


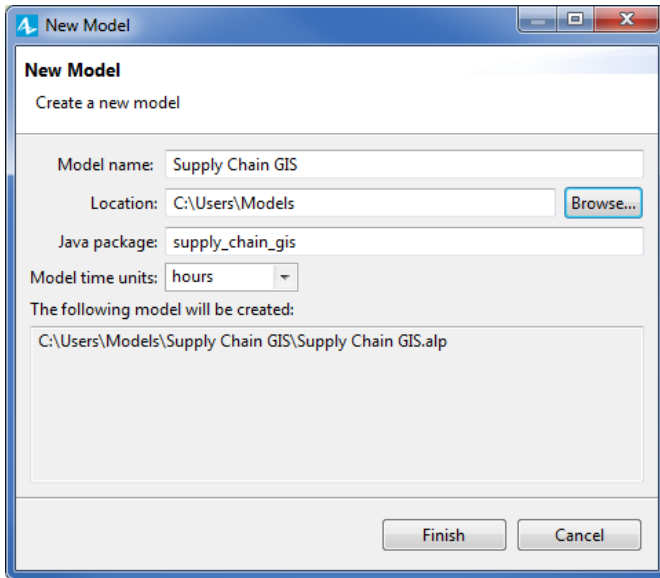
[Tutorials](#) > [Supply Chain GIS \(AB + DE\)](#)

Phase 1. Configuring the GIS Map



In this phase, we will create a model, then add and configure our first component, a tiled GIS map. We will navigate the map both at the design-time and at runtime.

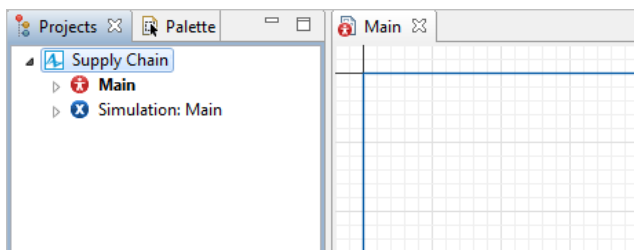
To create a new model

1. Click the **New**  toolbar button. The **New Model** dialog box will open.
2. Specify the name of the model. Type `Supply Chain GIS` in the **Model name** edit box.

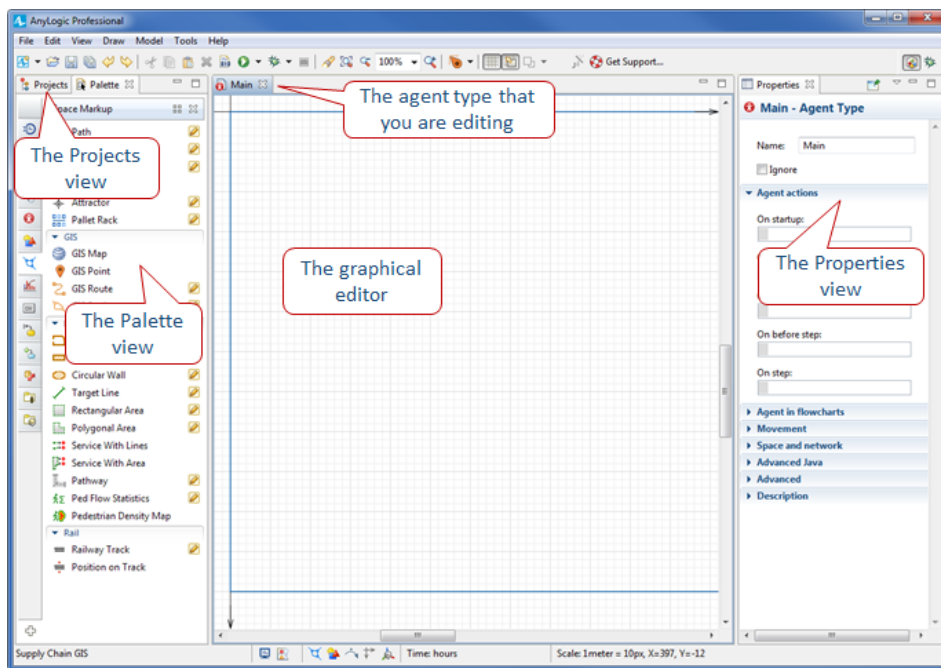


3. Specify the location where you want to store your model files. Browse for the existing folder using the **Browse** button, or type the name of the folder you want to create in the **Location** edit box.
4. Select `hours` as the **Model time units**.
5. Click **Finish** to complete the process.

