

FLEETMIND Q4 2019

CUSTOMER RELEASE NOTES

This document contains information about new features, improvements and resolved issues in the FleetMind family of products.

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	1.43.0.1951
FleetLink Mobile	5.46.2.617
FleetLink Reports	2.26.1.183
FleetLink Safety Dashboard	1.8.0
FleetLink Map	4.21.0.131
FleetMind API	2.143.0.220
The time period covered by this document is October 1- December 31, 2019.	

NEW FEATURES

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

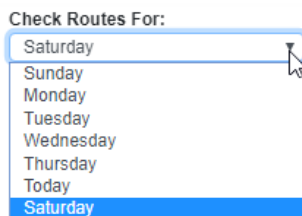
FleetLink Route System

FMRMS-1501 Selected routes can be dispatched immediately regardless of their predefined frequency or schedule

As of this release, a user who accesses today's route list can now immediately dispatch routes scheduled for any day other than today.

Steps for this procedure:

1. Open today's route list.
2. Select a day other than **Today** from the **Check Routes For:** drop-down list.

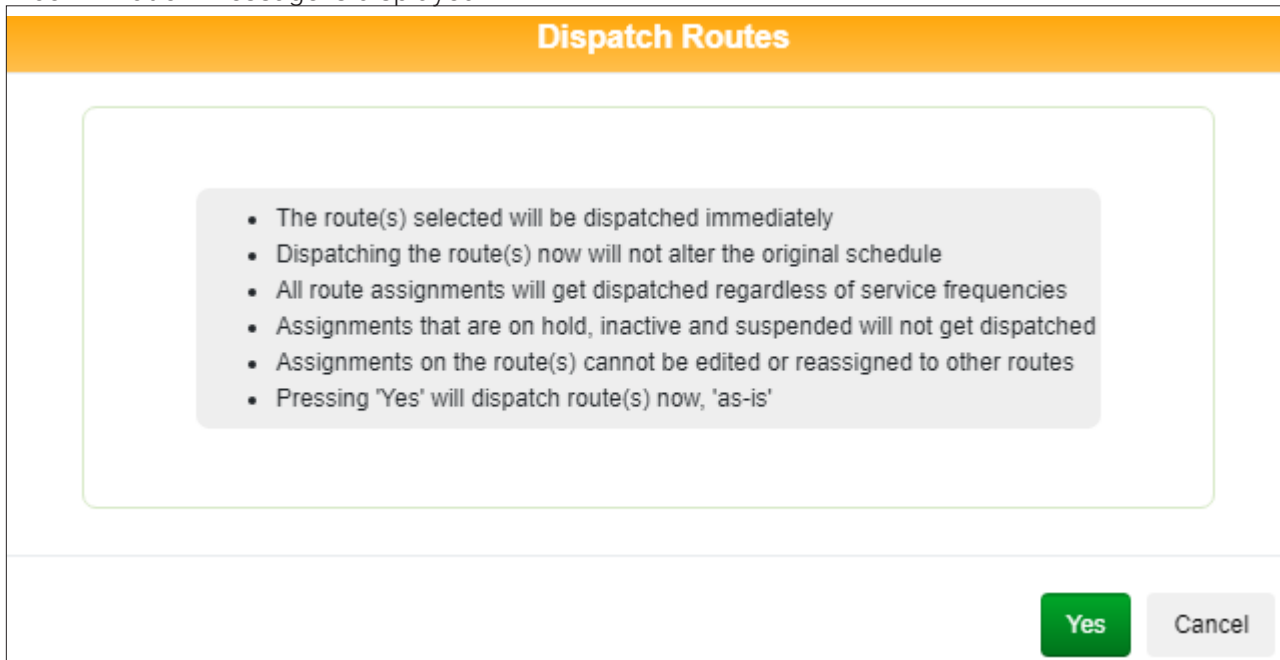


3. Select the routes you want to dispatch immediately from the list of routes.

- Click **Dispatch Now**.



- A confirmation message is displayed.




- Click **Yes** to confirm. The selected routes are dispatched immediately, regardless of the previously defined service frequency. No further changes are possible to a dispatched route.

FMRMS-1396 Optimized route reports can be downloaded

You can use the route optimization feature to re-arrange the sequence of assignments (or stops) in any given route to make it more efficient. Once the optimization is completed, a number of reports become available for your review.

