

Daily Planner User Guide (v25.2)

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# **About Daily Planner**

#### Appian Daily Planner Overview

Appian Daily Planner (ADP) is a cloud-based Route optimization and editing tool. It provides top-notch features for planning such as Dynamic Routing, Geocoding, resources for managing Orders, and tools to customize and refine Routes and Stops to fit every user's needs. ADP requires a license and is intended for one dispatcher per branch at a given time.

Find support for ADP by clicking on the Question Mark in the application toolbar, or view additional documents here.

- Visit the Resources section to find specific links to other ADP documents, training, and more.
- Daily Planner works best in Google Chrome. Other browsers (e.g., Mozilla Firefox, Microsoft Edge) are unsupported.

# **Navigating Daily Planner**

The Daily Planner has dedicated pages and panels for all of your Route planning requirements. The following list briefly describes where to locate information and each pages' main focus. Use section icons to correlate back to the application. Click on the links for a deep dive into each topic.

- Header Menu items A toolbar containing the following items from left to right:
  - Sidebar Click on the hamburger button (three lines) to access other topics (See Figure 1 below):
    - Organization and Management Manage Branches, Assets, and Trucks.
    - Dashboard View map, bar charts, and Route chart for the selected dispatch day(s).
    - Route Planning Build Routes from unloaded Orders or view previously built Route cards.
    - Dispatch Assign Drivers, Devices, and Assets to Routes.
    - Boundaries View boundary groups and upload boundaries from files created in DRTrack.
    - Fixed Routes View and edit stored fixed Routes.
    - Points of Interest (POI) Create and manage points of interest.
    - Accounts View and edit customer accounts.
    - Preferences Adjust Daily Planner preferences and other options.
  - Branch and Date A list of Branch names, dispatch date range, and options for displaying Branches.
  - Order Search Search for both loaded and unloaded Orders on your current Branch.
  - **Announcements** View all notifications, including product updates here.
  - Support Easy access to Customer Support.
  - Appian and Trimble Maps products Click on the Bento menu (set of boxes in ADP's toolbar).
- Footer Summary Statistics (for the Branch and date selected)
  - Unloaded orders Summarizes any unloaded Orders.
  - Routes Displays information about any built Routes.

# Organization & Management

Organization & Management is the Daily Planner page with links used to set up and manage your organization's Branches, Assets, and Trucks. See the User Permissions Table for permissions required.

- 1. Click on the three lines in the top left corner.
- 2. Scroll down to Organization & Management to start managing your fleet.

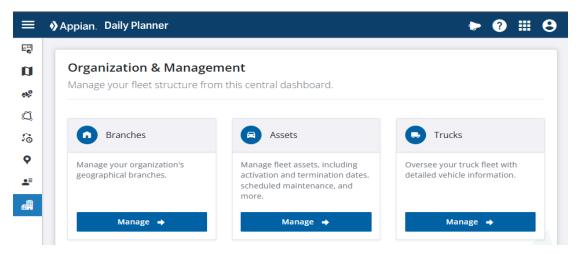


Figure 1 - Organization & Management page

#### **Branches**

Branches are the physical distribution locations where Assets (vehicles) are dispatched. Organizations can set up one or multiple Branches. The *Branches* page displays a list of your Branches and their locations on a map.



Figure 2 - Organization & Management - Branches map

#### Add a Branch

Creating a Branch is the first step in building and optimizing your Routes. Without a Branch, users cannot assign Assets, Drivers, and Devices, or load Orders and organize Stops.

Click on the + button at the top of the Branches page to open the Create Branch window (see Figure 4 below).



Figure 3 - Create a Branch +

- 1. Enter the Branch information.
  - Branch ID is the only required field, but it is recommended to complete all fields in the form.
- 2. Check the Auto Log Off with End Terminal box to allow drivers to automatically log off a Route when it crosses the branch's end terminal geofence (latitude and longitude).
- **3.** (Optional) Drag the blue Branch pin to the correct location on the map to pin it, or enter its GPS coordinates.

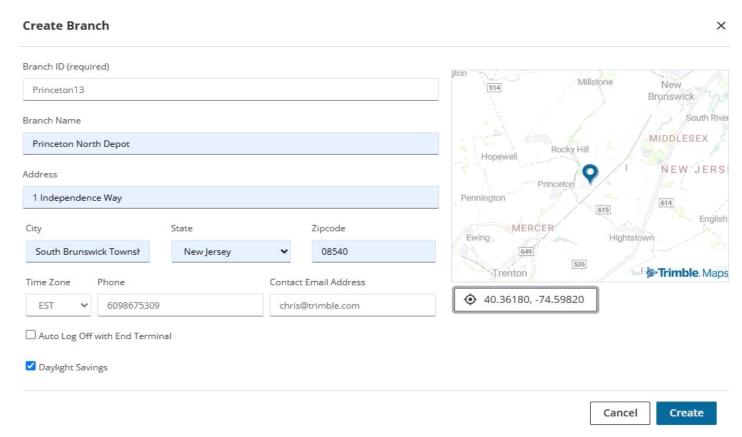


Figure 4 - Create New Branch window

4. Click on Create to finish and add the new Branch card on your list.

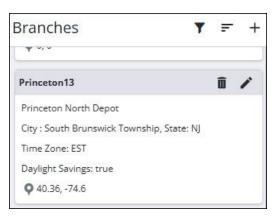


Figure 5 - Branch card within a list

#### Edit or Delete a Branch

- 1. Navigate to the Branches list.
- 2. Scroll to find the desired Branch card (see Figure 5 above).
- **3.** Select one of the following Click on the trash can to **delete** the Branch, or the pen to **edit** a Branch.

#### Filter Branches

Narrow your *Branch* list with filter options so only specific Branches appears:

- 1. Click on the filter button at the top of the *Branches* page and select *Filter*.
- 2. Select how your search term is applied to that field (e.g., Contains).
- 3. Enter your search term (e.g., Princeton).
- 4. Click on Add.

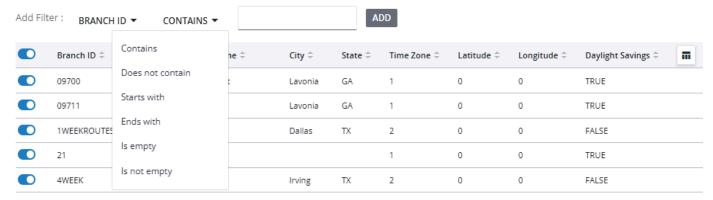


Figure 6 - Branch filter options

5. Select DONE at the bottom of the screen when you are done using the Filter tool.

#### **Sort Branches**

Sort all Branches so they appear in a particular order.

- 1. Click on the Sort button.
- 2. Select how you want to organize your list of Branches (e.g., by Time Zone, Branch Name).
- 3. Click on Reset to Default to delete the selected sort options.

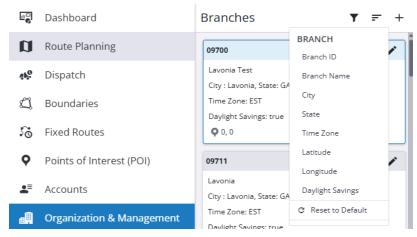


Figure 7 - Branch sort and filter options

#### **Assets**

Daily Planner uses the terms *Assets* and *Trucks* to differentiate between the fleet's actual vehicles (Assets), and the set of rules (Trucks) the routing algorithm uses to build Routes for those Assets.

Each Asset has a name and type, created by the user, in a format that best identifies and sorts vehicles in Daily Planner.



Figure 8 - Assets page with Name and Type

## Create An Asset Type

Create Asset Types for all of the Assets in your fleet before adding an Asset.

1. Click on the gears button (Show Asset Types) at the top right of the Assets page to view available Asset Types.



Figure 9 - Show Asset Types button (gears)

- 2. Select the + button (*Create Asset Type*) at the top of the *Asset Types* panel to create a new Type.
- 3. Enter an Asset Type name that best describes the type of vehicle in your fleet.
  - Types are a standard, shared description of the vehicle (e.g., Box, Lift, Semi).
- . Uncheck the Routable box if you do not want to add the Asset for routing.
- 5. Click on Create to finish and add an Asset
  - Continue creating Asset types until you have your entire fleet entered.

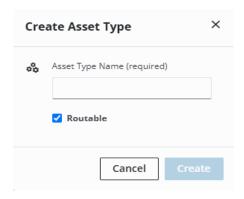


Figure 10 - Create an Asset Type window

#### Add an Asset

1. Click on the truck button (*Create Asset*) at the top of the *Assets* page.



Figure 11 - Asset page - Create a new Asset

- 2. Enter the Asset information (all fields are required):
  - **Asset Name** Unique Vehicle identifier within the Branch.
  - **Asset Type** Vehicle type created in the section above (e.g., Semi, flatbed, crane).
  - Activation Date and Termination Date Dates automatically default to a 10-year period from today's date.
- 3. Uncheck the Show on Route Calendar if you do not want the Asset to appear on the calendar for planning.

4. Click on Create to finish and add the Asset to the Assets table.

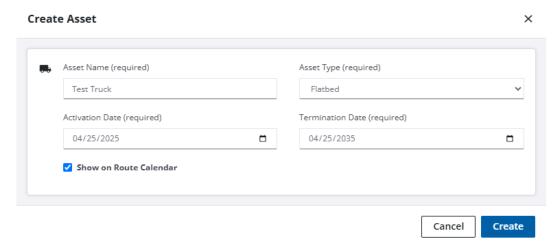


Figure 12 - Create Asset window

#### Delete an Asset

- 1. Hover over the Asset you want to delete until a pencil and three dots appear to the right of the Asset's row.
- 2. Select the three dots
- 3. Click on the Delete Asset box
  - If an Asset is deleted while it is assigned to a Route, it will remain on that Route. However, it won't be available for future assignments.

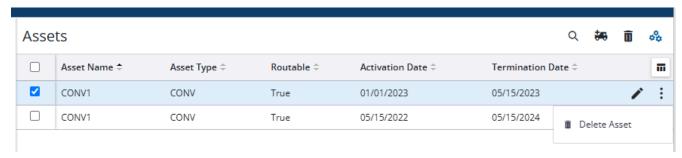


Figure 13 - Edit or Delete Asset

4. Click on Yes to confirm your Delete decision.

#### Edit an Asset

- 1. Hover over the Asset you want to edit until a pencil and three dots appear to the right of the Asset's row in the table.
- 2. Select the pencil to open the Edit Asset box.
- 3. Change any of the following: Asset's name, type, and activation and/or termination dates (See Figure 13 above).
- 4. Click on Save to finish editing.

#### Add Asset Maintenance

Add Assets to a maintenance schedule to prevent them from being included in a Route when they are out of service.

- 1. Hoover over the Asset and click on the Edit pen (See Figure 13 above).
- 2. Enter a start date, end date, and time for the maintenance.
- 3. Check Recurring event if the maintenance is regularly scheduled.
  - Select the maintenance frequency, if the *Recurring Event* box is selected.
- **4.** Add maintenance description (e.g., oil change and tire rotation).
- 5. Select Add Maintenance to add it to the Asset's maintenance log.
- 6. Click on Save to finish adding.

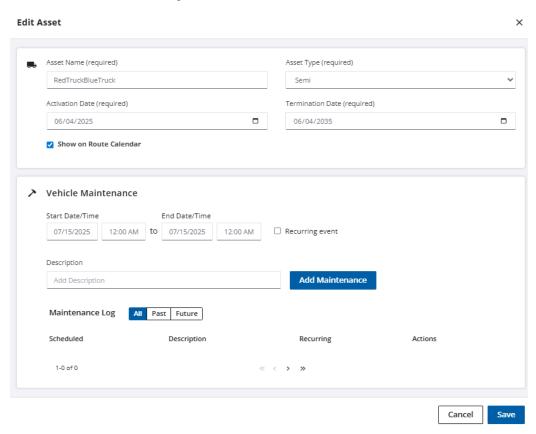


Figure 14 - Asset Maintenance window

#### Search or Filter Assets

Search or filter the display of Assets in the Assets page table using the features shown below.

- 1. Click on a column header to organize the chart in ascending or descending order.
- 2. Click on the magnifying glass to search for an Asset by name.
- 3. Click on the Configuration button in the upper right to select the information to display in the Assets table.

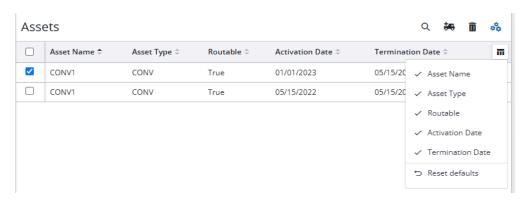


Figure 15 - Asset search and filter options

#### **Trucks**

A **Truck** is a collection of settings that govern how a Route is built. It uses dozens of data to optimize the algorithm and generate an efficient Route e.g., type of Asset (vehicle), hours of availability, costs, and special equipment, etc.

- View the Trucks for the selected profile using the Truck Profile table.
- Add and remove table columns by clicking on the Layout Configuration button to the right of the headers.



Figure 16 - Truck Profile page

#### Create a Truck Profile

Create a Truck Profile to organize Trucks into groups to easily find and manage them. Create a Truck profile before adding a Truck.

- 1. Click on the More Menu (three dots) on the top right of the *Truck Profile* page.
- 2. Select + Add Truck Profile.

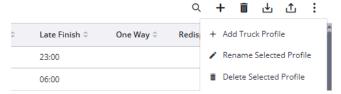


Figure 17 - Add Truck Profile Option

3. Enter a Truck Profile name and click Save.

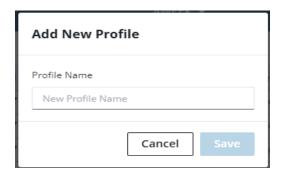


Figure 18 - New Profile window

- 4. Edit a Profile name or delete a Truck Profile using the same More Menu (See Figure 17 above).
  - If you delete a Truck Profile, all the Truck records associated with that Profile are also deleted.

#### Add a Truck

Trucks establish rules for the Truck Profile to improve planning efficiency and refine routing optimization.

- 1. Select the Truck Profile you wish to add a Truck to from the drop down menu.
- 2. Click on the + Plus button at the top of the Truck Profiles page to add a new Truck.



Figure 19 - Add new truck button

- 3. Enter the Truck name.
- **4.** Determine if you will create a Truck from Scratch or Copy from an Existing Truck.
  - If you choose to Create from scratch, click on Create.
  - If you want to Copy from an Existing Truck (all the Truck rules), choose a Truck from the drop down menu.
    - If you do not have an existing Truck, you will not have the option to Copy.

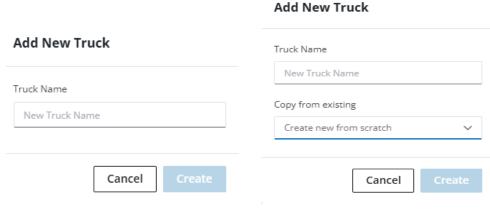


Figure 20 - Create new Truck

Figure 21 - Copy from existing Truck

5. Click on Yes to confirm the new Truck creation.



Figure 22 - New Truck confirmation request

- **6.** Enter the information in the *Create Truck* window.
  - The Truck ID Auto populates and is the Truck name you entered in step 3.
  - Truck Profile (Required) Tells the routing algorithm the type of Asset being routed.
  - Truck City (Required) Address of the Branch where Assets are dispatched.
- 7. Ensure Availability is toggled on (blue) to include the Truck in routing options.
- 8. Customize your Truck Enter *Work Rules*, *Cost*, *Volumes & UserFields*, and *Configurations* to create general rules Routing must follow when selecting the truck. If the rules are broken, violations occur (See Prescriptive Intelligence).
  - Earliest Day The earliest date an Asset may depart based on the established dispatch date.
    - o E.g., The Date of Dispatch is day 1. Enter a 1 in this field if the Assets can leave on the first day.
  - Latest Day The latest date an Asset can return to the terminal calculated from the dispatch date.
    - o E.g., A weekly Route might also have an Earliest Day of 1, but a Latest Day of 7.
- 9. Click on Create to finish.

#### Delete a Truck

Deleting the Truck does not impact the current Route or the Master Truck Record.

- 1. Follow the Edit a Truck steps to get to the Edit Truck Window.
- 2. Click on the *Delete Truck* button at the bottom of the window, and click the *Yes* confirmation button to finish.

#### Edit a Truck

Ensure your Truck and Truck profiles are updated as your Assets (fleet) changes to fully optimize your algorithms:

Scroll or filter until you locate the Truck ID you wish to edit and click when highlighted.

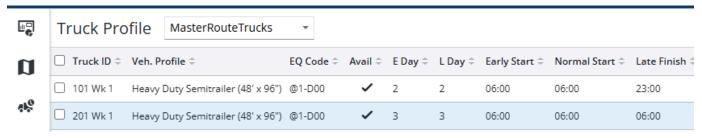


Figure 23 - Truck Profile table

2. Edit the necessary Truck info in the Edit Truck window (does not impact Master Record), and click on Save.

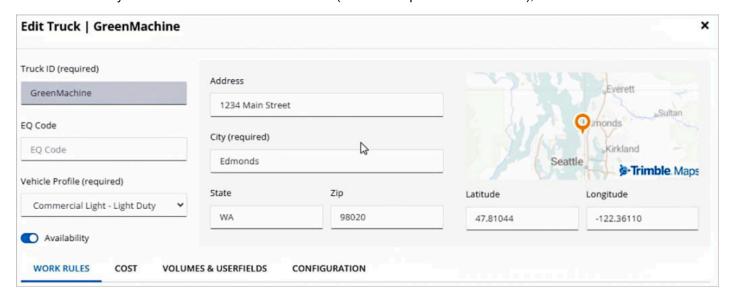


Figure 24 - Edit or Delete a Truck window

#### Search and Sort Truck Records

Search or sort through Truck records to find a specific Profile.

- 1. Click the magnifying glass at the top-right of the *Truck Profile* page to search using a key word.
- 2. Click any column header to sort in ascending or descending order. Slide headers left and right to organize the order.

### Upload a Truck Master Record

A Truck Master Record is a comma-separated values file (CSV), which contains all the necessary Truck information. This option allows the user to make large, sweeping changes to their fleet.

