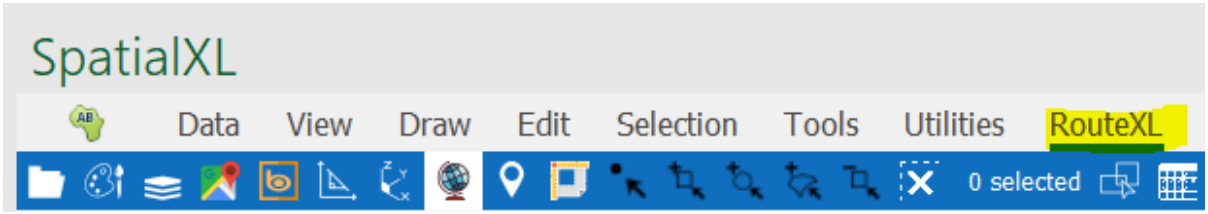
PrimeThought Software Solutions

Set to Set Routing in RouteXL

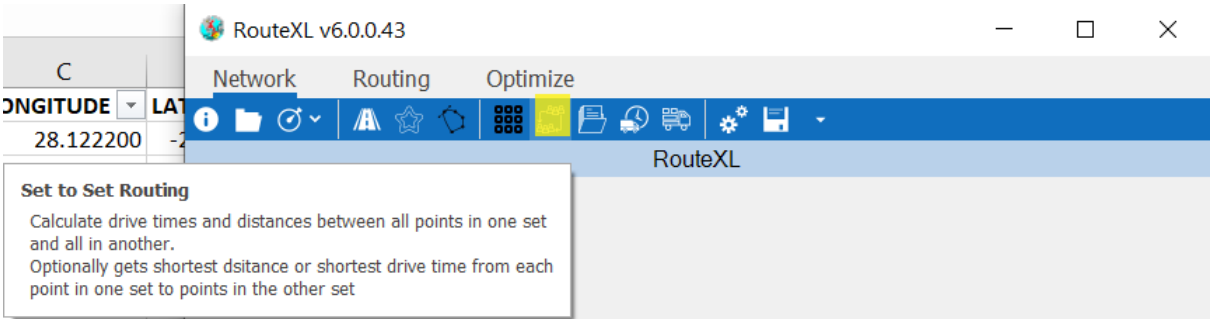
Contents

RouteXL

RouteXL is an add-in to SpatialXL that allows optimised routing, transportation scheduling and high-speed bulk routing operations.