As of this release, you can download the reports relating to the latest optimized route as a single archive ZIP file. To do so:

- Optimize the route of interest. For details, refer to the **Resequencing and Optimizing Routes** document.
- Once route optimization is completed, save the route, and then click the download icon  to download available reports. The system saves the archive ZIP file to the default download location on your hard drive.

FleetLink Mobile

FMMOB-491 Video camera button can be configured as shown or hidden

WasteApp provides an option to record event-based video. You can enable or disable this option by selecting or deselecting the **Enabled** check box in the **Event based video recording** panel of the **Video rec** tab on the settings screen. If this option is enabled, a video camera icon is displayed in the lower right corner of the WasteApp's main screen.

As of this release, you can show or hide the video camera button whether the event-based video recording is enabled or disabled. To do so:

1. Tap the settings icon on the main screen and then select the **Video rec** tab.
2. To show or hide the video camera button, select or deselect the **Show video camera button** check box at the bottom of the **Event based video recording** panel.

The screenshot shows the 'Configuration' screen with the 'Video Rec' tab selected. The 'Event based video recording' panel is highlighted with a red box. It contains the following settings:

- Enabled** ☒
- Automatically detected event**
 - Length before event (sec): 10 (15 Max)
 - Length after event (sec): 5 (30 Max)
- User initiated event**
 - Length before (sec): 10 (15 Max)
 - Length after (sec): 20 (30 Max)
- Show video camera button** ☒

Other panels visible include:

- General recording configuration**: Recording frame rate (12, 30 Max), Recording quality (D1), Recording cameras (1-8 checkboxes).
- Surveillance recording**: Enabled ☒ Enables continuous recording from selected cameras.
- Photo camera**: Cameras to use (1-8 checkboxes), Show photo camera button ☒.

The bottom navigation bar includes Back, Save, and Desktop icons.

FleetLink Reports

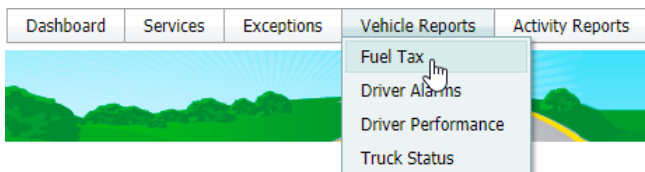
FMREP-110, FMREP-109, FMREP-106 New Fuel Tax Report is available for viewing and download

As of this release you can generate, view, and export a Fuel Tax Report that helps understand fuel consumption patterns for all vehicles in your fleet. The maximum date range available for this report is 90 days. The following data is available in the generated report:

- Date
- Vehicle
- Division
- Jurisdiction
- Odometer Start
- Odometer End
- Total Distance
- MPG (miles per gallon)
- GPH (gallons per hour)
- Total Fuel Used
- Off-Road Total Distance
- Off-Road Total Fuel
- PTO ON Total Time
- PTO ON Total Fuel Used

To access and download the report:

1. Go to the home page, and then select **Fuel Tax** from the **Vehicle Reports** menu.



2. Select the start and end dates and the division(s) from the corresponding fields, then click **View Report**. The report is generated and displayed in the report panel.

