

# “Delivery Fleet Optimization with GIS” Webinar Q & A

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# How does it work if there are multiple factories?

- See Product Delivery example model, there are multiple factories. One of the main modifications is to add a parameter in the Truck agent and assign the associated manufacturer to it so that each truck can recognize the manufacturer it belongs to.
- The “NumberOfTrucks” parameter in the main agent also should be moved into each manufacturer agent (and not as a global parameter in the main) so that each manufacturer could have a different number of trucks.

# In the open example called Product Delivery agents are added from a excel file. Is it also possible to add GISRegions as agents from an excel file?

- Yes, it is possible to Search for regions too, e.g. countries, states, etc. An Excel file can contain the corresponded names. You can directly search a region inside the map or by the following code if you read the region names from an Excel file:
  - `GISRegion gisRegion = map.searchFirstRegion("Region Name");`
- One useful method would be to check if a region contains a point with a given coordinates, which could be done as shown below:
  - `boolean IsInside = gisRegion.(lat, lon);`
- Please check AnyLogic API for more useful information.

# How can we control which path the trucks take, make some roads unavailable for certain vehicles, etc.?

- AnyLogic provides many options for collecting, viewing and analyzing output data. Please refer to “Analysis Palette” section of the help for more information. AnyLogic also supports a convenient way of collecting statistics for population of agents which is available under the “Collecting statistics on agents” title in the help.
- When agents are moving in the GIS map, they try to follow the shortest route. You can also select the fastest route by changing the “Routing method” in the map properties view. Information about routes are taken from the server. For the time being, it is not possible to make roads unavailable. The only way is to draw the required network manually and control how vehicles are moving. To draw your custom network, you can use the GIS elements available under the GIS section of “Space Markup” Pallet.

# Can you take into account information about traffic in the roads in order to calculate "real time" for trips?

- In general, it is possible to use traffic information as well, but such services are not free. A user can buy a license to access such data and then use it in the model through the special API.
- Also refer to the User Zone ([http://www.anylogic.com/user\\_zone](http://www.anylogic.com/user_zone)) on our website for links to useful documents, case studies, and the community forum, etc.

# Thank you!

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