1. Click on the Upload button in the top right of the *Truck Profile* page.

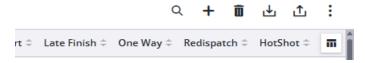


Figure 25 - Record Import and Export buttons

- 2. Click on the link at the bottom of the *Import Trucks* window to download the template and **create a new record** or Skip to Step 3 to **upload an existing record**.
  - a. Open the template in your favorite spreadsheet application (e.g. Excel).
  - **b.** Add all relevant Truck information.
- Upload the Truck Master record.

- a. Click Choose file to Upload to locate the file on your computer, or drag the file to the window.
- b. Review the Truck IDs in the preview window and check the IDs you wish to update or add with the import.
- 4. Click on the Save button to start using the Truck record.

#### Import Trucks



Figure 26 - Import Truck Records window

#### Download a Truck Master Record

- Check the boxes next to each Truck ID.
- 2. Click the Export Trucks button to download to your browser's default location (usually your Downloads folder).

#### Add a Driver

Drivers must be created in DRTrack or they will not appear in the Daily Planner.

- 1. Click on the Admin menu at the top of the DR Track window.
- 2. Click on Dispatch, then Drivers.
- 3. Select the correct Branch from the list then click on +Add New at the top.

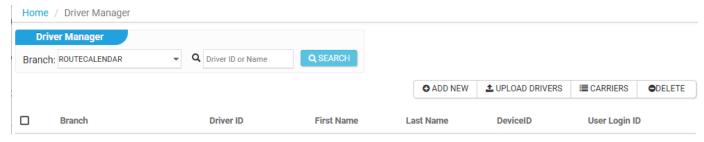


Figure 27 - Add new Driver information in DRTrack

- 4. Enter all Driver information.
  - Enter the Truck record in the DriverID field to create a link between the Asset and the Driver when planning.
- 5. Check the Show on Calendar box.
- **6.** Click on Save to start using the Driver in Route planning.

#### Add a Device

Devices are created using the Telematics/Mobile integration your organization is using. Each Driver requires a Device that has been set up in DRTrack.

- 1. Click on the Admin menu at the top of the DR Track window.
- 2. Click on Upload Devices to import Device information, or click on the + Add New button.
- 3. Enter all the Device information.
- 4. Click on Save to start syncing Routes to the Device.



# Dashboard

The Dashboard displays Route, Stops, and Driver information for the selected dispatch day using the GPS data relayed from the Driver's devices. Use three different visuals to gain insights — Map, Routes and Driver graphs, and Routes and Stops Charts. Use the Footer for quick statistics. If there is no GPS data, the Dashboard map and charts are blank.

### **Dashboard Map**

View the current location of all the Assets, assigned to Routes, that are in progress on the expandable map, including:

- The Driver's last position when they logged out of (or completed) the Route.
- The progress of the Route Green Assets are on time or ahead of schedule; red Assets are behind schedule.
  - The outer icon ring indicates the percentage of the Route that is complete.
- The Driver's current activity indicated by the shape in the color-coded circle.
  - Square Driver is stopped
  - Triangle Driver is moving with a compass heading
  - Check The Route is complete

Click on the circle to see the Route name, start time, on-time indicator, odometer reading at the beginning of the Route, and last reported GPS location.



Figure 28 - Driver is on time, moving at 40 MPH at 9:39 PM

#### Examples and explanations of the map's Asset icons:

571

Icon indicates Route 571 is ahead of schedule, in motion, heading north, and about 80% complete.



Icon indicates Route 544 finished (logged out) ahead of schedule and 100% complete.



Icon indicates Route 501 is stopped, ahead of schedule, Driver is still logged in, and 100% complete.



Icon indicates Route 575 is stopped, behind schedule, and approximately 50% complete.



Icon indicates Route 587 is in motion, heading south, behind schedule, and about 75% complete.



Icon indicates Route 417 finished (logged out) behind schedule, and 100% complete.

#### Click on the map? to display the legend for more icon descriptions

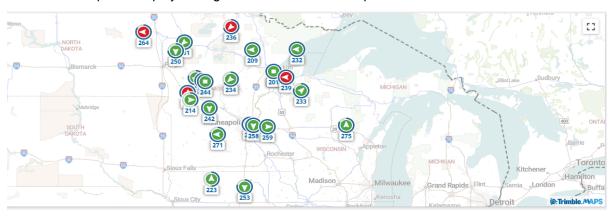


Figure 29 - Asset locations on Dashboard map

- Use the Show on Map tool to toggle between views Completed Routes, GPS breadcrumbs, or Other Routes.
  - o Toggle on the Completed Routes option to hide all completed Routes on the map.
  - Toggle on Other Routes to show all active Routes. Toggle off to show only the current Route.

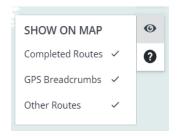


Figure 30 - Show on Map options

- o Toggle on GPS Breadcrumbs to display each GPS ping in the Route as a green circle on the map.
  - Select a circle to see details at the time of the ping the Asset's speed, the header, and the odometer. Information available is based on your GPS Integration option.



Figure 31 - Example of GPS pings in a Route

### Routes and Drivers Graphs

Toggle between Routes and Drivers (bottom) to see detailed real-time tracking in an expandable graph.

- Stops are represented as circles remaining Stops are outlined; completed Stops are color-filled.
  - Green Stops On time, ahead of the estimated schedule, or delivered early.
  - o Red Stops— Behind the estimated schedule or delivered late.
  - Current time is indicated by the blue vertical line topped with a truck icon.
- Right-click on the Stop circle to view Stop Details or Stop Summary in DRTrack or edit the Stop in ADP.
- Use sort and filter tools to refine the Route list from top to bottom (E.g., by Route status or Dispatch info).
- Routes longer than 31 days are not displayed on the graph.
- Expand Route rows in the graph to compare actual Stop times to planned Stop times. The planned Route appears below the actual Route.



Figure 32 - Driver graph showing Stops ahead of schedule despite a late start

### Route and Stops Charts

Assess the health of each Route and Stop as they progress using these charts and tables in the right panel.

- Toggle between *All* or *Remaining* to narrow the view to just the Routes and Stops not completed.
- The number in parentheses represents the total number of Routes or Stops while the number in the color-coded blocks represents the number for that particular category.

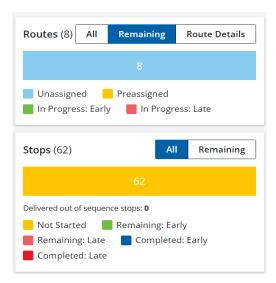


Figure 33 - Dashboard Routes and Stops chart

- Click on the Route Details tab to view Stop Status and times information on a Single Route (explained further below).
  - Click on the Stop Details button in each row of the table to open the Stop Details page in DRTrack.
  - View Routes that were completed out of the provided sequence (orange badge).



Figure 34 - Route Details Table with one Route completed late and out of sequence

#### Single Route View

Click a Device (blue outlined circle) to zoom in the map and display the Single Route in progress:

- The Route status is indicated by the color and shape inside of that circle:
  - o Green circle The Stop is on time or estimated to arrive early.
  - Red circle The Stop is estimated to arrive late or it was delivered past the estimated timeframe.
  - Checkmark The Stop is completed; a number indicates an incomplete Stop.
  - Blue outline Indicates its a device and the percentage of the Route that is complete.
- Hover over a Stop to display information about it time window and planned, estimated, and actual delivery times.



Figure 35 - Single Route view showing a completed Route

- Click on the Stop to display the *Edit Route* button and return to the Route Planning page, or zoom in to view completed / incomplete segments.
  - Completed segments are indicated by solid lines; incomplete segments have dashed.



Figure 36 - Single Route Segment view

#### **Footer**

The Footer appears on most pages and provides a Branch summary for the selected Dispatch day(s). It is synced to Route planning actions. Anytime a Branch, Route, Stop, or Order are altered, it is reflected in the Footer for real-time statistics. It includes: Number of Routes, Stops, Orders, and unloaded Orders; Average number of Stops per Route; and a breakdown of miles, hours and cost.

# Route Planning

The Route Planning page is ADP's primary resource for all things Route building. It houses multiple tools to build, optimize, and manage Routes. It is intended for one dispatcher per Branch per session. The page is composed of cards panels and lists to provide routing insights — Date picker, Route Cards, Stops Cards, Unloaded Orders Cards, Map panel, and Statistics panel. See the sections below for a deep dive into each component.

### Route Planning Date Picker

- The date picker at the top of the application lets users select one or multiple dates for Route building. Set the default view in Business Rules —Start, End or Span— and change views at any time in the ADP toolbar.
  - Start Shows only the Routes with the start date selected
  - o End Shows only the Roues that end with the date selected
  - Span Shows all the Routes that fall between the selected start and end date.
- Business Rules allow the user to determine if they want the date range of the Routes to auto-adjust if the user takes an action that is outside of the initial date range selected.
  - o Toggle on Date picker auto-adjusts, and the span includes the new dates in the range.
  - Toggle off Date picker does not change the date range. Displays changes in a Summary panel (top right).



Figure 37 - Route planning date picker

#### Route Cards

The Routes list (left) is a fixed panel displaying a list of all the Routes built for the selected day(s) and Branch. The list contains a toolbar with icons for quick actions, a More Menu (three dots) for additional Route management and customizable Route cards.

By default, the Route card is displayed in sequential order and has a header row and Route-specific information.

- Route cards can be sorted, filtered, styled, locked, and pinned.
- Hover over the Route card to highlight that Route on the map.
- Click on the card to view specific information, optimize sequence and view Truck info, etc.
- If no Routes exist, click the Create Route icon on the Routes header, or use the Route Building Wizard.

#### Route Card Header

Route card headers display the following: 1.) Route Name 2.) Route Lock 3.) Finalized Route indicator 4.) Push pin for pinning Routes 5.) Toggle to hide the Routes on the map 6.) More Menu for additional actions.

#### **Route-Specific Information**

The following is by default, but you can add more Route-specific information to the cards using the Card Layout Editor.

- Route start date and time
- Number of stops, stop details, and a light bulb icon for Route Suggestions
- Default Volume field #1 (See Set Alias)
- Violations present on the Route, if applicable (See Prescriptive Intelligence)

#### Pin a Route

Pin a Route to populate the Stops card and isolate the Route(s) on the map. The Routes list allows users to pin up to three Routes at a time.

- **1. Pin a single Route** Complete one of the following actions:
  - a. Click the push pin on any Route card.
  - b. Click any white space on the Route card.
  - c. Click on the Route card then click the checkbox on the Stop cards.
- 2. Pin multiple Routes Click each Route's push pin, or use the multi-Route selecting tool.

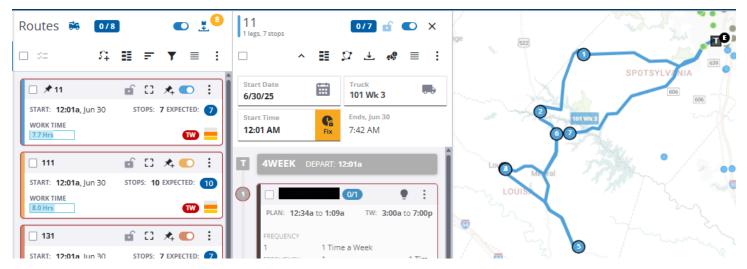


Figure 38 - Route 11 is pinned and isolated on the map

#### Unpin a Route

- **Unpin a Route** Click the X at the top right of the *Route Stop* list to unpin the Route and hide that Route Stop list.
- Unpin all Routes Click the Push Pin icon in the map controls menu (upper right on the map).

#### Lock a Route

Lock a Route to prevent unwanted changes when unloaded Orders are added or the Sequence is Optimized. See the Lock Routes section to learn how to lock multi Routes in a Branch, and use a fourth lock.

There are three different locks that you can apply to the Route using this option:

- All Changes Prevents stops from being added or removed. Stops can only be re-sequenced.
- Loading Orders Prevents new Stops from being added. Stops can be removed and / or re-sequenced.
- Unloading Orders Prevents Stops from being removed. Stops may be added and / or re-sequenced.
- Hover over a locked Route to see the type of lock(s) already applied (if applicable).

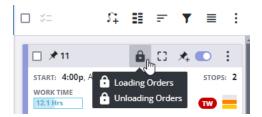


Figure 39 - Lock a Route button and lock options

- 2. Click on the *Lock* icon found in the Routes card toolbar.
- 3. Click on each lock you wish to apply Available lock options are grayed-out. Locks in use are blue.
- 4. Double click the lock to remove it.

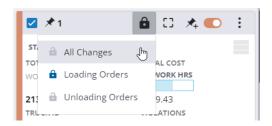


Figure 40 - Unlock a Route to allow changes

### Route Planning Toolbar

Icons in the *Routes* Toolbar allow you to perform several Route planning actions: Multi-Select Routes tool, Route Building Wizard, Create Empty Route, Card Editor, Route Sorting, Route Filtering, Route On/ Off Map toggle, Unloaded Order count, and a More Menu for multi-Route actions.

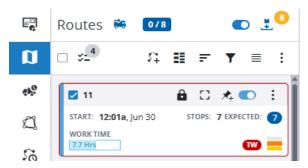


Figure 41 - Example Route card

#### Multi-Select Tool

The Routes toolbar allows users to select multiple Routes to complete the same tasks to each at one time.

- 1. Check the box next to the Route or Order card or line (in grid view).
  - The count on the icon at the top of the panel increases as cards are checked (see Figure 41 above).
- 2. Click the Only Show Selected Order icon to isolate the selected Routes or Orders.

#### **Build Route with Route Building Wizard**

Build Routes with the Route Building Wizard.

#### Step 1 — Set Alias Preferences

Set the Alias preferences before planning Routes (most other default settings are sufficient to get started).

- a. Navigate to the section named *Aliases* in the *Preferences* page.
- b. Toggle on the settings you plan to use in your Orders volume, quantity, Stop User, and Truck User Fields.
- c. Use the dropdown to assign the defaults for each setting that was turned on (e.g., Stop User Field #2)
- d. Move to Step 2 to start building Routes with the wizard.

#### Step 2 — Configure Route

- **a.** Use the Route Building Wizard to configure a routing solution (collection of Routes) for a group of Orders in four steps: 1) Route Dates 2) Candidates 3) Boundary Files 4) Review Selections, and 5) Preview Results.
  - Anything added via the wizard can be edited, so do not worry about mistakes.



Figure 42 - Route Building Wizard configuration steps

- **b.** Open the Route Planning tab.
- c. Click on the Build Routes button (truck) in the Route column.

#### Route Dates

Set the Orders dates for the build.

- a. Specify the Earliest and Latest dates for the Orders selected.
  - All the Orders available for the dates selected will be checked by default for Route building.
- b. Use the time and date filter options to remove Orders from this list or change the time of the Orders.
  - Sort Orders by any column, or add additional columns to find specific Orders or groups of Orders for editing.
- c. Ensure the selected Orders for routing solution are correct.
- d. Click Next to proceed, or Close to cancel your Route build.

#### Candidates

- a. Select the Truck profile to be used for the routing solution.
  - Click on View Truck Profiles to see all Profiles for a specific Master Truck Record.
- **b.** Adjust the *Earliest* and *Latest Route Dates* for the Profile.
- c. Select the Candidates (Trucks) you wish to add to the routing solution.

- Red Candidate is already in a built Route. Check Route dates.
- Yellow Candidate can be used if the Reuse Candidate setting is enabled (See Behaviors Settings).
- **Green** Candidate is available. This is an empty truck.
- Fixed Route Candidates cannot be unselected to ensure the FixedRT fields are considered.
- d. Click Next to proceed.

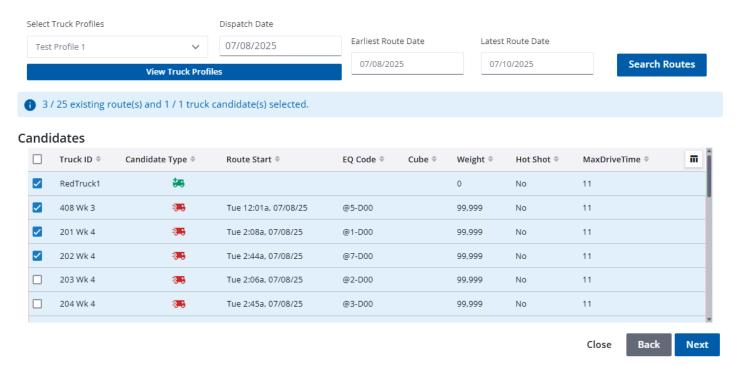


Figure 43 - Select Candidates window

#### **Boundary Files**

- a. Determine if the Routing solution should include a Boundary file.
  - For more information on Boundaries and Boundary Files, click here.

If your organization is	Then	
NOT using a boundary file (fully dynamic routing)	Choose Build Routes with No Boundary file	
Using an existing Boundary File	Click on Choose Existing Boundary File then select the desired file.	
Using a new Boundary File	<ol> <li>Create a Boundary file.</li> <li>Select <i>Upload New Boundary File</i>.</li> <li>Click on <i>Choose file to Upload</i> or drag the file into the box.</li> <li>Select the desired Boundary File to include in the routing solution.</li> </ol>	

b. Click on Next.

#### **Review Selections**

The preview pane summarizes the previous selections before starting the automated Route-building solution.

- a. Confirm all selections are correct. If you need to edit a selection, return to the previous steps to modify.
- **b.** Determine if you want to optimize the Route, if yes, check the box to *Optimize Routes after loading*.
- c. Click on Preview to review the Routes first, or select Build Routes without reviewing.

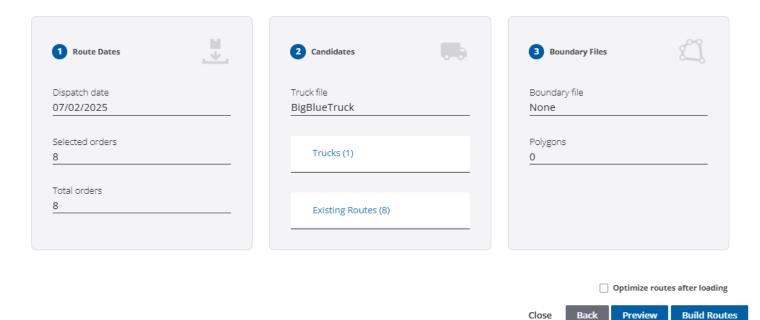


Figure 44 - Review Route variables window

#### **Preview Results**

This step itemizes the Routes created and the Routes and Orders impacted because of the new build. Users can go back to adjust selections or click on *Build Routes* to continue.

