

Release Date: July 2020

This document contains information about new features, improvements and resolved issues in the FleetMind family of products and supersedes the **FleetMind 20.2 Customer Release Notes Summary** document released earlier this year.

NOTE: It is assumed that the reader of this document possesses working knowledge of FleetMind products.

Refer to the following table for information on software products affected, and their version/build numbers.

Software title	Version/build number (up to and including)
FleetLink Route System	2.3.7
FleetLink Mobile	5.51.1
FleetLink Reports	2.30.2
FleetLink Map	4.26.2
FleetLink Safety Dashboard	2.3.7
PWS	2.3.7
FleetMind API	2.230.0

New Features

This section describes features that have been added and, where necessary, instructions on how to use them.

FleetLink Route System

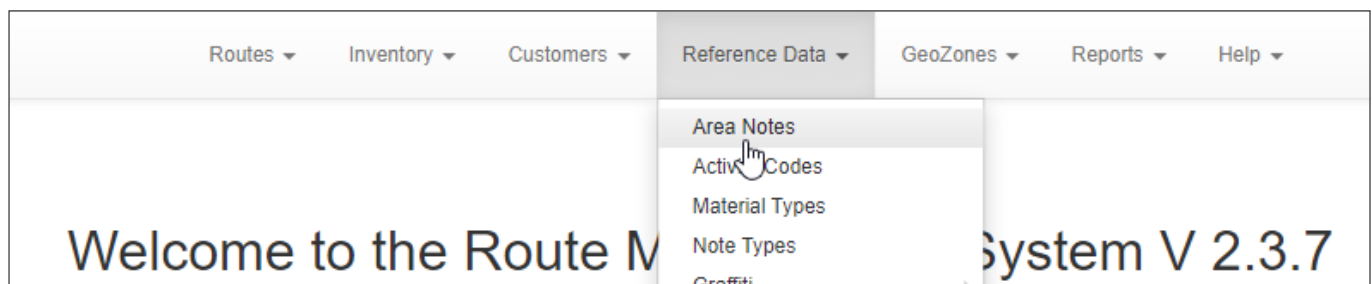
New Area Notes page is available to users for creating notes associated with a map area -

