

DRO Quick Reference Guide - Station

Accessing DRO

DRO is accessed via <https://dro.routesmart.com>

Choose the Station Employee login

Enter your credentials for access to DRO

For more information about any of the sections in this Reference Guide, see the DRO user guide.

Obtaining Technical Support

To obtain technical support, please call 1-800-ROUTING

Choose Your Station

Choose the appropriate station from the list.

Configure CSP Planning Window

The station determines the time of day that the CSPs can be planning for the sort in DRO.

Configure Dispatch Waves

The station determines the earliest dispatch time by wave and day of week as well as the latest return time by wave and day of week.

Set Vehicle Costs

The station can set the default costs (annual and variable) for each type of vehicle that may operate in the station. These costs are used on the cost reports that the station has access to.

Set Driver Cost

The station can set the default cost for each type of driver (currently just the Regular driver) that may operate in the station.

View Reports

The station has access to see the reports for each of the routes in each CSA. The reports will reflect time, mileage, type of stops, as well as estimated costs.

View Maps

The station has access to see on the map each route in each CSA. From this map, the Station may choose to swap stops between routes for the CSA, and even generate a new solution using a different sort plan than the one that was scheduled.

View/Review Dashboard

Service Area Review

The Service Area review on the Station Dashboard will show each Service Area that has a routing solution and the min and max time of the routes for the Service Area, as well as a listing of how many routes may be missing a Work Area Number.

Van Line Sort Review

The Van Line Sort Review report will identify how many packages are scheduled for each Van Line.

Service Area Stop and Package Summary

The Service Area Stop and Package Summary section is a summary of stops, packages, and stop types for each Service Area, grouped by Wave.

Unrouteable Stops

The Unrouteable Stops report identifies all stops that are not routed due to either poor geocode coordinates, or because of an undetermined CSA assignment.

Launch Final Optimization

When the planning window closes for the CSPs, the Station can then launch the final optimization.

Submit Sort Plan

At the end of the Final Optimization, and assuming the Station is happy with all Work Area assignments, the Sort Plan may be submitted to FedEx.

Admin View

The station can view a Sort Plans table, a Final Optimization table, or choose a CSA to view.



DRO Station User Guide

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Dashboard

On the Dashboard in DRO, you will see a number of panels that provide you with quick access to information you need.

Service Area Review

This area lets you identify potential issues that may need station intervention. In this section, you will see a list of the CSAs at the station. For each, you may see details on the total number of routes, total packages, min route, max route, and any work areas missing. Click the arrow next to a Service Area ID to see information about the work areas in the Service Area, including vehicle ID and type, route type, start time, and route length.

It is important for every route to have a valid Work Area Number. If the Work Area Number is missing for a route, the sort plan cannot be generated. To correct a missing Work Area Number, you must make the change in WAMT.

Van Line Sort Review

The Van Line Sort Review section is a summary of work areas and packages for each van line. Click an arrow next to one of the van lines to see details on the work areas, packages, vehicle IDs, and Service Areas for that particular van line.

If the Station chooses to readjust the work area numbers of any of the assignments to balance the Van Line, that adjustment must be done in WAMT before DRO will reflect the change.

Service Area Stop and Package Summary

The Service Area Stop and Package Summary section is a summary of stops, packages, and stop types for each Service Area, grouped by Wave. Click an arrow next to one of the Service Areas to see details on each wave's stops, packages, delivery stops, pickup stops, and combination stops. at the bottom of the list there is a total for each category.

Unrouteable Stops

This section provides a list of unrouteable stops in the station on all CSAs, grouped by CSA. These stops may be unrouteable because the coordinates for the stop are not precise enough to be routed or because of an undetermined CSA assignment.

Note: Unrouteable stops must be corrected using normal means outside of DRO.

Refresh WAMT Button

Enables you to manually refresh the WAMT table.

Get Latest Button

Refreshes the screen with all the latest information

Launch Final Optimization

When the planning window is closed, the Station can launch the final optimization. During this process, DRO will work through each CSA and perform the final routing based on known waypoint data at the time.

Note: If a final optimization has been submitted and you attempt to submit again while the first is still processing, DRO will warn you that the first instance is still in progress.

Submit Sort Plan

When final optimization is complete, and the station is happy with all work area assignments, you may submit the sort plan to FedEx. During sort plan generation, all contingencies files will also be generated based on ZIP Plus 4 records for all Postal Codes in the Station.

