



RELEASE NOTES

Descartes® Route Planner™

17.05

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Descartes® Route Planner™

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Introduction


Descartes® is pleased to announce the general availability of the Descartes Route Planner™ 17.05 release. Provided in the release notes below is a brief description of each enhancement and bug fix.


Document Conventions

This document uses the following conventions:

- Names of windows, frames, dialogs, menus, list boxes, and lists begin with uppercase and are bolded. (Tools menu, Save button)
- Key combinations that you press appear in mixed case. If the keys are joined by a plus sign (+), press and hold the first key simultaneously with the remaining keys (for example, CTRL+ALT+DEL).
- Text that you type appears in `Courier New` font. (Enter `USERID` in the login field.)
- Cross-references to other documents, or to sections within the current document, appear in underlined italics. (See *Saving a File* for details.)
- *Italics* are used for emphasis throughout this document.

 **Note**— Information important to a particular task or function is introduced with the note format and icon.

 **Tip**— Information that may make completing a task easier, but isn't essential to the task, is introduced with the tip format and icon.

 **Warning**— **This warning format indicates information that you need to pay particular attention to. Ignoring information presented as a warning could lead to damage and unexpected results. Disregarding information presented as a warning may result in damage to your software or data.**

New Features and Enhancements

Descartes Route Planner 17.05 includes the following new features and enhancements.

17.05

New User Interface Application Added for Descartes Route Planner Dashboard for Google Inc.'s Chrome™ Browser Only – 397439

This version of Descartes Route Planner is enhanced with a new version of the Planning and Dispatching Lite Dashboard that can only be used in Google Inc.'s Chrome™ browser. This new version of the Lite Dashboard is released in a Beta mode and will allow users to experience faster rendering speeds. Specifically, the map window of the Lite Dashboard is much faster (up to five times faster) compared to the traditional Descartes Route Planner Dashboard supported only by Microsoft Corporation's Internet Explorer®. It also has limited menu options for both the main menu and context menus. Users can use exactly the same credentials used in Descartes Route Planner to access this new version of the Lite Dashboard.

Users can access this new version of the Lite Dashboard by using Google Chrome™ only and navigating to the following URL: <http://servername/rp>. The minimum required version is Google Chrome™ 58.0.3029.110 (64-bit).

A new installer option has been created for the Lite Dashboard Version.

The new Lite Dashboard User Interface will eventually (possibly version 17.09) merge with our current Descartes Route Planner Dashboard and will be accessible using either Internet Explorer® or Google Chrome™.

License Check: System Enhanced to Allow 30-second Time Different between Servers – 407105

The Descartes Route Planner license control requires system clocks in all Descartes Route Planner servers sharing the same DCF database synced. When the clocks are out of sync even by just a few seconds, the license control could be halted by the error "system time is older than the license timestamps", keeping users from conducting critical operations such as optimization. To relax the time sync requirement, Descartes Route Planner now allows maximum time difference of 30 seconds between servers.

LNOSLicenseTool Enhanced to Generate License Status Reports – 403434

The LNOSLicenseTool has been enhanced to generate a periodic license status report in a user-configured log folder via Microsoft Corporation's Windows® Task Scheduler.

Clear All Actual Data Setting Added to Assist with Schedule Modeling – 400947

The **Clear All Actual Data** checkbox has been added to the **Copy Schedule** window to allow users to copy execution schedules without actual data (reported latitude and longitude values) for schedule modeling purposes. When users copy a schedule with this setting enabled, the system will clear all actual data in the resulting schedule.

Database Blocking Issues – 400170

To resolve database blocking issues, NOLOCK hints have been added to the relevant SQL queries.

Lock Next Trip on Recharge Complete Schedule Setting Added – 399985

When Descartes Route Planner is processing multiple trips with a mobile device, users were able to make a recharge static as intended, but if a suggestion were made, RMPI could suggest a slot prior to the static recharge at the end of the trip, thus violating the current trip. In some cases, however, it is preferable to stop the active trip from being modified/swapped to a different route. To enable this behavior, a new setting, **Lock Next Trip on Recharge Complete**, has been added to the **New/Edit Schedule** and **New/Edit Schedule Template** pages. This setting has the following options:

- **0:** disabled (default)
- **1:** set route position as trip number
- **2:** set route position as stop number

The screenshot shows a settings panel with several 'Lock Generated Time Window' fields. The 'Lock Next Trip On Recharge Complete' dropdown is highlighted with a red box and is open, displaying three options: 'None' (selected), 'Set Route Position As Trip Number', and 'Set Route Position As Stop Number'. Below the dropdown, the 'Reschedule Orders' link is visible.

When this setting is enabled, the system is designed to lock all other stops of the next trip, setting both the route position and preferred route.

When combined with the Resolved Issues *[RMPI Does Not Correctly Project Recharges with Actual Measures – 329933](#)* and *[Recharge Stated with Actual Measure Not Sent to RMPI – 345013](#)* (detailed in this document), this setting can be used to allow same-day execution of single-ended orders requiring the route to return to the depot prior to scheduling new work. To ensure this behavior occurs on the first trip, the route must be marked as "Start Empty", allowing a status at the initial recharge to limit the capacity of the remainder of the trip. This feature is useful for customers using reloads that do not work with a single commodity (e.g. Gas).

- ➡ **Note—** The **Lock Next Trip on Recharge Complete** setting only applies to pickups or deliveries. It will not be applied to double-ended or complex orders.
- ➡ **Note—** This configuration is only utilized if **Use Route Position** is configured to "1" or "2".

License Control Enhanced to Allow Configuration of Grace Period – 399372

The license control check now has a configurable grace period in the XML when creating the license file.

```
<?xml version="1.0" encoding="utf-8"?>
<LicenseInfo ProductName="RoutePlanner" OrgId="999999944" DateIssued="2016-
09-23T00:00:00" DateExpired="2020-05-27T00:00:00">
  <Criteria>
    <Criterion Name="dcfdbname" Value="DCF" />
    <Criterion Name="dcfdbhost" Value="L00915" />
    <Criterion Name="maxnoroutes" Value="99999" />
    <Criterion Name="GRACEPERIOD" Value="60" />
  </Criteria>
  <Seats>
    <SeatInfo MachineId="">
      <Modules>
```

When specified in the XML, the system is designed to use the value set in the GRACEPERIOD attribute. Otherwise, the grace period will default to 30 days. This value is compatible with existing license data formats and will default to 30 days.

Route Parameters Selection Query Modified to Improve Performance of RMPI Calls – 399298

To help prevent an issue where the route parameters selection query was executed so frequently that it blocked other RMPI calls, the route parameters selection query has been optimized.

POD Sheet Window Enhanced to Return Warning When Incorrect OrderKey Submitted – 399129

Previously, when users entered the OrderKey of an unassigned order or a non-existent order in the **POD Sheet** window and clicked **Go**, the system returned a blank POD sheet with an internal error message displayed.