FMRMS-1210, FMRMS-1530, FMRMS-1569, FMRMS-1579, FMRMS-1617, FMRMS-1622, FMRMS-1634, FMRMS-1639, FMRMS-1646

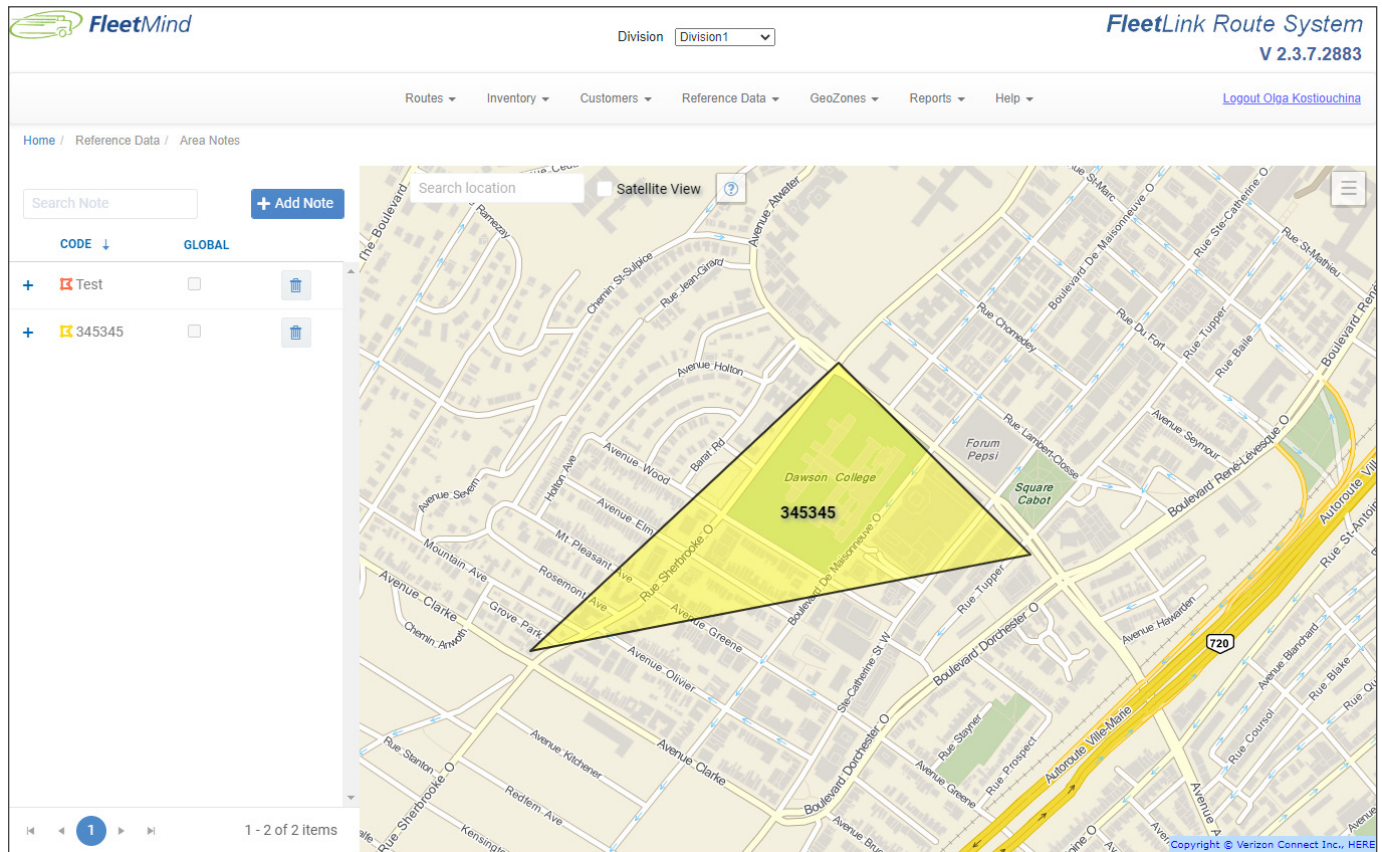
As of this release, the new **Area Notes** page is available to users. Users can create notes associated with a map area that is independent from any route. New area notes are communicated across FleetMind applications.

Accessing Area Notes

- To access the **Area Notes** page, select **Area Notes** from the **Reference Data** menu.



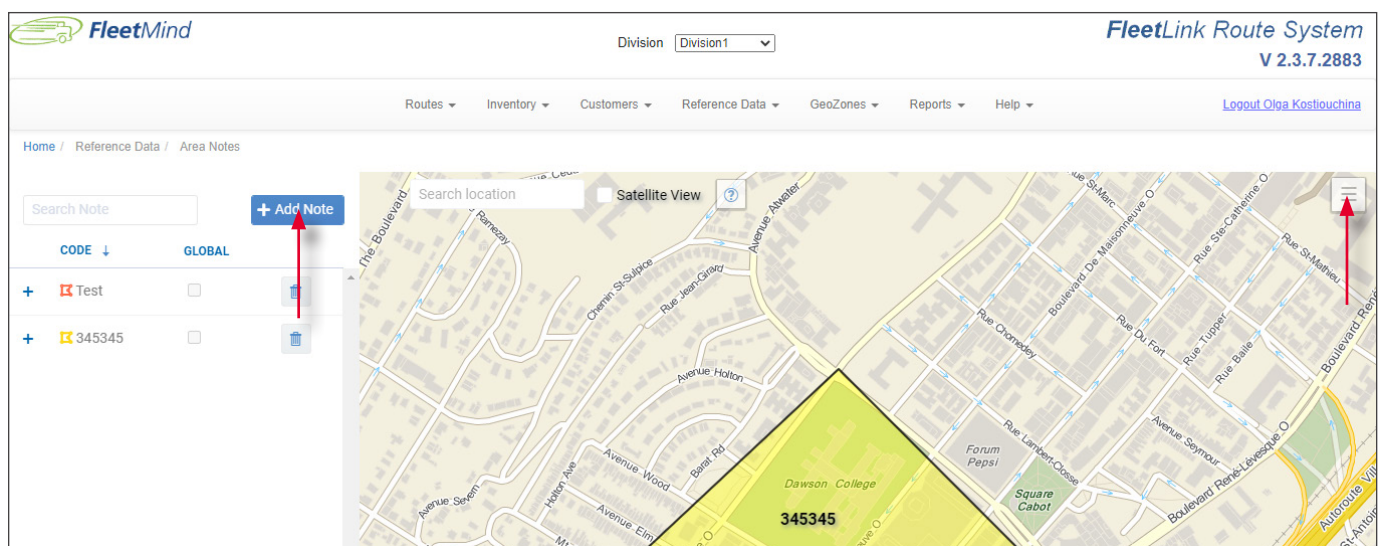
The **Area Notes** page is displayed.



