Product: DQ Route Map for ODTView Release Notes

Subject: DQODTViewer_RouteMap v1.0.37

Version: 1.0.37

February 2, 2017

Distribution: ODT Customers

DQ Route Map for ODTView v1.0.37

DQODTViewer_RouteMap.dll v 1.0.37

1. Optimize selected orders – specific orders on a route can be selected and optimized
   a. Select more than one order on a trip, then right-click, 'Optimize Selected'
   b. Only the selected orders will be sent to the optimize routine.
2. When optimize runs, the turn by turn distances that have not yet been calculated, are now calculated using the local Bing map. Previously, those calculations were not performed, which defaulted to using the Manhattan distance calculation to estimate distance. So this should be more accurate, but slower. The values are saved to the db for future solves.

DQ Route Map for ODTView v1.0.35

Changes:

1. The machine's local culture is now set when calling Bing maps or Bing REST services. The default is US, so this hopefully will improve searches made from other countries, like Canada.
2. The map now opens at the last location when it was closed. It was previously always opening, centered on the US, but this doesn't seem to be appropriate for all customers.
3. Set a default usertype setting – if the userId is not found or not specified, then the default will be used. The default would not have any permissions.
4. Route Scheduler vehicles can now be filtered. Click the 'Filter Vehicle' icon under the Route Scheduler pane.

DQ Route Map for ODTView v1.0.34

Changes:

DQODTViewer_RouteMap.dll v1.0.34

5. The order icon on the map now indicates the Stop# instead of the Load Seq#
6. Bug fix: Route Query – the query was not using the selected location list – now it is
7. Right-click menu added to plotted route – if you right-click over a route, it will show the route/trip menu.
8. Print Trip Docs – added to route/trip menu
9. User permissions setup now applied to RouteMap items:
   a. Show Drill Down On Dbl Click
      i. Show 'Drilldown' on right-click menu
   b. Show Delivery Detail On Dbl Click
      i. Show 'Delivery Edit…' on right-click menu, however, changes cannot be saved.

   c. Allow Edit of Delivery Detail
      i. Show 'Delivery Edit…' on right-click menu and now changes can be saved
      ii. Save Changes – the save icon is enabled and fields are editable and changes can be saved to the database
      iii. Trip:
         1. Show 'Reverse Route' on right-click menu
         2. Show 'Optimize Route' on right-click menu
         3. Show 'Upload to Device' on right-click menu
      iv. Allow Move Fence by dragging
      v. Allow Drag orders to route (combine/uncombine and update load sequence)
      vi. Show Advanced Routing icon on toolbar
   d. Show Combine Window
      i. Show 'Combine…' on right-click menu
      ii. Show 'Uncombine Order' on right-click menu

DQ Route Map for ODTView v1.0.33

Changes:

DQ Script update 20160906 or newer required

DQODTViewer_RouteMap.dll v1.0.33

- The map search has been expanded to include POI (point of interest) searches. For example, restaurants, airports, gas stations, hotels, banks, etc.
   a. So now, the search will search two things – Map locations and POIs and return the results from both searches together. Only the top 10 POI results found in the centered map will be returned.
   b. A limitation of the POI search is that it can't search wildcards. The name has to be typed in full in order to be found. For example, to find Burger King, you can't just type Burger K, you have to type the full name and it has to be spelled correctly.
- Multi-select has been added. Items on the map and grids can be multi-selected now which allows tasks to be run for multiple items at a time, for example, multiple orders can be selected on the map and all of them sent to the combine form.
   a. To multi-select items by clicking, hold down the ctrl OR shift key while clicking on the items.
- On the map, you can also multi-select by right-clicking and dragging the mouse to draw a rectangle. When you release the button, items inside the rectangle will be selected.

DQ Route Map for ODTView v1.0.28

Changes:

DQ Script update 20160906 or newer required

DQODTViewer_RouteMap.dll v1.0.28

- For VRP tool, "Auto Routing" renamed to "Advanced Routing"
- Rectify Address (Jobs and Warehouses) – refresh button added to grid
- Overnight Stop and Start locations – if the trip is an overnight, then it will not need to return or start from the warehouse, so to make the route look correct, the overnight will stop at an 'Overnight Stop' location and start from an 'Overnight Start' location. These locations don't have lat/long, so they don't represent real locations, they just act as placeholders so that overnight trips don't get routed back to the warehouse each night.

DQ Route Map for ODTView v1.0.27

Changes:

- "Print Directions" text color changed to make it easier to see.

DQ Route Map for ODTView v1.0.26

Changes:

DQODTViewer_RouteMap.dll (1.0.26)

Changes:

- Un-select trip – If a row is already selected in the Address grid and you click it again or collapse it (if it is expanded), it will become un-selected.
    - Unselected a row will un-highlight the row, clear the detail pane and if routed, un-highlight the route and unselect any selected direction rows.
- The printed directions report has been rewritten. Also, an image of the overall route is included in the report.
- Update an order/job lat/long location by right-clicking and dragging to new location. After the location is changed, if the order/location is part of a route, the route will be redrawn.
- Changed how clicking icons on the map works. Previously, an address on the map would be selected on the mouse up event, now it is selected on the mouse down, which is more intuitive.