New model is created. It already has one agent type called  **Main** and the experiment called  **Simulation**. These are two main components of any model: one agent and one experiment. You use the agent type to add there model objects and create other agents, and then you run the experiment of the top-level agent that brings all model elements together into a model.



In the center of the workspace you will see the graphical editor. It shows the diagram of the  **Main** type.



To the left of the graphical editor you can see the **Projects** view and the **Palette** view sharing the same area. The **Projects** view provides access to AnyLogic models currently opened in the workspace. The workspace tree provides easy navigation throughout the models. The **Palette** view contains all graphical elements you can add onto the graphical editor of your agent just by drag'n'drop. Model elements are grouped by categories in a number of palettes.

On the right side of the workspace you can see the **Properties** view. The **Properties** view is used to view and modify the properties of a currently selected model element(s). When you select something – e.g., in the **Projects** view or in the graphical editor – the **Properties** view displays the properties of the selection.

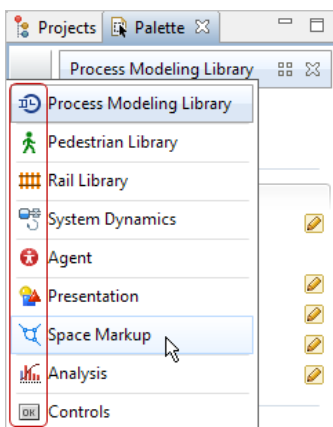
Now we can continue developing our model by modifying the model created by AnyLogic model creation wizard.

In modeling, you often move from left to right: you drag an object from the palette, position it in the graphical editor of the agent, and then you modify its properties.

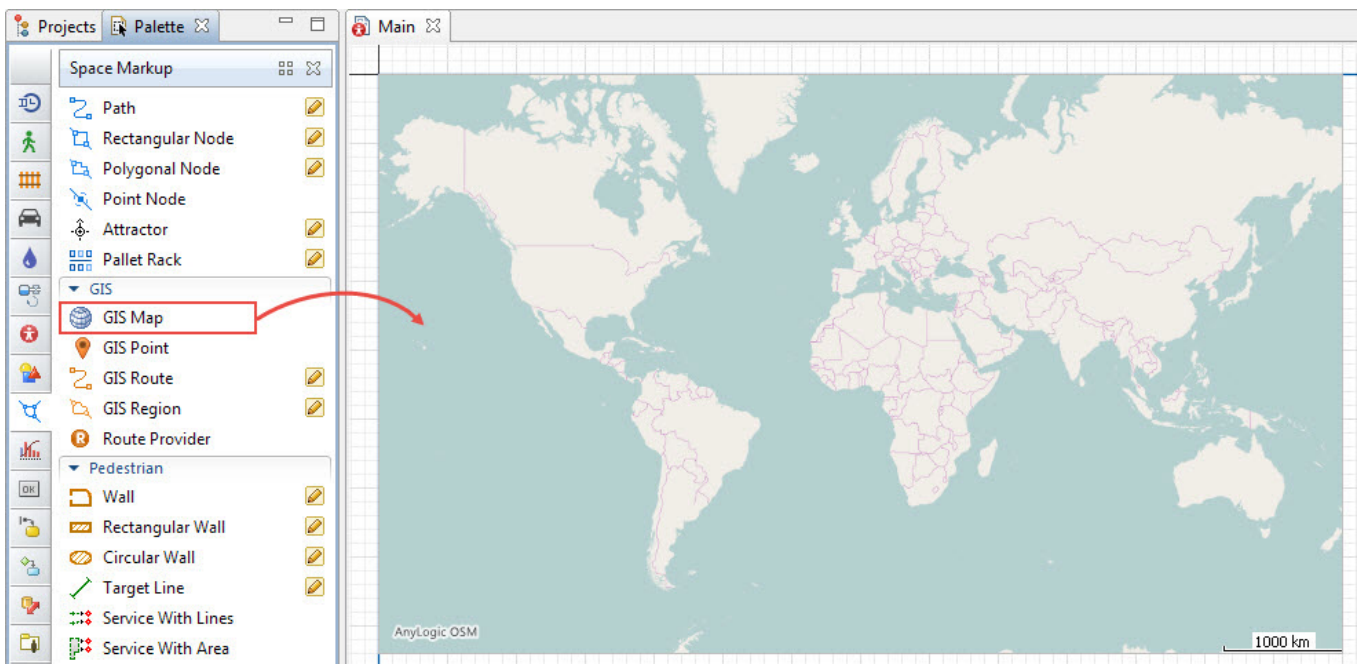
We will start with adding a GIS map onto the **Main** agent type diagram. All agents, that we will create later, will live on **Main**, and that means, in the GIS space.