Fuel Tax Report

Start Date	2019-08-21	End Date	2019-11-18	Divisions	(2) Selected	View Report	Export to CSV						
Date	Vehicle	Division	Jurisdiction	Odometer Start (Mi)	Odometer End (Mi)	Total Distance (Mi)	MPG (Mi/Gal)	GPH (Gal/Hr)	Total Fuel Used (Gal)	Off-Road Total Distance (Mi)	Off-Road Total Fuel (Gal)	PTO ON Total Time (Min)	PTO ON Total Fuel Used (Gal)
2019-11-18	ER20	Eureka	MIN	35,204.406	35,237.960	33.554	7.63	2.84	4.40	9.94	1.30	10.17	0.48
2019-11-17	ER20	Eureka	MIN	35,163.396	35,204.406	41.010	6.41	5.53	6.38	5.59	0.87	11.00	1.01
2019-11-16	ER20	Eureka	MIN	35,123.007	35,162.153	39.146	9.35	6.07	4.18	13.05	1.39	9.50	0.96
2019-11-15	ER20	Eureka	MIN	35,123.007	35,123.007	0.000	0.00	0.00	0.00	0.00	0.00	0.33	0.00
2019-11-15	GRAF2	Graffiti	QC	9,583,504.828	9,583,544.596	39.768	0.00	6,152.83	9,846.24	0.00	0.00	0.00	0.00
2019-11-13	ER20	Eureka	MIN	3,479.679	3,510.747	31.069	7.06	11.94	4.40	0.00	0.00	3.00	0.60
2019-11-13	ER25	Eureka	QC	3,106.856	3,119.283	12.427	5.65	1.16	2.20	0.00	0.00	5.67	0.11
2019-11-13	GF-1155	Eureka	QC	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2019-11-13	GRAF2	Graffiti	QC	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2019-11-13	RL1190	Eureka	QC	3,119.283	3,119.283	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2019-11-13	RL1190	Eureka	MIN	20,505.249	20,530.104	24.855	4.18	4.95	5.94	0.00	0.00	60.00	4.95
						237,364	2.58%	364.00%	9,878.14	41.63	7.26	109.67	8.55

3. To download the report, click the **Export to CSV** button. The report is saved in the default download location on your hard drive.

FMREP-165 Dispatching Log report is available to customers with integrated route management systems

Third-party route management systems can be integrated with FleetMind. You can generate reports that provide information about various activities by selecting them from the **Activity Reports** menu.

As of this release a new Dispatching Log report is available. The report allows you to track data that have been transferred from the third-party route management system to FleetMind servers.

To generate the Dispatching Log report:

1. Go to the FleetLink Reports home page and select **Dispatching Log** from the **Activity Reports** menu.
2. Enter the date for which you want to generate the report in the **Log Date** field.
3. Click **View Report**. The information for the selected date is displayed in the report panel.
4. Optionally, download the report as a CSV file by clicking **Export**. The report is saved in the default download location on your hard drive.

FleetLink Safety Dashboard

FMENG-845 Additional information and a downloadable report are available on the Driver Scorecard screen

You can review the driver performance by navigating to the **Driver Scorecard** screen.

As of this release, additional information is available for review on the **Driver Scorecard** screen:

- Driver name and email address
- A number of safety-related alarms

Additionally, a report can be generated and exported as a CSV file.

IMPROVEMENTS

This section describes improvements of existing functionalities intended to optimize customer experience.

FleetLink Route System

FMRMS-1444 Optimized route is displayed as a path outlining street sections

You can use the route optimization feature to re-arrange the sequence of assignments (or stops) in any given route to make it more efficient. Previously, the optimized route path would be displayed as straight lines, connecting stops.

As of this release, when you optimize a route using the **By route attributes** mode, the optimized route path outlines street sections between stops.



FMRMS-1492 Route paths can be edited directly from the map

You can edit route paths within geozones. Previously, you had to select a desired part of the route path from the **Route Paths** drop-down list in order to edit it.

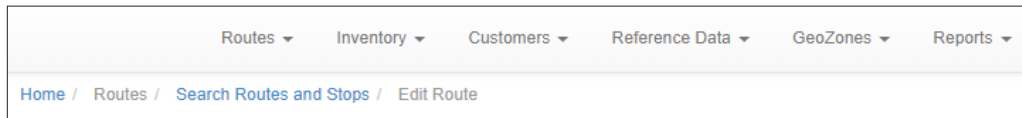
As of this release, you have the ability to select the desired section of the route path directly from the map in order to edit it.

To do so:

1. Display the geozone that contains the route path you want to edit.
2. Open the **Route Path** panel.
3. Make sure the **Edit** button is set to **Yes**.
4. Hover over the desired section of the route path on the map, and then click it to edit.

FMRMS-1443, FMRMS-1442, FMRMS-1466 Breadcrumb navigation menu is added

As of this release, a new breadcrumbs navigation menu has been added to all pages of the application with breadcrumbs linking to the appropriate pages.



FMRMS-837 Customers with integrated billing systems can no longer modify account data in FleetLink Route System

Third-party billing software can be integrated with FleetLink Route System. Previously, information about customers' accounts could be modified in both the third-party billing software and the FleetLink Route System.

As of this release, users of FleetLink Route System are restricted to being able to modify only operational customer data, but not the account data.