The system is now designed to return a warning when the OrderKey of an unassigned order or a non-existent order is submitted in the **POD Sheet** window: "An Internal Error has occurred. The process could not be completed. Function L NOS Reservations.DocOrder.GetDocOrderForPOD. Failed to get order For POD. Order doesn't exist."

AsyncUpdateStatus System Value Functionality Enhanced – 398140

The functionality of the AsyncUpdateStatus has been enhanced as follows:

- The performance of the AsyncUpdateStatus system value has been enhanced.
- If autopublish is enabled (via the **Application Configuration** and **System Values**), once all status messages for a given route have been processed, a route update is designed to be sent to Descartes wGLN™ automatically if the configuration thresholds have been exceeded. In asynchronous mode, a route will be autopublished regardless of the system value setting as long as the publish criteria is met.

🔹 **Note**— To use this feature, autopublishing in Descartes wGLN should be disabled.

Performance of Advise Filter Query Enhanced – 395575

To improve the performance of the Advise filter query, certain query conditions involving date functions have been enhanced in the Advise route filter.

System Enhanced to Overwrite Last Reported Values Even When EndRoute Has Timestamp Earlier Than LastReportedDate – 394636

The system is now designed to overwrite the route's last reported values (LastReportedStatus, LastReportedDate, LastReportedLatitude/Longitude) with the EndRoute message's values even when the EndRoute message has a timestamp earlier than the route's LastReportedDate value. This functionality helps ensure that once a route is completed (End of Trip), the system is designed to have the final information even if previously failed messages are re-posted.

Audit Log Table Added to LNOSLic to Track Changes to License Records – 394212

An audit log table has been added to LNOSLic to track changes to license records such as new license installations, updates by the backend or Batch Processor and removals.

LogID	LogTime_UTC	LicenseID	Action	ModifyDate	ModifiedBy	LCDData	CurrentSession	SessionStart
1	2017-03-23 19:43:53.070	5045	UPDATED	2015-09-16 13:05:00.000	4	DESCARTES ROUTE PLANNER 17.05.00000	NULL	NULL
2	2017-03-23 19:55:12.317	5048	INSTALLED	2017-03-23 15:55:12.283	3	DESCARTES ROUTE PLANNER 17.05.00000	DESCARTES ROUTE PLANNER 17.05.00000	2017-03-23 15:55:12.283
3	2017-03-23 19:55:16.550	5045	UPDATED	2015-09-16 13:05:00.000	4	DESCARTES ROUTE PLANNER 17.05.00000	NULL	NULL
4	2017-03-23 19:55:35.160	5045	UPDATED	2015-09-16 13:05:00.000	4	DESCARTES ROUTE PLANNER 17.05.00000	NULL	NULL
5	2017-03-23 19:55:36.730	5048	DELETED	2017-03-23 15:55:12.283	3	DESCARTES ROUTE PLANNER 17.05.00000	DESCARTES ROUTE PLANNER 17.05.00000	2017-03-23 15:55:12.283

Batch Processor Enhanced to Create Resources from Master Routes Based on Criteria – 394179

The Batch Processor can now be configured to perform tasks such as route creation from master routes at set times during the day. To implement this feature, a calendar manager has been added to Descartes Route Planner, where users can define calendar tasks in the Batch Processor configuration file. The configuration and use of this feature is described below. An configuration example is also provided.

- When the calendar manager is enabled, the Batch Processor is designed to run a calendar manager thread dedicated to executing calendar tasks scheduled to run at predetermined times.
- The calendar manager schedules tasks based on the date constraints (frequencies and holidays) of each task and any execution time requirements.
- If multiple tasks are scheduled to run at the same time, the calendar manager is designed to execute them in parallel to the extent that its thread pool size can accommodate.
- Each calendar task *must* specify 'org' and 'time'.
- Each calendar task can specify its own parameters required to perform the task with <setting> elements.
- Multiple calendar tasks can share the same set of parameters by defining a <ParmGroup> and referencing it with the 'parameters' attribute.
- Each calendar task can specify both 'parameters' and <setting>.

- Similarly, each calendar task can specify task-specific holidays by referencing a holiday group with the attribute 'holidays', specifying its own <holiday> elements or both.
- The preferred date format for holidays is "yyyy-mm-dd".
- DaysFromToday, together with NumberOfDays specify which dates resources are to be created on.

```
<FWBatchProcessor.Properties.ParmGroups>
  <parmGroup name="CRFM_PG"/>
    <setting name="DaysFromToday" value="7"/>
    <setting name="NumberOfDays" value="3"/>
  </parmGroup>
</FWBatchProcessor.Properties.ParmGroups>
```

For example, if the current day is April 4th, the above configuration is designed to produce this command XML.

```
<Input>
  <parmFWResourceItems>
    <FWResourceItems DaysFromToday="7"
    FromDate="2017-04-04" ToDate="2017-04-06" ... />
  </parmFWResourceItems>
</Input>
```

The system is designed to then create resources for the dates 4/11, 4/12 and 4/13 as long as master route frequency allows.

A complete configuration example is provided below:

```
<FWBatchProcessor.Properties.CalendarManager enable="true" threadPoolSize="1">
  <calendarTask name="sample" task="CreateRouteFromMaster" enable="true"
parameters="CRFM_PG" time="04:00:00" frequency="MTWRFSU" holidays="HG1" org="FW"
maxRetries="2">
    <setting name="Schedule" value="DefaultSchedule"/>
    <holiday name="off1" date="2017-03-30"/>
    <holiday name="off2" date="2017-04-05"/>
  </calendarTask>
</FWBatchProcessor.Properties.CalendarManager>

<FWBatchProcessor.Properties.ParmGroups>
```

```

    <parmGroup name="CREM_PG"/>
    <setting name="DaysFromToday" value="the number of days to the first date for
which resources are to be created"/>
    <setting name="NumberOfDays" value="how many days of routes needs to be
created?"/>
    <setting name="OrderKeyWizard" value="order keywizard ID"/>
    <setting name="ResourceKeyWizard" value="resource keywizard ID"/>
    <setting name="Filter" value="route criteria based on FWRoute and/or
FWResource goes here."/>
    <setting name="OrderGeneration" value="1 for auto-generation; 2 to assign
matching unassigned orders"/>
    <setting name="OrderMatching_IncludeRealOrderOnly" value="0 or 1"/>
    <setting name="OrderMatching_IgnoreTimeWindow" value="0 or 1"/>
    <setting name="OrderMatching_IgnoreLineItem" value="0 or 1"/>
    <setting name="OrderMatching_IgnoreUserAssignmentField" value="0 or 1"/>
  </parmGroup>
</FWBatchProcessor.Properties.ParmGroups>
<FWBatchProcessor.Properties.HolidayGroups>
  <holidayGroup name="HG1">
    <holiday name="h1" date="2017-03-31"/>
    <holiday name="h2" date="2017-05-01"/>
  </holidayGroup>
</FWBatchProcessor.Properties.HolidayGroups>

```

Enhancements to Filtering on Orders List Pages – 394147

Users can now filter the orders list pages by measures (Measure1...9, OrderLineMeasure1...9, etc.) greater than or less than a specific value.

