

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.



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.

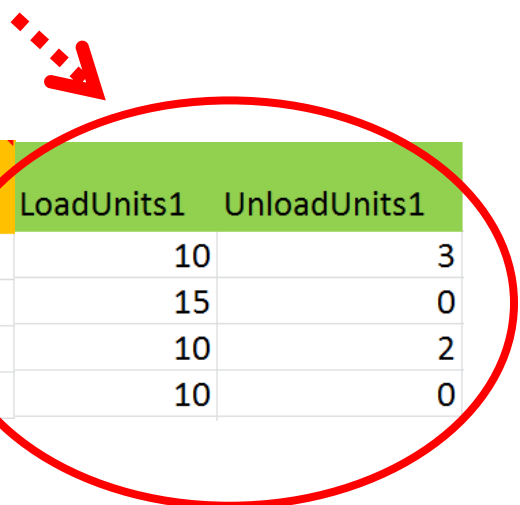
Capacity load	Initial load	Goback Street	Goback Number	Goback City	Goback Postal Code	Goback Province	Goback Country	Y Goback Coord	X Goback Coord	Goback Base Duration
150	0	Dufferin Street	1	London	EC1Y-8RY	London	United Kingdom			0:30
150	0	Dufferin Street	1	London	EC1Y-8RY	London	United Kingdom			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, 1
2	2015-05-04 Daniel Smith	12:28:38		Llegada	