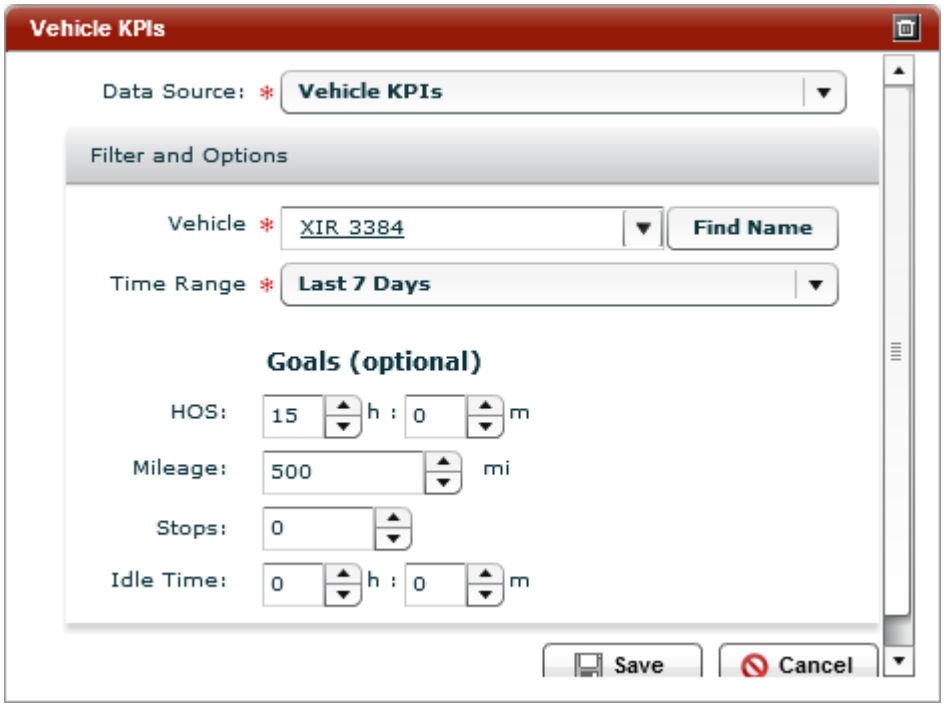

Figure 8: KPI configuration window

Multiple Metrics on a Single Dashlet

The ability to show multiple metrics on a single dashlet helps visualize the relationship between two different data sets. For example, this feature can be used to understand the relationship between distance driven and idle.

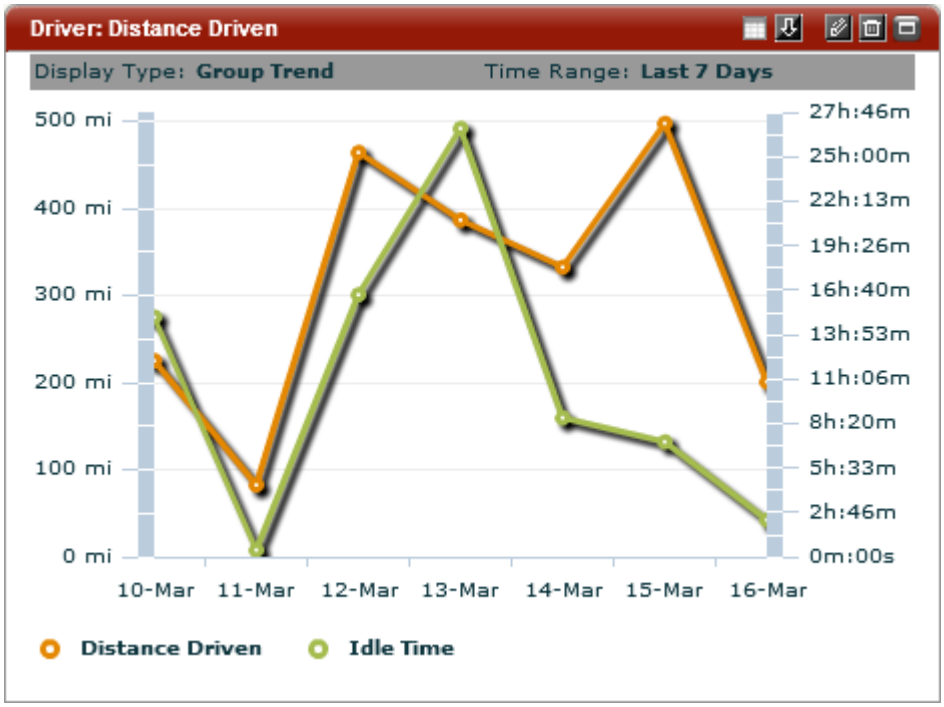

Figure 9: Sample dashlet displaying multiple metrics

Note that as necessary, a different Y-Axis scale will display on the right side of the graph. This occurs if the metrics being displayed have different units or scale. In the example above, two different scales are needed to compare miles and time.

To use this feature, a new radio button on the FleetOutlook Dashboard dashlet configuration screen allows the user to set whether they want an additional Benchmark (default) or an additional metric to be displayed.