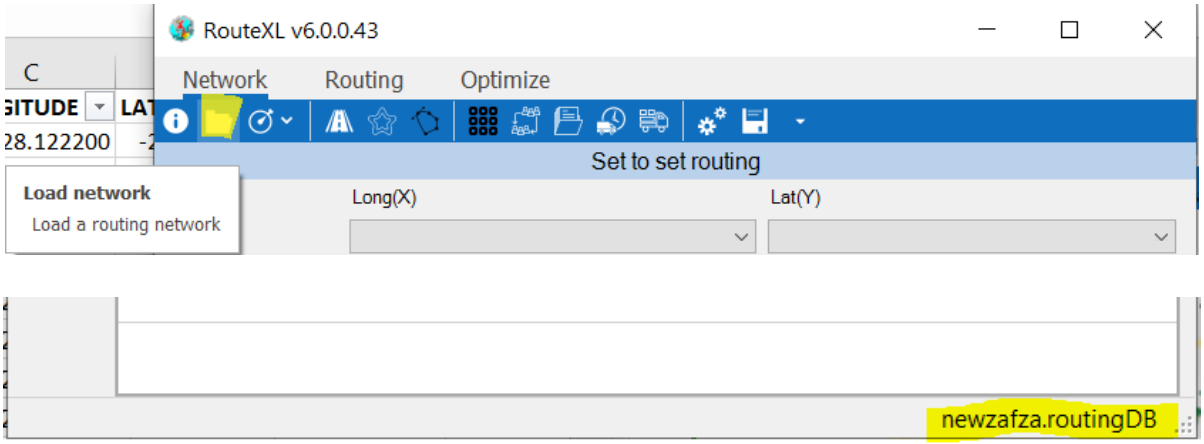
Set to Set Routing

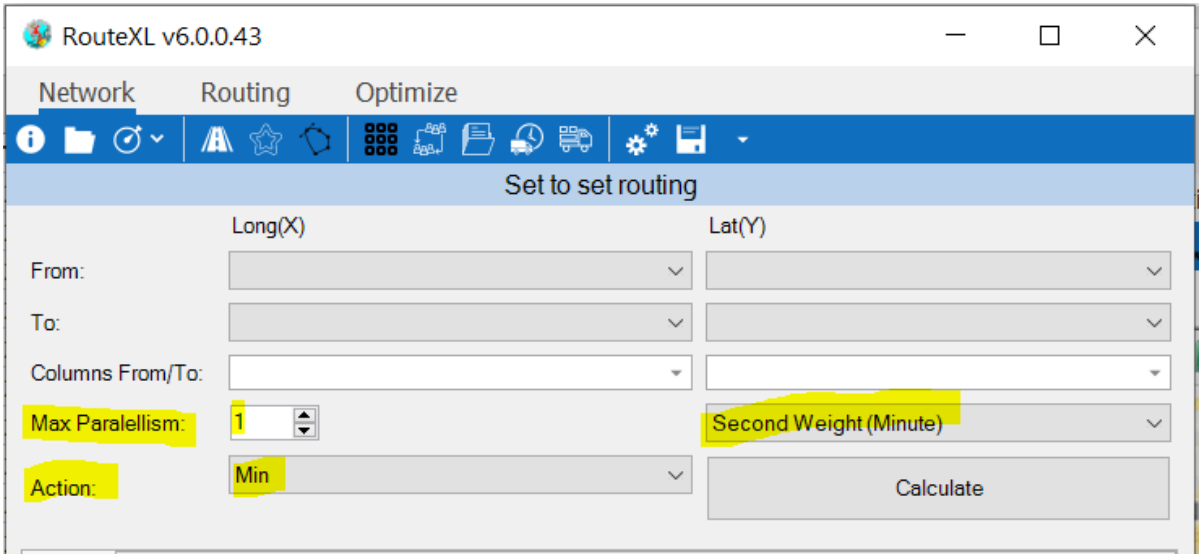


There is a sample Excel file available to download from our website that you can use and follow along with in the steps below: RouteXL-Sample-Work-book.zip

How to set up your data

Load your Routing Network by browsing to your .routingDB file. Your Routing Network will be displayed in the bottom right corner of your RouteXL window. I loaded **newzafza.routingDB** which is the South African Routing Network.



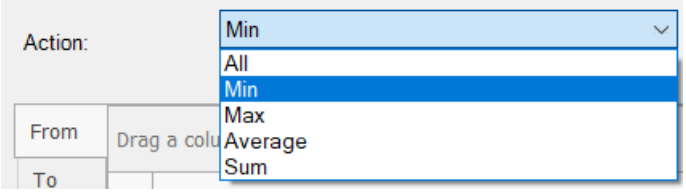


You can either optimize your routing by **First Weight (Meter)** or **Second Weight (Minute)**. I have chosen to optimize by **Second Weight (Minute)** in this example.

Max Parallelism is set at **1** as a default. This is the basic setting for processing your data.

Action is set at **Min** which will calculate the minimum time between the sets of points.

You can dropdown and select other options depending on what output you are looking for.



An explanation of what each of the Actions will do follows:

All: This will give times and distances between all the points in the one set and all the points in the other set.

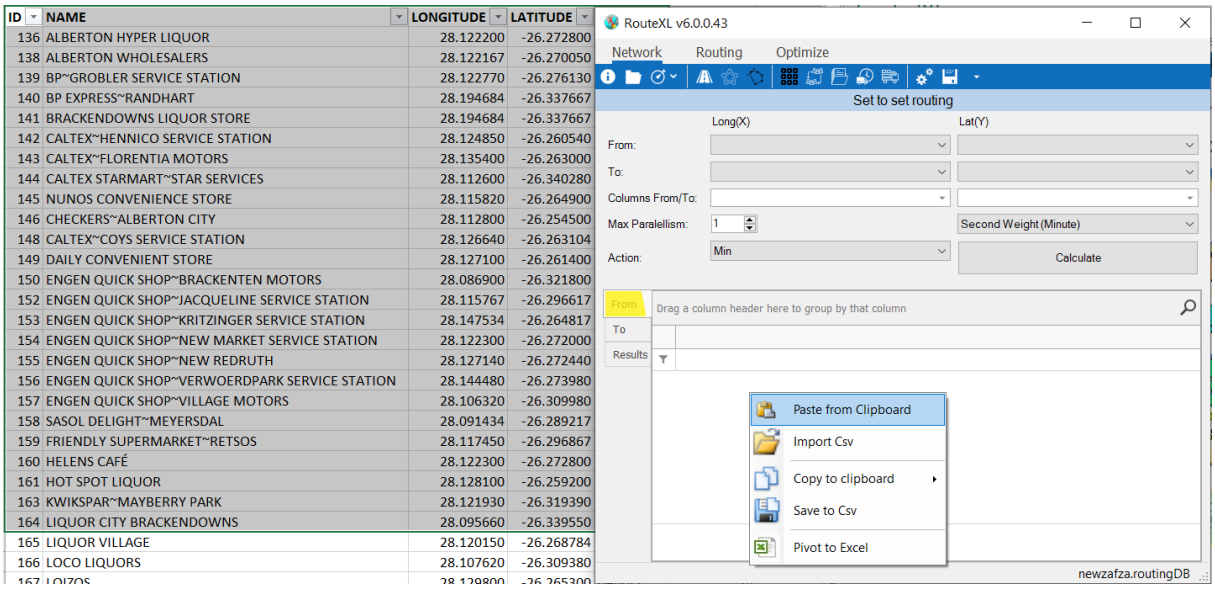
Min: This will *assign* points in one set to points in another set based on the point being the minimum distance or time away from the point in the other set.