Adding area notes

To add a new area note, perform the following steps:

1. Click the **Add Note** button on the left-hand side panel or the note toggle button in the top right corner of the map. Alternatively, you can right-click on the map to start defining the area for the new note right away.



The **New Note** panel is displayed.

The image shows two side-by-side screenshots of the 'New Note' panel in the FleetMind application. Both panels have a 'Reset' button and a 'Save' button at the top right.

The left screenshot shows the 'General' tab selected. It contains the following fields and controls:

- Code**: A text input field.
- Type**: A dropdown menu currently showing 'Info'.
- Note**: A large text area for entering the note's content.
- Point**: A checkbox.
- Polygon/Point**: A text area for entering coordinates.
- Global**: A checkbox at the bottom.

The right screenshot shows the 'Schedules' tab selected. It contains the following fields and controls:

- Start Date**: A date input field with a placeholder 'year-month-day'.
- End Date**: A date input field with a placeholder 'year-month-day'.
- Days of the week**: A row of checkboxes for Mo, Tu, We, Th, Fr, Sa, and Su.
- From**: A time input field showing '00:00'.
- To**: A time input field showing '23:59'.
- + Add Schedule**: A blue button to add a new schedule.
- START DATE** and **END DATE**: Two small blue buttons below the time fields.
- No Records Available.**: A message displayed in a scrollable list area at the bottom.

2. If you have not yet defined the area for the new note, right-click on the map to set a location for the new note, or continue right-clicking to outline an area polygon. Notice that the coordinates automatically populate the **Polygon/Point** text field.
3. Enter/select the following information on the **General** tab:
 - i. Enter the name of the new area note in the **Code** field.
 - ii. Select the type of note from the **Type** drop-down list.
 - iii. Enter the text of the note in the **Note** text field.
 - iv. Select the **Point** checkbox if this note is for a specific point on the map.
 - v. Select the **Global** checkbox to make this note visible to all fleet vehicles.
4. Click the **Schedules** tab and then enter/select the following information about the period of time this note will be in effect:
 - i. Enter the desired dates in the **Start Date** and **End Date** fields to define the date range.
 - ii. Select the checkboxes beside the desired days of the week.
 - iii. Enter the time range in the **From** and **To** fields.
 - iv. Once done, click **Add Schedule**. The newly defined schedule is added to the list of schedules in the bottom section of the panel.
 - v. To add more schedules, repeat steps **i** through **iv**.
5. Click **Reset** to clear all information you've entered.
6. Click **Save** to save the area note. If you don't want to save the note, click the note toggle button again to close the panel.

Editing existing area notes

To edit an existing area note:

1. Click the note of interest on the left-hand side panel. Alternatively, you can right-click on the map to start editing the defined area polygon right away. The **Edit Note** panel is displayed.

2. Make the desired changes and then click **Save**. If you don't want to save the changes, click the note toggle button to close the panel.

FleetLink Mobile

A new Android application is being developed for users of WasteApp - FMENG-1533, FMENG-1573, FMENG-1575, FMENG-1588

The new application can be used on Android-based mobile devices. In the first release, roll-off and cart maintenance services in manual mode will be available, from login until end of day. Drivers are going to be able to complete the workflow of each assignment for those lines of businesses, as well as record extras, exceptions and driver activities. The new application will be fully integrated with other FleetMind products.