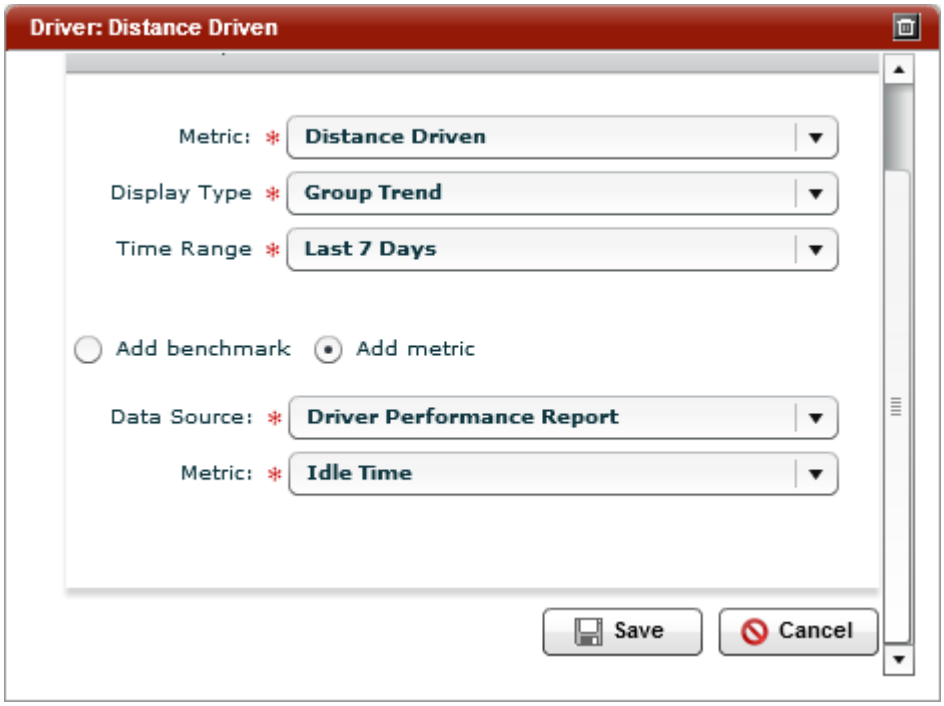

Figure 10: Setting up multiple metrics

Tracking Updates

This section describes a collection of changes that have been made to the FleetOutlook Tracking tab.

More Capable Map Tool Tip

The tool tip that is available by clicking on a vehicle on the map has been enhanced to provide additional user functionality.

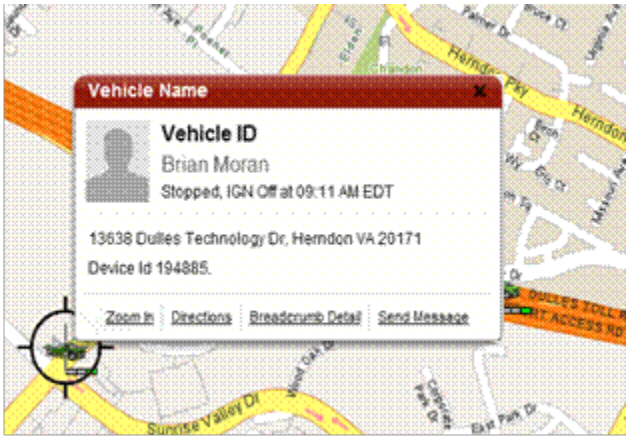

Figure 11: The New Tooltip

The enhanced tool tip allows user to perform the following actions:

- **Zoom to Street level** - zoom the map to street level with the vehicle at the center
- **Get directions to/from** - open the "Get Directions" dialog box
- **Breadcrumb Detail** - jump to the Breadcrumb Detail tab for the selected vehicle
- **Send Msg** - jump to the TechConnect tab for the driver of this vehicle. This option requires:
  - TechConnect is enabled;
  - the device associated with the vehicle is PND enabled; and
  - a driver is assigned to the vehicle.

  This option is grayed out if the necessary conditions to send do not exist.