Unassigned Stop:	Measure1	>=	10	+
And	Measure1	<=	11	+ -

Route Parameter Selection Query Enhanced – 393456

The performance of the route parameter selection query has been enhanced.

getMissedSecs and Summary Reports Rewritten to Enhanced Database Performance – 393670

The getMissedSecs function has been rewritten to help improve database performance. All reports (available via **Summary Reports** menu) have been rewritten to use this new function (getMissedSecs_inline) and the new (getWinAttrAllFields_inline).

For customers using Descartes Reporting Services™, any data sources utilizing the old function must be manually modified to use the new functions. The new function is a “table valued function” and the syntax is different.

Previous Descartes Reporting Services usage:

```
SELECT dbo.getMissedSecs(FWStop.ActivityID, FWStop.ProjectedBegunDate,
FWStop.ProjectedCompletedDate),
        dbo.getWinAttr FWStop.ActivityID, 'EarliestDate' ,
        dbo.getWinAttr FWStop.ActivityID, 'LatestDate'
FROM dbo.FWStop with (NOLOCK)
LEFT JOIN dbo.FWActivity with (NOLOCK)
      On FWStop.ActivityID=FWActivity.ActivityID
```

New Descartes Reporting Services usage:

```
SELECT mw.MissedWindowSec, mw.EarlyWindowSec, mw.LateWindowSec
        ,aw.EarliestDate, aw.LatestDate
FROM dbo.FWStop with (NOLOCK)
LEFT JOIN dbo.FWActivity with (NOLOCK)
      On FWStop.ActivityID=FWActivity.ActivityID
OUTER APPLY dbo.getMissedSecs_inline(FWActivity.ActivityID,
FWStop.ProjectedBegunDate, FWStop.ProjectedCompletedDate) as MW
OUTER APPLY dbo.getWinAttrAllFields_inline(FWActivity.ActivityID, 2) as AW
```

Dedicated MessageIDs Created for High Volume Error Messages – 392883

For larger clients, the security database could accumulate a large amount of data due to several common error messages that used the same MessageID.

To the amount of data stored the security database by, these messages have been given a dedicated MessageID and tracing for them has been disabled. This enhancement should also make it easier to detect higher priority errors.

FWStopSelWindow_Fn Enhanced to Return ActivityWindowID – 391932

The ActivityWindowID attribute has been added to the output the FWStopSelWindow_Fn.

Indexes Added to Enhance Query Performance – 391750

The following indexes have been added to enhance the performance of certain queries:

- FWStop table on RouteID and StopNumber (Advise call index)
- FWStop table on RouteID, ScheduleID, ScheduleKey, MasterRoute and PartyID
- FWFieldDataHistLink table on StopID, OrderLineID and OrderLineDetailID
- FWFilter table on FilterType and UserID
- FWFilterCondition table on FilterID and FilterConditionID

- FWResource table on ScheduleKey and MasterRoute
- FWLocation table on CallOutNotifyProfileID

Add PlannedGeoStopNumber Column to Route Detail Window – 391633

The PlannedGeoStopNumber column has been added to the **Route Detail Window** quadrants (FWStop table). When assigning or unassigning stops, the PlannedGeoStopNumber value will be equal to the GeoStopNumber. When a statused stop is added in the middle of a route, the PlannedGeoStopNumber value will not change, but the GeoStopNumber value will change.

Descartes wGLN DCF listener Enhanced to Return Non-200 Response When DCF Unavailable, New Descartes wGLN Listener Created – 389964

The Descartes wGLN DCF listener has been enhanced to return a non-200 status when the DCF package is unavailable. Additionally, a new dedicated listener has been created for Descartes wGLN. This listener is designed to return an HTTP failure for certain error messages in order to have the Descartes wGLN automatically retry. The new listener can be found at the following URL:
http://server/STAD/Listener/DocWglNDCFListener.asp

Depending on the configuration, it is recommended that users update the following settings profiles in Descartes wGLN to use this new listener:

- Wireless Handler (deprecated)
 - ➔ **Note**— The wireless handler URL has been deprecated. Customers using direct post should use the Communication Profile instead.
- Tunnel
- Communication Profile

Latitude and Longitude Values Rounded Off to Enhance Pathing Consistency – 389604

To enhance pathing consistency, database tables are now designed to store latitude and longitude values as decimals rounded to the fifth decimal place.

Paging Implemented for Route Templates List Page – 389580

Previously, the **Route Templates** list page displayed all route templates in the system on one page.

To ease browsing on the **Route Templates** page when a large number of route template records exist in the system, paging has been implemented, allowing users to display 10, 20 or 50 records at a time on each page and navigate between pages using the toolbar at the bottom of the list page.

Rows 1 - 10 of 29 / Page 1 of 3	Rows per Page: 10 / 20 / 50	Page 1 2 3	⏪ ⏩ ⏴ ⏵
---------------------------------	-----------------------------	------------	---------

Delta Actual Travel Time Calculation Change – 388674

Previously, the Delta Actual Travel Time value was calculated incorrectly between the initial depot and the first stop values. To more accurately represent the travel time, the Delta Actual Travel time between the initial depot and the first stop is now calculated using the Current Stop Arrive time and the initial Depot Complete/Departed Time.

CreateReturnOnMiss Schedule Setting Enhanced to Include New Options for Multi-task Orders – 388411

New options have been added for the FWSchedule CreateReturnOnMiss setting to handle cases where multi-task orders with two pickup tasks and a dropoff task would miss the second pickup and therefore the dropoff, making a return unnecessary. The options are as follows:

- **0:** Do not create Return on Miss
- **1:** Create Return on Miss
- **2:** Create Return on Miss only for double-ended orders.

Attributes Added to DocRouteStatusListener XSL – 386102

The following attributes have been added to the DocRouteStatusListener XSL:

- Direction
- Speed
- UnScheduledStop

Total Orders Values Added to Schedule Summary – 385394

The Schedule Summary quadrant will now display the following values in the RouteTotals section:

- Total Orders
- Total Assigned Orders
- Total Unassigned Orders

Schedule Summary	
RouteTotals	
Total Number of Routes :	1
Total Number of Empty Routes:	
Total Number of Used Routes:	1
Total Stops:	14
Total Assigned Stops:	11
Total Unassigned Stops:	3
Total Orders:	14
Total Assigned Orders:	11
Total Unassigned Orders:	3
Average Number of Stops Per Route:	11
Total Schedule Profit:	24,224.29
Average Route Profit:	24,224.29
Total Number of Window Violations:	0
Total Number of Requirements Violations:	0

RequestRetrievingTask XSDs Updated – 385334

The RequestRetrievingTask and RequestRetrievingTaskResponse XSDs have been updated to reflect the correct XSD elements.