Improvements

FleetLink Route System

The system now forwards all confirmation messages to an integrated third-party billing system - FMINT-278

Third-party systems can be integrated with the FleetMind solution and can be set up to receive confirmation messages from FleetMind products. Previously, only select confirmation messages were being forwarded from FleetMind to third-party billing systems.

As of this release, all confirmation messages from FleetMind are being forwarded to the third-party billing systems.

List of trucks is alphabetically sorted and can be filtered when adding a temporary route - FMRMS-1611

You can add a temporary route by clicking the **Add Temp Route** button on the page that lists today's routes. The **Add a Temporary Route** pop-up is displayed where you can enter/select the relevant information. Previously, the **Truck** drop-down list simply listed all available fleet vehicles.

As of this release, the **Truck** drop-down list is sorted alphabetically by default. It can also be filtered based on the name or description of the vehicle.

Add a Temporary Route

Name:

Start Date:

Route Frequency:

Truck:

Work Group:

Material:

Operating Department:

Temporary ☒

Update GeoLocation ☐

Update Rfid ☐

	Name	Description
✓	ER15	
✓	ER16	
✓	ER17	

Total Items: 70 (Showing Items: 24)(Selected Items: 1)

Route number is prepopulated when creating a new geozone - FMENG-635

A user can create a geozone for an existing route by going to the **Edit Route** page and clicking the **New Geozone** button. Previously, the **Routes** drop-down list on the displayed **Geozone** page was blank and the user had to enter/select the name of the desired route manually.

As of this release, the **Routes** drop-down list on the **New Geozone** page is prepopulated with the desired route name.

The screenshot shows the 'New Geozone' form. The 'Routes' dropdown menu is highlighted with a red box, showing 'BULK2' as the selected option. The form also includes fields for Name, Description, Is hole (checkbox), Color (dropdown), Polygon (text area), and a Save button. Below the form is a 'Route' section with a 'Copy To' button and a '--Select route' dropdown. A map is visible on the right side of the form.

Optimized routes include only facilities that accept those routes' allowed materials - FMRMS-1507

You can optimize routes for both garbage collection vehicles and street sweepers to increase service efficiency. Previously, optimized routes included all the facilities available in the area, regardless of the type of material that they accepted.

As of this release, when a route optimization request is sent to the third-party optimizer, the system includes only those facilities that accept materials configured for that route. For example, optimized street sweeper routes only include facilities that accept sweeper materials.

The Transfer Stops page is improved - FMRMS-1493

You can transfer incomplete assignments from one route to another on the **Transfer Stops** page. Previously, the options available to users on that page have been limited.

As of this release, the **Transfer Stops** page has been improved as follows:

- The tab header now displays the name of the route
- The **Status** drop-down list contains all available incomplete statuses
- Multiple statuses can be selected from the **Status** drop-down list
- Only the bins corresponding to the selected statuses are displayed on the map.

FleetMind applications support a new satellite imagery service provider - FMRMS-1674

You can display maps appearing in FleetMind products in satellite view. Previously, FleetMind products supported satellite imagery provided by Maxar.

As of this release, FleetMind products support satellite imagery provided by HERE instead.

Performance is improved on FleetMind Route System pages - FMENG-1637, FMENG-1638, FMENG-1639, FMENG-1657

You can perform various operations on the following pages: current day's routes, **Unscheduled Stops**, and **Transfer Stops**. Previously, users experienced slow system response when trying to load these pages or perform tasks.

As of this release, the system performance on these pages has been improved. The system provides faster response to help users complete their tasks in a more efficient manner.

36-character limit is supported on the Schedule on-demand stop pop-up - FMRMS-1573, FMRMS-1574, FMRMS-1575, FMRMS-1576, FMRMS-1577

You can create on-demand stops by clicking the **Schedule on-demand stop** button on the **Edit Location** page. Previously, the maximum number of characters allowed in the **Work Order Id U-** field on the displayed **Schedule on-demand stop** pop-up was limited to 24.