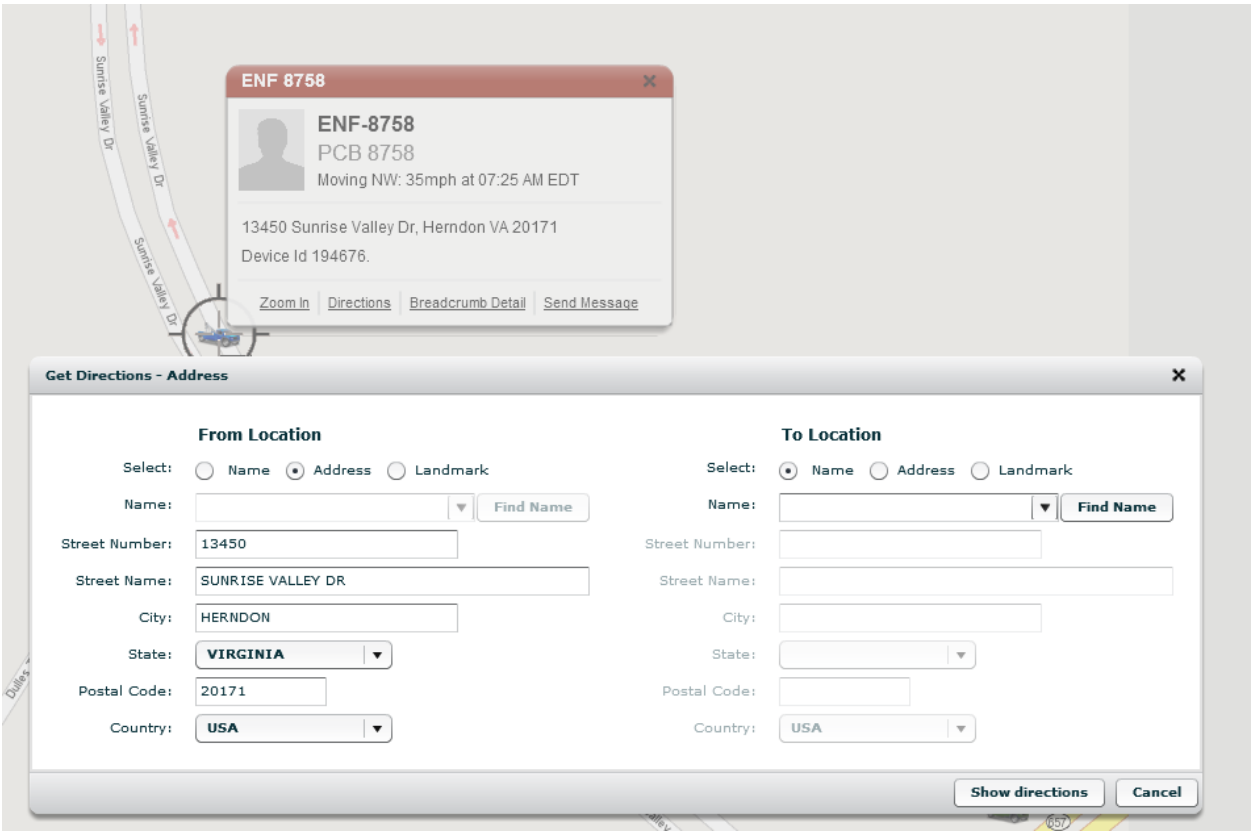

Figure 12: Get Directions popup dialog box for direction to/from the selected vehicle.

Traffic on Maps

User can now see real-time traffic on the tracking map. Traffic data is provided by Traffic Cast. Traffic Cast provides traffic information for over 400,000 miles of Interstate highways, other expressways, and major arterials in the United States.

Users can toggle the traffic overlay on and off by selecting the checkbox that appears when you hover over the Satellite button in the upper right hand corner of the map.

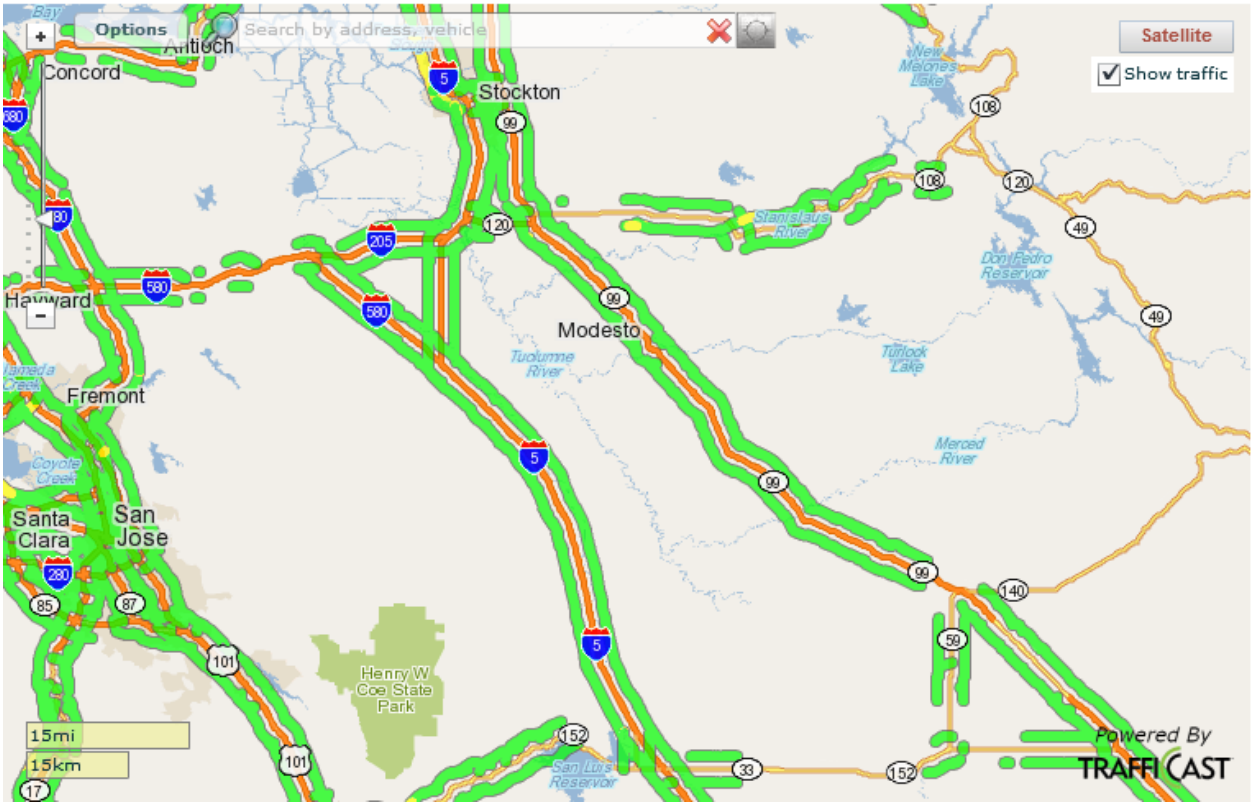

Figure 13: Traffic on maps

The colors for traffic are scaled to meanings relative to roads. Red indicates very slow traffic and heavy congestion. Yellow indicates slow traffic with general congestion. Orange indicates traffic is moving with minor congestion. Green indicates traffic conditions are good.

Posted Speed Limits (PSL)

FleetOutlook can now verify compliance with posted speed limits when speed limit data is available. For each event reported by a vehicle, the speed of the vehicle is compared to the posted speed limit at that location. A speeding event occurs if the speed is above the posted speed limit by a threshold set by the user. The same threshold applies to all

vehicles and all locations. If the speed is over the threshold, it will show up on the breadcrumb detail and in the posted speed violation report as below.

The default threshold is 10 miles per hour. To change the threshold, contact Wireless Matrix.

