

Routing Reparto

Loading vehicles: Taking into account the vehicle load

Plan routes with vehicle load

The functionality "Load vehicle" is used to plan where and when to reload the vehicle, so that the program will take it into account when planning routes. To start, you must download the last 2 templates named "Load" for vehicles and customers. We recommend using these new Excel (that is the same Excel that you were already using, but to which we added the columns "Load capacity", "Available load", "Duration Stop Base Return" and the columns to indicate a second address to reload). You can also add new columns to its former Excel. Always remember that it is very important to keep the formatting of cells and not to rename columns.

Download Excel
LOAD - CUSTOMERS



Download Excel
LOAD-VEHICLES



Firstly, you will have to fill the vehicles Excel by following these simple steps:

- 1 Indicate the capacity of load of the vehicle
- 2 Indicate the initial vehicle loading
- 3 Indicate the address where the vehicle will be load
- 4 Indicate the time required to load the vehicle

1. Loading goods: Vehicles Excel

1 Indicate the load capacity of the vehicle


To begin, enter the maximum load capacity of the vehicle in the "Load capacity" box. E.g. : 50

| Possible Break From | Possible Break Until | Return Base | Load capacity | Available load | Goback Street | Goback Number | Goback City |
|---------------------|----------------------|-------------|---------------|----------------|-----------------|---------------|-------------|
| 13:00 | 15:00 | Y | 50 | 0 | Dufferin Street | 1 | London |
| 13:00 | 15:00 | Y | 50 | 0 | Dufferin Street | 1 | London |

2 Indicate the available load of the vehicle

Then, enter the free vehicle load to start the route in the "Available load" box. If the vehicle leaves the base with its maximum load, then it should be noted in the "Available load" column with the value 0.

If the vehicle leaves the base loaded with 40, you have to indicate so by introducing the loading units that are missing to have the vehicle completely loaded. For example, if the maximum load is 50 and we left the base with 40, in the "Available load" box we have to write "10". This way, we indicate that the vehicle will have 10 missing loads to reach the maximum capacity and that the vehicles will be load with 40 units.




| Load capacity | Available load |
|---------------|----------------|
| 50 | 10 |
| 50 | 10 |

3


Indicate the address where the vehicle will be loaded

Fill the following boxes with full postal address of the location where the vehicle will be loaded:



| Capacity load | Initial load | Goback Street | Goback Number | Goback City | Goback Postal Code | Goback Province | Goback Country | Y Goback Coord | X Goback Coord | Goback Base Duration |
|---------------|--------------|-----------------|---------------|-------------|--------------------|-----------------|----------------|----------------|----------------|----------------------|
| 150 | 0 | Dufferin Street | 1 | London | EC1Y-8RY | London | United Kingdom | | | 0:30 |
| 150 | 0 | Dufferin Street | 1 | London | EC1Y-8RY | London | United Kingdom | | | 0:30 |

In case the geographical coordinates are indicated in boxes "Y Goback Coord" and "X Goback Coord", it won't be necessary to enter the full postal address.



| Capacity load | Initial load | Goback Street | Goback Number | Goback City | Goback Postal Code | Goback Province | Goback Country | Y Goback Coord | X Goback Coord | Goback Base Duration |
|---------------|--------------|-----------------|---------------|-------------|--------------------|-----------------|----------------|----------------|----------------|----------------------|
| 150 | 0 | Dufferin Street | 1 | London | EC1Y-8RY | London | United Kingdom | | | 0:30 |
| 150 | 0 | Dufferin Street | 1 | London | EC1Y-8RY | London | United Kingdom | | | 0:30 |

4

Indicate the time required to load the vehicle again.

Specify in the "Goback Base Duration" box the time required to load the vehicle again.

