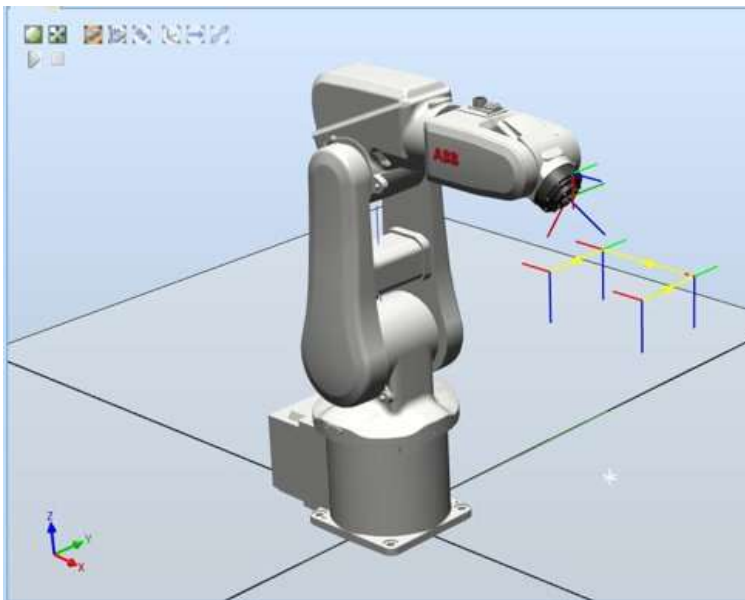


Simulation Description

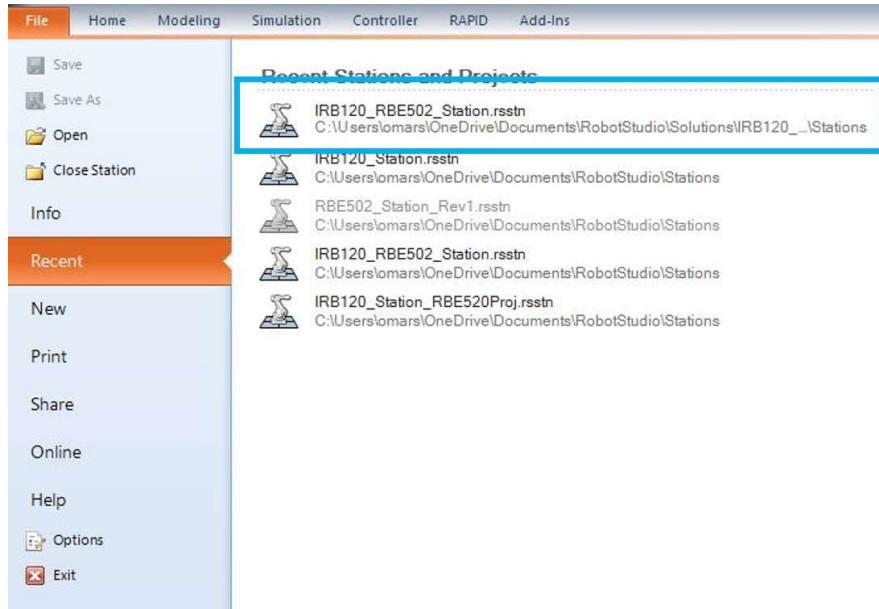
The MATLAB script “Trajectory_Pos.m”:

- Applies our computed torque control law to the ABB IRB120.
- Provides a series of plots.
- Sends joint angle data to RobotStudio to provide a simulation of the robot’s movements.



Instructions:

1. Open “IRB120_RBE502_Station.rsstn” in RobotStudio.



Step 1

2. Once the station is opened and the controller is running, go the “Simulation” tab and press “play” to begin the simulation. The virtual controller’s server will wait for a message from MATLAB, the client.



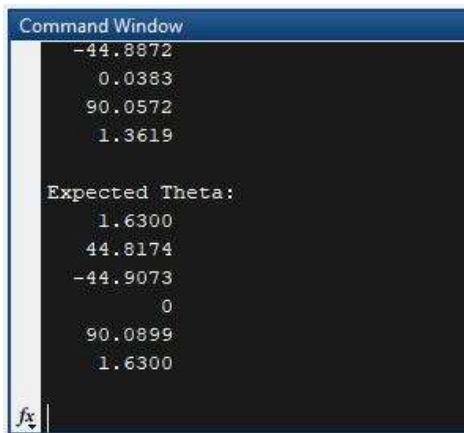
Step 2

3. Run the MATLAB script “Trajectory_Pos.m”. It will take about 5 minutes for the script to complete the calculations and send the angle data to RobotStudio, depending on your PC speed.

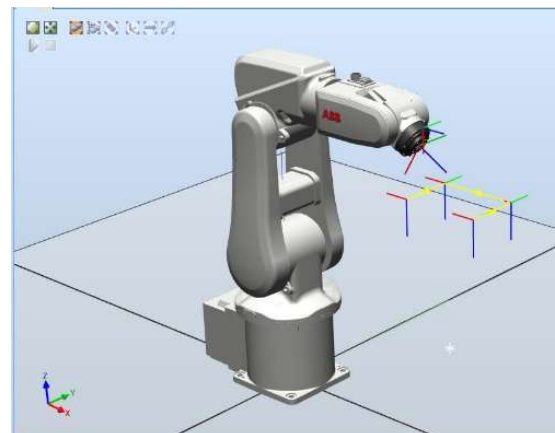


Step 3

4. After all angle data is sent (a), observe the robot’s motion in RobotStudio (b).



Step 4a



Step 4b