'Allow Partial Delivery' Schedule Setting Enhanced – 383577

Descartes Route Planner can now use the **Allow Partial Delivery** schedule setting when multi-task orders are executed. This setting now functions as follows when enabled:

- If one or more pickups are missed (but not all pickups) on a double-ended order, the system is designed to allow drivers to complete the delivery of the pickups successfully completed.
- If the first pickup of a multi-task order is missed, the remaining pickups and their deliveries must remain in "Pending" state.
- If the **Return on Miss** schedule setting is also enabled, if one pickup is missed, the rest of the tasks remain in "Pending" status. If one delivery is missed, the system is designed to create a return for completed pickups.

Please consider the following examples to illustrate this new functionality.

Example 1:

- Return on Miss disabled
- Allow Partial Delivery disabled
- If one pickup is missed, then all other tasks are missed.

Example 2:

- Return on Miss disabled
- Allow Partial Delivery enabled
- If one pickup is missed, the rest of the tasks remain in "Pending" status.

Example 3:

- Return on Miss enabled
- Allow Partial Delivery disabled
- If one pickup is missed, then all other tasks are missed. A return is created for completed pickups.

Example 4:

- Return on Miss enabled
- Allow Partial Delivery enabled
- If one pickup is missed, the rest of the tasks remain in "Pending" status.
- If one delivery is missed, a return is created for completed pickups.

DriverFirstName and DriverLastName Fields Added to Relevant Forms – 383256

In Descartes Route Planner 17.01, the Driver Name field was replaced on the New/Edit Driver page with two new fields, Driver First Name and Driver Last Name. In Descartes Route Planner 17.05, these fields have replaced Driver Name in other relevant forms in the application:

- **Assign Driver** window
- **Filters** – filter criteria
- **Routes** quadrant
- **Route Details Window** quadrant
- **Data Filters > Options** page – Options on the Line 1 and Line 2 dropdowns for the Show Labels on Last Known Location setting
- **Asset Gantt Chart** – DriverFirstName/DriverLastName values displayed in the left column of the table and on the information popup displayed when right-clicking a route
- **Route Detail Summary** list page
- **Route Summary** list page
- **Alert Management** page
- **Drivers** list page

- **Driver Assignments** list page
- **Trucks** list page
- **New/Edit Trucks** page
- **Crews** page
- **Print Route Manifest**
- CSV file resulting from Import/Export to CSV
- **View Route Directions**
- **Custom Alerts**
- **Update Planned Amounts**
- **Update Actual Amounts**
- All publish options if the record contains a driver name

Apply Master Route: Allow Changes to Routes Based on Master Routes – 380044

Previously, when the **Apply Master Route** process was used to assign orders to placeholder orders on a route based on a master route, users were unable to make changes to these routes.

A new setting has been added to the **Apply Master Route** window, **Match Placeholder Orders**. When enabled, the system is designed to assign unassigned orders to matching placeholder orders regardless of which master routes they are from originally.

Master Route Management / Apply Master Routes

Apply Master Routes

APPLY CLOSE

Assignment Matching Logic

☐ Ignore Time Windows In Assignment ☒ Ignore User Assignment Field

☐ Ignore Order Line Items In Assignment ☒ Replace Placeholder Orders

☒ Match Placeholder Orders

Note

When the **Match Placeholder Orders** setting is enabled, the **Ignore User Assignment** field is designed to be enabled and read-only; the user matching field cannot be used for the new assignment logic.

Routes By Location Quadrant Enhancements – 379988

The following enhancements have been made to the **Routes By Location** quadrant on the Dashboard:

- The **Select Locations** page is now designed to only list locations associated with the selected schedule.
- The routes filter will now apply to the **Routes By Location** quadrant as well. When users select Show All in the **Routes** quadrant, the filter in the Routes By Location quadrant will also be cleared.
- The **Page Size** setting in the Tree Control section of the **Data Filters > Options** page now applies to the Routes By Location quadrant.
- Using the **Page Size** dropdown on the **Select Locations** page, users can now displayed 15, 50, 100 or 200 records in the Selected/Available Locations tables.

Home / Select Locations
Select Locations

SAVE SAVE AND CLOSE CLOSE

Filter

Find where: - Show All - SEARCH FILTER

By Schedule: ☐ Page Size: 50

Locations

SELECTED LOCATION | Row 1 - 10 of 10

LocationKey	Location Name	Territory	Company
LTLCustomer0023		TC3	LTL Name0023
LTLCustomer0153		TC1	LTL Name0153
LTLCustomer0157		TC3	LTL Name0157
LTLCustomer0163		TC3	LTL Name0163
LTLCustomer0217		TC1	LTL Name0217
LTLCustomer1243		TC1	LTL Name1243
LTLCustomer1255		TC3	LTL Name1255
LTLCustomer1257		TC1	LTL Name1257
LTL_Depot1			LTL_Depot1
LTL_Depot3			LTL_Depot3

AVAILABLE LOCATION | Row 51 - 100 of 1276

LocationKey	Location Name	Territory	Company
TA_2016_ROV_Location_26	TA_2016_ROV_Location_26_Name		
location_A			
location_B	TA_2016_ROV_Location_25_Name		
location_C	TA_2016_ROV_Location_17_Name		
TA_2016_010_Location_4	TA_2016_010_Location_4_Name		
TA_2016_010_Location_6	TA_2016_010_Location_6_Name		
TA_2016_010_Location_10	TA_2016_010_Location_10_Name		
TA_2016_010_Location_11	TA_2016_010_Location_11_Name		
TA_2016_010_Location_12	TA_2016_010_Location_12_Name		
TA_2016_010_Location_13	TA_2016_010_Location_13_Name		
TA_2016_010_Location_14	TA_2016_010_Location_14_Name		
TA_2016_010_Location_15	TA_2016_010_Location_15_Name		
TA_2016_010_Location_16	TA_2016_010_Location_16_Name		
TA_2016_010_Location_17	TA_2016_010_Location_17_Name		
TA_2016_010_Location_19	TA_2016_010_Location_19_Name		
TA_2016_010_Location_21	TA_2016_010_Location_21_Name		
TA_2016_010_Location_22	TA_2016_010_Location_22_Name		
TA_2016_010_Location_26	TA_2016_010_Location_26_Name		
TA_2016_020_Location_1	TA_2016_020_Location_1_Name		
TA_2016_020_Location_2	TA_2016_020_Location_2_Name		

- Filters applied on the **Select Locations** page are now designed to persist when users navigate away from the page.

Data Reporting Feature: Identification and Extraction Processes – 379049, 378183, 378181, 378180

A new feature has been created to extract data from Descartes Route Planner for reporting purposes. This data is stored in an independent database with the eventual goal of merging information from various Descartes applications (Descartes Route Planner, Descartes wGLN, Descartes Route Planner On-demand, etc.). This enhancement details the first phase of this feature, the identification and extraction of relevant data.

This information can then be reported using Descartes Reporting Services™ or other reporting packages.

The extracted data will be retained for a certain number of years. A purge routine removes data older than the configured number. This value defaults to a 12-month period.

Configuration

For configuration details, please see **Mobile Resource Management BI Database - User And Configuration Guide**.

Deployment

The new reporting package will consist of a new database (MRM_BI by default) and will add additional items within the Descartes Route Planner database to help and manage the extraction of data. All new items have been added under a new schema "BIStaging". The release of this schema will be announced separately.