Figure 14: Breadcrumb Detail with Speeding Events based on Posted Speed Limits

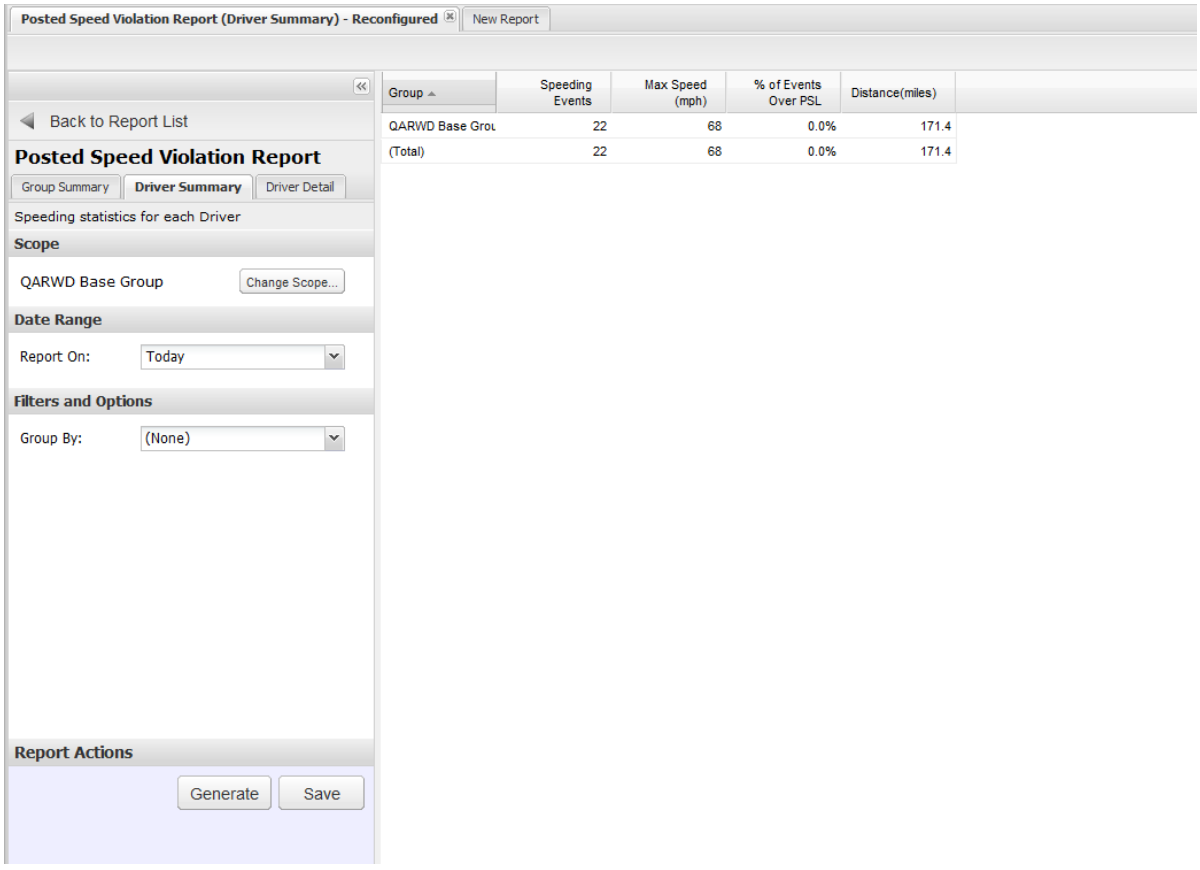

Figure 15: Posted Speed Violation Report

Because FleetOutlook evaluates each point, the occurrences of speeding are shown as an individual event in the event column. There is currently no alert for Posted Speed limit violations.

This new PSL capability is distinct from and in addition to the existing speeding capability that remains in FleetOutlook. The existing speeding capability can still be used and in some cases is a good compliment to the Posted Speed Limit capability. Remember, the existing speeding capability is initiated by the device when the vehicle is over the maximum set speed for 10 consecutive seconds. This is very different from the comparison of posted speed limits that only occurs when the device reports a moving event. The current speeding event only looks for speeds in excess of the max speed set for the enterprise. This value is typically 70 MPH, so only a small portion of actual speed violations are detected. Speeding on residential roads is missed.

Digital Outputs

For certain devices, FleetOutlook now has the ability to initiate actions on the vehicle through auxiliary equipment connected to the GPS device. This ability allows, for example, a vehicle to be set up with equipment that can disable the starter or lock and unlock the doors.

Operating a Digital Output

Select a vehicle from the Vehicle Summary tab by checking the box next to the vehicle to enable the Control Outputs button at the bottom of the screen.