Note: If you submit a sort plan and then submit the sort plan again, DRO will warn that the sort plan has already been submitted.

Note: If a final optimization has been submitted and you attempt to submit a sort plan, DRO will warn that the final optimization is not complete and the sort plan may not be submitted until final optimization completes.

Using Temp/Station-Level Service Areas

The Temp/Mgt Service Areas function in DRO enables you to set up temporary or station-level Service Areas.

When you are viewing your Service Area, you may add and edit contacts, add and edit vehicles, assign

route plans, and all other tasks typically performed by CSPs.

1. Click **Temp/Mgt Service Areas** in the header in DRO.
2. On the **Select Service Area** window that opens, choose the Service Area you want to use. Click **Open**. You will see the Service Area you chose in the CSP view.
3. From here, you may work in the Service Area to add and work with route data.

*Note: If you want to view another Service Area, you may click the **Temp/Mgt Service Areas** link in the header and choose another Service Area from the list.*

4. To switch back to the **Station** view, click **Manage Station** in the header.

Map

On the DRO **Map** page, you may view the map for any CSA at the station. You may also create routes, swap waypoints, and lock a solution for a CSA if needed.

Note: Interacting with the CSA solution on the map will likely be a rare occurrence and will typically only be done if it is necessary to have a viable sort for the day.

Display Options

Service Area – Enables you to choose the Service Area you want to view. The Service Area name and number will be displayed.

Wave – Enables you to choose the wave you want to see

Routes – a list of routes for the day in the current wave. Use the checkboxes to hide or show the routes on the map. The **Stop Info** table below the map will also show only the stops on the routes that you choose to view.

Map Tools



Search field – enables you to enter an address to find and zoom to on the map



Zoom In – Zooms the map in each time you click it



Zoom Out – Zooms the map out each time you click it



Default Map View – Returns the map to the default view



Pan – Click and hold on the map to drag the view to another area (image shows cursor on the map, not a button)



Zoom to Routes – Zooms the map to a view that includes all of your routes



Select Tool – Enables you to create a selection polygon



Clear Selection – Clears the current selection



Create Routes – Enables you to create routes using the active route plan during the planning window.



Swap Tool – Enabled after routes have been created and stops are selected in the table or on the map. The **Swap** tool enables you to move stops from one work area to another.



Lock Solution – Enables you to lock the current solution. Any stops that come into DRO after you lock the solution will be assigned based on the locked route structures. Bear in mind that locking a solution may limit dynamic route generation for future unassigned stops for the next day's sort.



Panel Toggle – Slide to hide or show the **Stop Info** panel below the map



Export – Enables you to export the map either plainly (Map Only) or with additional information like a title, author, copyright, and so on (Layout). You may export the map as a pdf or one of several image files.



Basemap – Enables you to choose a basemap to use on your map view

Note: You may also use the mouse scroll wheel to zoom in and out on the map.

Stop Information Table Tools

The Stop Information table shows information about the stops on the visible routes on the map. The Stop Information table tools, other than the search field and the stop type selection dropdown, become active when one or more stops is selected, either in the table or on the map.

Select Stop Types - You may choose to display all stops on the visible routes by the type of stop they are. You can choose to see Time Window stops, Pickup Stops, LP Stops (custom defaults), LP Stops (FedEx defaults), or Bulk Stops.

Search – Enables you to search the stops in the **Stop Information** table based on any field. As you enter your search term, the stops in the table will be restricted to just those fitting your search criteria.



Zoom to Selected Stops – When you have selected stops in the table or on the map, this tool zooms the map to an extent that includes all of the selected stops.



Show Selected Records – When you have selected stops in the table or on the map, this tool shows only the selected records in the **Stop Information** table



Show All Records – When the table is showing only selected records, this button will show all records again.



Export to CSV - Enables you to export your **Stop Info** table in .csv format. The download will occur when you click the button.

Map Functions

Selecting on the Map

You may use the Select Tool to easily select a group of stops on the map.



1. On the map page, click the **Select Tool** button.
2. Click once on the map to start drawing your selection polygon.
3. Continue clicking as needed to draw the polygon around the area you want to select.
4. When you are finished, double-click to create the last point. The stops within your polygon will be selected.