To add a GIS map

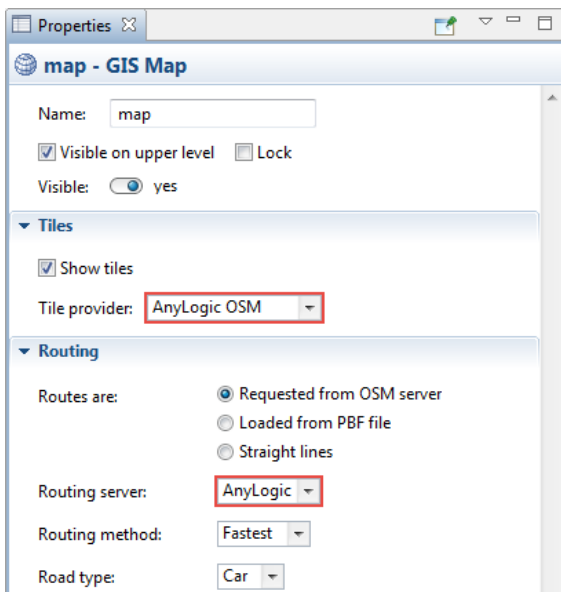
1. The **Palette** view opens by default the **Process Modeling Library** palette, and we need an element from a different palette. Hover the mouse over the vertical navigation bar, wait for the list of palettes to expand, and choose the **Space Markup** palette.



2. In the Space Markup palette, find the section **GIS**, and drag the **GIS Map** shape from the palette onto the graphical editor.

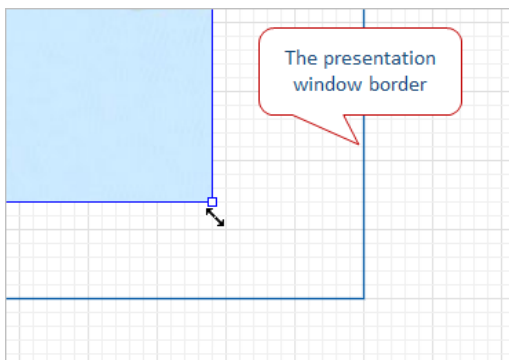


When you first drop the GIS map onto the agent's diagram, it displays the world map using [tiles](#). We will use the default configuration of the **GIS Map** shape in AnyLogic:



- Let us change the map size: it is common to have the map fill all presentation window. Drag one of rectangular handles to resize the shape in the graphical editor. The presentation window border is marked on this agent's diagram with the blue [frame](#). The model frame defines the size of the [presentation window](#) and the part of the graphical diagram that is shown in the window at the model runtime.