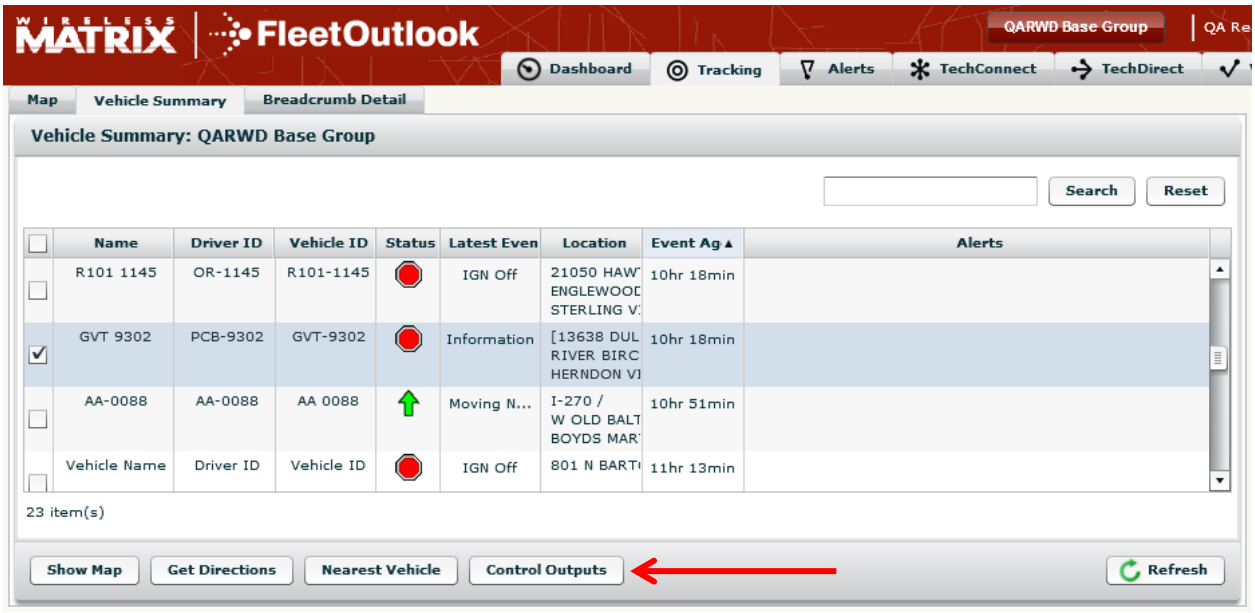

Figure 16: Vehicle Summary Screen with Control Outputs Button Enabled

Clicking the Control Outputs button opens the Control Outputs window. If the vehicle has digital outputs set up, the user can operate the equipment on the vehicle by selecting from the menu of available options.

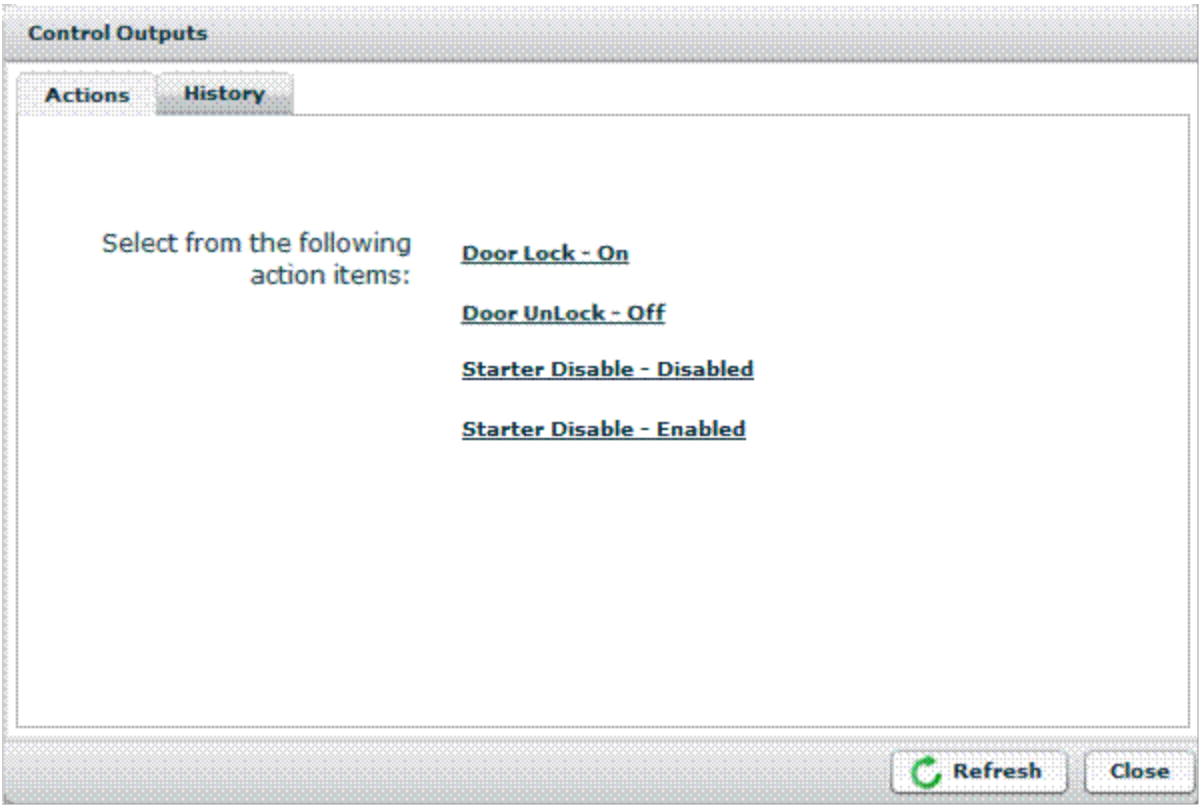

Figure 17: Sample Control Outputs screen showing menus for controlling door locks and starter

Users can view COMMAND HISTORY for the past 90 days by selecting the history tab. The history tab shows the Date Time, the User, the action and the status of the control. The statuses are:

- **Created** – the Menu item was successfully created.
- **Pending** – message is queued or has been sent to the device
- **Successful** – a response from the device has been received indicating the action is complete
- **Failed** – The request has timed out waiting for a response, or the device has indicated in its response that the attempt failed.

Note: Not all Users are allowed to execute Digital Output controls. The “Control Outputs” button is shown or hidden based on the User having the new “Control Digital Outputs” permission turned on in FleetOutlook Administrator.

Setting Up Digital Outputs

Users are responsible for procuring and installing the necessary equipment for remote functions and wiring it to the appropriate port on the GPS device. Please contact Wireless Matrix's Support team before starting this process to confirm that your device supports output on FleetOutlook.

Once wired, the device control outputs must be configured set up in FleetOutlook Administrator. From the Administrator Device tab, double click the device or select the device and click the query button to display the device set-up screen. Available digital outputs are shown on the features tab of the device set up screen. For this device below, four outputs are supported.