DQ Route Map for ODTView v1.0.24

Changes:

DQODTViewer_RouteMap.dll (1.0.24):

- Removed right-click option 'Remove Address'
- Renamed right-click option 'Remove Route' to 'Hide Route'
- After the optimize runs, the user is prompted to save changes. So now, the user if prompted to save changes before and after the optimize runs.
- Print turn-by-turn directions – on the Directions pane, on the Summary line, click '[Print Directions]' to bring up the print preview form. Then click the print icon to print to the default printer.
- Order grid row – Added ETA and ShipTo
- Trip grid row – Added ETD
  - Also, the ETD and ETR were added to the trip details pane below.
  - Also, the ETD and ETR are now saved back to the db when the route is shown. Previously, only the Estimated Distance and Estimated Time were getting saved back to the db.
- Expand/Collapse button – this has been replaced with a toggle button. So that if there are multiple grid levels being displayed, it will collapse one level at a time until all are collapsed, then it will start over by expanding all. The toggle sequence is:
  - Expand All - All levels are expanded
  - Collapse 1 level
  - … keep collapsing 1 level until all levels have been collapsed, then start over
  - Expand All

DQ Route Map for ODTView v1.0.23

Changes:

*** requires db update 20160715 or newer ***

DQODTViewer_RouteMap.dll (1.0.23)

Changes:

- Bug fix: Lat/Long fields unable to enter decimal point. Formatting changed so that decimal can now be typed in.
- Optimize Route – the orders need to be saved to the db before the optimize runs, otherwise, the optimize may not have the order's current location. So, now the user will be prompted to save any outstanding changes when they click optimize route.

DQ Route Map for ODTView v1.0.22

Changes:

RouteMap 1.0.22:

- Drilldown – right-click an order for option to bring up the drilldown form
- Upload to Device – right-click a trip for option to upload to device.
- Auto Routing (VRP) – newest release, includes setting a Starting ShipVia.
- Compress data transmissions between DQDataService.

DQ Route Map for ODTView v1.0.21

Changes:

RouteMap v1.0.21 changes:

- New option – 'Do not update ETA to database'.
    - If selected, these fields will not be updated in the db:
        - i.   trip_tbl - EstimatedTripTime, PlannedMileage
        - ii. order_tbl – ETA, ETD
- Rectify address bug fix: If the option, 'Only jobs with orders' was selected and a trip date range was specified, the current time was being included in the Begin and End trip date which could return orders on trips outside the specified range. Now, the dates are date only, no time, which is correct.
- Quick optimize. If an error is generated here, it would write it to the event log under the DQVRP_API event log source. However, this source would only exist if the full VRP app was installed. So on machines where it doesn't exist, it throws an error. Now, whenever an error is written to an event log, if it fails to write it, that error is ignored.
- The call to plot orders/trips can now be passed whether or not to also plot the routes. This could be called from ODTView to not only plot the trip, but route it also.

DQ Route Map for ODTView v1.0.19

Changes:

1. RunVRPOptimize routine is public and can be called from ODTView by passing in the tripId or list of orderIds and returning a list of orderIds in the VRP optimized sequence
2. Geofence color changed back to yellow, but a darker yellow that should be visible on both map types.

DQ Route Map for ODTView v1.0.17

Changes:

RouteMap vs 1.0.17

- For route optimization, the proximity distance can now be set and also whether or not it is included in route optimization. Under the Settings->Routes tab.
- The radius fence is now green instead of yellow.
- Route Scheduler – automatically plotting routes and orders is now configurable. Under Settings->Routes tab.
- Latest VRP – pickup orders are now handled
- When rectifying jobs, NoLatLong jobs will now include the order tab since it is the order lat/long that needs to be rectified.
- When rectifying jobs, the location filter was not being applied for jobs with orders – now it is included.

DQ Route Map for ODTView v1.0.16

Changes:

- Reverse Route – right click a trip row, select 'Reverse Route' to reverse the order sequence on the orders on the trip. If the trip is currently routed on the map, the route will be re-run in the updated load sequence.
- Optimize Route – right click a trip row, select 'Optimize Route' to run the route through DQVRP using quick optimize. Quick optimize is a simplified version of optimizing a route that doesn't take capacity, time windows and unload time into consideration. It should be purely sequencing in the optimal order.
- Refresh orders when popup closed:
  - Combine window – when the combine window is closed, the trip that was sent to the combine will be refreshed.
  - Delivery Edit window – when this window is closed, the trip that was edited will be refreshed.
- The highlight circle for a plotted window is a little bigger than before.
- There is now an option to rectify jobs for a specific customer account. The 'Select Customers' form is used to select customer(s) to include in the rectify job filter. Only those job accounts for the selected customer(s) will be included in the list.
  Locality is now included in the calculation to determine order Stop. It is currently set to 1km. So if two orders are within 1km of each other, they will have the same stop. Let me know if this value needs to be configurable

DQ Route Map for ODTView v1.0.15

Changes:

- Order icons – If an order is plotted as part of a route, then the load sequence icons will be used, otherwise, the location specific or default order icon will be used.
- Right-click on map to update the lat/long for an order/job
- Truck name does not appear on trip line if 'Route Scheduler' being used
- Weight and volume displayed on equip and trip line.
- If weight limit exceeded, a warning message is displayed and the weight column is highlighted yellow.
- A smaller font can be selected under the Settings -> General tab.