Max: This will *assign* points in one set to points in another set based on the point being the maximum distance or time away from the point in the other set.

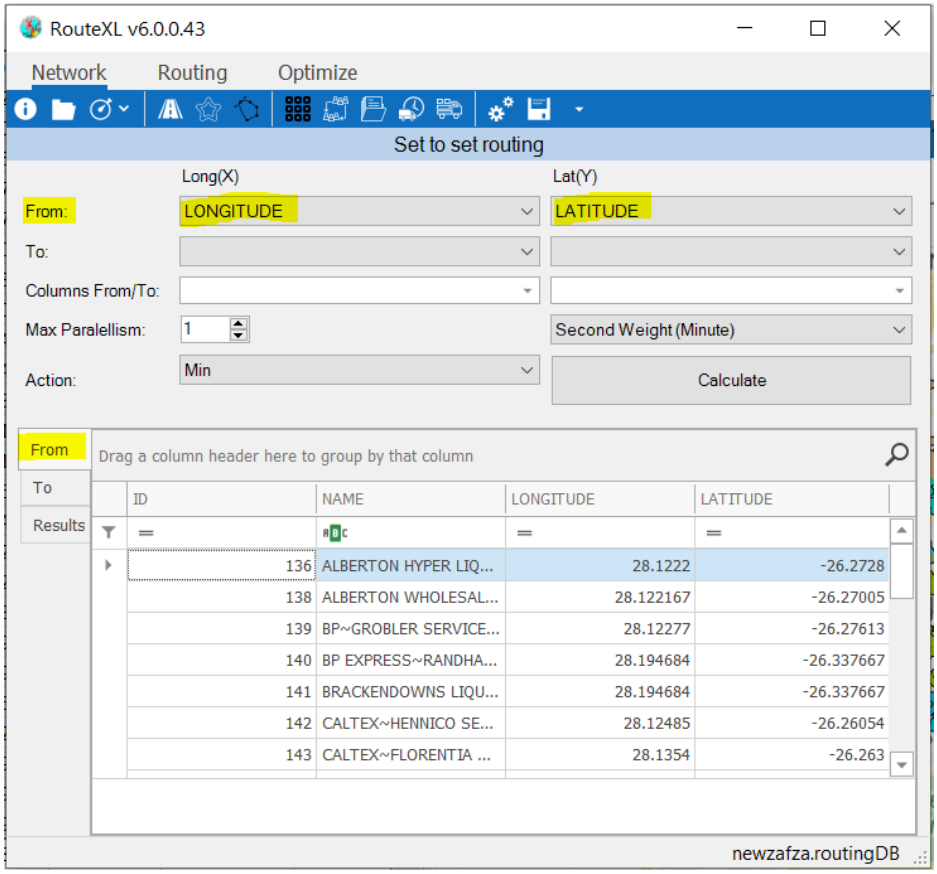
Average: This will give you the average time and distance between each point in one set and each point in the other set. For example, store "AFRICA SUPER-MARKET" distance to "Depot1" is 93KM and distance to "Depot2" is 56KM, with this option, the average of these distances will populate for this store as 74.8KM.

Sum: This will give you the sum of the time and distance between each point in one set and each point in the other set. For example, store "AFRICA SUPER-MARKET" distance to "Depot1" is 93KM and distance to "Depot2" is 56KM, with this option, the sum of these distances will populate for this store as 149.7KM.