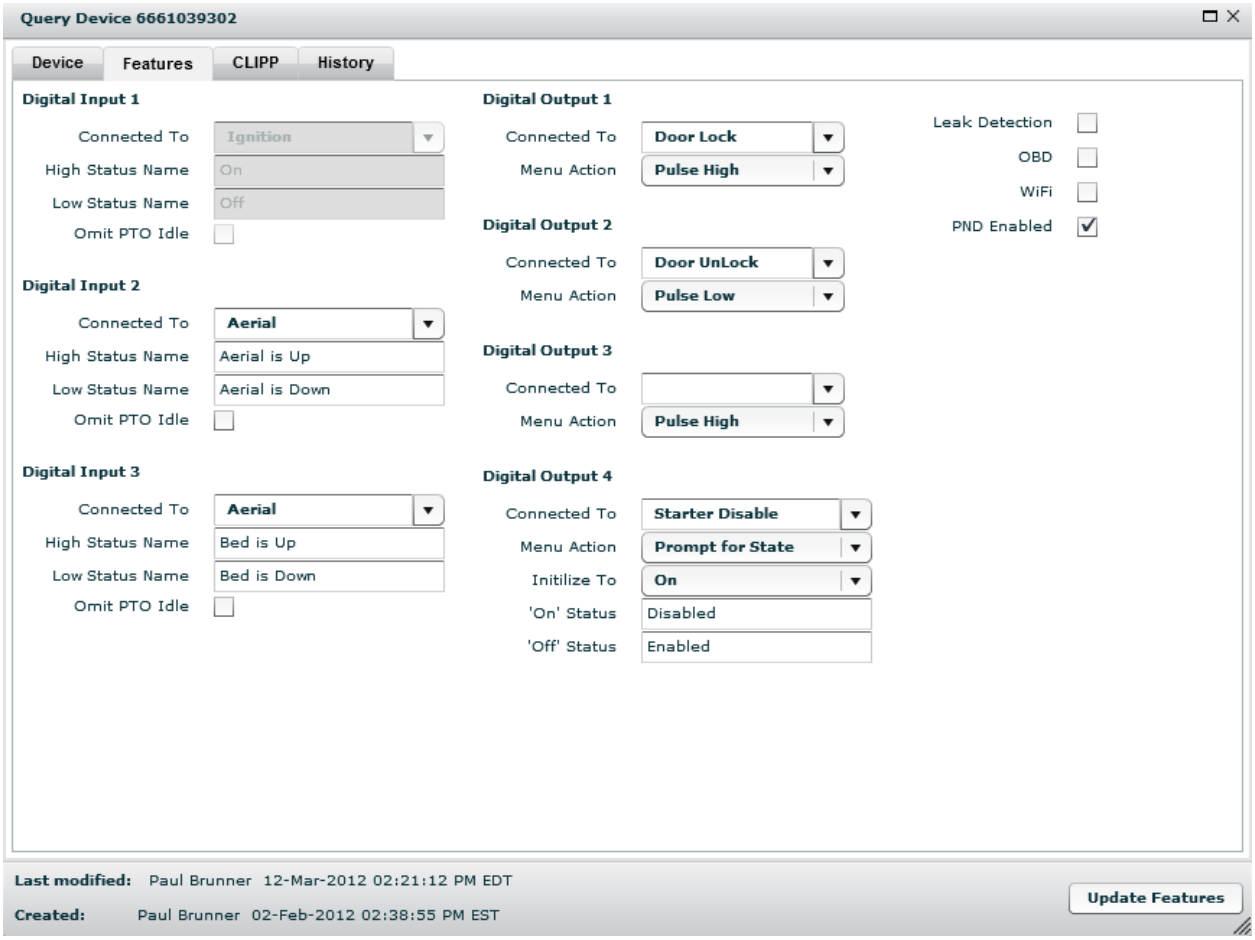

Figure 18: Configuring Digital Outputs

For each digital output port, the output can be named by filling in the “connected” field. This field is user editable. The menu action for the port is also set as Pulse High, Pulse Low or Prompt for State.

In the example, the first output is set to lock the doors by sending a pulse high to the vehicle to lock the doors. The second output unlocks the doors with a pulse low. These setting will vary based on the equipment installed in the vehicle. The equipment manufacturer should provide installation guidance including signal (pulse high/low) settings.

The fourth port is set to prompt for state. With this option the user selects a label for the on and off state of the port. The appropriate menu options reflect the settings selected.

Alerts Updates

New alerts have been created in Release 7.1. Some of these alerts depend on the device installed, and are only available to customers with these specific devices. The device requirements, where applicable, are included in the chart below. All alerts are set up in FleetOutlook Administrator.

Alert Name	Description	Requirements
Towing Alert	Detects movement of the Vehicle when the ignition is off.	Only on GVT-3000 and Enfora Devices. Vehicle has an Ignition Off, a moving event occurs, and the vehicle has moved more than 500 yards.
Collision Alert	Monitors hard breaking of collision.	Only on GVT-3000 and Enfora Devices with accelerometers Triggered on the device based on the device detecting an acceleration threshold of between 3 and 8 Gs.
Service Reminder Alert	Notifying fleet managers service is nearing due or is overdue.	Service events must be set up in Vehicle Maintenance Module.
Excessive Distance Alert	Alerts when a vehicle is driven for more miles than the alert threshold in a day.	None
Excessive Engine Hours Alert	Alerts when a vehicle's engine hours exceed the alert threshold in a day.	None

Towing Alert

This alert triggers if any vehicle in the group (or child group) selected has had a moving event where the ignition is off and the vehicle has moved more than 500 yards. The determination for this event is made on the FleetOutlook server, not on the device.

Common uses:

- Identify vehicles being stolen.
- Used most often for equipment at construction sites.
- User gets a record of activity that alerts them to investigate unplanned movements.

Set up:

Group: The alert will apply to vehicles in this group and all children groups.
Alert Name: This appears as the title of the alert in the Tracking Tab or email headers. Make sure the name differentiates it from other, similar alerts.

Collision Alert

This alert triggers if any vehicle in the group (or child group) selected has an excessive braking event. This data is obtained from the accelerometer sensor on the GVT-3000 or Enfora device.