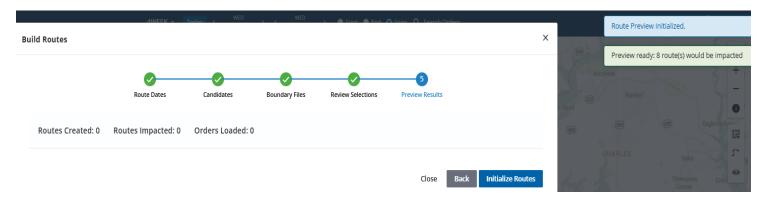


Figure 45 - Preview Route before finalizing

When the Route Building Wizard is done:

• The Route Planning tab lists the fewest number of Routes possible for the Trucks, boundaries, and Orders selected.

- The Route cards are stacked in the Routes column.
- The map shows all the Routes plotted in color-coded lines and stops.
- The Statistics panel (bottom of page) shows the Route comparison statistics.

# Create Empty Route

Create an empty Route for anticipated orders to ensure Drivers and Trucks are accounted for in the planning.

- 1. Click on the Create Empty Route icon to build the Route.
- 2. Select the Truck Profile and ID you want to create a Route for.
- 3. Review any violations and fix, if necessary.
- 4. Click on Continue to create the empty Route or Cancel to select a different Truck Profile/ ID.

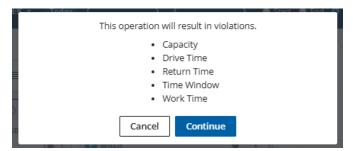


Figure 46 - Violations warning message during Route creation

- 5. Hover over the # in the Route header to view its Configurations and Avoids and Favors.
  - Enable or Disable these settings as needed.

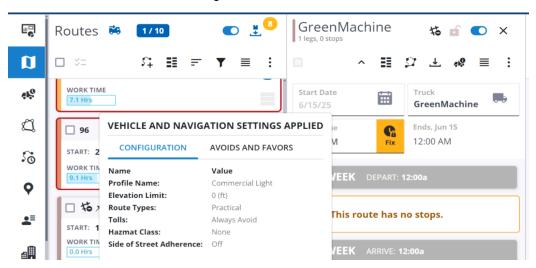


Figure 47 - Vehicle and Navigation Settings applied to the empty Route

- 6. Adjust the Truck Profile or ID, Start Date, Start Time, and set the time to Fixed or Floating from the Stop column.
  - If the Truck Profile/ ID is changed, it prompts users (top right corner) to also change the Route name to prevent multiple Routes with the same name (See Reuse Truck settings for more information).

• If the Start Date is adjusted beyond the dates selected in the Branch date picker in the header, the Route may fall out of view based on the settings enabled (See the explanation here).

# ■ Route Card Layout Editor

Click on the Layout icon and choose your desired Style and Layout. Easily switch between them.

- Choose between three different styles with customizable Layouts Details, Compact, None.
- Copy and modify any saved layout, or build a new one from scratch.

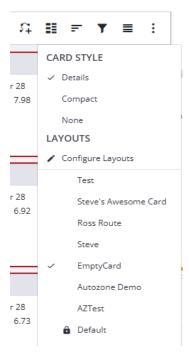


Figure 48 - Card Layout Editing options

#### Create a New Layout

Users can easily create a new layout or copy from an existing template.

- 1. Click on the Layout Editor icon.
- 2. Click on Configure Layouts, and select New Layout.
- 3. Determine if you want to copy and modify an existing layout or create a brand new layout.
  - Copy Select an existing template from the drop down menu at the bottom of the screen.
  - New Leave the template selection set to Blank.
- **4.** Enter the name of your new layout template.
- Click the green checkbox to confirm.



Figure 49 - Create new template using an existing Test template

- 6. Drag and drop the fields onto the card to customize the view.
  - Click on the green plus sign to add a new row.
  - b. Select the information from the left navigation panel and drag it over to the new row.
  - **c.** Hover over the row to display a grid and select the location for the new information.
  - d. Format font style and size, or edit text labels (where applicable).

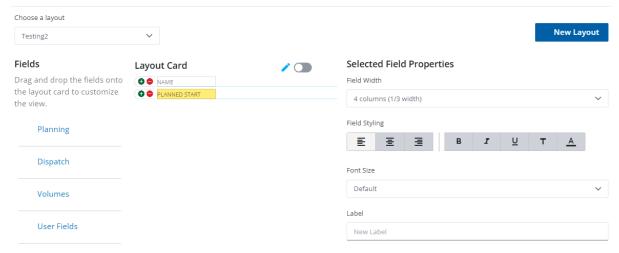


Figure 50 - Drop and drag fields into the new Layout Card

- 7. Click Save to use the template on a case by case basis, or click Save as Default.
  - The new layout template will appear as the default when you click on the Layout Editor Icon.

#### Switch Between Layouts

- 1. Click on the Layout Editor icon.
- 2. Click on Configure Layouts.
- 3. Select the template you wish to use from the drop down menu at the top.
- **4.** Click on *Apply* at the bottom of the screen.

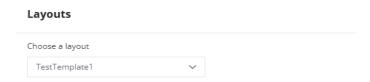


Figure 51 - Card Layout options in the drop down menu

### = Sort Routes

Sort Route card lists based on several attributes:

- Route Name
- Planned Start Time
- Planned End Time
- Rt Number
- Dispatch Date
- Route Modified Date
- Route Finalized Date

- Load Date
- Total Stops
- Total Cost
- Total Distance
- Work Time
- Total Legs
- EQ Code (equipment)

- Violations
- Completed Status
- Dispatch Fields
- Volume Fields
- User Fields

- **1.** Select the sort icon to display the list of sortable attributes.
- 2. Double click the attribute to change the sort direction from ascending to descending order.

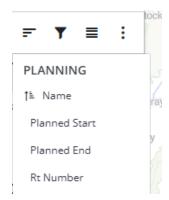


Figure 52 - Route sorting options

#### **Y** Filter Routes

A robust filtering tool allows users to create expression-based filters. You can filter either manually or automatically using system- applied rules. Only the filtered Routes appear on the map until the filters are reset.

#### Manual Filter

- 1. Select the filter icon to display a list of all of the Routes for that dispatch date.
- 2. Select / deselect Routes using the blue toggles to the left of each Route (see Figure 53 below).
- 3. Click *Done* when you are finished filtering, or Reset to clear filters (see *Figure 54* below).

#### **Automatic Filter**

Use this advanced option when there is **more than one attribute that you want to filter** by (e.g. load date AND total stops, assigned Driver AND planned start time). E.g., you **only want to see Routes that are greater than 150 miles**:

- 1. Click on the Filter Icon.
- 2. Use the drop down menus to select Total Distance AND Greater Than.
- 3. Enter 150, and click the Add button.
- 4. View what filters have been added and how it impacts the list totals at the bottom of the window.
- 5. Click Done when you are finished filtering, or Select Reset to clear filters (see Figure 54 below).



Figure 53 - Advanced filtering example

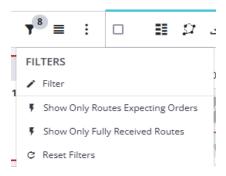


Figure 54 - Fast filters and Reset option

#### **Routes Grid**

Click on the four lines to toggle between cards and the data grid. The grid is a non-resizable two-pane window with all of the same functionality as the cards.

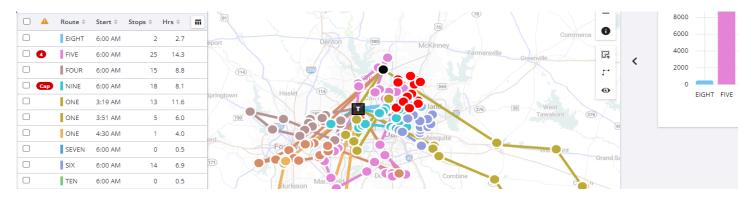


Figure 55 - Route grid view

- Click on the Configuration button (scroll to right) to select columns and a number of fields or volumes (see Figure 56 below). Configured data is retained between sessions.
  - o Scroll left and right to view all of the columns. They do not resize based on the number of columns selected.

- Drag the headers left or right to rearrange the order of columns (this is saved between sessions).
- Click on a column header to sort the data in ascending or descending order.
- Sort the entire grid using the icon at the top of the panel.

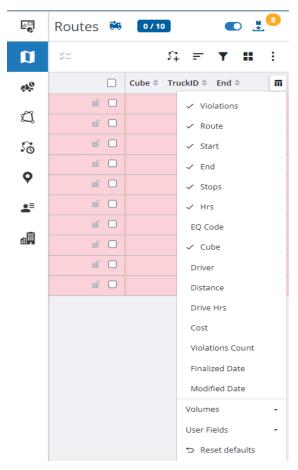


Figure 56 - Route grid configuration

### Routes On / Off Map

Focus on Route details without the distraction of segment lines on the map.

Toggle the blue On / Off button in the top right to hide or show on the map. When the toggle is blue, the Route lines are shown on the map.

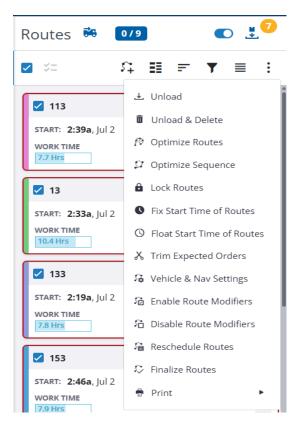
#### **Unloaded Orders Count**

Learn if there are any unloaded Orders and how many with this quick count feature (see Figure 57 below).

- Toggle Unloaded Orders by clicking the blue box with the M download symbol.
- See the Load an Unloaded Order section for more information.

#### More Menu

There are two sets of More Menus (three dots) to allow for Multi-selected Route actions or Individual Route actions.



0/9 Routes ✓ %= 113 **START:** 2:39a, Jul 2 Delete Route WORK TIME 7.7 Hrs Finalize Route Invert Route 13 Optimize Sequence **START:** 2:33a, Jul 2 la Reschedule Route WORK TIME 10.4 Hrs Show Stop Summary Show Truck Info **133 START**: **2:19a**, Jul 2 WORK TIME X Trim Expected Orders 7.8 Hrs ∀ehicle & Nav Settings
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 **153** Enable Route Modifiers START: 2:46a, Jul 2 Print WORK TIME

Figure 57 - Multi-Route level More Menu

Figure 58 - Individual Route level More Menu

#### Multi-selected Route Actions

The following actions impact all the selected Routes.

- 1. Check the boxes on all the Routes you want to perform the action on.
- 2. Click the More Menu in the Routes List Column (not the Individual card).
- 3. Select the action you want to complete from the menu and complete the steps in the sections below.
  - Unload
  - Unload & Delete
  - Optimize Routes
  - Optimize Sequence
  - Lock Routes
  - Fix Start Time of Routes
  - Float Start Time of Routes

- Trim Expected Orders
- Vehicle & Nav Settings
- Enable Route Modifiers
- Disable Route Modifiers
- Reschedule Routes
- Finalize Routes
- Print

#### Unload (multi-route)

Use this tool to remove the Orders from the selected Routes, but keep the empty Routes as a placeholder.

- Unloaded Orders move back to the unloaded Order pool for re-planning. To learn how to Load the Orders onto a Route, see the Load an Unloaded Order section.
- 1. Select Unload from the More Menu Action list.
- 2. Dynamic Route Click on Yes to confirm, or No to cancel.

Fixed Route – Type Unload in the box when prompted to start the unload, or No to cancel.



Figure 59 - Unload a Fixed Route confirmation request

#### Unload & Delete (multi-route)

This feature removes Orders from the selected Routes, and deletes the Routes in one step.

- Unloaded Orders move back to the unloaded Order pool to be picked up by another Route. To learn how to Load the Orders onto a Route, see the Load an Unloaded Order section.
- 1. Select Unload & Delete from the More Menu Action list.
- 2. Click on Yes to confirm, or No to cancel.

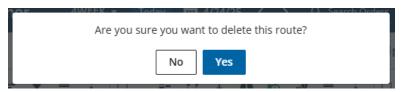


Figure 60 - Unload & Delete Route Confirmation Window

#### Optimize Routes (multi-route)

The Optimize Routes tool uses an Appian proprietary algorithm to optimize **the selected Routes** in the Branch, meeting all of the criteria selected in the *Preference* algorithm settings.

- Review the Locks applied to the Routes, and make necessary adjustments (See Lock Routes for details).
- 2. Select Optimize Routes from the More Menu Action list.
- 3. Click on *Preview* to see the optimized changes, click on *Optimize* to complete without a preview, or *Cancel* to exit.
- 4. Review the changes in the Preview and determine if you want to move forward with the optimization.

- The summary reflects the Routes modified and the stops moved along with the mile, cost, and hour adjustments made in the Route Optimization process.
- 5. Click on Apply Optimization to proceed, or cancel to exit.

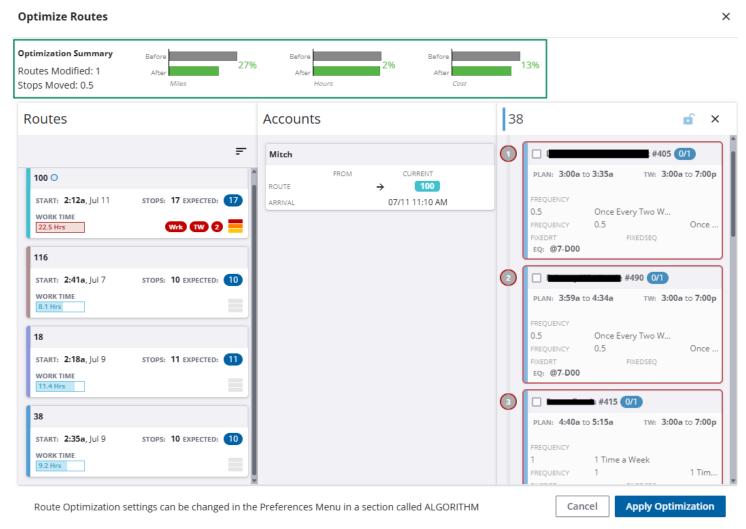


Figure 61 - multi-Route Optimization Preview window

#### Optimize Sequence (multi-route)

The Optimize Sequence feature uses an Appian proprietary algorithm to place **Stops on a Route in the best sequence**, meeting all of the Preference criteria selected in Algorithm settings. To Optimize Sequences for Individual Routes or using **Stops Lists**, view the instructions in their appropriate sections.

You can optimize the sequence of multiple Routes two different ways:

- Control+Alt+O Optimizes the sequence of **all Routes** at the same time without locks or previews.
- Multi-Select Optimizes the sequence of all the selected Routes at once, and offers an optimization preview.

#### Control+Alt+ O

Use the Control+Alt+O option to initiate a fast optimization of all Routes without options to lock or sequence previews.

• You cannot omit any Routes from this optimization process. All Routes are optimized to the fullest extent.

#### **Multi-Select Route Tool**

Moves Stop(s) into a sequence that is most efficient for every selected Route, but it does not move Stops from one Route to another.

- 1. Click Optimize Sequence from the More Menu Action list.
- 2. Determine if any Route needs locked before optimization to reduce disruption in the Route.
  - a. Determine which Routes you want to lock.
  - **b.** Drag those Route(s) from the *Route* card list (left) to the lock type columns (right). Add the Route to each lock type you want to apply. There are four lock types to choose from:
    - All Changes Prevents stops from being added or removed. Stops can only be re-sequenced.
    - Loading Orders Prevents new Stops from being added.
    - Unloading Orders Prevents Stops from being removed.
  - **c.** Click the Redo icon at the top of each column to empty that specific column and start over, or click the redo icon in the Locked Routes section to empty all columns.

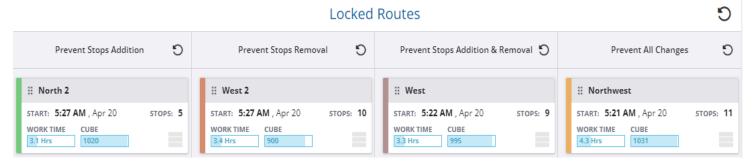


Figure 62 - Example of locked Routes and lock types

- 3. Preview the Routes' optimization options (See *Figure 63* below).
  - The left column shows the Routes selected for optimization, and the impact for each.
  - The columns to the right show the original Stops sequence and the optimized Stops sequence.
  - An Optimization summary (top) indicates the Mileage, Hours, and Cost savings of the new sequence.
  - If a Route is already in an optimal sequence, it displays a No Savings Found message.
  - If the Route has violations, it displays Could not optimize due to violations (See Prescriptive Intelligence).
  - If you do not wish to use the optimization suggestion, click *Cancel* at the bottom of the screen.
- 4. Click the box of each Route you want optimized. Verify changes. Undoing optimization is not an easy task.
- 5. Click Optimize at the bottom to save all of the new Stops sequences. Partial changes cannot be saved.

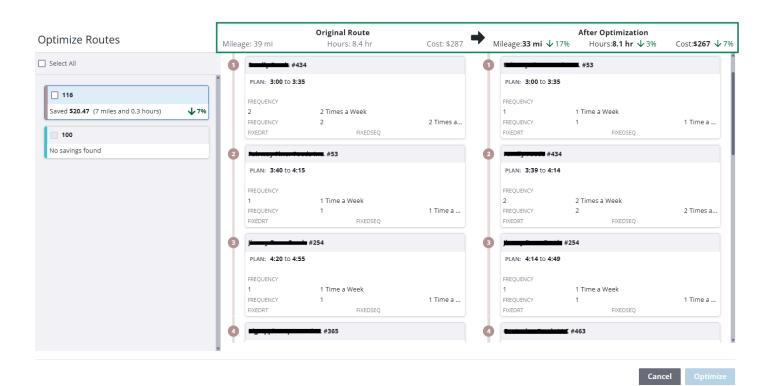


Figure 63 - Example of an Optimized Sequence preview and summary

#### Lock Routes (multi-route)

Lock all Routes in the Branch to prevent unwanted changes when unloaded Orders are added or Sequence is Optimized. There are four different locks that you can apply to the Routes.