As of this release, the maximum allowed number of characters in that field has been increased to 36 to better support customers' needs.

The list of stops transferred to another route can include completed stops - FMREP-215

You can transfer stops from one route to another on the **Transfer Stops** page.

As of this release, you have the ability to include completed stops as part of the list of transferred stops. To do so, include the stops with a **Completed** status when making a selection from the **Status** drop-down list.

Users can no longer choose route frequency on the Add a Temporary Route pop-up - FMSUP-349

You can add a temporary route by going to the list of today's routes and then clicking the **Add Temp Route** button. Previously the **Route Frequency** drop-down list on the displayed **Add a Temporary Route** pop-up allowed users to select the frequency of the temporary route.

As of this release the **Route Frequency** drop-down has a default value of "once" and is disabled.

FleetLink Mobile

Weight value messages sent by Rice Lake scales are recognized and supported - FMMOB-596

FleetMind products support communication with several brands of scales. Previously, the system had no support for weight value messages originating from Rice Lake scales.

As of this release, messages sent by Rice Lake scales are recognized and fully supported by the system.

Both single or combined camera photos can be sent to the server - FMMOB-593

Photos taken by a fleet vehicle's cameras are sent to the server. Previously, photos from all cameras were combined and sent to the server as a single image.

As of this release, a new **Combine photos** checkbox is available in WasteApp's configuration.

Length after (sec) 20 30 Max

☒ Show video camera button

Photo camera

Cameras to use

☒ 1 ☒ 2 ☒ 3 ☒ 4 ☒ 5 ☒ 6 ☒ 7 ☒ 8

Selected cameras will be used when photos must be taken from all available cameras

☐ Combine photos

☐ Show photo camera button

Save Desktop

- When selected, all the taken photos are combined and sent to the server as a single image.
- When deselected, each photo, along with pertinent information, is sent to the server as a separate file.

New location icons are added to bins and linked with assignment notes - FMSUP-439

You can add notes of different priorities to assignments. Previously, it was difficult to determine just by looking at the map which locations had any attached assignment notes.

As of this release, new color-coded icons representing assignment notes are displayed on the map beside the locations that have attached notes. Icon colors correspond to the colors of the attached assignment notes, coded by priority.

Users can stop the assignment note pop-up from being displayed on the screen - FMSUP-321

Assignment notes are displayed in a separate pop-up automatically once the vehicle arrives at the corresponding location. Previously, all assignment notes were displayed in the pop-up by default.

As of this release, new options are available in WasteApp's configuration for controlling which notes are displayed in the pop-up. Select one of the following new radio buttons, appearing under the **Application** tab in the **Configuration** window, to configure the pop-up behavior:

- **None** - None of the notes will be displayed unless a note is manually selected.
- **All** - All notes will be displayed.
- **Marked Only** - Only notes that are marked with a special character will be displayed.

Configuration

Vehicle Video Rec RFID Navigation Trek Camera Network Operation Mode Log Assignment Processing

Security Inspection Application Communication VoIP Time Param Work Group Info Import/Export Backup

Application Configuration

Warn Msg Delay Ms: 5000 Running Mode: Real

Pop Up Assignment Notes

☐ None ☒ All ☐ Marked Only

**A note is considered as "marked" when a special character(+/!) is written in front of it*

Collection Material

☒ Enable

☒ Material Pop Up Is Active

☐ Touring Layout When Road Sensor Is Active

☐ Allow Minimize

☐ Allow Change Resolution

☒ Allow Exit

Mile values converted from kilometers are presented in user-friendly format - FMREP-184

When mile values are converted to kilometers, users receive an email with an RTA alert. Previously, the system did not round up the converted mile values and they were presented to users with multiple digits after the decimal point.

As of this release, all converted values are rounded up to 2 digits after the decimal point to make the experience of reading the email alerts more user-friendly.

FleetLink Reports

Truck status reports are generated using the latest daily data - FMENG-1646

You can generate and view a truck status report by going to the **Truck Status** from the **Vehicle Reports** page, selecting a division and clicking **Search**. Previously, the system would retrieve and display three months worth of data which significantly slowed down the response.