Another popular technique is to [turn off panning of the presentation window](#) itself, leaving only the map panning at the runtime.

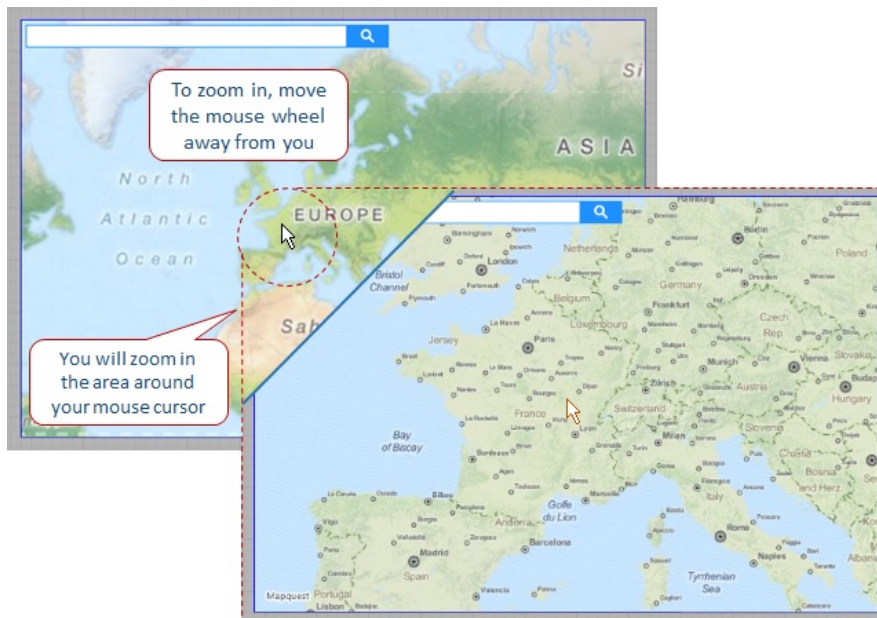


Next, let us choose the area that we want to use in the model and display it on the map.

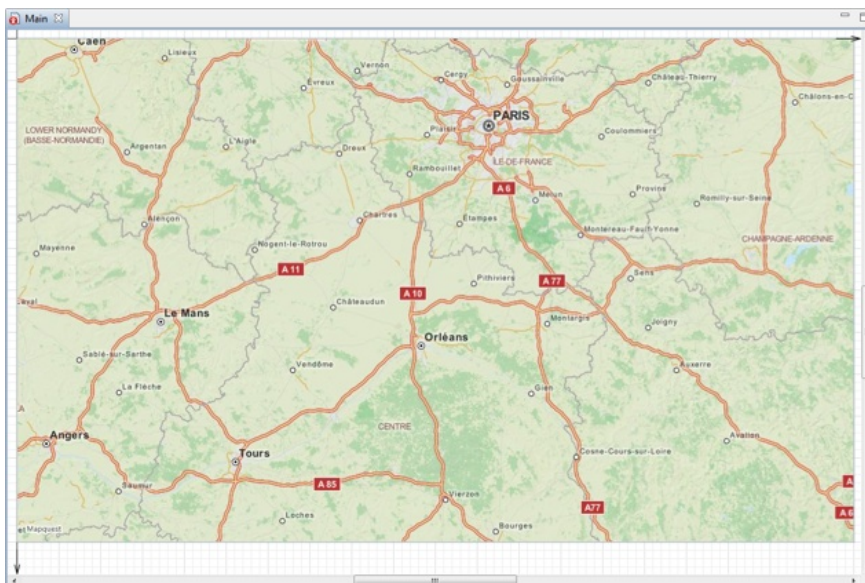
- Double-click the map, or right-click it and select **Edit map** from the context menu. You will enter the map edit mode, the map will remain highlighted unlike the rest of the graphical editor. Now you can navigate the world map to select some specific area:
 - To pan the map, hold down the left mouse button as you move it.



- o To zoom, move your mouse wheel towards or from you.