Process

Identifying Data to Extract

First, the system will identify which records should be extracted for reporting. The records are retrieved by entity type (Schedule, Order, Resource, Truck, Driver or Trailer) and the associated ID, it has several parameters to control the extraction of data.

- Filtered by Schedule
- Filtered by time "period" (e.g. older than a week, last week, last few days, etc.)

The process then identifies all the core reporting elements associated with the entities.

Data Extraction for Reporting

Once identified, the data summary is then extracted into a staging table in the reporting database. The destination database or server is parameterized; if the server is not the Microsoft Corporation's SQL Server® used with Descartes Route Planner, then it requires a linked server connection to the reporting database server.

Loading the Data for Reporting

Once the data has been staged from Descartes Route Planner, the system is designed to load the data into the final reporting schema tables and transition the data into "time period" tables.

Each month is stored in a separate table. A partitioned view has been provided which merges the contents of these tables into a unified means to access the data.

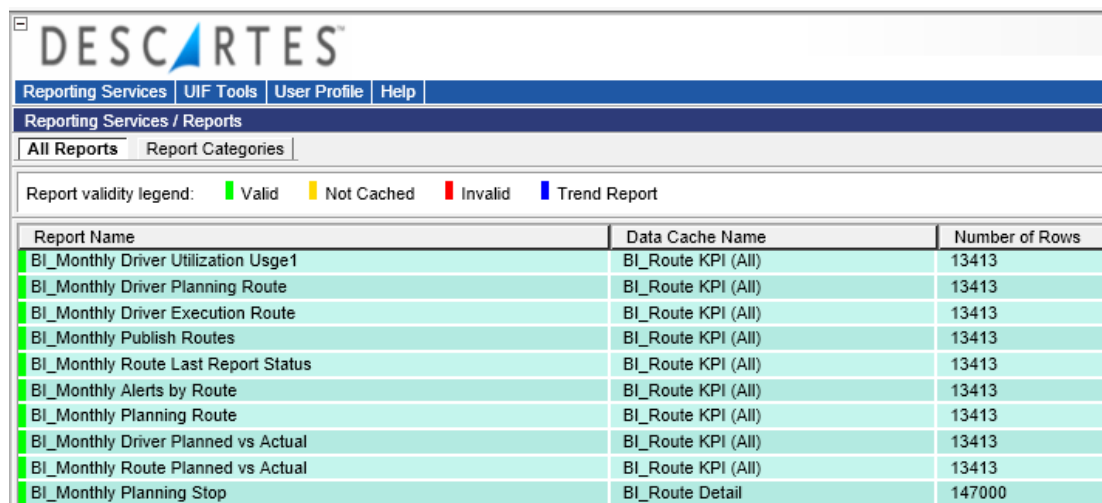
Reports

The reporting database comes with a set of pre-defined data sources and reports for use in Descartes Reporting Services.

Some of the reports categories included are:

- Compliance monitoring (Stop Completion, Time/Distance/Sequence variability, geocode quality, etc.)
- Operations Metrics (KPI's, Planned vs Actual, etc.)
- Asset location visibility (Last used, last position, etc.)

A sample of the report listing can be found below:



The screenshot shows the Descartes Reporting Services / Reports interface. It includes a navigation bar with links for Reporting Services, UIF Tools, User Profile, and Help. Below the navigation bar, there are tabs for All Reports and Report Categories. A report validity legend is provided, showing Valid (green), Not Cached (yellow), Invalid (red), and Trend Report (blue). The main table lists various reports with their Data Cache Name and Number of Rows.

Report Name	Data Cache Name	Number of Rows
BI_Monthly Driver Utilization Usage1	BI_Route KPI (All)	13413
BI_Monthly Driver Planning Route	BI_Route KPI (All)	13413
BI_Monthly Driver Execution Route	BI_Route KPI (All)	13413
BI_Monthly Publish Routes	BI_Route KPI (All)	13413
BI_Monthly Route Last Report Status	BI_Route KPI (All)	13413
BI_Monthly Alerts by Route	BI_Route KPI (All)	13413
BI_Monthly Planning Route	BI_Route KPI (All)	13413
BI_Monthly Driver Planned vs Actual	BI_Route KPI (All)	13413
BI_Monthly Route Planned vs Actual	BI_Route KPI (All)	13413
BI_Monthly Planning Stop	BI_Route Detail	147000

Fields Added to Cap Generated Window Open and Close Values – 376510

The Earliest Hr Gen OpenWindow and Latest Hr Gen CloseWindow fields have been added to the **New/Edit Route Template** and **New/Edit Resource** pages.

Availability			
EarliestStartDay	<input type="text"/>	LatestStartDay	<input type="text"/>
EarliestStartTime	<input type="text"/>	LatestStartTime	<input type="text"/>
EarliestEndDay	<input type="text"/>	LatestEndDay	<input type="text"/>
EarliestEndTime	<input type="text"/>	LatestEndTime	<input type="text"/>
EarliestServiceDay	<input type="text"/>	LatestServiceDay	<input type="text"/>
EarliestServiceTime	<input type="text"/>	Latest Service Time	<input type="text"/>
Prefix	<input type="text"/>	Suffix	<input type="text"/>
Earliest Hr Gen OpenWindow	<input type="text"/>		
Latest Hr Gen CloseWindow:	<input type="text"/>		

These fields allow users to put a cap on how early a generated time window can open and how late a generated time window can close. If the generated time windows resulting from any of the following operations exceed the cap values set in the Earliest Hr Gen OpenWindow and Latest Hr Gen CloseWindow fields, the system is designed to use the cap value instead.

- Lock Generated Time Windows operation
- Route moved to another schedule
- All routes moved to another schedule
- Status updated from first status call

For example, if a user selects the Lock Generated Time Window option for a route in the Routes quadrant and the generated open time window is earlier than the cap value entered in the Earliest Hr Gen OpenWindow field, the cap value is used instead.

Please note the following the following exceptions regarding this feature:

- If the Projected Arrive Time is earlier than the Earliest Hr Gen OpenWindow value, the system is designed to use the Projected Arrival Time instead.
- If the Projected Departure Time is later than the Latest Hr Gen CloseWindow value, the system is designed to use the Projected Departure Time instead.

➡ **Note**— In these cases, users should fix the route starting and ending times since the resource settings conflict with the cap values provided.

- If no value is entered in these fields, no cap is enforced.

Order Save and Advise Call Enhanced to Retrieve Territory Information from

Location References – 375210

As part of a business workflow, some clients separate customer and order creation processes, placing a reference to the customer's LocationKey in new orders instead of reiterating address, territory and customer name data. However, users were unable to perform an Advise with no territory specified in the XML.

To support this workflow, the Advise call and order save functionality have been enhanced and designed to retrieve territory values from referenced locations based on TerritoryBase when the AssignTerritory setting is set to "2" and the UDF Territory value is empty. If the input location territory is empty, the system is designed to then attempt to retrieve the territory from the database record. If the database record is empty, the system is designed to assign a territory.