As of this release, the system retrieves only the latest daily data and generates the truck status report using only that data.

Improved search functionality eliminates delays on the Service Verification (Operations) page - FMENG 1921

You can generate and view reports on the **Service Verification (Operations)** page. You can do so by going selecting the **Service Verification (Operations)** option from the **Services** menu, entering your search criteria and clicking **Search**. Previously, the system was slow to respond and users had no ability to cancel the search in progress in order to adjust the search criteria and perform a different search.

As of this release, the system displays the progress of the current search and adds data to search results as the request is being processed. Users can also cancel a search in progress.

User interface is improved on the Service Verification (Operations) page - FMENG-1645, FMENG-1679, FMENG-1681

As of this release, the following elements have been added to the user interface on the **Service Verification (Operations)** page:

- A calendar picker in the **Date From** and **Date To** fields that allows you to select the inquiry dates from monthly calendars
- A **Year** drop-down list that allows you to pick one or more years
- A **Cart maintenance activities** checkbox that allows you to generate a report only for cart maintenance activities
- A search progress bar that displays the progress of your search
- A toggle **Search/Cancel** button that allows you to start a search or cancel a search in progress.

User interface is enhanced on the 1 Month Summary of Calls page - FMENG-1652, FMENG-1653

You can generate and review a report that contains the summary of data about all calls during any one month by selecting the **1 Month Summary of Calls** option from the **Activity Reports** menu, entering the search criteria and clicking **Search**.

As of this release, the following improvements have been made to the user interface on that page:

- The **Divisions** drop-down list allows you to select multiple divisions
- The **Line of Business** drop-down list allows you to select multiple lines of business
- The **Month** drop-down list displays 12 months and allows you to select one month only
- The **Year** drop-down list display the current year and the previous year and allows you to select one year only
- Clicking the **Search** button with no search criteria selected generates a **No data found!** message

- Clicking the **Search** button with search criteria selected generates a summary report that will be presented as follows:
 - A separate bar graph table for each line of business
 - Separate bars for each collection date
 - Color-coded bar sections for each type of call
 - Numbers of calls reflected on each color-coded section.
- A new **Zoom** toggle switch allows you to increase or decrease the size of the displayed graphs.

FleetLink Map

Users creating new customer cases are successfully redirected from FleetLink Map to FleetLink Route System's prepopulated pop-up - FMENG-1484

You can open a case for a customer from FleetLink Map. To do so, click the customer location on the **Bin Monitor** page and then click the **Open case** link that appears in the displayed pop-up. The system redirects you to the FleetLink Route System's **Add new Customer Case** pop-up. Previously, the system did not carry the selected customer data into the **Add new Customer Case** pop-up, and users had to enter the information manually.

As of this release, users are successfully redirected to the FleetLink Route System's **Add new Customer Case** pop-up with the following customer information prepopulated:

- Customer ID
- Contact Name
- Contact Phone
- Route
- Service date
- Address
- Container RFID
- Container Serial
- Driver

FleetMind API

Customer, Location and Subscription information is returned - FMINT-280

FleetMind API can return various customer-related information.

As of this release, **Customer**, **Location** and **Subscription** information is successfully returned and is matched to the FleetMind database information for users integrating third-party billing systems and using the `/v2/division/{divisionId}/customer/{billingCustomerId}/profile` API.

Software Problems Resolved

FleetLink Route System

Existing temporary routes are successfully deleted from the system on the following day - FMSUP-425

You can create temporary routes to supplement the existing schedule. A temporary route is meant to be in effect only on

the day it was created and to service the stops transferred from a different route. Temporary routes must be deleted by the system on the following day. Previously, the system would fail to delete temporary routes created on the previous day. As a result, temporary routes were still displayed on the list of routes on the following day and could contribute to service interruptions.

This software problem has been resolved. In the described context, the system successfully deletes temporary routes on the following day.

WorkZones option no longer appears in the Routes menu after it is disabled - FMRMS-1688

You can prevent the **WorkZones** option from appearing on the **Routes** menu by deselecting the **Display Work Zone information** checkbox on the **Application Settings** page. Previously, even when a user would deselect that checkbox, the **WorkZones** option still appeared in the **Routes** menu.