FleetLink Mobile

FMMOB-490 Notes about failed inspection items are displayed in the inspection summary report

You can complete pre-trip and post-trip inspection reports and enter your notes about each inspection item, as well as general notes about the inspection. When the inspection report is saved, its contents can be reviewed by other users.

As of this release, when you mark an item as failed and enter notes about this item, these notes, along with the general notes about the inspection, are displayed in the generated inspection summary report viewable by other users.

FMMOB-522 RFID icon is no longer displayed on devices not equipped with RFID scanners

Your mobile unit may or may not be equipped with an RFID scanner. Previously, the RFID icon was displayed on the WasteApp's main screen on all devices, regardless of whether they had an RFID scanner.

As of this release, the RFID icon is displayed on the main screen only on portable devices equipped with an RFID scanner.

FMSUP-352 WasteApp configuration UI improved

WasteApp provides an opportunity to configure various settings.

As of this release, the new **Config** tab has been added to the **Vehicle Status** screen. It replaces the following components that have been removed from the main screen:

- The **Settings** button on the status bar
- The **Config** button on the login panel.

The configuration form that was previously accessible by tapping the removed components listed above now appears under the new **Config** tab on the **Vehicle Status** screen.

FMMOB-530 GPS module on GD4010 devices tracks dates and times correctly after GPS reset

GPS feature of WasteApp keeps track of dates and times for all events that happen while the app is in use. On older devices, such as GD4010, the GPS module supported a limited number of weeks that could be tracked. Once the unit reached this limit, it would reset. As a result, the consequent dates and times were tracked incorrectly.

As of this release, the GPS modules on GD4010 devices now track dates and times correctly after the reset.

FMMOB-521 WasteApp disables a process that consumed excessive CPU capacity

WasteApp runs on Windows operating system. Previously, a process called **PresentationFontCach** that runs on mobile units consumed excessive CPU capacity. As a result, WasteApp would become very slow or non-responsive.

As of this release, WasteApp automatically disables this process and frees up the CPU capacity, restoring the processing speed.

FMSUP-352 RFID scanner can be activated from main screen on Panasonic tablets

Panasonic tablets running WasteApp may be equipped with RFID scanners. Previously, the only way to activate the scanner was by pressing the physical button on the tablet.

As of this release, you can activate the RFID scanner from the WasteApp's main screen on Panasonic tablets by tapping the new RFID button in the upper right corner of the screen.

FMMOB-485, FMMOB-484, FMMOB-469 Route path can be configured to always be displayed, and optimized path is displayed when available

WasteApp provides an opportunity to configure various settings.

As of this release, you can configure the display of route path directly from your mobile unit by going to WasteApp settings and tapping the **Navigation** tab.

- To always show route path, make sure the **Always Show** check box is selected (this is a default setting).
- To stop displaying route path, deselect the **Always Show** check box.

If the route path is configured to be displayed by default, and a route is selected:

- The following changes are reflected on the screen:
 - Route path is displayed.
 - The **PATH** button is highlighted.
- The following actions are available:
 - Tap the **PATH** button to hide the displayed route path and bring the button into a released state.
 - Tap the **PATH** button to show the route path and bring the button into a depressed state.

Additionally, an optimized route path is displayed whenever available.

NOTE: For workzone routes, route path will always be displayed, regardless of the **Always Show** check box's status.

FMMOB-368 Photo attached to an exception includes activity code

You can save photos along with exceptions records for situations where a customer location cannot be serviced.

As of this release, the annotation stamp that the system adds to saved photos includes the activity code entered by the driver for each exception. To further improve readability of the annotation stamp, the words **Lat/Lon** have been removed.

FMMOB-495 Touring view interface has been optimized

While in touring view, a map panel showing the route progress is displayed on the screen of the mobile unit. Additionally, some buttons are displayed as well.

As of this release, the following improvements have been made to the described interface:

- The **RESUME** button has been moved to the upper left corner of the map panel.
- The navigation instructions box has been added at the bottom of the map panel, above the **ROUTE** and **PATH** buttons.

FMMOB-496 A photo of the new artist's tag is optional and photos can be discarded

You can create a new graffiti removal assignment in WasteApp on the spot. Previously, when adding a new artist you were required to take a photo of the artist's tag.