Copy Keyboard Shortcut Enabled for Order, Location, Resource and Driver Keys on the Dashboard – 331544

Users can now copy OrderKey, LocationKey, ResourceKey and DriverKey values to the clipboard from Dashboard quadrants. To copy these values:

- 1 Hold **CTRL** and left-click the value you wish to copy. The value is highlighted in the cell.

Home / Dashboard					
Dashboard					
Route Detail Window 1					
Customize Reset Find GeoStop Auto Hide + -					
Route Detail Row 1 - 1 of 1					
Route ID	Resource Key	Name	StartDate	EndDate	InitialLocation
4444	Resource-1444-6	TA_2016_010_Resource_Nat	5/10/2017 12:01 AM	5/10/2017 11:59 PM	
Stops					
Stop ID	Stop No	OrderKey	LocationKey		
66888	0				
66891	1	Order-1445-42	TA 2016 010 Location 11		
66904	2	Order-1445-53	TA 2016 010 Location 11		

- 2 Press **CTRL+C**. The value is copied to the clipboard and can be pasted elsewhere via **CTRL+V**.

No Error Message in Response for Duplicate BOLLineNumber in DocMasterBOL – 292013

Users will now receive a descriptive error message in the output when attempting to submit a duplicate BOLLineNumber in the DocMasterBOL XML.

```
<?xml version="1.0"?><Command><Execute><Status>
<DocResponse>
  <TotalDocumentsRead>1</TotalDocumentsRead>
  <DocumentsAccepted>0</DocumentsAccepted>
  <DocumentsRejected>1</DocumentsRejected>
</ListenerName>DocFWBOLListener</ListenerName>
```

```

<ExtDocControlID>228519</ExtDocControlID>
<ResultTime>17-03-27 15:42:00 CUT</ResultTime>
<CommandNo>...</CommandNo>
<AuthServer>...</AuthServer>
<DataServer>...</DataServer>
<ElapsedTime>765</ElapsedTime>
<Message></Message>
<STADMessage><Message>Order Task Error; Failed to save order 228519.
[reason]Duplicate ProductKey or BOLLineNumber
0875834821;...</Message></STADMessage>
<Result>FAILURE</Result>
<EchoData></EchoData>
</DocResponse>
</Status></Execute></Command>

```

Background Optimizer (BGO)

New Setting Added to Exclude Double-ended and Multi-task Orders that Exceed Dynamic Zoning Distance – 396850

The BGO can be configured to use a reduced Dynamic Zoning distance during optimization. This setting can be used to keep routes more compact for future days. Double-ended or multi-task orders can break this reduced Dynamic Zoning distance; the system is designed to assign these orders to a route of their own. The system then fills the rest of the routes and prevent other orders from being assigned.

This new setting in the BGO is designed to not assign a double-ended or multi-task order if the order exceeds the Dynamic Zoning distance. These orders will be left unassigned.

```
com.descartes.escheduler.optimizer.assign_exclude_gtr_dz = 1
```

This property is disabled by default.

BGO Enhanced to Send LastReportedTime Value to RMPI – 396849

The BGO is now designed to extract the time portion of the LastReportedDate value and send it to RMPI as LastReportedTime.

Compact Routes Phase Implemented for BGO – 390175

A new optimization phase has been added to the BGO, the Compact Routes phase. This phase will attempt to reduce the number of routes being used. The Compact Routes phase is enabled with the following property. This phase is disabled by default.

```
com.descartes.escheduler.optimizer.compact_routes = 1
```

The BGO is designed to search for "short" routes as determined by two properties.

```
com.descartes.escheduler.optimizer.compact_routes_min_stops = 10
```

`com.descartes.escheduler.optimizer.compact_routes_elapsed_percent = 15`

A route is considered “short” if the route has less stops than the `min_stops` value or there is more spare elapsed time than `elapsed_percent` of the total available elapsed time of the route. If the difference between `Resource.LatestEnd` and `Resource.EarliestStart` is 10 hours and `elapsed_percent` is 10, then the route will be considered short if it is less than nine hours long.

For each short route, the BGO is designed to find other routes from the same depot and select a number of them as determined by the `max_group` property. It selects these routes based on whether or not there is a stop at the same latitude and longitude as the short route and then, if necessary, adds the shortest from the same depot until `max_group` routes are selected.

`com.descartes.escheduler.optimizer.compact_routes_max_group = 5`

The BGO then unassigns the orders from the short route and runs a mini-optimize all on the now empty short route, the selected group of routes and the unassigned orders from the short route.

The BGO may need two attempts to free up a route with this phase. The first time through, the route is shortened and the second time emptied altogether.

The following properties determine how long the phase is run before cycling around other phases. The `run_time` property determines how long an individual optimization is allowed to take.

`com.descartes.escheduler.optimizer.compact_routes_phase_time = 5`

`com.descartes.escheduler.optimizer.compact_routes_run_time = 300`

If defined, `maxelapsedtime` will be used instead of calculating `LatestEnd` to `EarliestStart` to retrieve the maximum elapsed time allowed.

BGO Enhanced to Ensure Portability of optimizer.properties File – 384977

In order to ensure that the BGO’s `optimizer.properties` file can be copied from one area folder to another, the BGO is now designed to check for the following properties in the `optimizer.properties` file.

- `#com.descartes.escheduler.optimizer.live_url = {a value}`
- `#com.descartes.escheduler.optimizer.work_url = {a value}`
- `#com.descartes.escheduler.optimizer.scheduler_service_name = {a value}`
- `#com.descartes.escheduler.optimizer.scheduler_service_temp_path = {a value}`

In previous versions, the Descartes Route Planner installer set these properties to a particular value. Now, the installer will set these property values as before, but each line will be commented out. Configuration specialists can uncomment the properties to enable the associated functionality.

If the properties are not found, the BGO is designed to determine the port for the URL, the area name for the scheduler service name and the path to the temp folder by reading the server.xml file in the area folder.

BGO Enhanced to Start Empty Routes in Dispatch Mode – 353544

When the BGO sends an improvement to Descartes Route Planner, the response contains the new hash values for the routes involved in the improvement. The BGO saves them and uses them for the next improvement concerning one of those routes. Because Descartes Route Planner returns the new hash values in a DocSchedule element instead of a DocRoute element, the BGO was not extracting the value, leading to a case where the second improvement for a route was rejected.

To prevent this issue, the BGO has been enhanced to check for both DocSchedule and DocRoute elements in the response from Descartes Route Planner. This enhancement is designed to allow the BGO to start empty routes in dispatch mode.

Installer

Number of BGO Instances Now Configurable When Installing Via LNOS Setup Executable – 398758

The LNOS Setup executable installer has been enhanced to allow users to install up to eight BGO instances. A prefix name can be specified for each instance name.