This software problem has been resolved. In the described context, when the **Display Work Zone information** checkbox on the **Application Settings** page is deselected, the **WorkZones** option no longer appears on the **Routes** menu.

Users can no longer input a location code that already exists in the system - FMPRO-164

You can edit customer location information by going to the **Edit Location** page and making the changes. Previously, the system would allow users to input a location code that already existed in the system for a different location. As a result, two or more different locations could share a location code which could result in erroneously scheduled and performed service.

This software problem has been resolved. In the described context, the system no longer allows duplicate location code to exist in the database.

User name and password character limits on the login screen have been increased for v.1.44.5 - FMSUP-449

Character limits are set for **Username** and **Password** fields on the **Login** screen. Previously, the system v.1.44.5 restricted the length of user names and passwords to 10 characters. As a result, when the system was scheduled to be upgraded to that version, existing user accounts that exceeded these limits would be denied access.

This software problem has been resolved. In the described context, the character limits for both the **Username** and **Password** fields have been increased to 30 characters in the system v.1.44.5.

Stops are deleted correctly from routes - FMSUP-411

You can delete stops from routes by going to the **Edit Route** page and displaying route stops on the **Recurring Associations** tab. To delete all stops, you can click the check mark in the header row to select them, and then click the green cross icon in the header row to delete them. Previously, when you followed the procedure to delete all stops, the system would delete only some of the selected stops and not others. As a result, inaccurate information about the route was presented to users.

This software problem has been resolved. In the described context, all the selected stops are successfully deleted from the route.

Transferred stops are successfully dispatched - FMSUP-369

You can transfer stops to another route by following the procedure for transferring stops described in the FleetLink Route System User Guide. Previously, if you selected the stops you wanted to transfer by drawing a rectangle around them on the map, not all transferred stops would be dispatched by the system. As a result, service interruptions could occur for customer locations that have been transferred in this way.

This software problem has been resolved. In the described context, the system successfully dispatches all the stops transferred by way of drawing a rectangle around them on the map.

The status of today's routes is correctly displayed on the list of routes - FMSUP-417

You can set the time when your route generator will run and the time your next day starts for the route generator on

the **Application Settings** page. Depending on your settings, the information displayed on today's route list is adjusted accordingly. Previously, the system would not adjust the dates and times for today's route list to match the settings used for route generator. As a result, the status of routes was displayed incorrectly on the today's route list.

This software problem has been resolved. In the described context, the system successfully synchronizes the today's route list information with the route generator's settings and displays today's routes statuses correctly.

FleetLink Mobile

The call list is updated in WasteApp after the changes made in FleetLink Route System - FMSUP-420

You can add, remove, or transfer stops to or from routes in FleetLink Route System. The changes you make are communicated across your FleetMind solution. Previously, the system would fail to update the list of calls in WasteApp to reflect the changes made in FleetLink Route System. As a result, drivers were not receiving the most up-to-date information about their routes which could lead to service interruptions.

This software problem has been resolved. In the described context, the list of calls is successfully updated in WasteApp after the changes made in FleetLink Route System.

FleetLink Reports




Gate crossing activities received from WasteApp are now displayed under the Activities tab - FMPRO-292

Drivers can record various activities in WasteApp. The information about recorded activities is communicated across your FleetMind solution. Previously, FleetLink Reports would fail to display the recorded gate crossing activities under the **Activities** tab on the **Driver Activities** page. As a result, driver productivity reports could be negatively affected.

This software problem has been resolved. In the described context, gate crossing activities are successfully displayed under the **Activities** tab on the **Driver Activities** page in FleetLink Reports.

Modifications made to disposal records are successfully saved - FMPRO-283

You can update a disposal record by clicking the edit icon beside the record of interest on the **Disposal Details** page.

Disposal Details				
Deployment_ACUA		-- All Dispatch Types --	Feb 2020	
Edit	Route Id	Facility Description	Ticket	Material
	11WE	MSW LANDFILL	222222	CARDBOARD ONLY
	G0311WE	RECYCLING	1234	WOOD
	MTL01DAY	MSW LANDFILL	1234	

Previously, the system would not allow to save the changes you made on the displayed **Modify Disposal Record** pop-up. As a result, users may have been presented with inaccurate or erroneous disposal information.