- All Changes Prevents stops from being added or removed or re-sequenced.
- Loading Orders Prevents new Stops from being added. Stops can be removed and / or re-sequenced.
- Unloading Orders Prevents Stops from being removed. Stops may be added and / or re-sequenced.
- Loading / Unloading Prevents Stops from being added or removed. Stops can only be re-sequenced.
- 1. Drag the Route to the appropriate column.
- 2. Click the X at the top of the window to return to the Routes page.



Figure 64 - Example of locked Routes and their lock types

**Delete all Locks** — Click on the Reset All button to unlock all Routes and return cards to the left Unlocked column. **Delete a Lock category** — Click on the Unlock button to clear all the Route locks in that category.

**Modify a Locked Route** — If you attempt to change a Locked Route, an alert will appear.

- 1. Click Cancel to avoid the changes or Proceed to continue.
  - Proceeding overrides the lock and completes the action, but does not remove the lock.

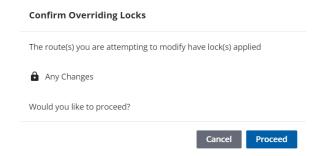


Figure 65 - Lock Overriding confirmation request

#### Fix Start Time of Routes (multi-route)

Lock the start time of **multiple Routes** to prevent adjustments when an Order is added or the Routes are optimized. Select *Fix Start Time of Routes* from the More Menu Action list.

- To reverse this setting and allow start time adjustments for all Routes, toggle the Routes to a Float Start Time.
- To adjust just one Route, click on the Route card to populate the Stop cards and click on the clock at the top.
- If the Routes have a Fixed Start Time, the Start Time icon is blue.

#### Float Start Time of Routes (multi-route)

Float the start time of **all the Routes** to allow adjustments when an Order is added or the Route is optimized.

Select Float Start Time of Routes from the More Menu Action list.

- To reverse this setting and fix start times for all Routes, toggle the Routes to Fix Start Time of Routes.
- To adjust just one Route, click on the Route card to populate the Stop cards and click on the clock at the top.
- If the Routes have a floating start time, the Start Time icon is yellow

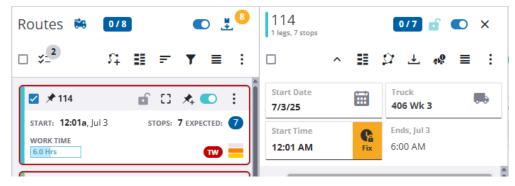


Figure 66 - Example of Routes with Fixed start times

#### Trim Expected Orders (multi-route)

Trim Routes with Expected Orders that have been delayed to avoid unnecessary Stops.

- 1. Ensure the DRT INI FixedRoutesAction is properly set.
  - WithOrders Manual Orders created in DRT show up as Expected in the Daily Planner.
  - WithoutOrders Manual Orders created in DRT DO NOT show up as Expected in the Daily Planner.
- 2. Select the Routes you want to trim from the Routes page, or use the Show Only Routes Expecting Orders quick filter.
- 3. Scroll down to Trim Expected Orders from the More Menu Action list.
- 4. Ensure you want to trim the Routes, and click on the Trim button to proceed. This action cannot be undone.

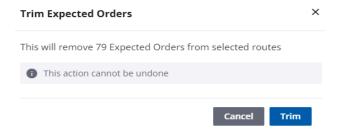


Figure 67 - Trim Expected Orders confirmation window

#### Vehicle & Nav Settings (multi-route)

Apply a variety of settings to customize and enhance multiple Routes in the Branch at one time (e.g., routing based on loads and road preferences). Any option selected in this window overrides the Default settings made in Preferences.

- This action is only visible with an active PC\*Miler Web Services (PCMWS) license.
- If you take actions on a Route after you apply Vehicle & Nav Settings, those settings are voided.
  - Routes deleted and rebuilt require settings to be re-configured even when the new Route has the same name.
  - These configurations are applied post-routing and may cause violations or impact build times.
- Routes with settings applied should cache the options selected.

#### **Available Configurations**

- Configuration Tab —Vehicle and Navigation settings (e.g., avoid tolls, fastest vs shortest Route).
  - Vehicle Profile The backup profile used if an invalid profile is detected while applying vehicle settings.
    - Vehicle type, dimensions, and load influences how Routes are calculated while being legally compliant.
    - Configure in the Account Manager. For more information, click here.
  - Elevation limit (N. America only) Sets the elevation limit for the Asset type and load. Default value is null.
    - The entered limit is ignored if it is deemed impractical, or a Stop is located at an elevation higher than the entered limit.
  - Max Speed (N. America only) Sets max speed, in mph or kph, determined by the DistanceUnits parameter.
  - Apply Traffic Data This allows the algorithm to use traffic data and historical traffic patterns and avoid traffic closures while calculating the trip's ETA and travel time.

- The trip's departure time is set within 15 mins of the current time
- Real-time traffic data is used for the first 15 miles and historical traffic patterns are used for the remainder.
- Feature is only used when the *Route Type* is set to *Fastest* with the exception of road closures.
- Highway Only Enables highway-only routing to generate distances between cities or postal codes.
- Use Sites Indicates if the Stops are off site and considers site gates during routing.
- Route Type Calculates your trip based on preference. For additional information, click here.
  - **Practical** Uses a typical Route. Takes the most direct path and stays on major, high-quality highways to minimize time and cost.
  - **Shortest** Uses the shortest Route within reason. May be longer than the practical route based on road conditions, speed limits, and other factors.
  - Fastest (N. America only) Uses the fastest Route based on real-time and historical data. Mileage may be more than the practical Route. Not recommended for trucks. Only be used for vans and automobiles.
- Tolls Pick between Always Avoid or Try to Avoid tolls. This could impact distance, ETAs, etc...
- Hazardous Material Class For hazardous material types and categories, click here.
- Side of Street Adherence Use this setting to avoid the destination being on the opposite side of the street.
  - The **Off** setting will not reroute based on the side of the street, while **Strongly Adhere** uses any means necessary to reach the destination on the same side of the street.

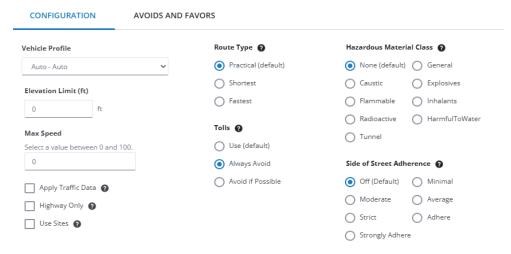


Figure 68 - Vehicle and Navigation Settings window

- Avoids and Favors Tab Avoid unfavorables in a Route for a more viable path. E.g. avoid construction or streets
  with noise ordinances.
  - Manage Avoids and Favors in Content Tools, and select which ones to apply from the Avoids and Favors tab.
  - A confirmation message appears in the top right corner of the screen when rules have been applied.

#### Enable / Disable Route Modifiers (multi-route)

Click on *Enable* or *Disable Route Modifiers* to quickly use/ not use the established Vehicle and Navigation settings on multiple Routes. This action overrides the default settings made in Preferences.

#### Reschedule Routes (multi-route)

Automatically reschedule selected Routes to accommodate changes to Stops, added Orders, or other variables like a change in Drivers. Select *Reschedule Routes* from the More Menu Action list.

#### Finalize Routes (multi-route)

Finalized Routes are ready to be integrated into the ERP or TMS system. This functionality allows you to focus on the completed Routes while avoiding the ones still in planning.

- 1. Click on Finalize Routes from the More Menu Action list.
- Confirm the Routes were finalized with the checkmark next to the Route planning icon.

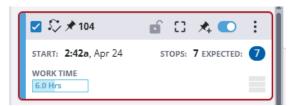


Figure 69 - Finalized Route with checkmark

#### Print (multi-route)

Printing Routes may be useful to Drivers that regularly pass through areas with limited cellular service.

- 1. Click on Print from the More Menu Action list.
- 2. Select Print Route Map.
- 3. Choose your print settings and click *Print*.

### Print a Route Manifest (multi-route)

A Route Manifest is a summary of the Route, its Stops, Orders and other information. It can be printed as an HTML file or CSV (comma-separated values file) file.

- HTML— A line-by-line list of stops in sequential order, including breaks and layovers. It's easiest to read.
- CSV Opens as a spreadsheet (e.g., Excel) where columns and rows can be filtered, sorted, or hidden. It can also be used as a primary backup method.
- 1. Toggle the file type you want to print (e.g., CVS).
- Select the manifest type you wish to print from the dropdown Stop, Order, or Line item.
- 3. Check the Print with map box if you wish to include the Route map on the last page.
- 4. Select up to two additional columns from each field drop down to add extra information to the printed manifests.
- **5.** Navigate to the Prescriptive Intelligence section and set the Violations to *Not Important*. If you **do not** want the violation to be displayed. Violations are printed by default.

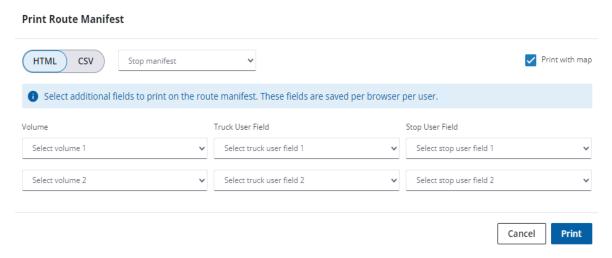


Figure 70 - Print Route manifest selection window

#### Individual Route Actions

The following actions are accessed through the Route card More Menu, and impact the Individual Route only.

- 1. Click the More Menu on the individual Route card.
- 2. Select the action you want to complete from the More Menu and complete the steps in the sections below.
  - Delete Route
  - Finalize Route
  - Invert Route
  - Optimize Sequence

- Reschedule Route
- Show Stop Summary
- Show Truck Info
- Unload Route

- Trim Expected Orders
- Vehicle & Nav Settings
- Enable Route Modifiers
- Print

### Delete Route (individual routes)

This action deletes the individual Route.

- Unloaded Orders move back to the unloaded Order pool to be picked up by another Route. To learn how to Load the Orders onto a Route, see the Load an Unloaded Order section.
- 1. Select Delete from the Card's More Menu Action list.
- 2. Dynamic Route Click on Yes to confirm; No to cancel.

Fixed Route — Enter Delete then click on Yes to confirm.

Are you sure you want to delete this route?

Please type delete to confirm:

No Yes

Figure 71 - Delete Fixed Route Confirmation Window

#### Finalize Route (individual routes)

This action works in the same way as the multi-Route option, but allows the user to finalize just an individual Route.

Select Finalize Route from the More Menu Action list. Finalized Routes are indicated with a checkmark.

#### Invert Route (individual routes)

The Invert Route feature allows users to flip the Route sequence and place the Stops in reverse order.

Click on Invert Route from the Card's More Menu Action list.

Inverting Routes could result in Route violations. See Prescriptive Intelligence for further details.

#### Optimize Sequence (individual routes)

This action uses the Appian proprietary algorithm to place Stops on a Route in the best sequence while meeting all of the Preference criteria selected in the Algorithm settings. To optimize more than one Route, see the Multi-Route option.

Click on Optimize Sequence from the Card's More Menu.

- The system automatically optimizes. There is no preview window.
- A message (top right) displays the Mileage, Hours, and Cost savings for the optimized Route.

#### Reschedule Route (individual routes)

Change a Route without causing many disruptions. Changes made to loaded orders may alter any Route configuration.

Select Reschedule Route from the Card's More Menu Action list.

- The system recalculates the Route, including start and end time, drive time, departure and arrival times, and volume.
- The Route is modified to its most efficient routing configuration when the recalculation is complete.

### Show Stop Summary (individual routes)

Stop details open in DR Track. See the DR Track User Guide for further summary table instructions.

- 1. Click on Show Stop Summary from the Card's More Menu Action list.
- 2. View the Stops in DR Track in another window.
- 3. Pay attention to warnings related to Route modifications.

#### Show Truck Info (individual routes)

This action allows users to view and edit Truck Information from a copy of the Truck Master Record. See Edit a Truck.

1. Click on Show Truck Info from the Card's More Menu Action list.

- 2. Make necessary changes in the Edit Truck window.
- Click on Save to finalize edits.

#### Unload Route (individual routes)

Unload an individual Route to move unloaded Orders back to the pool for re-planning, and save the Route as a placeholder. To unload multiple Routes at the same time, use the multi-Route option.

- 1. Select *Unload* from the Card's More Menu Action list.
- 2. Click on Yes to confirm, or No to cancel.

To learn how to Load the Orders onto a Route, see the Load an Order section.

#### Trim Expected Orders (individual routes)

This action works the same way as the multi-Route Option, but allows you to trim just one Route. Click here for details.

#### Vehicle & Nav Settings (individual routes)

Apply a variety of settings to customize a Route. To customize multiple Routes in the Branch at one time, click here.

- 1. Click on the Vehicle & Nav Settings from the Card's More Menu Action list.
- 2. Set the Vehicle Configurations. For an explanation of configurations, see Vehicle and Nav Settings (multi-Route).
- **3.** Tab over to the *Avoids and Favors* section and select your preferences.
- **4.** Click on Save to finish configuring.

#### **Enable Modifiers (individual routes)**

Click on Enable Route Modifiers to quickly use the established Vehicle and Navigation settings on that individual Route.

This action overrides the default settings made in Preferences.

#### Print (individual routes)

Printing a Route may be useful to Drivers that regularly pass through areas with limited cellular service. The print action works the same for an individual Route as it does for multi-Routes. For further instructions or to print multiple Routes at one time, see the Print (Multi-Routes) Section.

#### Lock A Route (Individual Routes)

Lock a Route to prevent unwanted changes when unloaded Orders are added or Sequence is Optimized. There are three different locks that you can apply to the Routes:

- All Changes Prevents stops from being added or removed. Stops can only be re-sequenced.
- Loading Orders Prevents new Stops from being added. Stops can be removed and / or re-sequenced.
- Unloading Orders Prevents Stops from being removed. Stops may be added and / or re-sequenced.
- 1. Hover over a locked Route to see the type of lock(s) already applied.

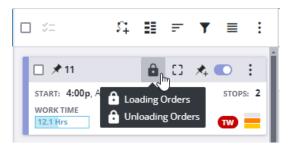


Figure 72 - Sample Route is locked to prevent Loading and Unloading orders

2. Click on the desired lock. Available lock options are grayed-out. Locks in use are blue.

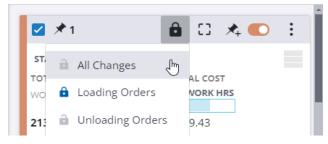


Figure 73 - All Changes and Unloading Orders locks available

3. Click any blue lock to remove it.

# **Stops Cards**

The Stop list is organized in much the same way as the Route list. The list contains a toolbar with icons for quick actions, a More Menu for additional management, and customizable Stop cards. Click on a Route to display the Stops list.

By default, the Stop card has a header row and Stop-specific information.

- Cards are shown in sequential order from top to bottom.
- The blue number in parentheses on each Stop card indicates the number of Orders in a Stop.
  - If the number is (+2) or higher, it is a consolidated Stop, and the number reflects the Stop Order count.
- Cards have an E before the Stop account name when Stops are on Fixed Routes with expected orders.
- View Stop information by clicking the number at the top of the card.
- Hover over the Stop card to highlight that Stop on the map.
  - Scroll through each Order's information using the small arrows at the bottom of the expanded card.

### Stop Card Header

The Stop card header (or toolbar) displays the following: 1.) Account Name 2.) Number of Orders within the Stop (see Consolidated Stops) 3.) Light bulb icon for suggested Routes 4.) More menu (three dots).

### **Stop-Specific Information**

The following is by default, but you can add more Stop-specific information to the cards using the Card Layout Editor.

- Each Stop's planned arrival and departure times, including the time window (TW).
- Equipment code (EQ) and Boundary code, if you are using a Boundary file.
- Any Violations present in the Route

### Suggested Routes (Stops)

The Suggested Routes feature uses the Daily Planner's algorithm to determine the best Route for a Stop (or Unloaded Order) while taking into account all violations.

- a. Select the Stop (or unloaded Order) that needs to be loaded onto a Route.
- **b.** Click on the lightbulb at the top of the card (lightbulb turns blue when in use).
- c. Review the Route Suggestions to determine the best option based on time, distance, cost and Route sequence, etc.
- d. Click on Load to add the Stop to a top suggestion or click Load More to see the expanded list of Route suggestions.
  - If the address and/ or account for multiple orders match, the Stops are consolidated (Manage Consolidation Rules under Consolidations in the Preferences section).
- e. Confirm the Stop has been added to a Route with the confirmation message in the top right corner of your screen.

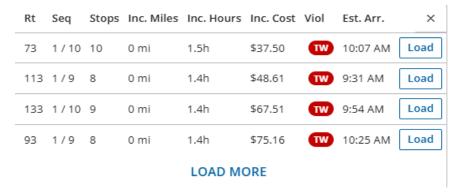


Figure 74 - Suggested Route window

### Stops Toolbar

Some actions in the Stops Toolbar are similar to the quick actions for Routes. In the Stops Column, users can change the Route name, adjust start dates and times, change truck profiles and IDs, edit the Stop Cards, Optimize Stop sequences, unload the Route, show Truck info, toggle to grid view, and use the More Menu for additional actions.

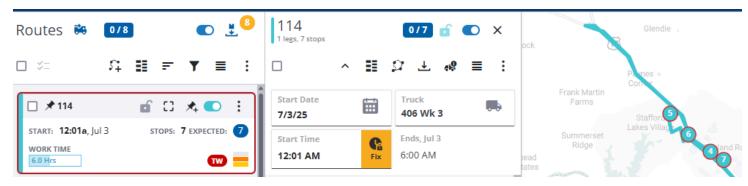


Figure 75 - Stop card for Route 114 - Future Route with expected Stops

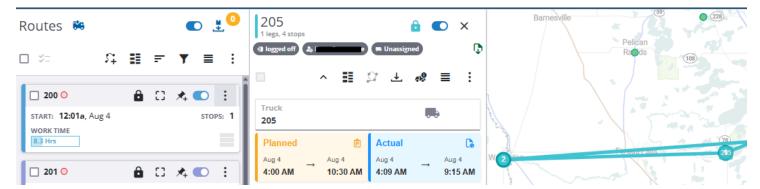


Figure 76 - Stop card for Route 205 - Current Route with Planned and Actual times

### **Change Route Name**

Branches should not have multiple Routes with the same name. This can occur unintentionally when Truck profiles or IDs are updated. To change the Route name, follow these steps:

- 1. Click on the Route that needs to be renamed to open its Stops list (See Figure 75 above).
- 2. Click on the Route name at the top of the list to open the editing box and enter the new Route name.