5. Choose some area, for instance, a country with several big cities between which you would like to create a supply chain system. We have chosen France here.

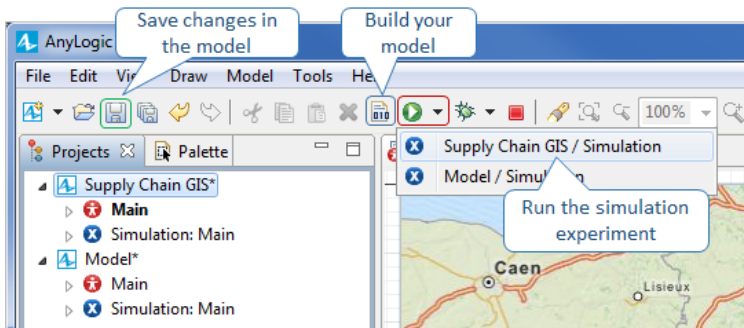



6. To exit the map edit mode, click the grayed out area of the graphical editor outside the map, or right-click the map and select the option **Finish map editing** from the context menu.

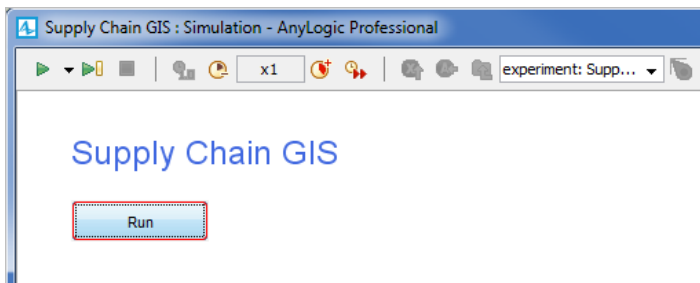
We have finished setting up the **GIS Map** shape on the agent's diagram. Let us run the model and navigate the map at runtime.

To run the model

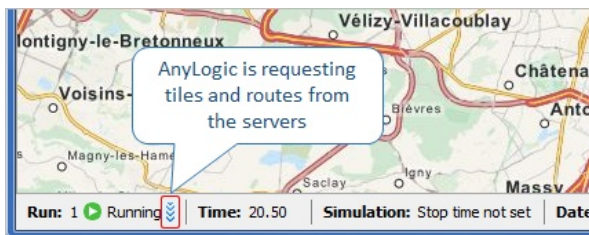
1. Now you have the **Palette** view open. Click the **Projects** view title to open it. If your model has any unsaved changes, you will see an asterisk * next to its name. Click the button  **Save** on the toolbar to save the changes in the model.
2. Build your project by clicking the  **Build Model** toolbar button. If there are some errors in your model, the building fails and the  **Problems** view appears listing all the errors found in your model. Double-click an error in the list to open the location of the error and fix it. After the model is successfully built, you can start it. Running the simulation, you automatically bring the current model up to date.
3. Choose the experiment you want to run from the drop-down list of the  **Run** toolbar button. Your simulation experiment is called `Supply Chain GIS / Simulation`. Later on you can use the **Run** toolbar button to start the previously run experiment.



4. Having started the model, you will see the presentation window. It displays the presentation designed for your simulation experiment. AnyLogic automatically places the show-bench title and the button enabling running your model and switching to the presentation designed for the  **Main** agent type.



5. Click the **Run** button. The model will run and display the map. You can navigate the GIS map at runtime using the same commands as at the design-time. We only started developing the model, so there is only the map now. But as we run the model, and navigate the map, the tiles get cached in the model folder. Next time, the model with the map will be running faster, using this cache.
6. You can check if AnyLogic requests tiles or routes at runtime of the GIS model: the network indicator will be active. You can find it in the status bar of the presentation window:



Next, we will create several agents and place them on the map.

You can compare your model to the reference model that we provide for every phase here:

Reference model: [Supply Chain GIS - Phase 1](#)

 [Supply Chain GIS Model](#)

 [Phase 2. Creating agents](#)