This software problem has been resolved. In the described context, the system allows users to save the changes made to disposal records on the **Modify Disposal Record** pop-up.

The connection status of fleet vehicles is displayed correctly on the Truck Status page - FMSUP-434

You can generate and view a report that contains data on all the division's fleet vehicles by selecting the **Truck Status** option from the **Vehicle Reports** menu, then selecting a **Division** of interest and clicking **View Report**. Previously, the system

erroneously displayed the connection status of listed vehicles as offline. As a result, users may have had difficulties in making related fleet management decisions.

This software problem has been resolved. In the described context, the system correctly displays the connection status of all the division's vehicles.

A report about recorded extras is successfully generated and displayed on the Extras page - FMENG-1649

You can generate and view a report that contains a list of the recorded extras by selecting the **Extras** option from the **Exceptions** menu, entering the search criteria and then clicking **Generate**. Previously, the system would fail to generate a report and display an error message. As a result, users were unable to review the extras information and take appropriate action.

This software problem has been resolved. In the described context, the extras report is successfully generated and displayed.

A report about recorded exceptions is successfully generated and displayed on the Driver Exceptions page - FMENG-1648

You can generate and review a report that contains a list of the recorded exceptions by selecting the **Driver Exceptions** option from the **Exceptions** menu, entering the search criteria and then clicking **Generate**. Previously, the system would take too long and then fail to generate a full report. As a result, users were unable to review the exceptions information and take appropriate action.

This software problem has been resolved. In the described context, the driver exceptions report is successfully generated and displayed.

FleetLink Safety Dashboard

All columns in the Driver Behavior table can now be sorted - FMREP-208

You can generate a report about various aspects of driver behavior by selecting the **Driver Behavior** option on the left-hand side panel, selecting the search criteria on the displayed **Driver Behavior** page and clicking **Generate**. Previously, the system would not allow users to sort the contents of the following columns in the ascending or descending order: **Harsh Braking**, **Speeding**, and **Acceleration**. As a result, users could not easily review the information in these columns to determine which drivers most or least frequently used these unsafe driving habits.

This software problem has been resolved. In the described context, the information displayed in all columns of the driver behavior report can be sorted in ascending or descending order.

FleetLink Map

Driver activities are now displayed on Route View, Route Activity and Vehicle Activity maps - FMPRO-291

You can review information about a route on maps accessed by selecting various menu items. Previously, the system would not display driver activities on maps that are accessed from the following menu options: **Route View** (under the **Fleet Status** menu), **Route Activity** and **Vehicle Activity** (under the **Replay** menu). As a result, users were unable to assess the route progress accurately.

This software problem has been resolved. In the described context, the driver activity information is displayed on the above mentioned maps.

Vehicle data is successfully retrieved and displayed - FMENG-1441

You can display vehicle data on the map by selecting the **Area Monitor** option from the **Fleet Overview** menu, selecting the search criteria and then clicking **Get Data**. Previously, the system would fail to retrieve the requested data. As a result, users were unable to access and review the requested information.

This software problem has been resolved. In the described context, the requested information is successfully retrieved and displayed on the map.

PWS

PWS.FMWindowsServices is successfully restarted after reboot - FMSUP-304, FMSUP-341

PWS.FMWindowsServices provides the means of interaction between FleetMind products. Previously, *PWS.FMWindowsServices* would fail to restart after the server or the system were restarted. As a result, users had no access to the latest information that would have been provided by the running web services.

This software problem has been resolved. In the described context, *PWS.FMWindowsServices* is automatically restarted after the server or the system is restarted.

Material name character limit is synchronized between user interface and database - FMSUP-268

Previously, the material name character limit was mismatched between the user interface and the database. As a result, scheduled routes would fail to appear in some FleetMind applications.

This software problem has been resolved. In the described context, the material name character limit in the database matches that in the user interface.

For more information about FleetMind products and features, please visit:
<http://community.safefleet.net>