As of this release, you are no longer required to take a photo of the artist's tag. Additionally, you can now discard the photos that have been taken by tapping the new **Discard** button.

FleetLink Reports

FMREP-164 More details are displayed in the assignment pop-up on the Fleet Trails screen

You can review assignment details displayed in the pop-up boxes by clicking each assignment on one of the following screens:

- **Bin Monitor**
- **Route View**
- **Area Monitor**
- **Fleet Trails**

Previously, the information available in pop-ups on the **Fleet Trails** screen was not as detailed as on other screens.

As of this release, the same assignment details can now be viewed by clicking an assignment displayed in the **Route** view of the **Fleet Trails** screen, accessible from the **Trip Monitor** menu.

FMSUP-372 A date range and visible columns can be selected on the Driver Score Card

You can view a report that reflects the number of points a driver has scored for various evaluation criteria. This report can be accessed by going to home page, and selecting **Driver Score Card** from the **Activity Reports** menu on the left-hand side panel.

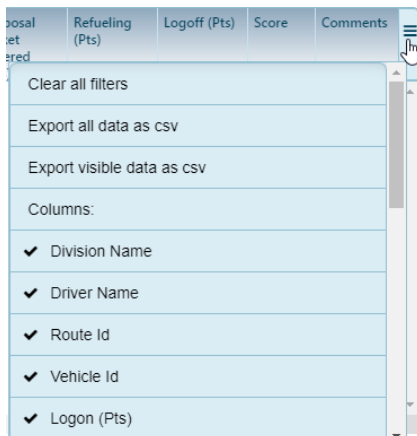
As of this release, the following improvements have been made to the **Driver Score Card** report screen:

- You can select a date range for the report.

Driver Score Card

Start Date End Date

- You can show or hide the columns on the displayed report.



FMREP-167 Disposal weight for roll-off assignments is displayed on service verification report

You can verify which services have been dispatched for a customer by going to the home page and selecting the **Service Verification** option from the **Services** menu. You can generate a report by entering search criteria and making selections from the available drop-down lists. For roll-off assignments the disposal weight information found in the **Weight** column of the generated report serves as a disposal ticket. Previously, the system would fail to display the disposal weight in the **Weight** column of the generated report. As a result, you could not gather the disposal ticket information for roll-off assignments from the generated report.

As of this release, the systems displays the disposal weight information in the **Weight (kg)** column for roll-off assignments in the generated service verification reports.

FleetMind API

FMREP-162 Timestamp and date are returned for a dispatched route

FleetMind API can return information about routes and dispatched assignments. Previously, the only information returned about the time of the dispatch was the date.

As of this release, the following information is returned:

- "RouteDate"** parameter contains the date for which the route is scheduled.
- "DispatchTime"** parameter contains the timestamp showing when the assignment was dispatched.

SOFTWARE PROBLEMS RESOLVED

This section describes existing issues that have been fixed, including details and resolution of each problem.

FleetLink Route System

FMPRO-87 Route associations for duplicated assignments are displayed correctly

You can duplicate assignments for customers subscribed to a service that runs more than once a week. Previously, when you duplicated an assignment that affected stops on several different routes, the system would fail to display information about all the affected routes in the **Route** column of the **Container Route Info** tab on the **Edit Location** screen. As a result, a user viewing this screen would not get accurate information about route associations.

This software problem has been resolved. In the described context, the route associations for duplicated assignments are displayed correctly on the **Edit Location** screen.

FMSUP-367 New subscriptions with customer-owned containers are activated by default

You can subscribe customers to services by navigating to the **Edit Location** screen, and then clicking **Subscribe > New Service**. Previously, if you selected the **Use Customer's Own Container** in the **Container Selection** panel, the **Active** check box in the **Subscription Type** panel was not selected by default. As a result, if you forgot to select the **Active** check box, the new subscription would not get activated.

This software problem has been resolved. In the described context, the **Active** check box is selected by default and new subscription is activated.

FMSUP-360 Case History in RMS displays date and time

You can review customer case history by going to the home page and selecting **Customer Cases** from the **Customers** menu. When you enter customer information and click **Search**, history of this customer's case is displayed in the **Case History** section. Previously, the system failed to display time in the **Date/Time** column of this section.