### Adjust Start Dates and Times

- 1. Click on the Route card that needs to be adjusted to display the Start Date and Time in the Stop Column.
  - Use the caret (^) in the header to hide/ unhide this panel.
- 2. Click on the Date to type in or select a new date from the calendar.
  - If the Start Date is adjusted beyond the dates selected in the Route planning date picker, the Route may fall out of view based on the settings enabled (See the explanation here).

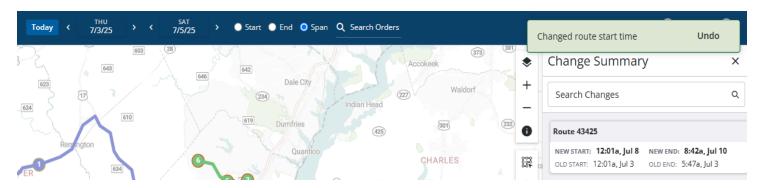


Figure 77 - Change summary notification

- 3. Click on the Time to enter the new start time, and click on OK.
- 4. Determine if the time should be Fixed or Floating.

### Change Truck Profiles and IDs

- 1. Click on the Route card that needs edits to display the truck button in the Stop Column.
  - Use the caret (^) in the header to hide/ unhide this panel.
- 2. Select or search for the desired Truck Profile then select the associated Truck ID.

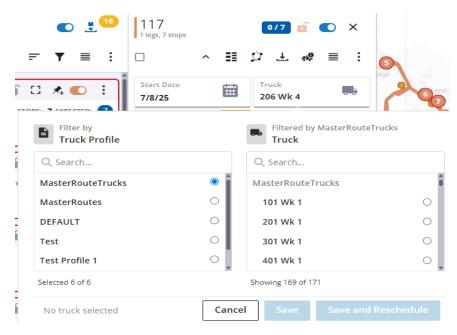


Figure 78 - Edit Truck Profile and IDs window

- 3. Click on Save to change only the Truck Profile / ID, or Save and Reschedule.
- 4. View the confirmation message in the top right, and determine if the Route name should change.
  - **a.** Click on *Change Route Name* to avoid having multiple Routes with the same name.
  - **b.** Ignore to proceed without a name change.

## Stop Card Layout Editor

See instructions found in the Route Card Layout Editor section.

### Optimize Sequence (Stops Card)

Use the Optimize Sequence icon in the header of the Stop list after Pinning a Route.

- There is no preview window.
- A message appears (top right) displaying the Mileage, Hours, and Cost savings for the optimized Route.

You saved \$35.57 with a reduction in 23.9 miles and 0.7 hours

Figure 79 - Optimization confirmation message

### Unload Stops from a Route

Manage Stops and Routes with quick action icons.

- 1. Click on the Route that needs to be unloaded to populate the Stops cards.
- 2. Check the Stops that need to be unloaded from the Route.
- 3. Click on the *Unload Route* icon in the Stops toolbar.

#### **Show Truck Info**

The Show Truck info icon allows users to quickly access the ADP *Edit Truck* window for Truck management and configuration. Make the necessary edits and click on the *Save and Reschedule* button.

### Stops Grid

Stops are viewed as cards by default. Use the hamburger button (three lines) to toggle between cards and the data grid.

- The grid is a non-resizable two-pane window with all of the same functionality as the cards (See Figure 80 below).
- Select the arrow next to the Order to expand and view or configure the line items.
- Drag Order rows into existing Routes, or create new Routes.
- Scroll right (bottom of list) and click on the Configuration button (top right of list) to configure columns, fields, or volumes (see Figure 80 below). Configured data is retained between sessions.
  - Drag the headers left or right to rearrange the order of columns

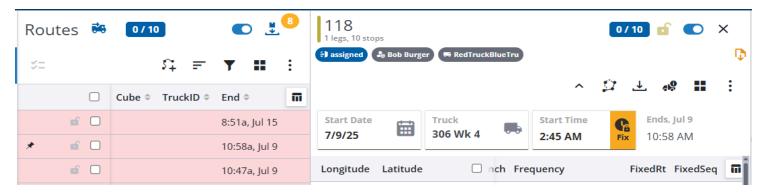


Figure 80 - Route and Stop grid view with Route 118 assigned

### Stops More Menu

The Stops list contains a More Menu for multi- Route/ Stop actions and individual Stop actions. Most of the More Menu actions are the same as the Routes actions and instructions can be found in their respective sections: Invert Route, Stop Summary, Finalize Route, Delete Route, Trim Expected Orders, Vehicle & Nav Settings, and Print.

#### **Edit Stop Details**

Stop Details are edited in DR Track. To edit the stop information:

- 1. Click on the Route card to populate the Stops list.
- 2. Locate the Stop that requires edits.
- 3. Click on the card's More Menu Action list and select Stop Details.
- **4.** Edit the necessary information in the DR Track window.

#### **Unload Stop**

Orders can be unloaded from Stops just as Stops can be unloaded from Routes.

- 1. Navigate to the Stop card that needs to be unloaded.
- 2. Click on the More Menu Action list and select *Unload Stop*.
  - The system automatically returns the Orders to the Unloaded Orders list.



# **Unloaded Orders Cards**

The Unloaded Order list provides users with basic Order information for the selected Branch and Route Dispatch date (or a selected date range). The list is organized in much the same way as the Stop and Route list — a toolbar with icons for quick actions, a More Menu for additional Route and Order management, and customizable Order cards.

By default, the Unloaded Order card has a header row and Order-specific information.

### Unloaded Order Header

The Unloaded Order header (or toolbar) displays the following: 1.) Order's Account Name 2.) light bulb icon for Suggested Routes 3.) More menu (three dots) for additional Order actions.

### **Unloaded Order-Specific Information**

The following is by default, but you can add more Unloaded Orders information using the Card Layout Editor.

- Each Unloaded Order's estimated ship date and time window.
- Equipment code (EQ)

## Suggested Routes (Orders)

The Suggested Routes function works the same way for both unloaded Orders and Stops. For instructions, see the Suggested Routes section under Stops Card.

#### **Unloaded Orders Toolbar**

The actions available in the Unloaded Orders Toolbar are much the same as the quick actions in the other lists' Toolbars. Users can set Start and End dates, edit the Order Cards, filter and sort, toggle to grid view, and use the More Menu for additional actions.

#### Set Start and End Dates

Set the start and end date of the delivery window for the unloaded Orders. See Branch Date Picker for more details.

- 1. Check all of the unloaded Orders that need dates established.
- 2. Click on the Calendar icon and set the Start and End date.

#### **Unloaded Orders Card Layout Editor**

See instructions found in the Route Card Layout Editor section.

#### Filter and Sort Unloaded Orders

The filter and sort for Unloaded Orders works the same as the Route filter and sort functionality in the Routes panel.

• When the Unloaded Orders are filtered, it also filters the Unloaded Orders Statistics pane within the Solution Statistics panel, and visa versa. These sections are synced.

#### Unloaded Orders Grid

Unloaded Orders are viewed as cards by default. Use the three lines to toggle between cards and data grid.

- Use the caret icon (^) to expand or collapse the panel.
- Resize by clicking and dragging the grey bar at the top of the pane.
- Select the arrow next to the Unloaded Order to expand and view the line items.
- Click the Configuration button (right of the grid) to add or remove columns like shipping address and Order frequency. Configured data is retained between sessions.
  - Scroll left and right to view all of the columns. They do not resize based on the number of columns selected.
  - Drag the headers left or right to rearrange the order of columns (this is saved between sessions).
  - o Select a column header to sort the data in ascending or descending order.
  - Click on the More Menu and select View with Pagination to change the scroll settings.

#### Unloaded Orders More Menu

The Unloaded Orders list contains a More Menu for multi- Route/ Order actions and individual Order actions. Some of the More Menu actions have been covered previously and instructions can be found in their respective sections like Build Route, Create Route, Assign POI. Geocode orders can be found below.

#### Load an Unloaded Order

Incoming Orders are placed in the *Unloaded Orders* list. These Orders are ready to be loaded onto a Route.

Use the Load Unloaded Orders workflow to choose the most optimal Routes:

- Select all the Unloaded Order(s) you want to load from the Unloaded Orders list.
- Click on the More menu in the list (not the card), and select Build Route.

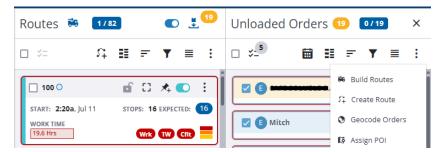


Figure 81 - Unloaded orders list with the multi-Route More Menu open

3. Follow the instructions in the Build Route section.

Orders can also be loaded using a drag and drop approach. Simply click anywhere on the Order card / row and drag it into the desired Route.

#### GeoCode Orders

Daily Planner notifies the user if an unloaded Order needs to be geocoded. If ADP highlights unloaded Order(s) in yellow complete the following steps:

- 1. Use the Multi-Select tool to select every Order you want to geocode.
- 2. Click on the Unloaded Orders icon at the top right of the Route panel to maximize the Unloaded Orders panel.
- 3. Right-click on the Unloaded Orders panel, and select Geocode Orders.

Individual Orders can also be geocoded by selecting Geocode from the Unloaded Orders card More Menu.

#### Order Details (Edit an Unloaded Order)

Unloaded Order edits are done in DRTrack. There is not an option to edit them in ADP. To edit the Order details:

- 1. Click on the *T*oggle Unloaded Orders icon in the Route Planning toolbar.
- 2. Select the More Menu (three dots) on the desired Unloaded Order card.
- Click Order Details from the list, and make the necessary changes in the DRTrack window.

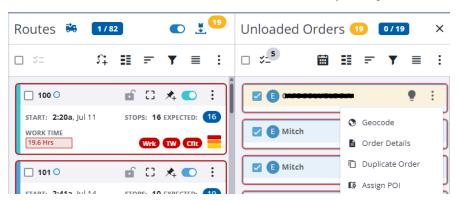


Figure 82 - The Unloaded Orders card More Menu options

### **Duplicate Order**

When customers have repeat Orders they can be duplicated for quick loading and Route management.

- 1. Click on the Order that needs to be copied.
- Click on Duplicate Order and the system will automatically add that Order to the Unloaded Orders list.

### Importing Orders into Daily Planner

Customers using both DRTrack and DirectRoute may find Daily Planner useful for building daily Routes. Order integration methods include upload from DirectRoute, Order Import Service (OIS), or web service integration.

- If Orders and Truck Profiles exist in a user's instance of DRTrack, they are available in Daily Planner.
- Export to ADP following the same steps for exporting Orders and Truck Profiles from DirectRoute to DRTrack

# **Routing Map**

The Route Planning map interface allows users to choose different map styles along with traffic and weather overlays. There are also a variety of tools to customize the map view and create Routes.

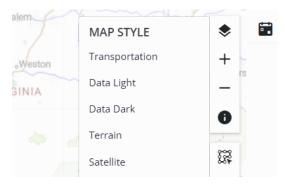


Figure 83 - Routing map style and displays

# Lasso Stops

The Lasso Tool allows you to create a Route on the map by drawing a lasso around the unloaded Orders (red circles).

- a. Click on the Lasso in the Map tools.
- **b.** Surround the stop by clicking on points in the map.
- c. Double-click the last point of the lasso to finalize it.
- **d.** Right click and select Create (Fixed) Route.
- e. Select the Truck Profile and Truck ID for the Route.

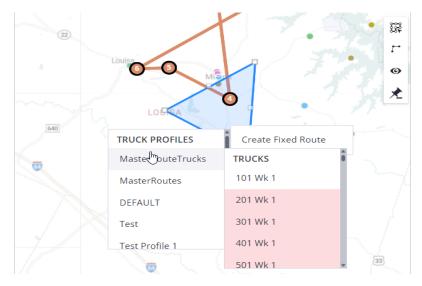


Figure 84 - The Build a Route option from the Lasso tool

Once the Route is created on the map, a corresponding Route card is created within the Route list.

# Route Line Styles

Route lines are drawn between stops two different ways:

- 1. Crow fly style Lines are measured using a direct, straight line between two Stops.
- 2. Road network Lines are measured using the road network which may not be as direct, but it is more accurate.

# Show On Map

Show or hide a variety of Route-related data on the map. Any item not selected in *Show on Map* falls under the *Hidden* category. When Toggled on:

- Unloaded Order The map displays the unloaded order as a red circle with an E in the center.
  - Multiple Orders Displayed on the map as a black circle.
  - Click on the black dot to see the list of Orders; click on the individual Order to see the details (see Figure 86).





Figure 85 - Single Order stop

Figure 86 - Multi-Order stop

- Loaded Stops The map displays the Stops as color-coded circles.
  - o Colors coordinate across Stop circles, Route cards, and Stop cards; however the colors are not customizable.
  - Hover over the Stop circle to display its card; click on the circle to see Route details.
  - Use the arrows in the card header to cycle through the Stops in the Route.



Figure 87 - Map with several Routes, Stops, and a Stop Card

- Route lines The Color-coded Routes are displayed based on the line style selected.
- Stem Lines Segments of the Route coming or going from the terminal.
- Stop Sequences The map shows a number in every circle indicating its Stop position within the Route.
  - Use the arrows in the card to cycle through the Orders in the Stop.
- Route Name and Truck Name The names appear inside of color-coded boxes near the Route center.
- Terminal The Starting and Ending point for each Route in a Branch is displayed on the map as a T symbol.

#### Solutions Statistics

Solution Statistics is an expandable panel providing three tabs of information including the following:

- Number of Routes and Stops created (numbers may differ depending on consolidated stops)
- Number of Orders and unloaded Orders on Routes
- Mileage, cost, and work hours of all Routes

Click on one of the tabs below the map to access the information: Orders, Route Comparison. Solution Comparison.

#### **Orders**

Provides information about the Orders loaded on Routes and any unloaded Orders per dispatch date selected. Compares against previous business day's quantities and volumes established in Alias Preferences.

- Use the Calendar button to change comparison dates.
- Use the filter button to narrow the view to either received orders, expected orders, or bad geocodes.

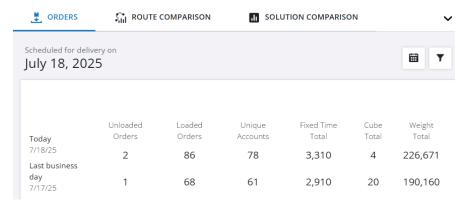


Figure 88 - An sample Order comparison between the current and previous dates

### **Route Comparison**

Provides several charts to compare Route data side by side. Route bar colors correspond with the Route card colors.

1. Click on a bar to: 1.) pin that Route 2.) open the Stop list for that Route and, 3.) highlight the Route on the map.

- 2. Select another Route bar to pin and compare.
- 3. Select one of the comparison fields from the drop down: Cost, Distance, Drive Hours, Stops, Work Hours, or Volume.
- 4. Use the sort and filter options to organize and refine the chart.



Figure 89 - A sample Route Comparison based on cost

# Solution Comparison

Compares today's dispatched solution against any other previous dispatch day, week, or month.

- Solutions Statistics Analyze miles, cost, hours, and violations for two Routes and dispatch dates.
- Solutions Totals Review solutions totals, in chart form, by: Cost, Miles, Stops, Hours, and Volume.
- **KPIs** Compare Key Performance Indicators by dispatch date.

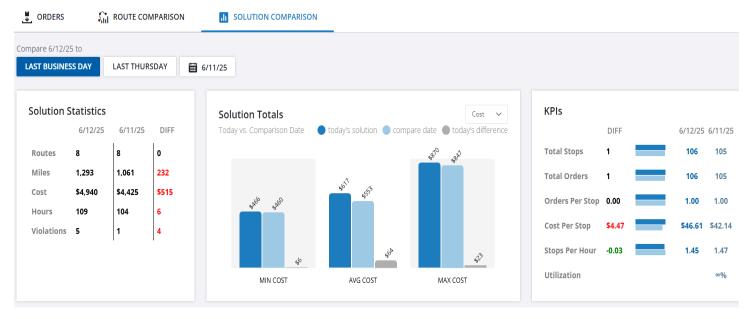


Figure 90 - Solution Comparison charts and tools

# Dispatch

The Dispatch page allows users (one user per branch per session) to assign Drivers, Devices, and Assets to the Routes being created. It also has notification options and an export feature for Route tracking and operational visibility. The Dashboard appears when at least one Route is dispatched before logging into the Daily Planner.

See the Branch Date Picker section under Route Planning for information on Branch dates and selection options.

# **Assignment Table**

The Assignment table is a customizable and expandable data grid with a Toolbar for various actions and information about each Route. It includes the export status, planned and actual start times, assigned resources, and any scheduling conflict.

The table is customized two different ways:

- Click on the header of each column and drag it to the desired order on the table.
- Scroll to the right of the table and click on the Configuration button to add or delete columns to/ from the table view.

### Assign Drivers, Devices, & Assets

The table allows users to pre-assign Drivers, Devices and /or Assets to Routes. To preassign a Route:

- 1. Select the Route that needs to be pre-assigned.
- 2. Select the appropriate Driver, Device, or Asset from each dropdown, and the system assigns automatically.
  - See the Organization & Management section for instructions on creating a Driver, Device, and Asset.
- 3. Click on the row to see the planned Stops and the Route on the map.
  - The Dispatch Map has the same tools and styles as the Route planning map.

Each Route, for the selected date and Branch, has color-coded information that corresponds to the assignment status:

- White Unassigned and not logged in
- Blue Preassigned and not logged in
- Green Assigned and logged in
- Grey Assigned and logged off
- Orange Route was completed out of sequence



Figure 91 - Assignment Table with an Asset assigned, and a Stop delivered out of sequence

### Edit a Pre-assignment

For Routes that have **not been logged in**, editing the pre-assignment is done the same way as creating a pre-assignement in the section above. To unassign a Route, complete the steps below:

- 1. Determine if the Driver has logged into the Route.
  - If the Driver has **Not** logged in, move to Step 2.
  - If the Driver has logged in, undo the login event before moving to Step 2 (See Section below for instructions).
- 2. Navigate to the Route requiring unassignment.
- **3.** Select *Unassigned* from the dropdown menu for each resource that needs unassigned, or right-click on the Route row and select *Unassign* to complete the task for all three resources at once.

