As you have seen in Part 1, the APM lets you model a given manufacturing area and export the data in a format compatible with the OPIL server.

If you want to display the navigation of the robots controlled by OPIL in the 3D window of the APM, you will have first to install the APM in the same computational environment where you are running the OPIL Server. A binary version of the APM should be downloaded from the BetterFactory Github repository (https://github.com/ramp-eu/Advanced_Plant_Model) and installed in a docker-based environment (as instructed by the Github repository).

By default, the APM subscribes the following two entities on the ORION CB (Context Broker) of the RAMP IoT Platform:

- id: map type: ROBOT
- id: robot_opil_v2 type: ROBOT

The APM has the following behavior:

- OPIL Messages are processed in the context of the 'OpilArea' physical area. This name is pre-defined in the APM. When generating the digital artifacts for OPIL (part 1 of this tutorial) you should name the physical area as 'OpilArea'.
- The 'map' message coming from the ORION CB is processed but the APM doesn't do anything with the contents of this message.
- Messages from the robots are processed and the APM expected two JSON fields to be in the message: **current_motion** and **robot_description**. These are used to update the localization of the robot in the 3D area and to set the geometric dimensions of the robot.
- The APM instantiates a robot on the first message coming from a robot through the Orion CB. The robot type with the same name is used in the instantiation of the robot in the 3D Model.

Thus, you should do the following on the APM's user interface:

1. Create a Physical Area with the name **OpilArea**. You should follow the same steps as in the part 1.

   The APM will associate the messages coming from the ORION Context Broker with this area.

   If you don't do this, messages coming from the ORION Context Broker are simply ignored.

2. Create a robot of type 'Robot.AGV' with the same name as the one used by OPIL.

   In the default configuration, there is one OPIL robot: **opil_robot_v2**. If this is the case, you may associate a CAD model to the robot type so that you have a more realistic visualization of the root in the APM user interface.