Creating Routes

During the planning window, you may create routes using the active route plan for the day for the current set of waypoints. After routes are created, the waypoints on the map will be classified by the assigned route value, and the Map and Report pages will be updated with information on the routes. In addition, Actual and Informed Optimal solutions are created.

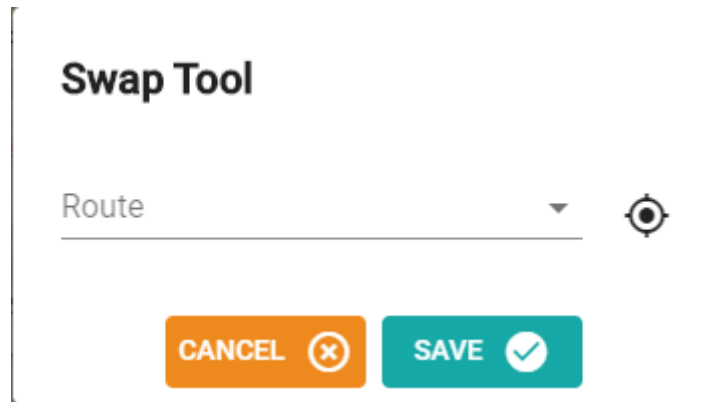


1. To create routes, click the **Create Routes** button on the map.
2. When you are asked to confirm that you want to create routes based on the active route plan, click **Confirm** to continue.

Wait for the solver to be called. Resulting routes will be created using the scheduled route plan and the currently available stops. It can take up to 10-15 minutes for all routes to be created. Avoid hitting Create Routes again before this time.

Swapping Waypoints

To fine-tune your routes, you may find it necessary to move some points from one route to another. The Swap Tool button on the Map page lets you easily swap waypoints between routes during the planning window.



1. Select the stop(s) you want to move to another route. You may select these stops on the map using the **Select Tool**, or you may select them in the Stop Info table below the map.
2. Click the **Swap Tool** button.
3. On the **Swap Tool** window that opens, click the **Route** dropdown to choose the route to which your stop(s) should be assigned.



*Note: If you do not know which route to choose, you may use the **Identify** tool and then click your target route on the map. The Route dropdown will reflect the route you clicked.*

4. After you have chosen your target route, click **Save**. Your stop(s) will be moved to the other route.
5. Click the **Swaps** tab in the Stop Information table below the map. The Swaps tab shows all of the swaps you have made. Swaps are temporary and are included in the next day's sort.

Exporting Your Map

The Export feature enables you to save your map as a pdf or image file.



Click the **Export** button to export your map view.

Exporting Layout

1. On the **Layout** tab, enter the title you want to use for your map.
2. Click the **Page Setup** dropdown to choose the page size and orientation (**Portrait** or **Landscape**) you want to export.
3. Choose the file format you want to receive. You may choose **PDF** or one of several image types.
4. Click **Advanced Options** if you want to set the map scale, or add **Author** or **Copyright** information to the output. You may also choose the **DPI** at which the output file would print, and whether you want to include a legend.

5. When you are finished, click **Export**. When the file has been created, it will appear below the export button, and you will be able to download it from there.

Exporting Map Only

1. On the **Map Only** tab, enter the file name you want to use for the export file.
2. Choose the file format you want to export. You may choose **PDF** or one of several image types.
3. Choose the **Width** and **Height** of your output map.
4. Click **Advanced Options** if you want to adjust the map scale, the **DPI** at which your export file would print, or whether you want to include a legend on the map.
5. When you are finished, click **Export**. When the file has been created, it will appear below the export button, and you will be able to download it from there.

Reports

On the **Report** page, you may review the reports for each CSA in the station. The costs in the reports here are based on the station-entered cost defaults and not on costs CSPs have assigned. Because of this, it is possible that costs shown on Station reports may not match costs the CSPs see on their own reports.

1. To view the reports for a CSA, choose the one you want to see from the **Service Area** dropdown at the top of the page.
2. Click the **Wave** dropdown to choose the wave you want to see.
3. In the **Solution** section, click the radio button to choose whether to see the **Actual** or **Informed Optimal** solution.

Solution Summary – The Solution Summary report shows projections for Actual and Informed Optimal solutions, including number of routes, total time, total distance, fixed and variable costs for both vehicles and drivers, overtime, and total cost, as well as a summary of the differences between the Actual and Informed Optimal solutions. As with any projection, actual results may vary and should be evaluated in light of the service provider's independent business judgment and knowledge of its CSA.