LNOS Pathing Service

Configuration Settings Related to RouteMatrix Assembly Reorganized

The LNOS Pathing Service (LPS) uses RouteMatrix (RM) Assembly to communicate with RouteMatrixWS. Previously, the settings related to RM Assembly were combined with the LNOS Pathing Service settings in one Web.config file. These settings have been separated into two configuration files: RouteMatrix.config and Schedule.config. Please refer to the [*Descartes Route Planner 17.05 LNOS Pathing Service Installation and Configuration Guide*](#) for details.

RM Assembly enhanced to support independent RouteMatrixWS settings for each pool

Each RM Assembly Pool (Standard, Small and P2P) can now support independent sets of RouteMatrixWS servers. This enhancement allows the RM Assembly to direct P2P traffic to different sets of RouteMatrixWS servers versus larger matrixes. Please refer to the [*Descartes Route Planner 17.05 LNOS Pathing Service Installation and Configuration Guide*](#) for details.

RM Assembly Enhanced to Support Alternate RouteMatrixWS Data Sources

Support has been added to RouteMatrix for the specification of an alternate RouteMatrixWS. For this feature, the RouteMatrixWS data source has been designed to use "Service.MapName" in RouteMatrix.Config.

```
<add key="Service.MapName" value="MapValue" />
```

Service.MapName can also be set programmatically using RouteMatrix Assembly's Settings object. If Service.MapName is not set or is NULL, then the RouteMatrixWS default map data source is used.

RM Assembly Enhanced to Support Retries

Support has been added to RouteMatrix for retries. When a matrix fails to compute by RouteMatrixWS, the request is sent back to the top of the queue for a retry. Users can control the number of times a retry is attempted with the following RouteMatrix.Config setting:

```
<add key="Service.ServiceRetries" value="3" />
```

Setting Service.ServiceRetries to "0" will disable retries. Service.ServiceRetries can also be set programmatically using the RM Assembly's Settings object.

RouteMatrixWS Enhanced to Support Multiple Data Sources

RouteMatrixWS has been enhanced to support multiple data sources. Data sources are configured in the web.config file.

```
<add key="map.1"
value="name=HERE;url=d:\data\here;dcaList=*|!AA;default=true"/>
<add key="map.2" value="name=HERE_USCA;url=d:\data\here;dcaList=US|CA"/>
```

The syntax for specifying map coverage in the dcalist has been changed. A * (asterisk) is no longer needed after a country code when the country has more than one DCA. For example, US* is now just US. In Addition, a "|!AA" should be appended to all dcalist. Please refer to the [*Descartes Route Planner 17.05 LNOS Pathing Service Installation and Configuration Guide*](#) for details.

RouteMatrixWS Adds Support for Taking Service Offline

RouteMatrixWS can now be taken offline to allow the service to finish processing any existing requests while not receiving any incoming requests. Please refer to the [*Descartes Route Planner 17.05 LNOS Pathing Service Installation and Configuration Guide*](#) for details.

TileServer Enhanced to Support Multiple Data Sources

The TileServer has been enhanced to support multiple data sources. Data sources are configured in its web.config file.

```
<add key="Map.1"
value="name=Default;url=D:\Data\HERE\Default.epf;cacheDir=D:\MapTileCaches\
HERE\default\;default=true"/>
<add key="Map.2" value="
name=TomTom;url=D:\Data\TOMTOM\Default.epf;cacheDir=
D:\MapTileCaches\TOMTOM\default\"/>
```

Please refer to the [*Descartes Route Planner 17.05 LNOS Pathing Service Installation and Configuration Guide*](#) for details.

Support Added to LNOS Pathing Service for Side of Street Service

LNOS Pathing Service has been enhanced to support side of street service. This functionality is enabled via a new setting, Routing.ExtSideOfStreet. This setting has the following values:

- **0:** Use AllowUTurn setting
- **1:** BothSidesAllowed
- **2:** SameSideOnly

➡ **Note—** Descartes AltaMap version 17.04 and the latest version of LNOS Pathing Service are required for values of "1" and "2" to function properly.

Resolved Issues

Descartes Route Planner 17.05 resolves the following issues:

17.05

ArrivedDate Value Removed from Final Depot Stop after Completed Message – 405749

When an Arrived message was posted to the final depot stop of a route followed by a Completed message, the Arrived Date value of the stop was removed.

'Unassign All Stops from All Routes' Options Fails When 'Publish Stop' Enabled – 403943

When the **Publish Stop** setting was enabled in the Publishing Settings section of the **Application Configuration** page, the **Unassign All Stops on All Routes** right-click option did not apply when selected on the Dashboard.

Latitude/Longitude Decimal Places Lost When Copying Field Values in Response to GetSchedule Call – 401717, 401397

When Descartes Route Planner copied the LastReportedLatitude and LastReportedLongitude values for the response to a GetSchedule call, the decimal places of the latitude/longitude values were lost in the output XML. This issue could cause the BGO/RMPI to create incorrect projections for the route.

This issue has been resolved. Field mappings and related queries have been enhanced to help properly handle decimal places in this case.

Stops Displayed in Incorrect Locations on Map for Routes Generated from Master Route – 400991

To prevent an issue where routes created from master routes were displayed on the map with stops in incorrect locations, the system is designed to no longer copy the FWStop.ReportedLatitude or ReportedLongitude values from the stops of a master route to a generated stop.

Lock Schedule Does Not Work in RunOptTask – 400003

When the Batch Processor was run with RunOptTask enabled, lock schedule functionality did not work properly.

System Does Not Lock Time Windows Based on Schedule Settings for UpdateStatus – 399979

When the first status message was posted to a route, the system did not lock related time windows based on the LockGenTimeWindow and SetTWtoGenTW schedule settings.

DZEntireRoute Setting Not Considered When Disabled – 399669

When Dynamic Zoning was enabled for a schedule, the system did not consider the DynamicZoningEntireRoute schedule setting when it was disabled (null). This issue caused the system to return incorrect dynamic zoning violations for the route.

Descartes wGLN Handler Trimmed to Remove Extra Spaces – 399662

To prevent issues where extra spaces in a URL could cause problems with the user interface, the system is now designed to remove any extra spaces from URLs entered in the following areas:

- **Setup > Application Configuration**
- Network repository
- Descartes wGLN
- Descartes wGLN handler

Find Functionality Returns an Error in Status History – 399653

When users attempted to search records in the **List Route History** window (accessed via Status History column link or **Status History** right-click option) using the Find functionality, the system returned an error.

Icon Colors Incorrect When Using Display by Territory Color – 399388

When using Descartes Route Planner with Internet Explorer® 11, selecting the **Display by Territory Color** right-click option for a route in the Map quadrant displayed all icons in black instead of the in the territory's configured colors.

Missing License Warning Message Incorrectly Displayed in User Interface Header – 398898

Due to an issue between the Batch Processor and the Descartes Route Planner user interface, the system erroneously displayed the following license warning in the header: "[WARNING]LICENSE STATE DATA IS TOO OLD. CHECK WHETHER BATCHPROCESSOR IS RUNNING."

This issue has been resolved. The warning message is now only displayed when a missing license is actually detected by the Batch Processors.