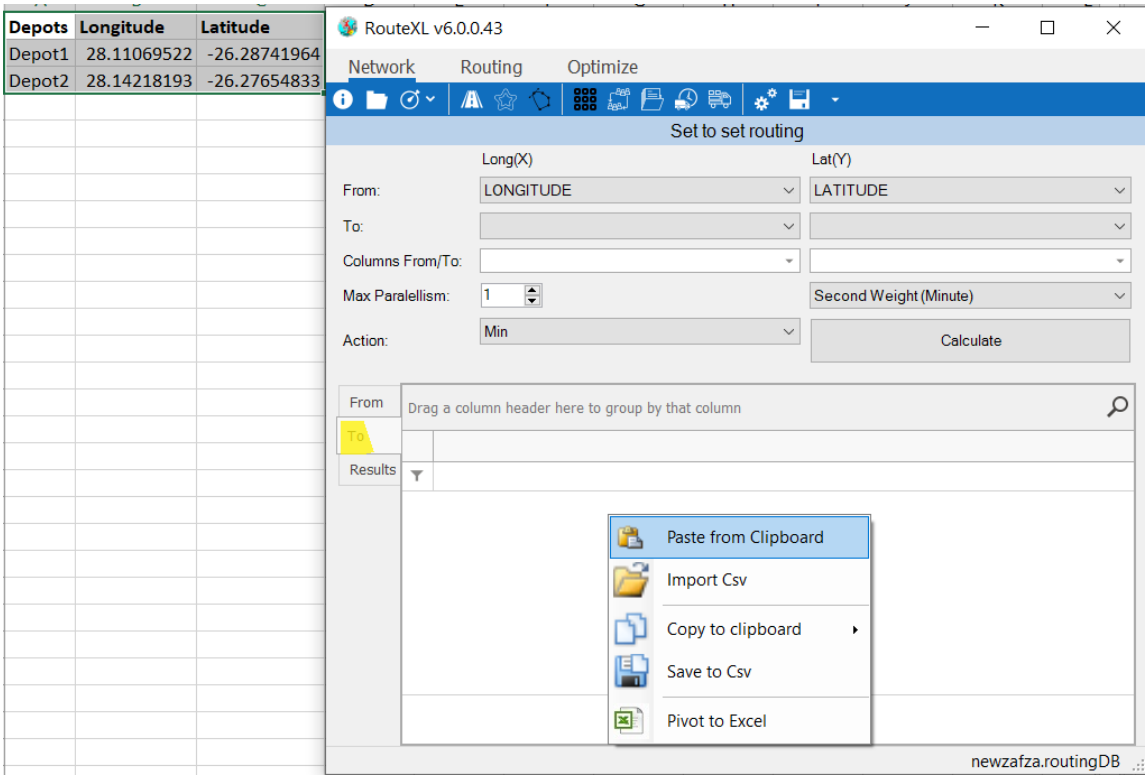
Inputting your data



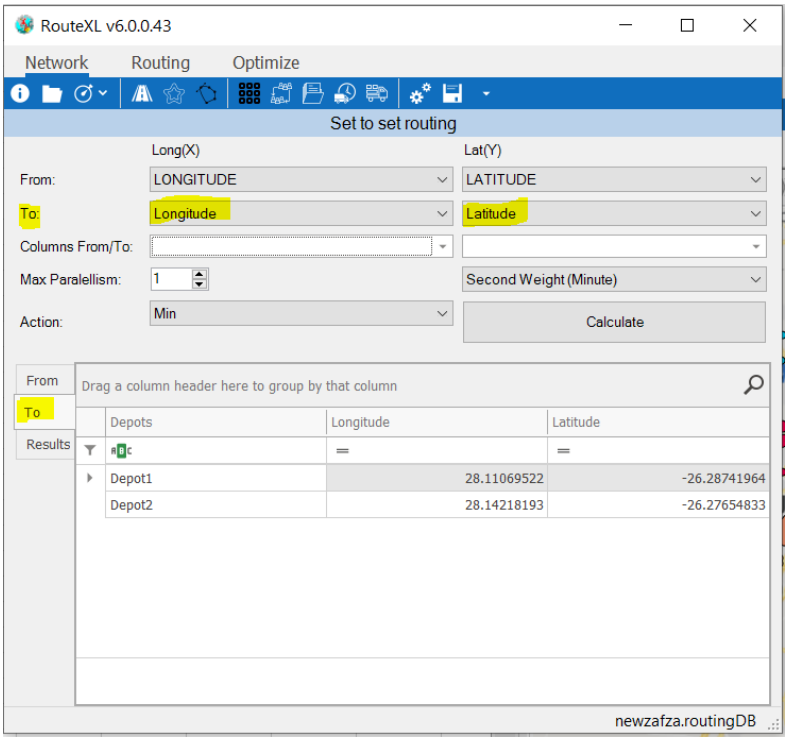
Select the **From** tab. Then copy your data from your Excel spreadsheet and **Paste from Clipboard** by right clicking in the white area.