#### Conflicts and Violations

All conflicts and violations are displayed with color-coded badges. A number in the badge indicates multiple violations. Hover over the badge to determine the issue. Set violation priorities under Prescriptive Intelligence. See the Violations Table for definitions.

# Dispatch Toolbar

The Dispatch Toolbar provides users the ability to filter and sort Routes for assignment, finalize Routes, Send Notifications, Export Routes, and reschedule.

### Filter Dispatched Routes

The data grid can be sorted very similarly to the Unloaded Orders or Routes. Filter the table by the following fields. Click on the filter funnel icon for the options.

- Unassigned Route has not been assigned a resource (Device, Driver, or Asset).
- Preassigned Route has been assigned at least one resource.
- Loggedin The Driver has logged in to the Route.
- Logged off The Driver has logged off of the Route.
- Not Logged In The Driver has not logged in to the Route yet.

### Sort Dispatched Routes

Sort the Dispatch table by Route Planning variables, Dispatch fields, Volume settings, and User fields. Click the Sort icon for a list of options in the drop down menus (see *Figure 92* below).

 The Planning variables are set on the Route page, and the Volumes and User Fields are set in DR Track and managed on the Preferences page under Aliases.

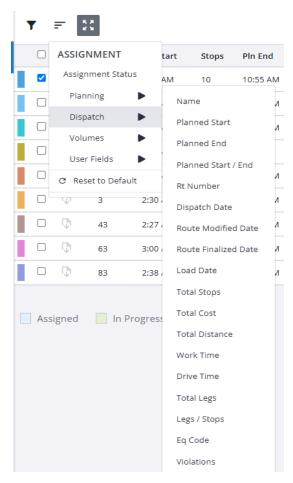


Figure 92 - Sorting options for Dispatched Routes

# Finalize Dispatched Routes

The Finalize Routes action on the Dispatch page completes the same action on the Route Planning page. It identifies Routes ready to be integrated into the ERP or TMS system to allow focus on the completed Routes while avoiding the ones still in planning.

- 1. Check the Routes you wish to finalize.
- 2. Click on the blue Finalize Routes button in the toolbar, then view the confirmation message in the top right corner.

### **Send Notifications**

The Send Notifications feature is a licensed service used to send Routes and Order status notifications to the Customer Communication Manager (CCM).

- 1. Check the Routes in the table you wish to send to the CCM.
- 2. Click on Send Notifications in the Toolbar.

### **Export Routes**

Use the *Export* button to export multiple or individual Routes to a variety of mobility and tracking integrations for mobile client applications. This allows ADP to be used for Route tracking and operational visibility during the execution of the Routes. Routes that have been changed after initial export require a re-export following the same instructions below.

Users may be required to do the following based on the telematics/ mobile integration chosen:

- Preassigned Drivers before exporting Routes
- Export a Route to distribute Route plans to Drivers

#### **Individual Routes**

- 1. Right-click on the individual Route row, and click on *Export*.
- Select the Device type to export to (based on the integration package available).

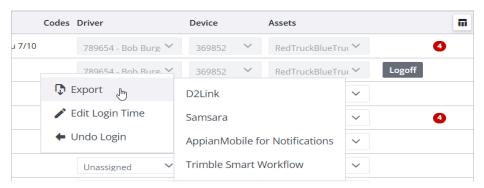


Figure 93 - Exporting an individual Route

#### **Multi-Routes**

- 1. Check the boxes next to each Route you wish to export.
- 2. Click on the Export button in the Toolbar.
- 3. Select the Device type to export to (based on the integration package available).

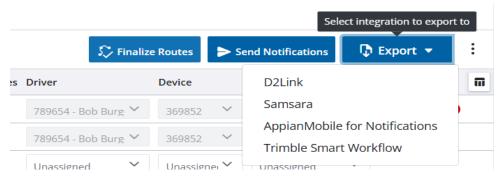


Figure 94 - Export multiple Routes

The status is displayed in the table with a color-coded export icon to the left of the Route number. Hover over the icon for the export status.

Grey — Route is unassigned and not exported

- Orange Route is preassigned but not exported
- Green Route has been exported
- Red Route has been exported but changed, and needs to be re-exported

## Reschedule Dispatched Routes

Reschedule Routes using the More Menu in the toolbar (multi-Routes selection) or the More Menu in the individual Route row in the table.

- 1. Click on the Route(s) that need to be rescheduled.
- 2. Click on the More Menu, and select Reschedule Routes.
- 3. View the confirmation message in the top right corner.

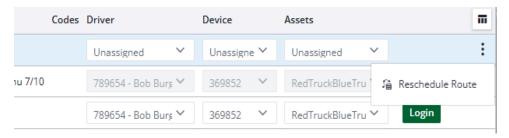


Figure 95 - Reschedule Dispatched Routes using the More Menu option

# Manual Login / Logoff

A dispatcher may want to manually log a Driver into or log a Driver off of a Route rather than using a telematics or mobile integration. Click the appropriate *Login* or *Log off* button on the assignment row (The time is set when the icon is clicked).

## Undo Login/Logoff

Cancel a login or logoff that occurred by accident or needs to be canceled.

- 1. Right-click on the Route and select the appropriate *Undo Login* or *Undo Logoff* button.
- 2. Confirm the action to remove the login event.

## **Edit Login Time**

The login time of a Route can be updated if adjustments are required.

- 1. Right-click on the logged in Route and select Edit Login Time.
- 2. Change the start date and /or time of the Route login.
- 3. Click on Change to save the edits.

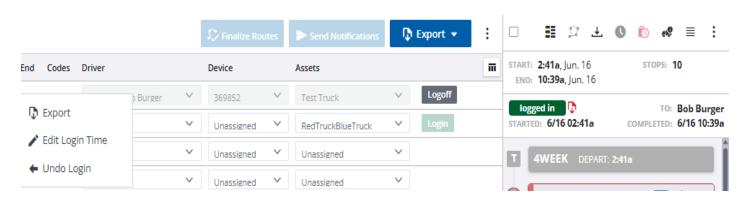


Figure 96 - Assignment table with Edit Login Time option for assigned Driver.

# Boundaries

The Boundaries Page allows users to upload Boundary files to be used in the Routing algorithm. Unlike dynamic routing, the algorithm looks for Orders within each boundary and builds appropriate Route ensuring the Orders are matched with Assets and Drivers within those boundaries. It may not be as efficient as Dynamic Routing, but it is less disruptive.

#### **Dynamic Routing:**

- Implementing fully dynamic routing can be disruptive to the rhythm of an organization, and create significant daily
  routing changes for Drivers Each workday can be very different.
  - Organizations need to determine how much daily disruption makes sense for its Drivers and their organization.

#### **Boundary Routing:**

- Confine Routes and Orders to geographic boundaries using codes, and view on the map as polygons.
- Corresponding Assets in the Truck File have the same Boundary Codes (SpEQ code) ensuring the matched Orders
  are loaded on the appropriate Asset.
- When Orders fall in an area where boundaries overlap, the system applies multiple boundary codes to the Orders.
  - The Routing algorithm loads the Order on any Route with one matching boundary code, or changes the Route selection when volume flexes in the overlapping Boundary.
- Control daily disruptions to meet your organization's tolerance levels.
  - Run the same Driver and Assets in the same areas every day with little or no variations to their Routes.
- When a Boundary file is uploaded, it is added to a sortable Boundary file list. Click on the Boundary file to view the orders and customers that are using the boundary file.

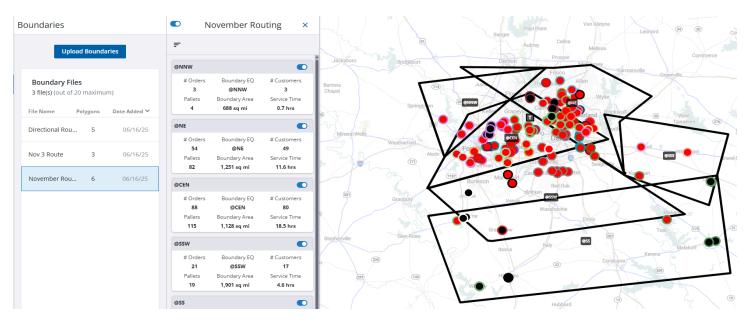


Figure 97 - Boundaries Page showing 8 boundary cards and their corresponding polygons on the map.

# Create a Boundary File

For assistance creating an ADP Boundary File, reach out to your implementation team.

# **Upload Boundary Files**

- 1. Open the Boundaries page.
- 2. Click on the Upload Boundaries button, and select the boundary file.

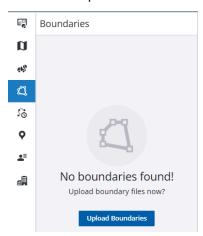


Figure 98 - Upload Boundary Files

# Fixed Routes

The Fixed Routes page is structured the same as the Route Planning page and behaves in similar ways with some minor exceptions to reduce the likelihood of a Fixed Route being modified unintentionally. There is a sortable, filterable, and customizable Fixed Route list, Stop list, and Unloaded Orders list, as well as a map panel (See the Route Planning section for page and component details). A notable difference is the Branch Date Picker — in Fixed Routes, users select the Branch, Truck Profile, and specific weeks and/ or days rather than a start, end, or span range.

This section focuses on three different Route types: Fixed Routes, Cloned Routes, and Predefined Routes.

### **Fixed Route Toolbar**

The Fixed Route page toolbars provide much of the same functionality as dynamic routing. Find instructions for these actions in the Route Planning Section — Create an Empty Route, Card Layout Editor, sort, and filter. Each panel also has a More Menu for additional multi- and individual Route/ Stop / Order actions. Follow the links below for details.

#### Multi-Route actions:

- Unload
- Unload & Delete
- Optimize Route
- Optimize Sequence

- Fix Start Times
- Float Start Times
- Reschedule Routes

#### **Individual Route actions:**

- Delete Route
- Invert Route
- Optimize Sequence
- Reschedule Route

- Show Stop Summary
- Show Truck Info
- Unload Route

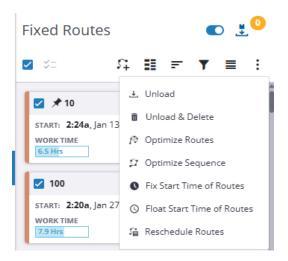


Figure 99 - Fixed Route Multi- Route More Menu

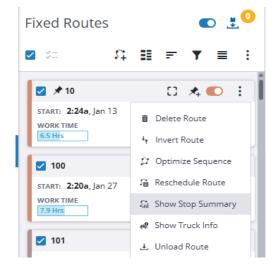


Figure 100 - Fixed Route Individual Route More Menu

### **Cloned Routes**

Most Fixed Routes are stored in Appian Daily Planner and DRTrack, and can be cloned, creating daily Routes.

- Cloned Routes contain expected Orders (that may be placed). They are identified by a blue E badge on the card and outlined in red on the map.
  - o Click on the red outlined Stop for details. Expected and Consolidated Orders also display an E on the map card.

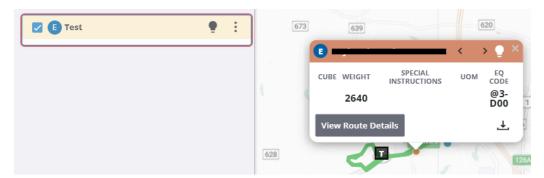


Figure 101 - Expected Order Stop details on the map

• Routes with Expected Orders have an Expected number displayed. Hover over the number to see different amounts.



Figure 102- Routes awaiting fulfillment

Figure 103 - Expected orders for the Stop

- When the actual Orders, from an ERP, are sent into Appian, the expected Orders are replaced, and the impact of the actual daily Order volume on the plan is changed.
- The Route card has a red outline when there are no filled Orders for that Route.

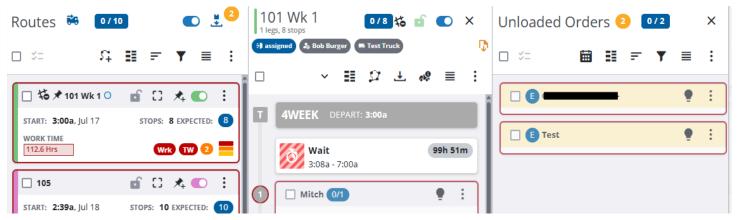


Figure 104 - Shows the Order, Stop, and Route card with no filled Orders

#### **Predefined Routes**

Fixed Routes are occasionally stored in an ERP system rather than Appian software, but the fleet may want ADP to adhere to a Route plan, rather than build a Route from scratch. This works for Routes that have been previously created or will be created with the Route-Building Wizard. It works this way:

The fleet passes values with the Orders so those Routes can be created.

#### FixedRT Value

- Toggle on the FixedRT Stop User field for the Route the Order will be placed on (see Alias Settings).
- 2. The Order's FixedRt value corresponds to a Truck ID (Truck name) value that matches, and that Order is placed on that matching Asset.

#### FixedSeq Value

- 1. Toggle on the FixedSeq Stop User field for the Route the Order will be placed on (see Alias Settings).
- 2. Apply sequences to specific Routes (single or multi-Route option).
- 3. The Stops in the Route are sequenced according to the FixedSeq values associated with those Orders.

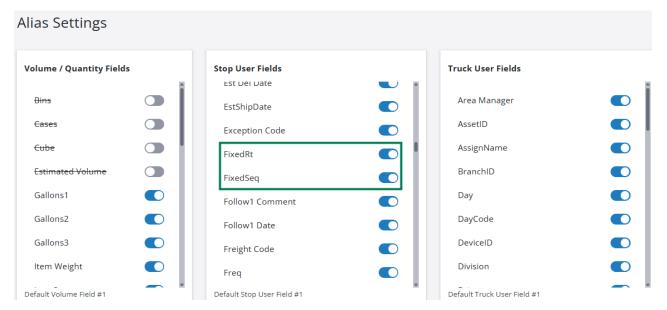


Figure 105 - FixedRT Value and FixedSeq Value in the Stop User Fields of the Alias Settings

### Apply Fixed Sequence & Optimize

Routes containing Orders with Fixed Route fields are resequenced according to the sequence rules set in the ERP or Stop files. You can apply this to single or multi-Routes, but the option only appears when Routes have FixedRt values.

• Access the *Apply Fixed Sequence and Optimize* action on the Route card More Menu (Individual Route), Fixed Route page More Menu (multi-Route), or in the Route Details More Menu.

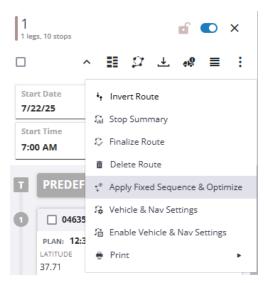


Figure 106 - Fixed Route More menu with Apply Fixed Sequence & Optimize

The system resequences the Orders according to the following rules:

- Sequences the selected Routes according to the FixedRt and FixedSeq fields associated with the Orders.
- If a Route has a combination of Orders with / without FixedRt and FixedSeq identifiers, it applies the Fixed sequencing logic to applicable Orders, and then fits in non-sequenced Orders according to the algorithm.
- If the Order contains a fixed sequence (FixedSeq), but not a fixed Route (FixedRt) value, the fixed sequence is ignored. The Order is placed in the best sequence possible according to the algorithm.
- If a Route contains multiple Orders with the same fixed sequence, it prioritizes Orders that were sequenced first, then fits in the other Orders with overlapping sequences. It tries to maintain the original sequences with little interference.

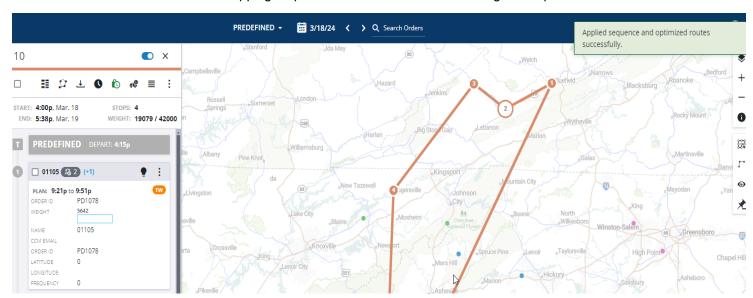


Figure 107 - Predefined Route badge displayed in the Route list

## **Badges and Visibility**

Fixed Route Orders are identified by badges in the card view and highlighting in grid view. If these Routes have pre-assignments, it is also reflected on the card. The TruckID, FixedRT and FixedSeq and frequency fields can also be added to the Route Cards and Grid Layout. See instructions below.

#### **Card View**

- Orders with FixedRT display a gray badge with the TruckID and sequence number on Unloaded Orders. Once the
  Order is loaded, the badge only shows the sequence number in the Route Details card view.
  - o If the FixedSeq value associated with the Order is non-numeric, it will not appear in the badge.
- Fixed Routes with preassigned Drivers and Devices have a color-coded dot next to the Route name on the Route card. Hover over the dot to view the Driver and Device assigned to the Route (see Dispatch Assignment Table).

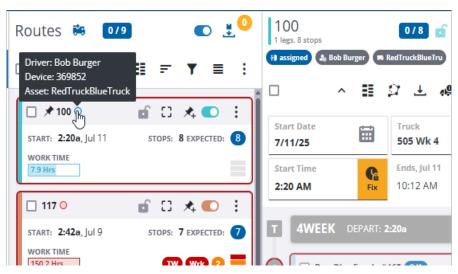


Figure 108 - Route with a pre-assigned Driver and device (blue)

#### Example: Add FixedRt / FixSeq

- 1. Click on the Card Editor button in that **Route**'s Toolbar. See Route Card Layout Editor for additional instructions.
- 2. Navigate to the Fields section on the left, and scroll down to the User Fields.
- 3. Select FixedRT and/ or FixedSeq and move it to the Layout card in the center.