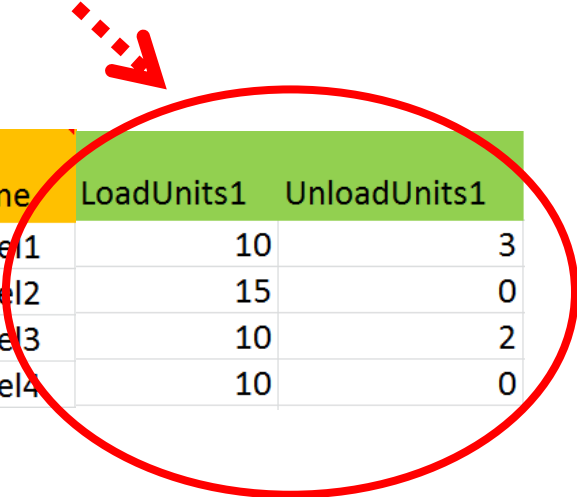
| Capacity load | Initial load | Goback Street | Goback Number | Goback City | Goback Postal Code | Goback Province | Goback Country | Y Goback Coord | X Goback Coord | Goback Base Duration |
|---------------|--------------|-----------------|---------------|-------------|--------------------|-----------------|----------------|----------------|----------------|----------------------|
| 150 | 0 | Dufferin Street | 1 | London | EC1Y-8RY | London | United Kingdom | | | 0:30 |
| 150 | 0 | Dufferin Street | 1 | London | EC1Y-8RY | London | United Kingdom | | | 0:30 |

2.- Loading goods: Customers Excel

Once you have completed the vehicles Excel, you shall indicate in the customers Excel the units that are loaded and unloaded at each visit to a client. On a visit, the vehicle can be loaded, unloaded or can do both. To write it, we have the columns "Load Units1" and "Unload Units1".

In the customers Excel, you have to enter the units delivered to the customer in the "Load units1" and the units collected in the "Unload units1".

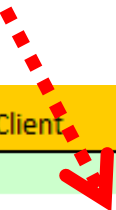
In the following example, in the customer visit "Hotel1", the vehicle delivers 10 units to the customer (LoadUnits1). However, on the client "Hotel3", the vehicle delivers 10 units to the customer (customer load) and takes 20 units (customer unload).



| Client | | | |
|--------|--------|------------|--------------|
| ID | Name | LoadUnits1 | UnloadUnits1 |
| 1 | Hotel1 | 10 | 3 |
| 2 | Hotel2 | 15 | 0 |
| 3 | Hotel3 | 10 | 2 |
| 4 | Hotel4 | 10 | 0 |

3.- Planning results

Finally, note that in the planning result, the times when the vehicle returns to base to load again are named as "Break".



| Vehicle | Name | Time | Client | Client name | Address |
|---------|-------------------------|----------|--------|-------------|-----------------------|
| 1 | 2015-05-04 Robert Jones | 09:00:00 | | Salida | Elverton Street, 1 |
| 1 | 2015-05-04 Robert Jones | 09:03:42 | 1 | Hotel1 | Eaton Square, 112 |
| 1 | 2015-05-04 Robert Jones | 09:42:55 | | Break 1 | |
| 1 | 2015-05-04 Robert Jones | 10:12:40 | 3 | Hotel3 | Kensington Gore, 84 |
| 1 | 2015-05-04 Robert Jones | 10:43:47 | | Break 2 | |
| 1 | 2015-05-04 Robert Jones | 11:27:04 | 7 | Hotel9 | Glasshouse Street, 46 |
| 1 | 2015-05-04 Robert Jones | 12:13:41 | | Break 3 | |
| 1 | 2015-05-04 Robert Jones | 12:44:23 | 5 | Hotel5 | Whitehall, 70 |
| 1 | 2015-05-04 Robert Jones | 13:27:55 | | Llegada | |
| 2 | 2015-05-04 Daniel Smith | 09:00:00 | | Salida | Elverton Street, 1 |
| 2 | 2015-05-04 Daniel Smith | 09:02:46 | 12 | Hotel15 | Smith Square, 5 |
| 2 | 2015-05-04 Daniel Smith | 09:51:09 | 2 | Hotel2 | Piccadilly, 210 |
| 2 | 2015-05-04 Daniel Smith | 10:39:03 | 9 | Hotel12 | Grafton Street, 3 |
| 2 | 2015-05-04 Daniel Smith | 11:11:37 | 6 | Hotel8 | Shepherd Market, 3 |
| 2 | 2015-05-04 Daniel Smith | 11:50:56 | 11 | Hotel14 | Ambrosden Avenue, . |
| 2 | 2015-05-04 Daniel Smith | 12:28:38 | | Llegada | |