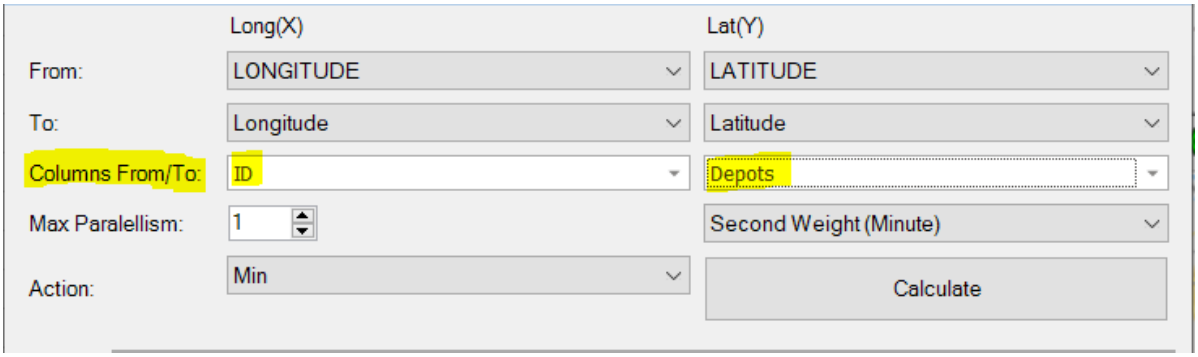
From will now be populated with the **Longitude** and **Latitude** from your Excel spreadsheet.



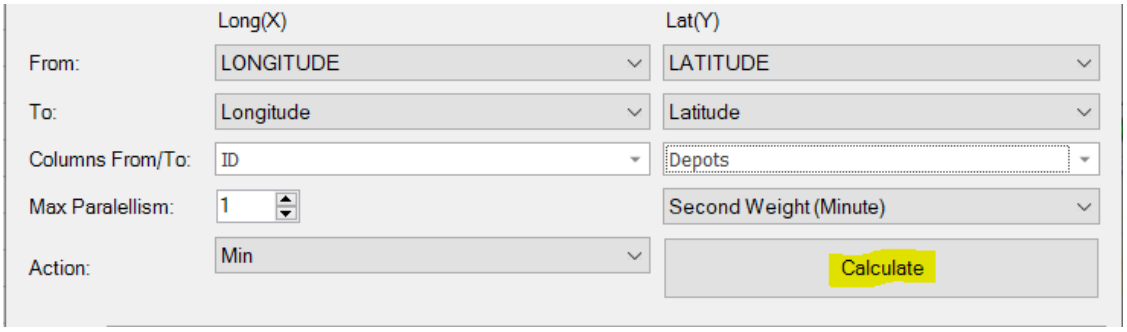
Select the **To** tab. Then copy your data from your Excel spreadsheet and **Paste from Clipboard** by right clicking in the white area.



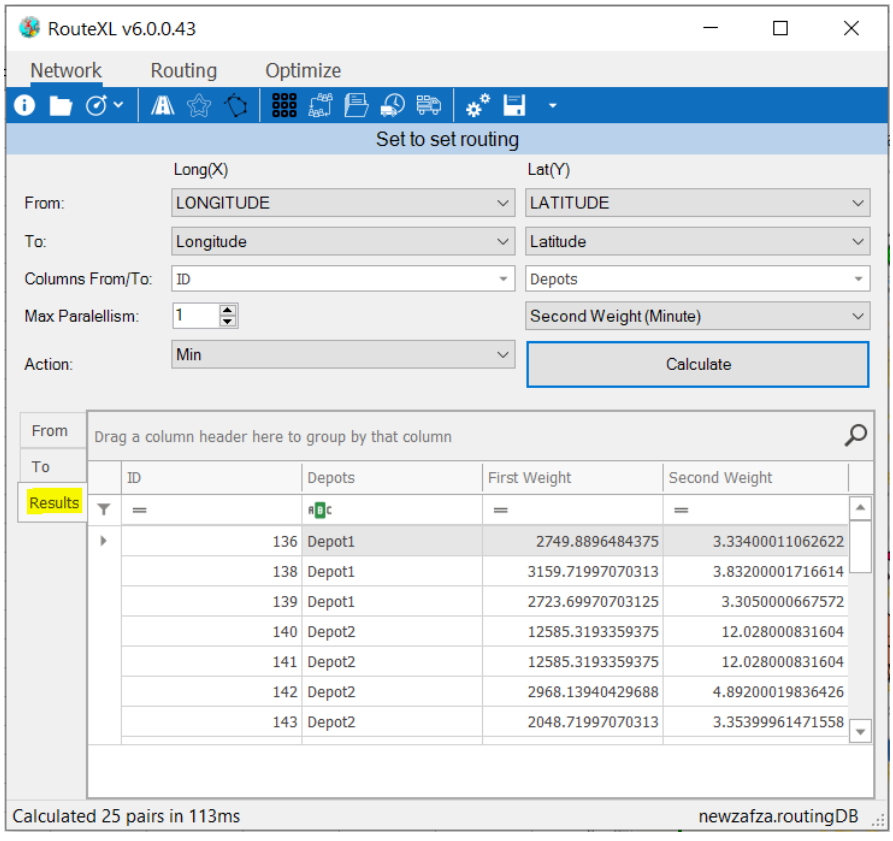
To will now be populated with the **Longitude** and **Latitude** from your Excel spreadsheet.