Common uses:

- Managers receive notification that a driver is driving aggressively or has had an accident or near accident.
- Maintenance managers get notification if a vehicle is being abused.
- Safety officers get a record of activity that they can use to verify safety precautions and rules are followed.

Set Up:

Group: The alert will apply to vehicles in this group and all children groups.
Alert Name: This appears as the title of the alert in the Tracking Tab or email headers. Make sure the name differentiates it from other, similar alerts.

Service Reminder Alert

This alert triggers if any vehicle in the group (or child group) selected has a service event based on service schedules set up in the Vehicle Maintenance tab of FleetOutlook.

Common uses:

- Fleet Mangers get notified if maintenance is approaching or overdue.

Set Up:

Group: The alert will apply to vehicles in this group and all children groups.
Alert Name: This appears as the title of the alert in the Tracking Tab or email headers. Make sure the name differentiates it from other, similar alerts.
Alert When: Select the option for alerting, as a warning or once the maintenance is overdue.

Excessive Distance Alert

This alert triggers if any vehicle in the group (or child group) selected is driven for more miles in a day than are set in the alert.

Common uses:

- Driver managers or dispatchers wanting to know about excessive miles driven.

Set Up:

Group: The alert will apply to vehicles in this group and all children groups.
Alert Name: This appears as the title of the alert in the Tracking Tab or email headers. Make sure the name differentiates it from other, similar alerts.
Distance (Miles): The threshold for miles driven in a day.

Excessive Engine Hours Alert

The excessive engine hours alert is triggered when a vehicle's total Engine Hours (time with Ignition On) exceeds the daily configured threshold for Daily Engine Hours Limit. The threshold is set in hours.

This alert triggers if any vehicle in the group (or child group) selected registers engine hours in excess of the limit set in the alert.

Common uses:

- Driver managers or dispatchers wanting to know about excessive engine hours.
- Monitoring third part contracts where equipment is leased.

Set Up:

Group: The alert will apply to vehicles in this group and all children groups.

Alert Name: This appears as the title of the alert in the Tracking Tab or email headers. Make sure the name differentiates it from other, similar alerts.

Engine Hours: The threshold for engine hours in a day.

New Vehicle Status Alert Message Type - Power Failure

Vehicle status alerts are used occasionally to troubleshoot device related situations and are not commonly used alerts. The vehicle status alert is set up for individual vehicles.

The power failure message type only works for devices with a battery back-up (GVT-3000 and Enfora). These devices detect and report a loss of power. When the device reports the loss of power event, this message type is triggered.

Set up of this message type is the same as other vehicle status alert message types.

TechConnect Updates

TechConnect has been updated to now work with Canadian Addresses.

TechConnect now has an audible signal that sounds when new messages arrive. The sound is set to off by default. If your enterprice would like this capability enabled, call support for assistance.

Administrator Updates

This release also provides several new capabilities in FleetOutlook Administrator for administrators.

Vehicle Icons

Administrator users now have choices for the icon displayed for a vehicle, as well as the color of the icon.

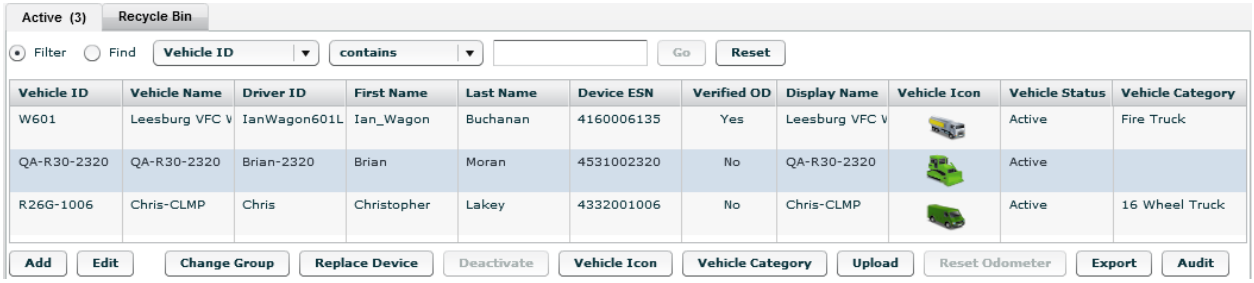

Figure 19: Vehicle Admin Screen Showing Vehicles With New Icons

A user with administrative privileges can change the vehicle icon and vehicle color. Changes are made in the Vehicle tab by double clicking on a vehicle or clicking on the edit button.

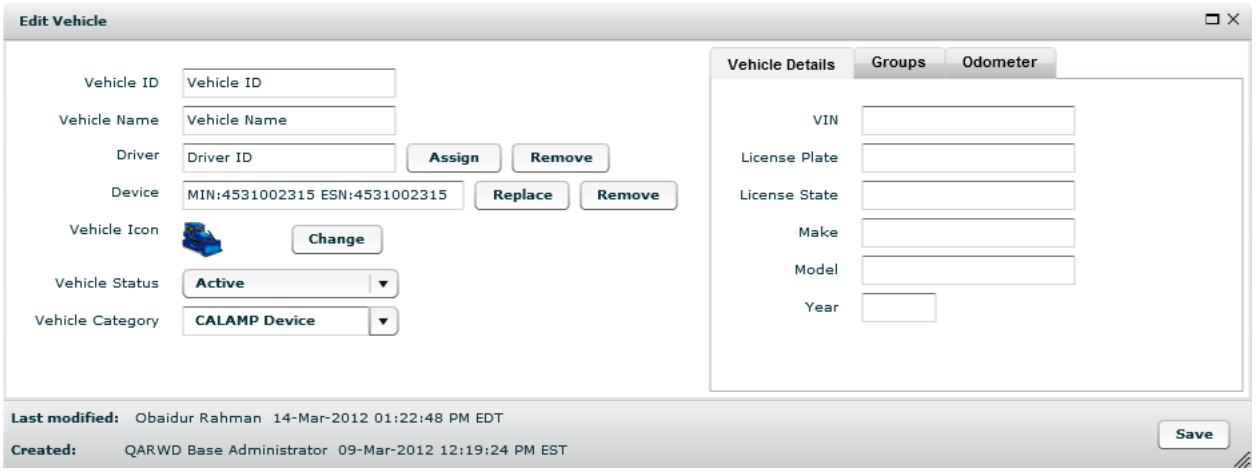

Figure 20: The Edit Vehicle Window with Vehicle Icon edit capabiliy

To change the icon, select the “change” button next to the existing icon. On the popup window that appears, select the desired icon and color.