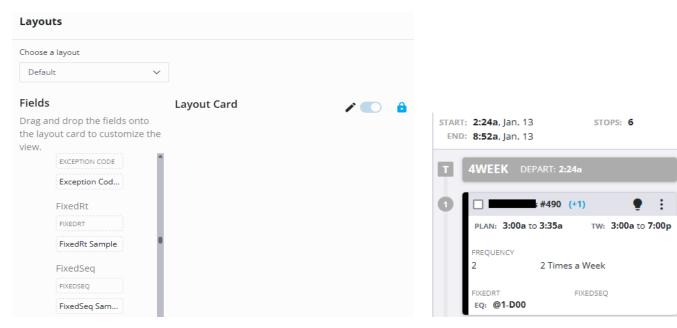


Figure 109 - FixedRT and FixSeq options in the User Fields

Figure 110 - Card with the RT, SEQ, and Frequency fields

#### **Grid View**

#### **Example: Add Truck ID**

- 1. Scroll to the right in Route Grid view, and click on the Configuration button in the top right.
- 2. Scroll down to User Fields and select Truck ID from the list to add that column to the grid.

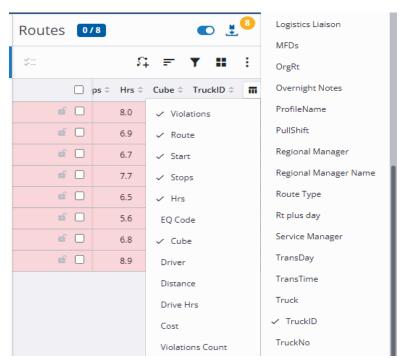


Figure 111 - Route Grid view with Truck ID selected

# Points of Interest (POI)

Use the POI feature to identify and save geolocations in a library. These POIs are used in the same manner as a valid address when assigning and routing Orders in DRTrack. POIs are useful for deliveries to locations without an established address (e.g., new construction), rural locations, or offsite deliveries. If you manually geocode many Orders, setting POIs can be a time saver.

#### Create a POI

Create a new Point of Interest.

- 1. Double-click anywhere on the map, or Right-click and select *New POI*.
- Move the pin to ensure the Latitude and Longitude are correct.
  - Use the satellite view found under Map Style (top right corner of the map panel) for fine-tuning.
- 3. Enter the name, notes, and type (commercial or residential) into the Create New Point of Interest window.
  - Each POI should have a unique name.

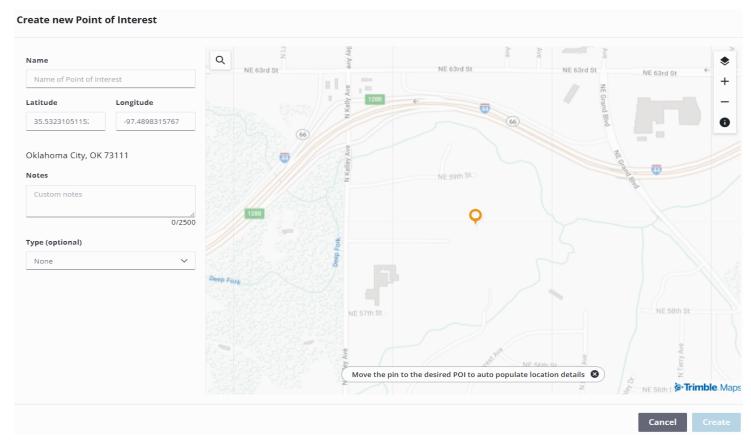


Figure 112 - Create POI Window

4. Click on the Create button to finish and display the POI card in the left panel and on the map.

- The POI can now be assigned.
- Selecting a pin on the map displays the same POI card on the map panel.

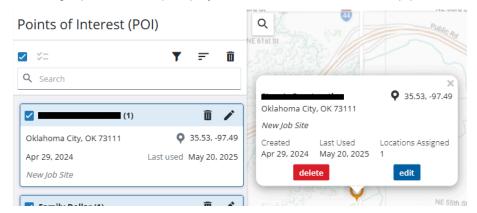


Figure 113 - POI card list after creation and POI on the map

#### Edit a POI

Update POI details at any time to maintain a full, accurate library.

- 1. Use the search, filter, and sort options on the Points of Interest page to locate the POI that requires edits.
- 2. Click on the pencil icon (top right corner of the POI card), or click on the card and select the edit button on the map.
- 3. Edit the details that need updates, and click on the Save button to finish.

### Delete a POI

- 1. Use the search, filter, and sort options on the Points of Interest page to locate the POI(s) that require deletion.
- 2. Click on the trashcan on the POI card to delete one POI at a time, or click on the trachcan in the POI panel toolbar to do a batch deletion.
- Click on the Yes button on the confirmation window to delete the POI.



Figure 114 - Delete POI confirmation request

### Search POIs

Click on the Search bar and enter the key word. Search POIs by name, address, city, state, ZIP code, and notes.

### Filter POIs

POI filter options are used in a few different ways to render the best results:

- 1. Click on the funnel icon to filter POIs by Last Used Date in descending order, or
- 2. Click on the funnel icon then select Filters to use advanced filter options (See Filter Routes for additional details).
- 3. Click on the Configuration button to customize columns for additional filter and sort options.

#### **Filters** ADD Add Filter : NAME ▼ CONTAINS ▼ Name # City \$ Zip ≑ Longitude = Latitude \$ Stop Count \$ Created \$ Last Used \$ Notes \$ Type \$ 73111 -97.49 35.53 13,447 04/29/2024 POI ✓ Name 73111 -97.48 35.53 13,447 05/15/2024 ✓ State 1 > >> 1-2 of 2 ✓ Zip ✓ Longitude ✓ Latitude ✓ Stop Count ✓ Created ✓ Last Used Notes

Figure 115 - Filter POI options and the configuration menu to add more filter options

#### **Show Bad Georesults**

The Show Bad Georesults filter on the Unloaded Orders panel is based on the BadGeoresultstoHighlight setting in DRTrack. It allows the user to filter Orders with bad georesults to help make POI assigning easier. This setting is adjusted in DRT's Configuration Manager under Badgeo (See the DRTrack User Guide for instructions).

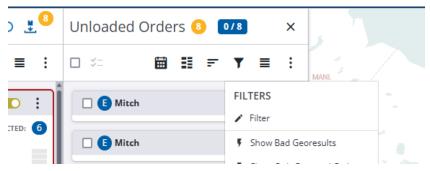


Figure 116 - Show bad Georesults Filter option in the Unloaded Orders card

### Sort POIs

Sort by any POI field. Click on Reset to Default to clear sorting.

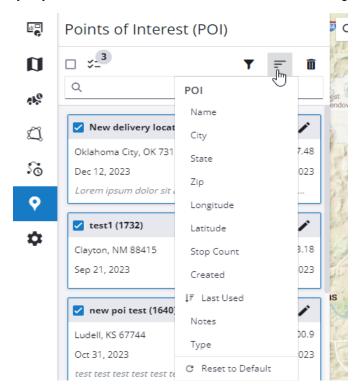


Figure 117 - POI Sorting options

### POI More Menu

The More menu on the POI page behaves the same way as the More menu on other pages, and the Geocode, Order Details, and Duplicate Orders actions are explained in the Route planning section.

### Assign POIs

POIs can be assigned individually or through a multi-Route action on the Route Planning page.

- 1. Click on the Unloaded Orders icon in the toolbar.
- 2. Determine if you want to assign the POI to one or to multiple unloaded Orders, and click on the proper More Menu.
- 3. Select Assign POI from the More menu.
- 4. Select the desired POI from the library, and click on the Assign button to finish.

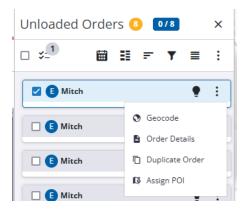


Figure 118 - Unloaded Order card More menu

6. Confirm the POI is assigned with the confirmation message in the top right corner.



Figure 119 - POI assignment Confirmation message

# Accounts

The Accounts page allows permissioned users the ability to view and modify customer accounts. Accounts are managed in a customizable, expandable table based on the Branch selected in the Daily Planner.

- 1. Click on the hamburger button (three lines) in the top left corner.
- 2. Scroll down to Accounts.
- 3. Customize the table. Configurations are saved locally per user and browser.
  - a. Click on the Configuration button in the top right of the Accounts table to add or remove rows and reset defaults.
  - **b.** Click on the Column headers and drag them into the desired order.
  - c. Change the pagination value in the bottom left. It is defaulted to 50 results per page.

### **Account Actions**

- 1. Create Accounts
- 2. Sort, filter, and search Accounts.
- 3. Click on any row in the table to view Account information and take additional actions.
  - **a.** Navigate to different topics using the side navigation Contacts, Delivery Time Windows, and Fixed Routes.
  - **b.** Click on the More Menu to complete one of the following actions Geocode, Duplicate Account, or Set account as the Primary.

### **Create Accounts**

Create an account to manage your customer items such as billing and shipping addresses and other contact information.

- 1. Click on the *Create Account* icon or right click anywhere on the map.
- 2. Enter the customer information (User information can be edited at any time).
  - Account Name and ID are required. More information provides a better Route planning experience.
- **3.** Enter the customer's street information and select the suggested address, if one is available, or use the *Latitude and Longitude* button and move the pin to the approximate location on the map.

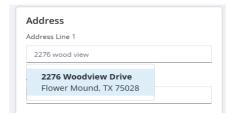


Figure 120 - Customer's street address and the suggested location

- 4. Click on the Geocode button for exact longitude and latitude coordinates.
  - Re-activate the *Geocode* button by either changing the address or by clicking the *Latitude Longitude* button.
- **5.** Click on the provided coordinates to zoom to the location on the map.
- 6. Click on Create to finish the account set up.

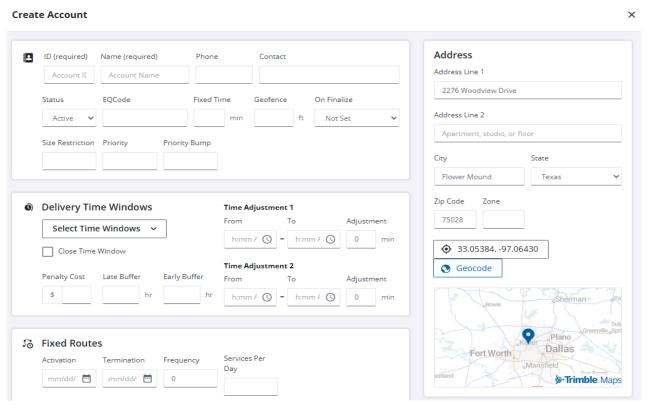


Figure 121 - Create and Account window

### **Primary Accounts**

Primary Accounts are pre-filled templates. Administrators can set up Primary Accounts per customer/company (not per Branch) to auto-fill content when creating a new account. Primary Accounts are not required.

- 1. Hover over the Account that you want to identify as the Primary Account.
- 2. Click on the More Menu (three dots), and select Set as Primary.
  - Primary accounts are identified by the Primary label next to the account name.
  - Follow the same steps to unset the account as the Primary.

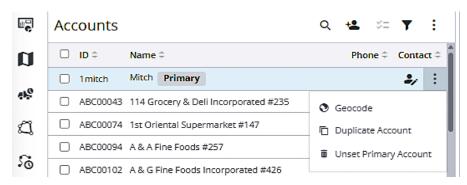


Figure 122 - An example of an account set as Primary

#### **Edit Accounts**

Edit accounts directly from the Accounts table or from the Account view.

- 1. Edit from one of the following options:
  - a. Account Table Hover over an account to display the Edit and More Menu Actions then click on the Edit icon.
  - b. Account View Open any Account from the Account Table then click the edit pencil in the top menu bar.



Figure 123 - Account table view edition option



Figure 124 - Account View editing option

2. Make the necessary changes.

- 3. Fine-tune the latitude and longitude of an existing Account using the last known Stop as a reference.
- 4. Click on Save.

#### Sort and Filter Accounts

Filter the table by Account Status (Active, Inactive, Hold) and sort each column in ascending or descending order by clicking on the column header (ID, Name, address, etc).

#### Search Accounts

Use the search bar located in the Toolbar to search Accounts by ID, Name, Address, or City.

### **Accounts Map**

The Accounts map displays pins for all current Accounts by page.

- 1. Click on a pin from the map to scroll to the coordinating Account in the table.
  - Green Pins Active Account
  - Yellow Pins Account on Hold
  - Grey Pins Account is Inactive
- 2. Navigate to another page in the table to refresh the map to show additional accounts.
- **3.** Right click anywhere on the map to use the *Create Account* action. See *Create Accounts* for instructions.
  - The map completes a reverse GeoCode and enters the address data into the new account.
  - The Geocode overrides the Primary Account address, if one was established.

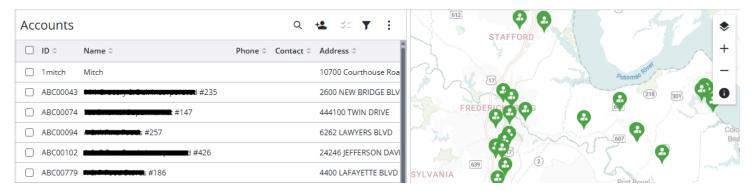


Figure 125 - An example of an Accounts map with sensitive information redacted

### **Account Shipping Addresses**

Shipping Addresses (also known as Ship-tos) can be used in place of the original account address for routing purposes. An account can have multiple shipping addresses to accommodate all of their locations.

### Add Shipping Address

If the account does not have a separate shipping address, it defaults to the Account address, but a shipping address can be added at any time.

- 1. Navigate to the desired Account in the table as if you were going to edit it.
- 2. Click on the Add shipping address button.
- 3. Enter the new shipping address and Geocode it, if necessary (see Created Accounts for instructions).

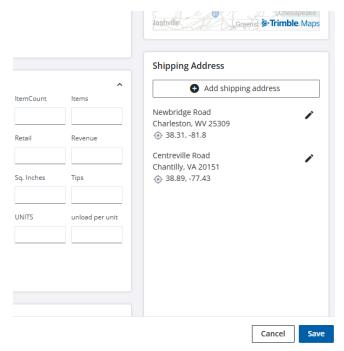


Figure 126 - Add a shipping address button

**4.** Click on Save to populate the shipping address in the Account table.

To view the Shipping address cards:

- 1. Click on the desired Account in the table to navigate to the Account Details page.
- Click View all next to Shipping Address to see the full list associated with the account.

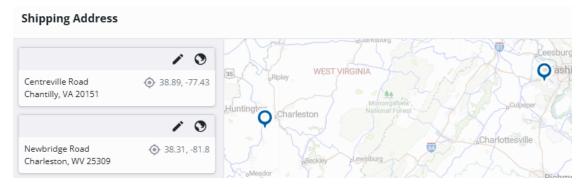


Figure 127 - Shipping Address list for an account

## **Delivery Time Windows**

Delivery Time Windows establish acceptable timeframes for Order deliveries for each account and shipping address.

### Add Delivery Windows

- 1. Click on the edit pencil in the top toolbar of the Account.
- 2. Click on the Select Time Windows button to open Select Time Windows.
- 3. Select the days of the week and time by clicking each of the fields and selecting those values.
- 4. Click on the Add More button to enter multiple delivery windows.
- 5. Click on Done to save the selections and populate the Delivery Time Window section of the Account.
  - Click anywhere on the existing Time Windows to reopen for edits.
  - Click on the trash can icon next to the time window to delete the delivery window.

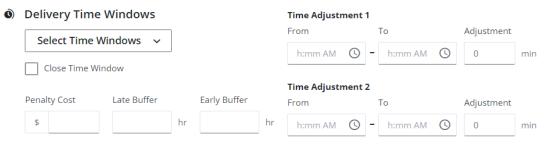


Figure 128 - Adding delivery time windows for the specified account

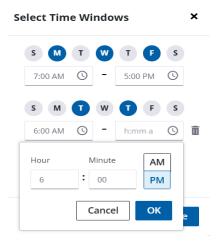


Figure 129 - Time and day editing window

## Fixed Routes (Accounts)

Fix a Route for customers with repetitive, scheduled daily Routes.

1. Click on the edit pencil in the top toolbar of the Account.

- 2. Enter the Activation and Termination dates for the limited delivery window.
- 3. Enter the number of times (frequency) a delivery can be completed per day in the window selected.

In the example below, the customer is allowing one delivery a day for each day in the month of May.

#### 5 Fixed Routes



Figure 130 - Fixed Route frequency settings

## **User and Quantity Fields**

Quantity and User fields are dynamically populated according to your global *Alias* settings in Preferences. Adjust these settings per account to customize Routing.

- 1. Click on the edit pencil in the top toolbar of the Account.
- 2. Enter Account-specific Quantity and User values.

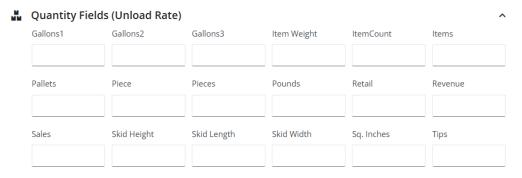


Figure 131 - Quantity value settings

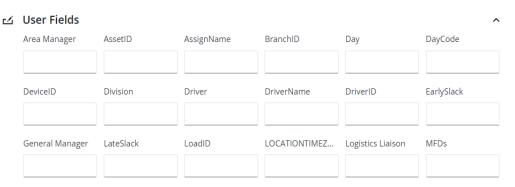


Figure 132 - User value settings

# **Permissions**

Permissions are set in DRTrack and shared with Daily Planner. Use the table to determine permissions requirements.