Columns From/To are the Unique IDs you choose to do the **Set to Set Routing** exercise. I have selected **ID** from my **From** tab and **Depots** from my **To** tab.



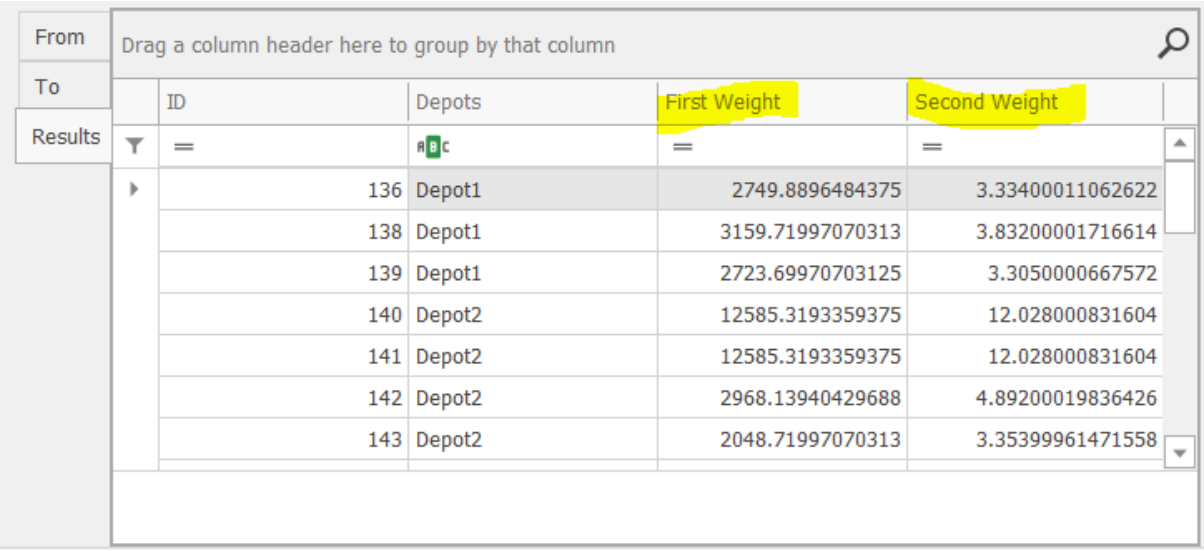
Click on **Calculate**.



Your **Results** tab will now be populated.

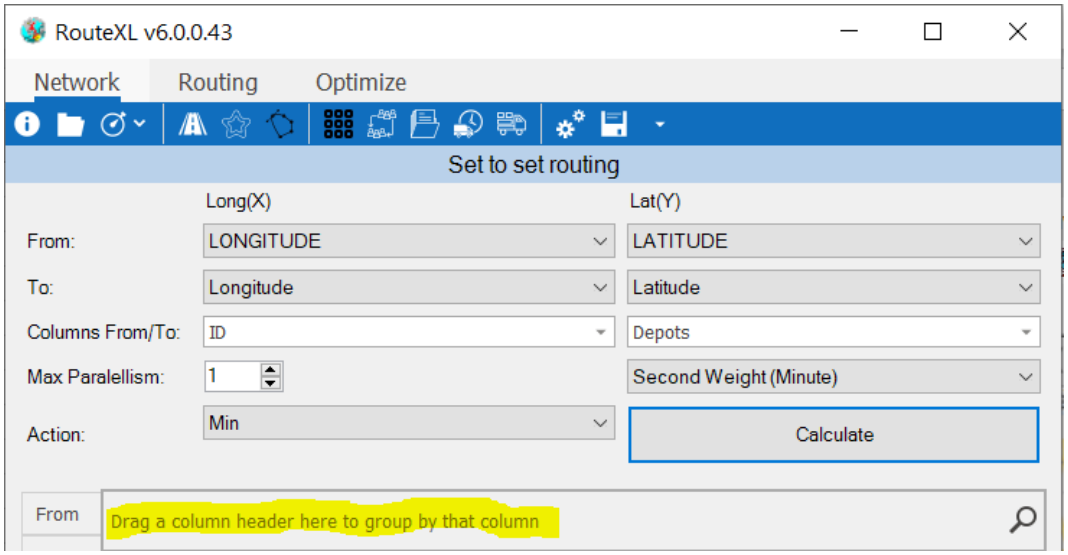
Understanding your data

Calculated 25 pairs in 113ms means it matched up 25 points from your Excel spreadsheet (**From** tab) to the appropriate **Depots** in your **To** tab in terms of minimum time. This calculation took 113 milliseconds.