Figure 21: The Vehicle Icon Selector Popup Window

Auxiliary Input Names

Admin users can customize labels for digital inputs. On the Features tab of the device edit screen, type in a new label or select form the predefined list. The custom label will be reflected on reports, vehicle summary and the breadcrumb detail where events are shown. Once a custom label is used, it is added to the drop down list of reuseable labels.

The user can also add free-form labels for the high and low status indicators as appropriate based on the input wired to that port.

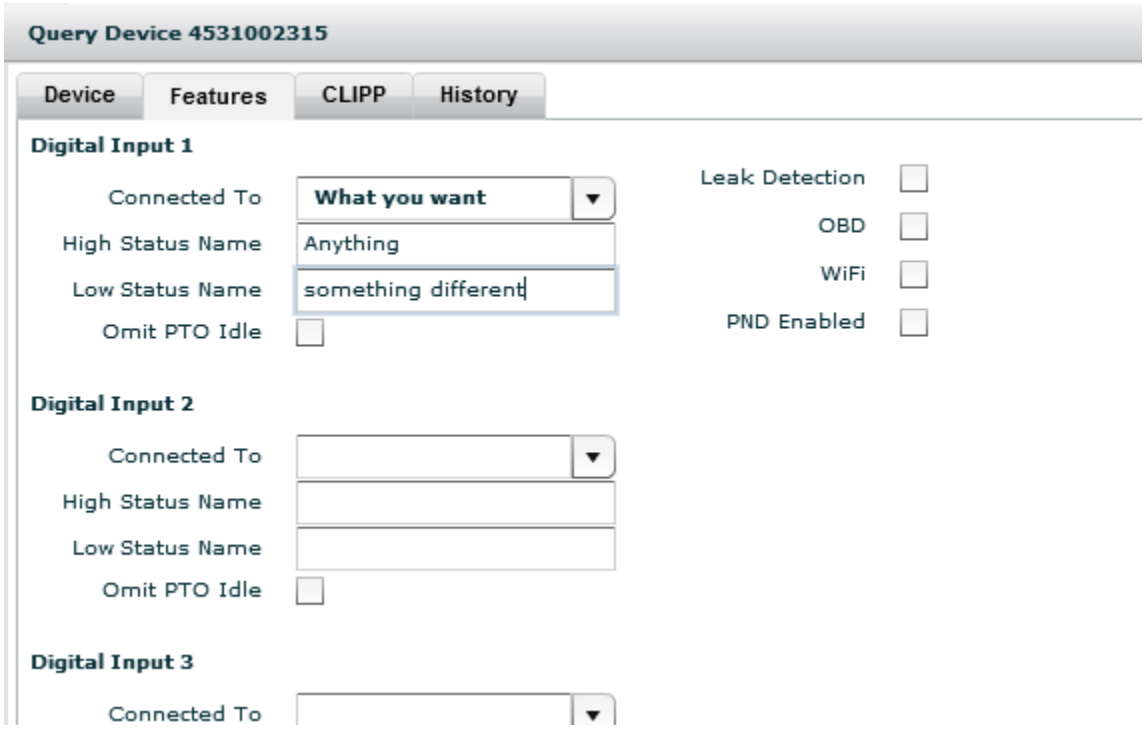

Figure 22: Creating custom labels for digital inputs

Reports: Additions and Enhancements

We are continuing to add and enhance interactive reports to FleetOutlook. A list of the new or enhanced reports is provided below:

- **Posted Speed Violation** (New Report): The Posted Speed Violation Report provides data on Drivers' number and severity of speeding violations against the posted speed limit (PSL) on roads where this value is available from DeCarta map information. Time of day and location per speeding violation is available in a detail view. This report provides Driver Supervisors with a view of Drivers' posted speed limit violations and differs from the existing Speeding Report which shows the number and severity of violations of the vehicle's maximum speed configured value.
- **Work Order Metrics** (Enhanced): Corrections were made to calculations for work order durations and averages. Performance enhancements allow this report to be run for a longer reporting interval.
- **Landmarks Report** (Enhanced): The report is revised to include a column that specifies the time vehicles spent within Landmarks. With the introduction of the

GeoFence Landmark type, a new filter now allows inclusion or exclusion of specific Landmark types. The report also has a new "Group by" selector.

- **Vehicle Metrics Report** (Enhanced): A new column is added to indicate the total idle time with an active input that has been marked indicating PTO usage. The PTO Idle Time column is useful for customers who can claim fuel tax credit for fuel consumed while powering a PTO device vs. powering the vehicle.
- **Vehicle Maintenance Report** (Enhanced): The Vehicle Maintenance Report now shows each vehicle's Display Name and Vehicle Category. Maintenance due deadlines are now also expressed as an Engine Hours reading as well as the existing columns for a due date and a due odometer reading

Questions

Contact Wireless Matrix Customer Support at 866.456.7522
or customercare@wrx-us.com.

We are continuously improving the documentation and training we supply to our customers, but we need your help. Do you have any suggestions for what you would like to see in the future? If so, please send an email to Mark Freeman and let us know the resources you need to be successful.