This software problem has been resolved. In the described context, both date and time are now displayed in the **Date/Time** column of the **Case History** section.

FMPRO-163 System generates error message when duplicate RFID and serial numbers are present in the external file

You can upload your container inventory information from an external file by going to home page and selecting **Import Containers** from the **Inventory** menu. Once you select the file to upload and click the **Validate and Import** button, the system analyzes the file contents and attempts to validate the information before importing it. Previously, the system would allow importing duplicate information about container RFID and serial numbers. As a result, containers with duplicate RFID and serial numbers would exist in the customer's container inventory.

This software problem has been resolved. In the described context, the system successfully identifies duplicate RFID and serial numbers in the file and displays an error message, stating that the file contains invalid data.

FMPRO-231 Uploaded customer location is no longer duplicated for the same address with multiple containers

You can upload data about routes and stops from an external file. Previously, if a customer location had more than one container at the same address and no location code was provided in the external file, the system would duplicate the customer location when uploading data from that file. As a result, multiple customer locations would exist in the system for the same address.

This software problem has been resolved. In the described context, the system no longer duplicates customer location for the same address.

FMSUP-314 Daily routes can be dispatched by clicking Dispatch Now

You can manually dispatch selected routes with daily frequency in the morning by clicking the **Dispatch Now** button. Previously, the system would fail to update the status of routes that have been completed on the day before from **Completed** to **Ready to dispatch**. As a result, the system would fail to dispatch these routes when you tried to dispatch them on the next day by clicking **Dispatch Now**.

This software problem has been resolved. In the described context, all selected routes are successfully dispatched when you click **Dispatch Now**.

FMSUP-355 Temporary truck assignments are displayed on route list

You can assign a temporary truck for selected dates to a route on your route list. Previously, after you completed this task, the system would continue displaying the originally assigned truck in the **Truck** column of the route list. As a result, the temporary truck assignment would not be communicated to the users viewing the route list.

This software problem has been resolved. In the described context, the system correctly displays the temporary truck number in the **Truck** column of the route list.

FMSUP-332 Service subscription information is uploaded and displayed correctly

You can upload data about routes and stops from an external file. Previously, the system would fail to upload the information about service subscriptions contained in the file. As a result, the uploaded data displayed on the **Edit Location** screen was missing service subscription information, and the customer had to be subscribed manually.

This software problem has been resolved. In the described context, the system uploads information on service subscriptions originating from external file and displays it on the **Edit Location** screen.

FMRMS-1491 Geozone editor behavior is corrected

You can edit geozones by displaying a desired geozone in the geozone editor and then adjusting the geozone boundaries. Previously, the behavior of geozone editor was inconsistent:

1. The pin color legend did not correspond to the pin colors appearing on the map.
2. When pins were repositioned on the map, the geozone boundaries would not adjust.

As a result, the editing experience was confusing and geozone boundaries could not be adjusted.

This software problem has been resolved. In the described context, the geozone editor now functions correctly and geozones can be successfully edited.

FMPRO-190 Service frequency is included in exported reference data

You can export reference data from FleetLink Route System by going to the home page and then selecting **Import/Export Reference Data** from the **Reference Data** menu. The data is exported as CSV files inside the archive ZIP file. Previously, the system would fail to include the service frequency data in the exported **Service** CSV file. As a result, no data appeared in the **Service Rate Frequency** column in the exported CSV file.

This software problem has been resolved. In the described context, the exported **Service** CSV file now contains the data on service frequency in the **Service Rate Frequency** column.

FMPRO-44 Newly created geozones can be modified or deleted and are correctly displayed on the map

You can create and edit generic and route geozones in FleetLink Route Manager. Previously, the system would display an error message when a user tried to modify or delete the newly created geozones. Additionally, newly created route geozones would have the same system IDs as newly created generic geozones. As a result, it was impossible for users to modify or delete new geozones, and the newly created geozones would display on the map incorrectly.

This software problem has been resolved. In the described context, users are able to modify and delete the newly created geozones. Additionally, the system no longer duplicates system IDs for newly created route geozones and displays them on the map correctly.

FMSUP-385 List of geozones is loading successfully

You can view the list of geozones by going to the home page and selecting **List GeoZones** from the **GeoZones** menu. Previously, the system was not be able to get past the loader page. As a result, the list of geozones was inaccessible.