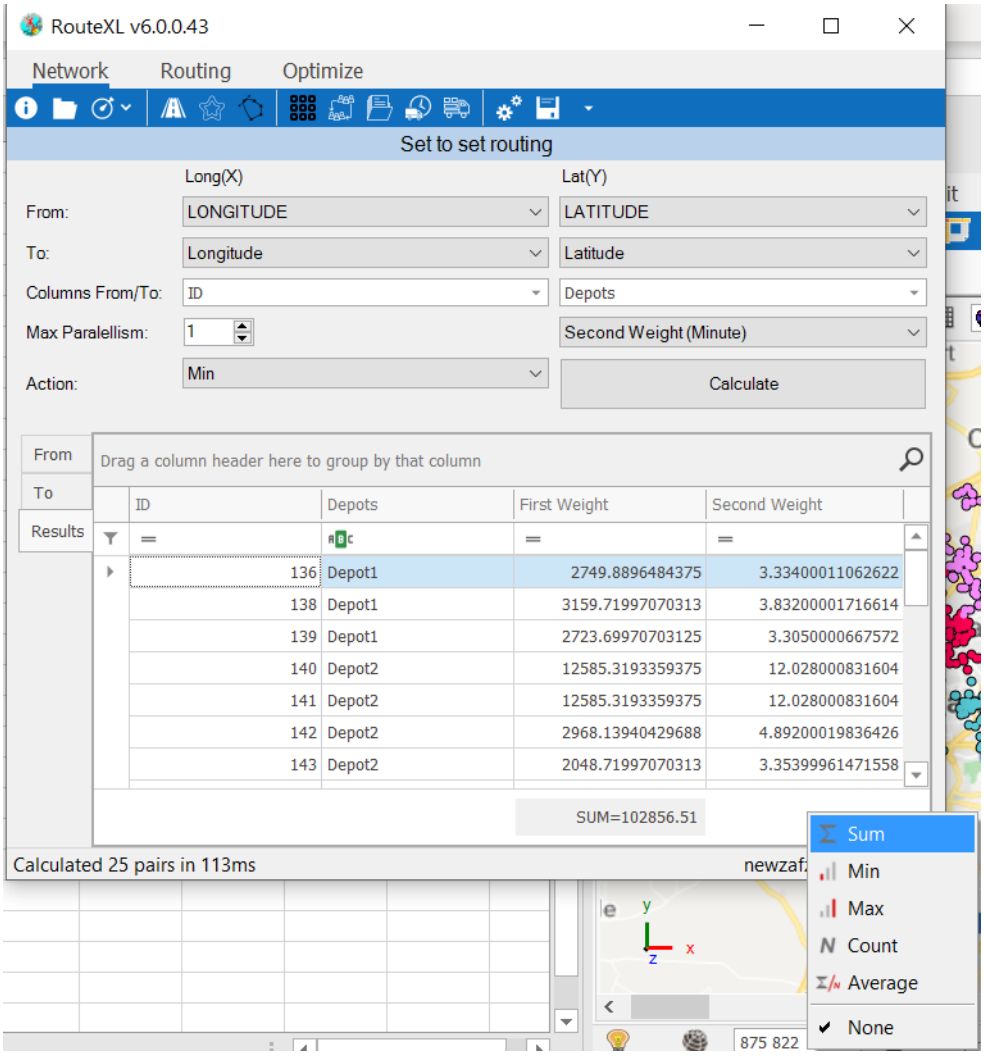


ID	Depots	First Weight	Second Weight
136	Depot1	2749.8896484375	3.33400011062622
138	Depot1	3159.71997070313	3.83200001716614
139	Depot1	2723.69970703125	3.3050000667572
140	Depot2	12585.3193359375	12.028000831604
141	Depot2	12585.3193359375	12.028000831604
142	Depot2	2968.13940429688	4.89200019836426
143	Depot2	2048.71997070313	3.35399961471558

First Weight and **Second Weight** are also populated here. You can see that your points (**ID**) are matched up with the appropriate **Depots** in terms of minimum time.