Note: The default values for Fixed and Variable Vehicle costs are based on typical vehicle price, mileage, wear-and-tear, maintenance, fuel, and other factors. However, actual vehicle costs will vary with each business and CSA. Accordingly, to improve the helpfulness of the Actual and Informed Optimal solution projections, service providers may wish to adjust the Fixed and Variable costs to reflect the costs their business is actually incurring. This can be done in the Defaults page of DRO. Fixed and Variable Driver Costs have no default value and are set by the service provider in the Fleet page of DRO.

Package Detail – The Package Detail report shows the work areas in the solution. For each work area, the report shows the route type, time, distance, delivery information (stops, packages, cube, TW Miss), pickup information (stops, TW Miss), and Combo information (Stops, Packages, Cube, TW Miss). At the bottom of the report there is a total for each field.

Cost Detail – The Cost Detail report shows the work areas and their associated route type in the solution. For each work area, the report shows projections for time and distance, as well as the Vehicle cost (fixed and variable), the Driver cost (Fixed, Variable, and Overtime), and the total cost. At the bottom of the report there is a total for each field.

Note: The default values for Fixed and Variable Vehicle Costs are based on typical vehicle price, mileage, wear-and-tear, maintenance, fuel and other factors. However, actual vehicle costs will vary with each business and CSA. Accordingly, to improve the helpfulness of the Actual and Informed Optimal solution projections, service providers may wish to adjust the Fixed and Variable Vehicle Costs to reflect the costs

their business is actually incurring. This can be done in the Defaults page of DRO. Fixed and Variable Driver Costs have no default value, and are set by the service provider in the Fleet page of DRO.

Time and Distance Detail – The Time and Distance Detail report shows the work areas in the solution. For each work area the report shows the route type, time components (total, time, stem out, stem back, in zone, waiting, at stop, break), and distance components (distance, stem out, stem back, in zone). At the bottom of the report there is a total for each field.

Package Type Detail – The Package Type Detail report shows the work areas in the solution. For each work area the report shows the route type, total time, distance, and package type summary: LP stops, LP packages, Bulk stops, Bulk packages, Regular stops, and Regular packages. At the bottom of the report there is a total for each field.

Inbound Package - The Inbound Package report shows you how many inbound LP or Bulk packages are at a stop. For each stop with LP or Bulk packages, the report also shows information about the stop (name and address information, sequence number, time window details) and the packages (total weight, total cube). You can choose to see LP or Bulk packages on all routes, or choose a particular route to view.

- The Bulk Stop Report will show you a list of stops that qualify as 'bulk' (based on your threshold) and their current route assignment.
- The LP Stop Report will show you a list of stops that qualify as 'LP' (based on your custom thresholds or the default LP flag provided by FedEx) and their current route assignment.

If you want to export the Inbound Package Report, click Export to CSV. The report will download according to your browser settings.

Configuring the CSP Planning Window

The planning window is the hours during which the CSP can be planning a solution—generating routes and swapping stops between routes. This planning window is set by the station and is recommended to be from 8 pm (20:00) to 2 am (02:00), but you may change it if needed.

1. To change the open and/or closed times of the planning window for your station, click **Edit**.
2. On the **Edit Planning Window** window that opens, enter the times at which the planning window opens and closes.
3. When you are finished, click **Save**.

Configuring Wave Dispatch Times

The station controls the earliest dispatch and latest return time by wave for each day. DRO will ensure that no route is planned to start before the earliest dispatch time and the routes will not be scheduled to return after the latest return time.

1. To edit the dispatch/return times for a wave, hover over the wave you want to change and click **Edit**.
2. On the **Edit Dispatch Waves** window that opens, you will see the day of the week and a wave number displayed (not editable). Make changes to the **Earliest Dispatch Time** and/or **Latest Return Time**.
3. When you are finished, click **Save**. The updated times will be displayed on the main dispatch waves list.

Editing Vehicle Cost Profiles

You may edit the default costs by vehicle type at the station level. These cost values are used for reporting and do not affect optimization when creating routes. These costs may also be different from the costs the CSPs use, meaning the cost reports for the station may be different from the cost reports for the CSPs.

1. To edit the cost profile of a vehicle type, hover over the vehicle and click **Edit**.
2. On the **Edit <vehicle type>** window that opens, make changes to the **Annual Fixed Cost** and/or **Variable Cost**.
3. When you are finished, click **Save**.