PERMISSIONS	ACTIONS ENABLED						
ACCOUNTS							
Create Accounts	Create a new Customer Account						
View Accounts	<ul> <li>View customer accounts</li> <li>Accounts page is hidden if not enabled</li> </ul>						
Modify Accounts	Edit customer accounts						
Administrator	<ul><li>All Account actions</li><li>Set Accounts as Primary</li></ul>						
	ROUTING						
View Routes	<ul> <li>View Routes located on the Route planning page and on the Map by Day or Week</li> <li>View all Scheduled Time Blocks in Day and Week View; Reservations, Maintenance and PTO</li> <li>Use View Routes Details option on the Route card and edit corresponding DRTrack page</li> </ul>						
Create Routes	<ul> <li>Create Routes via the Route Calendar by dragging and dropping from Unloaded Orders panel</li> <li>Create Routes via the Lasso Tool on the Map (Lasso is hidden when not enabled).</li> </ul>						
Modify Routes	Can complete the following for Routes already created on the Route Calendar and on the Map:  Change Start Time and Date  Change Assigned Assets and Drivers  Add and/ or remove Orders  Use the Optimize Route option (option is hidden when not enabled).						
Delete Routes	Use the <i>Unload Route</i> option from the Route card dropdown (option is hidden when not enabled).						
Manage Trucks	<ul> <li>Use View Truck Info option on the Route card dropdown and edit corresponding DRTrack page</li> <li>Schedule Maintenance blocks for Assets on the Route Calendar (option is hidden if not enabled).</li> <li>If not enabled:</li> <li>Cannot View Route Details (option is hidden)</li> <li>Cannot Print Route Details (option is hidden)</li> </ul>						
DISPATCH							
Export Routes	Use the Export icon on Route card and export routes						

ORDERS						
View Orders	<ul> <li>Interact with the Unloaded Orders panel (option is hidden when not enabled).</li> <li>View Unloaded Orders in the Unloaded Orders panel and on the Map</li> <li>Use the POI Manager icon located on the Unloaded Orders panel</li> <li>If not enabled, user cannot Modify Orders</li> </ul>					
Modify Orders	<ul> <li>Use the More Menu located on each Unloaded Order card (option is hidden when not enabled).</li> <li>Access to the following options: Edit corresponding DRTrack page, Geocode, Duplicate Order</li> </ul>					
Create Appointments	<ul> <li>Create Reservations on both the Asset and Driver views</li> <li>PTO is not affected by this Permission; user can still create PTO blocks</li> </ul>					
Modify Existing Appointments	Use the Edit option on existing Reservations to modify the following:  Notes Start/ End Date and Time Assigned Asset and Driver					
Delete Appointments	Use the Delete option on existing Reservations					
	DRIVERS					
View Drivers	Create PTO blocks for Drivers					
	SITE					
An Administrator	Interact with the Preferences tab (option is hidden when not enabled):  User can change Aliases  User can set Violation parameters  User can set Calendar Start Time and Business Hours/ Days					
	BRANCHES and DISPATCH GROUPS					
View Branches	<ul> <li>View the Organization &amp; Management landing page and sidebar menu</li> <li>View the Branches &amp; Dispatch Group tiles.</li> <li>See all Branches and Dispatch Groups on the page</li> <li>Cannot manage Branches and Dispatch groups if not enabled</li> </ul>					
Create Branches	<ul> <li>View the + sign to add a new Branch or Dispatch group on the Branches and Dispatch panes.</li> <li>Cannot modify or delete Branch and Dispatch groups if not enabled.</li> </ul>					
Modify Branches	<ul> <li>See the pencil icon next to each Branch</li> <li>Click on a Dispatch group name to edit</li> <li>Cannot delete a Branch or Dispatch group if not enabled.</li> </ul>					
Delete Branches	See the <b>trash can icon</b> next to each Branch name or Dispatch group and be able to delete it.					

# Preferences

The Preferences page provides five different areas to set Branch and global rules for Route planning. Everything from violations, algorithm settings, and business rules are managed here.

- Prescriptive Intelligence Establishes violation priorities
- Business Rules Sets Time and Calendar behaviors for Routing
- Aliases Sets standards for Volume/ Quantity, Stop Users, and Truck Users
- Algorithm Tweaks the way the Algorithm behaves
- Behaviors Adjusts Routing preferences like Auto Reschedule, Delivery Date Ranges, and Truck Reuse.

## Prescriptive Intelligence

Establish the priority level for each violation type, from not important to critical, to set expectations during Route planning. For instance, if Wait Time is a critical violation, then the algorithm will prevent Routes that exceed the time established, or it will indicate that there is a violation to that rule.

- Violations are displayed and sorted in the Routes page based on priority level.
- Violations appear as color coded circles on the Route or Stop card and Dispatch depending on the violation and its priority.
  - o Not important white circle
  - o Important grey circle
  - Very Important orange circle
  - o Critical red circle

Violation	Route Card	Stop Card	Dispatch	Dashboard
Cap (Capacity) — Truck capacity has been exceeded	~		~	
<b>CFLT</b> (Scheduling Conflict) — Resource (Driver or Asset) has a period of time overlapping multiple Routes. To resolve, reassign a new resource or reschedule.			•	
Dist (Max Distance) — Max distance for the truck has been exceeded	~		V	
<b>DM</b> (Delay Minute) — The Stop-level warning shows how many minutes the Stop is late based on actuals. The Route-level warning shows the last delayed Stop (non-cumulative). Displayed only as a number.	ζ.	V	~	V
Drv (Drive Time) — Total allowed drive time for the Truck has been exceeded	~		V	
<b>EQ</b> (Equipment Code) — The assigned Truck and loaded Stop are incompatible		V	V	
Ret (Return Time) — The total trip time has been exceeded	~		~	

SEQ (Sequence) — Sequence code entered was not followed		~	~	
<b>TW</b> (Time Window) — Delivery is expected outside of the allowed times for the stop		~	V	
Wrk (Work Time) — Set work time has been exceeded	~		~	

Statistics are displayed on the Unloaded Orders and Solution Comparison panes within the Solution Statistics panel.

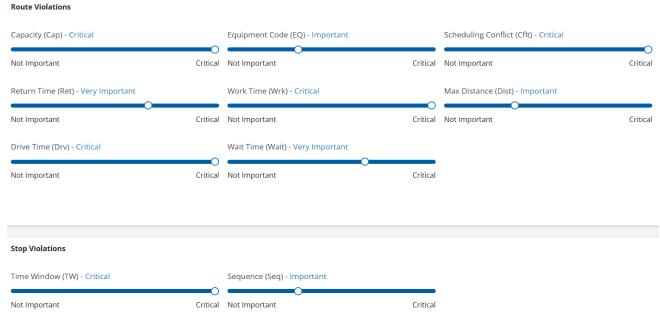


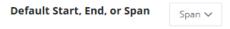
Figure 133 - Violation Settings under Prescriptive Intelligence

#### **Business Rules**

Business Rules set the time and calendar behaviors for each customer to ensure the algorithm creates Routes during the appropriate time windows. It also manages the date picker at the top of the ADP application.

**Date Range Picker Default view** — The date picker at the top of the application lets users select one or multiple dates for viewing and building Routes — Start, End or Span. Users can select their preferred default view:

- Start Shows only the Routes with the start date selected
- End Shows only the Roues that end with the date selected
- Span Shows all the Routes that fall between the selected start and end date.



This configuration setting determines the default behavior of the date picker for the Route Planning and Dispatch pages. If you make a change to this setting you will need to log out and login to see the change. You can also manually change the start, end, span option from the top date picker.

Figure 134 - Date picker view defaulted to Span

**Auto Adjust Date Filters** 

Auto Adjust Date Default — When an action is taken (e.g. Route rescheduled) that moves the Route outside of the range selected in the Date picker, users can select their preferred default response:

- **Toggled on** The Date picker adjusts to show the Routes within the new date range created by the action.
- Toggled off The Date picker does not adjust the dates and shows the changes in the Change Summary panel.

This configuration setting determines if the date range on the Route Planning and Dispatch pages automatically adjusts to include updated routes. When this setting is toggled on, the date range will automatically adjust if a change to a currently visible route would place that route outside of the current date filter. When this setting is togged off, the date range will not adjust if a change to a currently visible route would place that route outside of the current date filter. Instead the application will provide a change summary.

Figure 135 - Auto-adjust Toggled off

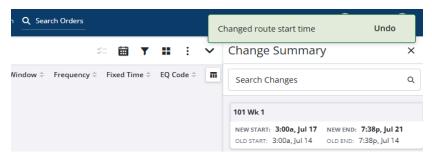


Figure 136 - Change Summary

### **Aliases**

Aliases are commands such as a function, script, or executable that ADP completes based on settings created in DRTrack.

- When toggled on, they are shown in ADP.
- If they are not created in DRTrack, the field appears with a line through it in the ADP settings.

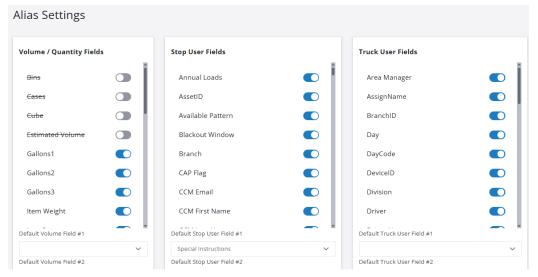


Figure 137 - Alias Settings on the Preferences page

This table shows where selected Aliases are displayed within ADP. Currently, Truck User Fields are not shown anywhere.

	Volume #1	Volume #2	Stop User #1	Stop User #2
Solution Statistics Unloaded Orders pane	<b>'</b>	<b>'</b>		
Unloaded Orders cards within Unloaded Orders page	<b>'</b>			
Loaded / Unloaded Order Map popups	<b>✓</b>	~	<b>✓</b>	~
Boundary File cards in Boundary Tab	<b>V</b>			

### **Algorithm**

Configure the settings that govern how the Route-building and optimization algorithms function. Algorithm settings can be applied in Daily Planner (globally or per Branch), or imported from DirectRoute.

- Algorithm Settings applied are identified with a badge in the left navigation and the top Global and Branch buttons.
- Return to default at any time, but changes impact Routes based on how they were applied globally or per Branch.

Use the left navigation to explore six different topics to allow for maximum customization. Each section describes the settings, how it impacts the algorithm and if there is a default:

- Adjustments Sets values concerned with Asset speed, mileage, distance, rush hour, and turn time
- Consolidation Sets preferences and exceptions for consolidating Orders, equipment codes, and fixed time
  - Daily Planner is not affected by the Consolidation settings in the DirectRoute Algorithm section when imported.
     To ensure Consolidation works as expected, change the INI settings in DRTrack.
    - Navigate to DRTrack either through direct login or through the Bento menu in the ADP toolbar.
    - 2. Click on Admin and select Site.
    - 3. Scroll to Settings and Configuration.
    - **4.** Enter *Consolidate* in the search bar and click on the *Filter* button.
    - 5. Check the settings you want considered when consolidating Account Address, AccountID, or FixTimes.
      - When all three settings are enabled, Orders within the same time window, EQ Code, Lat/ Long, earliest / latest date, and zone are consolidated, and the fixed times on all the Orders/ items on the Stop are added together.

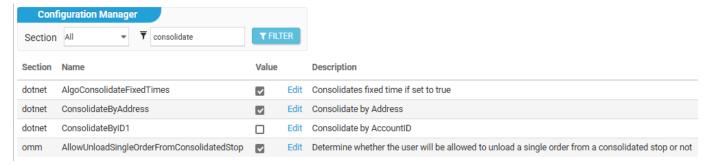


Figure 138 - Configuration Manager for Consolidated Orders

Constraints — Sets distance and time between Stops, max wait times, number of Stops, and backhaul defaults

- **Distances** Sets the distance calculations and vehicle & navigation (e.g., vehicle profiles) preferences.
  - This setting determines how the algorithm generates and uses distances and drive times to weigh the best options. If Routes are built or edited outside of Daily Planner, distances and drive times defaults to Straight Line calculations.
    - 1. Click on *Distances* in the left navigation (Preferences *Algorithm* tab).
    - 2. Determine how the algorithm generates and uses distances/drive times:
      - a. Straight Line (Default) Uses proprietary straight line formulas to approximate road distances and drive times.
      - b. Road Network (Recommended) Calls Trimble Maps service to generate commercial road distances and drive times based on the Asset profile selected. This may impact solve times depending on the size of the solution.
        - Only Routes built and edited in Daily Planner can use Road Network calculations.
      - **c. Approximate** Uses the proprietary map to calculate drive times while using commercial road distances.
    - 3. Select an option in the *Vehicle Profile and Region* for calculation Required for *Road Network* or *Approximate*:
      - EU Auto
      - EU Heavy Rigid
      - EU Light Commercial
      - EU Midsize

- North American Auto
- North American Heavy (53')
- North American Light Commercial
- North American Midsize

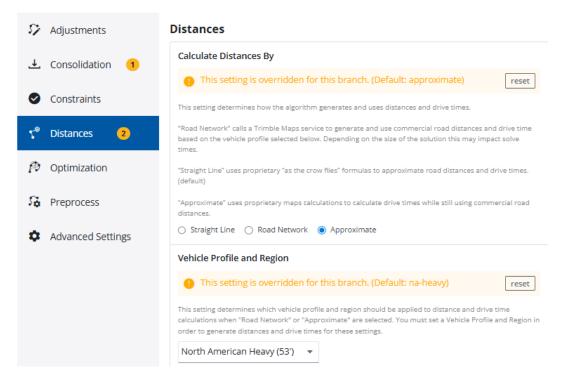


Figure 139 - Distances window for algorithm settings

Optimization — Sets minimums and maximums for Route optimization and its penalties and passes.

- **PreProcess** Sets the defaults for determining if trucks are identified by either their LoadID or TruckID.
  - This setting determines whether trucks are identified by their Truck ID or Load ID for matching and display purposes on the Route Planning and Fixed Route pages.
  - Fixed Route customers should use Truck ID unless they have unique Load IDs for each truck in their fleet, as this
    could cause issues with Direct Route files.
- Advanced Settings Sets the strategies for calculating Routes.

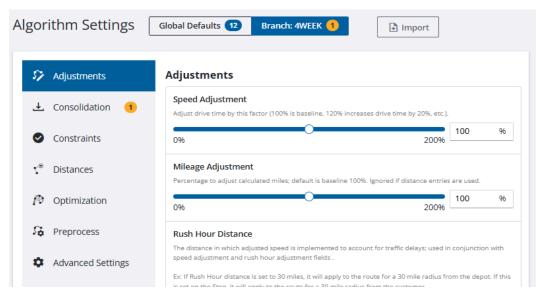


Figure 140 - Algorithm Settings page

### Import Algorithm Settings

DirectRoute users can use the current DRProject.config file to set the algorithm settings.

- 1. Ensure the Consolidation settings in DRTrack are set properly (see Consolidation Exception for instructions).
- 2. Click on the Import button.
- Choose the DRProject.config file stored locally on a computer.
- Select which settings you would like to set based on the file, and click on Save.
  - The sections and settings in DirectRoute match the settings available in Daily Planner. Use the information on the Algorithm page for guidance.

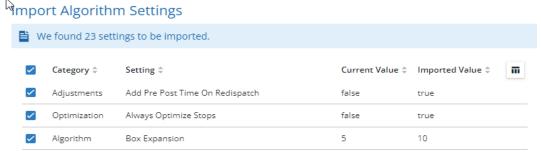


Figure 141 - Import Algorithm Settings window

#### **Behaviors**

Adjust Routing preferences like Auto Reschedule, Delivery Date Ranges, and Truck Reuse on the Behaviors tab.

### Reuse Trucks

Enable this setting to reuse Trucks in the Route Building Wizard when they are already associated with a different Route during the same period.



This configuration setting determines if trucks can be reused when they already have a route associated with them in the same time frame.

- When this setting is toggled **on**, trucks can be reused if another route exists on that truck in the same time frame
- When this setting is toggled off, trucks cannot be reused if another route exists on that truck in the same time frame.

Figure 142 - Truck Reuse setting in Behaviors

# **Appendix**

### Color Labels

Daily Planner does not have color-picking functionality for Orders. Order colors are set using the DRTrack Color Columns and Daily Planner matches them with the best possible result.

- If colors are not assigned in DRTrack, color assignments are not passed into Daily Planner.
- A color is assigned to consolidated Orders only when one of the Orders lacks a color. A color from one of the other Orders in the group is applied.

Order colors are displayed in the following locations:

- Left edge of Order and Stop cards and grid row
- Order search results
- Label outlines on maps on Route Planning, Boundaries, Dispatch, and Fixed Routes pages:



Figure 143 - Screen showing use of color-coded Routes and Stops

Use the table below for color approximations.

DR/DRT Color	New Color	Hex Code	DR/DRT Color	New Color	Hex Code
Aqua		#76BDF2	Lime		#FDF69E
Black		#000000	LimeGreen		#75C67D
Blue		#549ED6	Magenta		#95C885
Brick		#CF4932	Maroon		#DF84D0
Brown		#D28A6E	MediumBlue		#7F3542
Chocolate		#D2691E	Navy		#2E41AD
Crimson		#D13734	Olive		#333364
Cyan		#43C0CE	Orange		#5C9C63
DarkBlue		#23257A	Orchid		#EBAC63
DarkGray		#A9A9A9	PaleGreen		#DF84D0
DarkGreen		#385035	PaleTurquoise		#C0E2BF
DarkKhaki		#BDB76B	Peach		#AFEEEE
DarkOliveGree n		#556B2F	Pink		#FFB07C
DarkPurple		#7A3D7A	Plum		#8E98D8
DarkRed		#8B0000	Purple		#C883DE
DarkTeal		#004C57	Red		#D3332A
Fuchsia		#C883DE	RoyalBlue		#4169E1
Gold		#B5A53F	SaddleBrown		#7A4F48
Gray		#808080	Silver		#C0C0C0
Green		#75C67D	Teal		#009C9D
Indigo		#8E98D8	Turquoise		#77EDF0
LemonChiffon		#FDF69E	Violet		#8E98D8
LightBlue		#ADD8E6	White		#FFFFFF
LightCyan		#A1D6D6	Yellow		#B5A53F
LightGray		#D3D3D3	Silver		#C0C0C0
LightGreen		#AFE1AF	Teal		#009C9D
LightPeach		#FFD8B1	Turquoise		#77EDF0
LightPink		#FFD8B1	Violet		#8E98D8
LightViolet		#FFB6C1	White		#FFFFFF
LightYellow		#D6B4FC	Yellow		#B5A53F

## Resources

### **Related Documents**

View additional ADP Documents here.

- Account Manager: Vehicle Routing Profiles
- ADP FAQs
- DRTrack User Guide
- DR Track User Guide: Stop Summary
- DRTrack Drawings and Boundaries
- PC\*Miler Hazmat Routing
- PC\*Miler Route Types
- Restful APIs Developer Guide
- Vehicle Routing Profiles

## Helpful links

- Content Tools
- CoPilot Overview video

## Support

Support phone number: 1-800-663-0626

Email: support@trimblemaps.com