Order Remains Assigned to Initial Route after Move with AllowUpdSchedule Setting Enabled – 394678

When users attempted to move an order from a route in one schedule to a route in another schedule with the AllowUpdSchedule setting enabled, the order remained assigned to the initial route, but the order's Schedule and Schedule Key values were updated to that of the target schedule.

Descartes wGLN Listener Modified to Retry Only Priority Messages – 391755

The Descartes wGLN listener is now designed to only retry priority message. Priority messages contain the following information:

- Has a complete-equivalent stop status, e.g. "Completed" (3), "Exception" (6) or "Missed" (9)
- Has a signature
- Has field data
- Has a route status of "Dispatched" (15) or "EndRoute" (17)

External Pather LNOS Pathing Service Cache Issues for Clients Not Using Truck Attributes – 391610

When schedule groups were configured for clients that do not use truck attributes, the External Pather and LNOS Pathing Service sometimes sent the same requests twice with different values, which doubled the size of the cache and could potentially cause memory issues.

Status Messages Do Not Apply But System Returns Success – 389675

When a status update was sent, in some cases the system did not apply the status but still returned as a successful update.

Two changes were made to help resolve this issue:

- The system is now designed to return a failure message for these APIs
- The system is now designed to return an HTTP error from the listener if there is a failure.

CtyUser View Missing NumFailedLogins and LockedOut Columns – 389606

The NumFailedLogins and LockedOut columns were missing from the CtyUser view.

Delete Takes Longer Than Intended for OrderLineDetail and OrderLineInfo Records – 389367

The system took longer than intended to delete OrderLineDetail and OrderLineInfo records.

Slow Performance When Editing Resource – 388601

When users attempted to edit a resource from the user interface, the system was slow to load the **Edit Resource** page.

ConstrainedVehicleHazMat Missing Default Value in BGO Dataslice API – 388386

In the Background Optimizer (BGO) dataslice API, with parameterization disabled, the ISNULL(FWScheduleGroup ConstrainedVehicleHazMat) SQL statement was missing a default value which caused an error when the BGO requested a dataslice.

Incorrect Default Speed Values on 'New Routing Parameters' Page – 387916

When users created a new routing parameter, the system populated the wrong default speed values for the External Pather on the **New Routing Parameters** page.

This issue has been resolved. The correct default speed values will now be populated. Additionally, the cost/hr and cost/km values have been adjusted as follows:

- Cost/km is now defaulted to "0.1"
- Cost/hr is now defaulted to "100"

Error Returned for Advise with Negative Latitude/Longitude – 387891

When users posted an Advise XML with a negative latitude or longitude value, the system returned an error: "Incorrect syntax near 'Longitude'". This error only occurred when UseSPInAdviseFilter was set to "2" and UseParameterizedSQL was set to "1".

Frequency and Variation Duration Issues – 387396

FWStopSelWindow did not handle frequency and variation duration properly.

The case statement was using EarliestTime values instead of LatestTime and did not consider open or close time in call cases.

Filter Date Range Does Not Display Properly on Dashboard – 387354

When users filtered schedules on the Dashboard by date, the applied filter date range displayed properly in the page header, but not display in the upper right hand corner as intended. The filter information did not display until users navigated away from the page and then returned.

System Enhanced to Send Single RMPI Call for UpdateStatus XML with Mixed status Codes or Location Keys – 387154

When users posted an UpdateStatus XML with multiple messages, the system ensured that only a single RMPI call was made for the XML as long as the following attributes had the same value:

- FWRouteEdit.ResourceKey
- FWRouteEdit.DriverKey
- FWRouteEdit.LastReportedDate
- FWRouteEdit.LastReportedStatus
- FWStopEdit.[Arrived|Begun|Completed|Departed]Date
- FWStopEdit.LocationKey
- FWStopEdit.Status

To expand this functionality, the following changes have been made to help relax this restriction. Now, a single RMPI call is designed to be made for UpdateStatus XMLs that contain the following information:

- Mixed status codes, as long as they are complete-equivalent (3, 6, 7, 9, 10, 11, 12, 14, 15, 19) or skipped (13)
- Different location keys, those stops in a single geostop that have different location keys depending on the New Stop schedule setting

➡ **Note**— With this change, Descartes wGLN should be configured to combine XMLs for improved performance of status messages when there are multiple jobs at the same stop.

Issues with Archive Process Syncing CtyVersionLog – 386616

To prevent issues where the archive database would display a different version number than the log file, the archiving process is designed to no longer synchronize the CtyVersionLog.

No Response for DocMasterBOL with Lengthy Address 1 Value – 337652

When users submitted a DocMasterBOL with an Address 1 attribute value with greater than 20 words, no response was returned and all subsequent requests failed as well until DCF was restarted.

No Sort Option Available for Territories List Page – 321076

Users were unable to sort the Territories list page by column values. The **Sort** option was grayed out on the **Select Columns** page for territories.

Background Optimizer (BGO)

BGO Reverts to Schedule Setting for Number of Measures after Refresh – 402178

After a data slice was refreshed, the BGO no longer used the Number of Measures value configured on the **Edit Data Set Properties** page. The schedule setting was used instead.

RMPI

RMPI Sends Passenger Vehicles with Both Dimension 0 and -1 – 408088

When routing passenger vehicles, RMPI sent vehicles with Dimensions of both 0 and -1 in the requests, which resulted in duplicate cache entries requiring twice the amount of memory than necessary.

RMPI Does Not Handle Partial Downloads from LNOS Pathing Service When Traffic Patterns Enabled – 405750

When RMPI performed asynchronous requests for large branches with traffic patterns enabled, the amount of data returned was so large, it had to be downloaded from LNOS Pathing Service in batches. However, if the entire cache was not calculated in the first batch, pathing failed for new stops processed in subsequent batches due to excessive memory requirements. This issue has been resolved.

Missed Pickup Causes Capacity Violation on Route – 398671

The system erroneously returned a capacity violation for a route when the driver missed a pickup stop on the route.

Suggestions Not Returned for Schedule with Territories – 387009

With the RestrictToZonableJobs schedule setting configured to "1" or "0", users did not receive the same suggestions when using territories in the schedule.

Windup Time Excluded When Static Recharge Added – 368795

The system did not account for a resource's Windup Time values after users added a static recharge.

Recharge Stated with Actual Measure Not Sent to RMPI – 345013

When a recharge was stated with actual measures, the system did not provide the actual measure to RMPI.

This issue has been resolved. Actual measures are now sent to RMPI.

RMPI Uses Value of "0" Actual Measure Not Provided on Recharge Complete – 345012

When a recharge on a route was completed and no actual measures were provided, RMPI defaulted to the onboard value to "0", which caused RMPI to project another recharge to be immediately required.

RMPI Does Not Correctly Project Recharges with Actual Measures – 329933

RMPI did not correctly project recharges with actual measures. When actual measures were calculated, the onboard measure at the start of the route was adjusted to match the actual measures rather than the planned measures. RMPI then determined the route was empty when it was not.

This issue has been resolved. RMPI is now designed to handle a non-full capacity at the initial depot and at subsequent recharges when projecting onboard capacity and recharges forward.