*Note: If you want to reset to the default vehicle cost profiles, click **Reset to Default** at the top of the screen.*

Editing Station Driver Cost

The Station Driver Cost page enables you to enter a default Daily Fixed Cost and an Hourly Cost by driver type.

*Note: Currently, **Regular** is the only driver type available for editing.*

This cost information will be used for the Station cost reports.

1. Hover over the driver type you want to change and click **Edit**.
2. On the <driver type> window that opens, make changes to the **Daily Fixed Cost** and/or **Hourly Cost** for the driver type.
3. When you are finished making changes, click **Save**.

Admin View

Viewing CSAs

CSA View provides **Read Only** access to DRO onboarding information for a chosen CSA:




- Fleet
- Route Plans
- Anchor Areas
- Stop Overrides
- Street Settings
- Defaults
- Map (you will **not** have the ability to create routes or lock a solution)
- Reports and DRO Dashboard


1. To view a CSA, click **CSA View** in the **Admin View** menu.
2. On the window that opens, choose the CSA you want to view and click **Open**.
3. Before proceeding, agree to the terms laid out on the screen.
4. To return to your station view, click **Manage Station** at the top right of the screen. To view another CSA, click **Switch Service Area**.

Viewing Final Optimization

The Final Optimization page enables you to see final optimization details for a station.

Final Optimization Table Tools

	Refresh Content - Refreshes the contents of the table with the latest content meeting the filter criteria.
	Show Filter Panel - Opens the Filter Panel window, enabling you to choose what types of records you want to see.
	Disable Auto-Refresh - Turns off the auto-refresh. You will have to manually refresh the table to see new records.
	Auto-Refresh - The frequency with which the table refreshes. You can change this time; the minimum is 60 seconds.

	Search Field - Enables you to search the records in the table. As you type, the records fitting your search term will be displayed.
	Export to CSV - Enables you to export the table to a CSV file. The file will be downloaded according to your browser settings.

Filtering the Final Optimization Table



1. To see the records you want in the Final Optimization table, click the **Show Filter Panel** button on the **Final Optimization** page.
2. On the Filter Panel window that opens, choose a start date for the date range you want to see. You can manually enter a date, or use the calendar icon to choose a date.
3. Choose a start time on your start date. You can manually enter a time, or you can use the clock icon to choose a time.
4. Choose an ending date for the date range you want to see.
5. Choose an end time on your end date.
6. Optional: Choose a Login ID to view. The Login ID is the ID of the FedEx user who launched final optimization.
7. Choose an available sort date from the dropdown box.
8. Choose a Station ID to view results for.



Note: For any of the dropdowns, you can start typing in the dropdown field to narrow down results



9. When you are finished choosing your filters, click Save. you will see the Final Optimization table populated with records that match your filter choices.

Viewing Sort Plans

The Sort Plans page allows you to see sort plan details for a station.

Sort Plan Table Tools

	Refresh Content - Refreshes the contents of the table with the latest content meeting the filter criteria.
	Show Filter Panel - Opens the Filter Panel window, enabling you to choose what types of records you want to see.

	Disable Auto-Refresh - Turns off the auto-refresh. You will have to manually refresh the table to see new records.
	Auto-Refresh - The frequency with which the table refreshes. You can change this time; the minimum is 60 seconds.
	Search Field - Enables you to search the records in the table. As you type, the records fitting your search term will be displayed.
	Export to CSV - Enables you to export the table to a CSV file. The file will be downloaded according to your browser settings.

Filtering the Sort Plan Table



1. To see the records you want in the Sort Plans table, click **Show Filter Panel** on the **Sort Plans** page.
2. In the **Creation: Start** field on the Filter Panel window that opens, enter a starting date for the date range you want to see. You can manually enter a date, or use the calendar icon to choose a date.
3. Choose a start time on your start date. You can manually enter a time, or you can use the clock icon to choose a time.
4. Enter an ending date for the date range you want to see.
5. Choose an end time on your end date.
6. Choose an available sort date from the **Sort Date** dropdown.

Note: You can start typing in the dropdown field to narrow down results.

7. Choose a **Station ID** to see results for.

Note: You can start typing in the dropdown field to narrow down results.

8. When you have set the filters you want, click **Save**. You will see the Sort Plan table populated with records that match your filter choices.