

## AGV Manager and RAT (Robox Agv Tool)

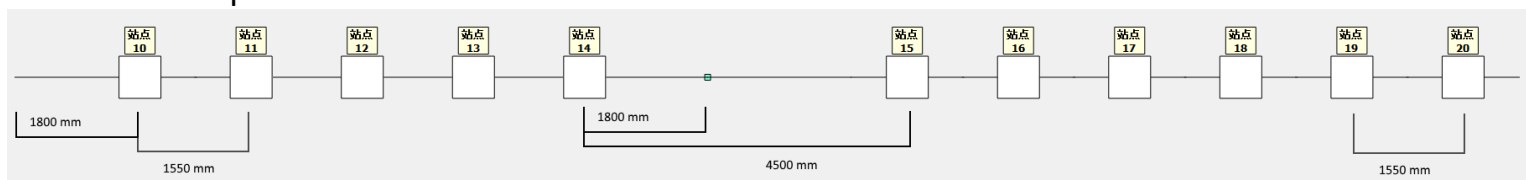
This first exercise is meant to start getting familiar with Robox agv manager, xScript and making practice drawing a map.

In this exercise you will be asked to handle a system where the AGV must move among the stations of the map, chosen at random.

### 1. Draw a map with RAT (Robox Agv Tool)

Make a folder to store this project and save your xml map file in a subfolder called “map”. Open RAT and draw a map respecting following specifications:

- 1 horizontal line 22 m long.
- 11 stations (user points) numbered from 10 to 20, divided in two groups: 10-14 and 15-20.
- Station 10 is set at quote 1800 mm of the line.
- In every group, station distance is 1550 mm constant.
- Distance between station 14 and 15 is 4500 mm.
- A generic point called “Stand by point” is set at 1800 mm after station 14 (right side). This point code number is 200.



Create 1 agv in the RAT project to be played in this sample.

### 2. AGV Manager project

In the project folder you should make your AGVM project. If you want, you can start from BasePrj\_AGVM, that you can find online in Robox OneDrive AGV folder. Set AGV as emulated, since in this sample there is no Robox controller connected to a real agv.

You must write a xScript that makes the agv to move to a target point chosen at random among enabled ones from 10 to 20 stations (only enabled ones!). In this sample the generic point 200 is not used.

Hint: **XUserPointsList** structure may help you to make the station list and handle it.

### 3. Debug

Start AGVM and make the system work. See agv moving and try to disable some stations to see that agv must avoid choosing them as target.