This software problem has been resolved. In the described context, the list of geozones is successfully displayed.

FMENG-1031 Configured date format is displayed correctly

You can configure the date format for all customer data in the system. Previously, for some customers, a configured date format was misinterpreted by the system for created service subscriptions. As a result, the date format was displayed incorrectly on the related screens.

This software problem has been resolved. In the described context, the configured date format is displayed correctly.

FleetLink Mobile

FMPRO-242 Assignment list is sorted at expected speed

WasteApp automatically sorts assignments on the assignment list. Previously, due to performance issues, the system consumed excessive CPU capacity when sorting the list. As a result, the sorting operation was slow which in turn slowed down the driver.

This software problem has been resolved. In the described context, the sorting operation is performed at the expected speed.

FMMOB-553 Lift-arm truck assignments are confirmed correctly

WasteApp can automatically confirm assignments. On lift-arm trucks, automatic confirmation is triggered when the lift-arm goes down after the bin is emptied. Previously, the confirmation message displayed on the screen failed to disappear after some lifts even when the lift-arm was already down. As a result, as the driver moved on to the next assignment, the system would keep the confirmation message open on the screen, and then confirm the wrong assignment once the lift-arm was down again.

This software problem has been resolved. In the described context, the confirmation message disappears after each lift and confirms the correct assignment each time.

FMPRO-247, FMPRO-497 Assignment list panel is automatically displayed when a lift event is detected

A lift event can be communicated to the system in one of the following ways:

- By the driver
- By the lift sensor
- By the system's Stop-By logic

Previously, the system failed to display the assignment list panel when a lift event has been detected. As a result, the drivers had to access the list manually.

This software problem has been resolved. In the described context, the system successfully switches to the assignment list panel once the lift event has been detected.

FMSUP-340 Container sizes are logged into the system correctly

When auditing a container at service location, the user can enter container dimensions into the dedicated fields.

Previously, the system failed to recognize and accept the information on sizes of serviced containers. As a result, billing issues arose for some customers.

This software problem has been resolved. In the described context, the system now recognizes and accepts the container sizes.

FMMOB-533 Street sweeper vehicle progress is displayed correctly

You can view the street sweeper vehicle progress on the map displayed on your mobile unit. The portion of the route that has been completed is reflected on the map as a green line outlining parts of the streets that have been serviced. Previously, the system displayed route progress incorrectly. As a result, the driver would see an inaccurate visual representation of the route progress.

This software problem has been resolved. In the described context, the system now correctly outlines the portions of the route that have been completed.

FMSUP-399 Roll-off disposal assignments are confirmed correctly

WasteApp supports roll-off workflows. Previously, after a roll-off disposal, the system would put that assignment on hold instead of confirming it before displaying the next assignment.

This software problem has been resolved. In the described context, the system correctly confirms the roll-off disposal before the next assignment is displayed.

FleetLink Reports

FMPRO-241 Available line of business options are corrected on the Driver Alarms page

You can view a report about incident events that triggered a driver alarm by going to home page and selecting **Driver Alarms** from the **Vehicle Reports** menu. You can generate a report by entering search criteria and making selections from the available drop-down lists. Previously, the information was missing or displayed incorrectly in the **Line of Business** drop-down list. As a result, you could not reliably use this criterion to include the line of business information in the generated report.

This software problem has been resolved. In the described context, the **Line of Business** drop-down list now displays accurate information.

FMPRO-147 Downloaded driver activities CVS file name includes correct date range

You can view driver activities for a specified time range. You can then download a CSV file that contains data about driver activities for the specified date range. Previously, the system would include an incorrect date range in the file name of the exported CSV file containing data about driver activities.

This software problem has been resolved. The name of the exported CSV file containing data about driver activities now includes the correct specified date range.

FMSUP-363 Service verification report can be downloaded

You can view a service verification report by going to the home page and then selecting the **Service Verification** option from the **Services** menu. Previously, the system would generate an error when you tried to download the report by clicking the **Export to CSV** button. As a result it was impossible to download the report.

This software problem has been resolved. The system successfully downloads the service verification report as a CSV file.