DQ Route Map for ODTView v1.0.14

Changes:

- There is now a settings form to set user options.
- Option to geocode addresses by matching existing addresses.
- Radius changes are now recorded using audit triggers on the order, job and location tables. (this is a db script change)
- If rooftop geocode is available, it is used instead of the street geocode.
- A bunch of various bug fixes.

DQ Route Map for ODTView v1.0.12

*** Requires new compile of ODTView ***

*** Requires db script 20150309 or newer ***

Changes:

- Route Query – Like the RouteQuery from DQDeliveryMap, starting from a certain date, you can search for orders for X days within a certain distance of the map center.
- Custom Symbols – A symbol can be selected from a list of available symbols and set for a Device, a location or an order location (all orders for a specific location will have the same icon)
  - Click the icon and a form with a list of icons will pop up. Select the icon and click Update to update the db if you want the change to persist.
  - The icons will be set in the table, so it will be the same for all users.
- Auto-Routing has been added.
  - VRP had to be updated to work with the DQDataService.
- For Recitify Jobs, an option to 'Exclude NoLatLong jobs' has been added
- Search functionality has been added to the map.
  - Type is a search term and a search will be made for matching Bing locations.
  - Right now, it only includes map locations, not POI (points of interest) type locations.

- Previously, Bing web services were used to route addresses and geocode addresses. This was changed to use Bing REST services instead which are recommended because they are faster and will be supported in the future.

DQ Route Map for ODTView v1.0.9

*** requires updates to ODTView and DQDataService before it can be installed ***

Changes:

- The top menu has been moved to the left and sized smaller. Tabs have been added for 'Find Order', 'Rectify Address' and 'Show Devices'.
- Trip tab information has changed – added depart location, return location, estimated distance and estimated time. Removed shipto and address fields.
- Trip route – now starts from depart location (if specified) and returns to return location (if specified)
- Truck and driver are now part of the trip information displayed in the grid
- 'Plot All' button added to the grid toolbar. If clicked, then all addresses (locations, orders, jobs or devices) will be selected one by one, which will attempt to plot each one to the map.
  - If plots are unsuccessful they will be colored red. If they have an issue, they will be colored yellow.
- For 'Find Order', there are a couple of new filter options:
  - Trips/Orders – the results can be returned grouped by trips, then orders or by orders only. Also, on the grid toolbar, there is a dropdown where the view can be switched between group by trips or group by orders. These two basically do the same thing.
  - Driver or Truck Assigned – the results will be filtered to show only trips where the driver or truck is set and the order is not yet enroute.
- If plotted addresses are stacked on top of one another, then hovering the mouse over the icons will generate a list of all addresses that the mouse is over. Selecting the hyperlink for a certain address will select that address in the grid and bring it to the top of the stack.
- Bug fix: Bad geocoding should not plot to the middle of the ocean anymore.
- Routing:
  - The route start time is based on the trip load time begin time value
  - When routing a trip or group of orders, the trip EstimatedTripTime and PlannedMileage is calculated for the trip and updated to the trip record.
  - Also, the ETA and ETD are calculated for each order.
  - The 'Update' button must be clicked in order to save these calculations back to the db.
  - Orders must all be on the same trip in order to route them together. Open the combine window to combine orders together.
- Orders can be dragged up and down in the grid. Moving an order will also change load sequence.

- Dragging orders from one trip to another will open up the combine windows screen.
- Combining orders:
  - Right-click and order to open the combine window. Or drag an order from one trip to another will open the combine window.
- Map display options are now 'Road' or 'Satellite' only.
- Added warehouses to rectify tab.
- Devices Tab:
  - Device current location can now be shown on map.
    - Clicking a device icon or the grid row will refresh the icon position (re-query the phone db)
    - Also, clicking 'Plot All' will refresh all devices in list.
  - Colors:
    - Green – found
    - Red – not found
    - Yellow – found, but flagged for either no point returned within 1 hour or device has been stopped for more than 1 hour.
  - Device icons are rotated to current GPS direction.
    - If direction is 0 and speed is 0, then the icon is set to neutral position. If the direction is 0 and speed is not 0, then icon is set to 0 direction.
    - If direction is greater than 180, then the icon is flipped and shown reversed and the number is now backwards. If this is an issue, we may need to come up with new icons.
- A different data serializer is now used instead of the default Microsoft serializer – Protobuffers. It runs faster and smaller.