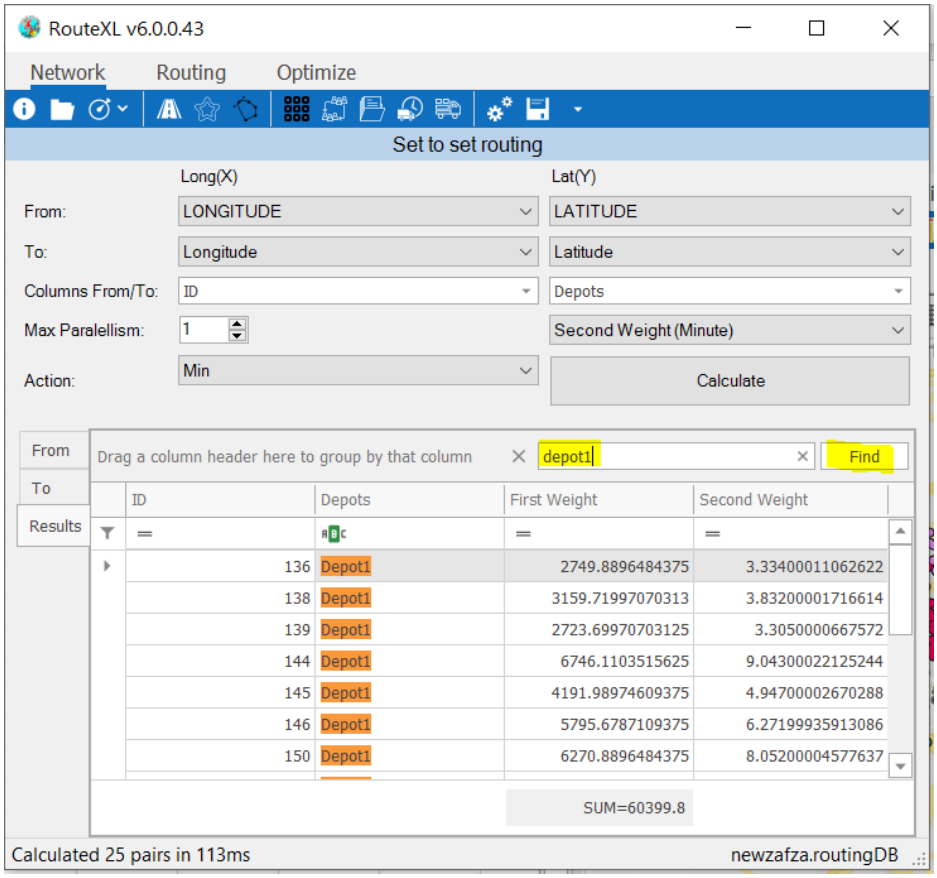


You can also group your data by column headings by dragging your heading/s as above.

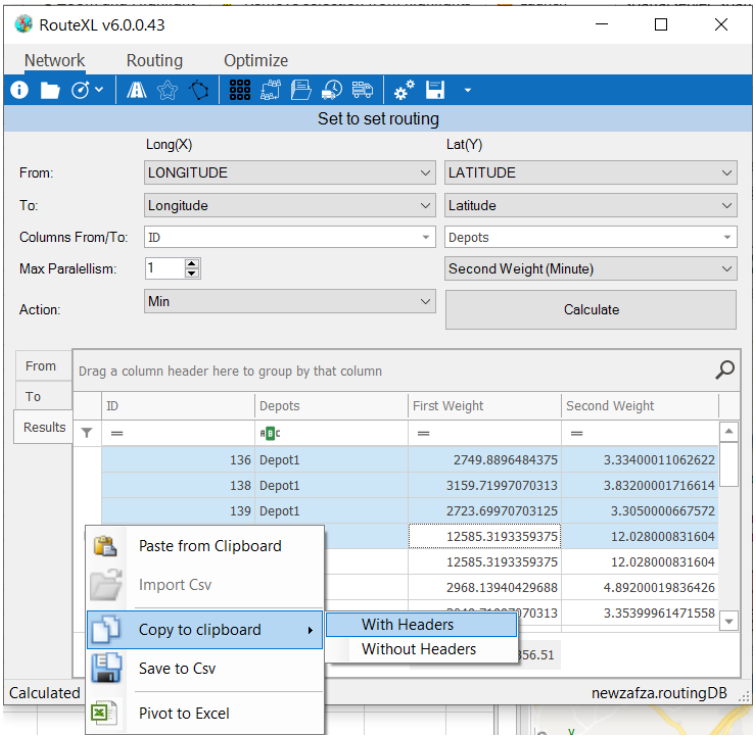


A **Sum** etc. of your columns can be gotten by right clicking the white area and selecting the appropriate option.

Click on the magnifying glass symbol.



If you want to find a specific name etc. in your data, just type it in as above. Click **Find** if necessary – It automatically finds the data just by typing it in but **Find** is an option as well.



Your data can be saved, copied out, and pivoted to Excel for further analysis. Select your data as above then right click and choose the appropriate option.

Support

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