FMSUP-359 Unconfirmed assignments are converted from pending to missed at the end of day

You can view daily work summary reports by going to home page and selecting **Daily Work Summary** from the **Activity Reports** menu. When you generate a per route work summary report, the displayed graph reflects how many stops were missed along the route. Previously, when the route was already completed, the system would fail to convert the pending unconfirmed assignments into missed ones at the end of the day. As a result, the daily work summary graph would display inaccurate information.

This software problem has been resolved. In the described context, the system converts the pending unconfirmed assignments into missed ones when the route has been completed.

FMPRO-161 Available select dispatch type(s) options are corrected on the Service Verification (Operations) page

You can verify which services have been dispatched for a customer by going to the home page and selecting the **Service Verification (Operations)** option from the **Services** menu. You can generate a report by entering search criteria and making selections from the available drop-down lists. Previously, several options were missing from the **Select Dispatch Type(s)** drop-down list. As a result, you could not reliably use this criterion to include the type of dispatched services in the generated report.

This software problem has been resolved. In the described context, the **Select Dispatch Type(s)** drop-down list now displays accurate information.

FleetLink Safety Dashboard/FleetLink Map

FMREP-153 Channel 2 videos on Trek-674 units are successfully decoded and available for review

You can view videos recorded by the vehicle DVR in FleetLink Map and in FleetLink Safety Dashboard. Previously, the system failed to decode and play Channel 2 videos recorded by Trek-674 units. As a result, users who wanted to review these videos, have been unable to do so.

This software problem has been resolved. In the described context, the system successfully decodes Channel 2 videos, and users are able to review them.

FleetMind API

FMINT-258 Vehicle positions are returned correctly

FleetMind API can return information about various attributes of fleet vehicles. Previously, the **/v2/division/{divisionID}/vehicle/position** API was returning information similar to that returned by the **/v2/division/{divisionID}/vehicle/breadcrumbs** API. As a result, incorrect information has been passed down to the systems communicating with FleetMind servers.

This software problem has been resolved. In the described context, the **/v2/division/{divisionID}/vehicle/position** API returns the information on vehicle positions only.

FMPRO-172 Subscription ID is no longer duplicated for different customers

You can create service subscriptions for customers. Previously, the system allowed the use of the same **SubscriptionID** parameter for multiple customers. As a result, duplicate **SubscriptionID** parameters were allowed to exist in the system.

This software problem has been resolved. In the described context, the system no longer allows duplication of the **SubscriptionID** parameter.

FMREP-163 Reported extra calls information is returned successfully

FleetMind API can communicate various information about assignments. Previously, the system would not return information about extra calls reported by drivers. As a result, inaccurate information about assignments was communicated across systems.

This software problem has been resolved. In the described context, the reported information about extra calls is successfully returned.

FMINT-155 Redundant customer billing attributes have been removed

FleetMind API can communicate various billing information about customers. Previously, the billing APIs would include the following attributes:

- **"startDate"**
- **"endDate"**
- **"timeStamp"**

These attributes were unnecessary as they were not used by customers.

This software problem has been resolved. In the described context, the redundant attributes have been removed and are no longer in use.

FMINT-150 An error message is generated when invalid data strings are entered

FleetMind API generates error messages when it encounters invalid data strings. Previously, when an invalid phone number was entered, the system would reject it but would fail to generate an error message or would generate a broad error message that contained no details. As a result, it was difficult or impossible to find and correct invalid data strings.

This software problem has been resolved. In the described context, the system generates a detailed error message when it encounters an invalid phone number string.

FMREP-161 Assignment information is returned according to the requested date range

FleetMind API can communicate various information about assignments. Previously, information about the same assignment would be returned for different requested time periods. As a result, inaccurate information about assignments was communicated.

This software problem has been resolved. In the described context, assignment information is returned according to the requested date range.

FleetLink Route System/FleetMind API

FMINT-255 Customer location is geocoded and lat/lon coordinates are displayed

When a new customer location is created, the system automatically generates the latitude and longitude coordinates for the customer location. Previously, the system would fail to geocode the new customer locations and generate the coordinates. As a result, the latitude and longitude coordinates were not automatically filled in both in FleetLink Route System **Edit Location** screen and in the FleetMind API's customer location parameters.

This software problem has been resolved. In the described context, customer location is successfully geocoded and the latitude/longitude coordinates are automatically filled in.

Please contact FleetMind if you need more information.

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