P3 Report: dqp34

The following are a series of images showing successful operation of the action client and action server:

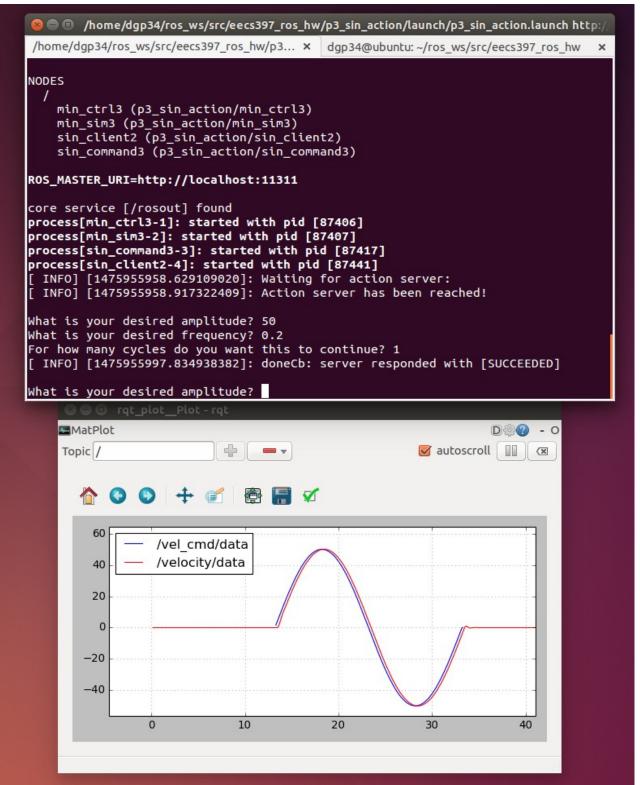


Fig. 1: Input of 50 amplitude, 0.2 frequency, 1 cycle. Success.

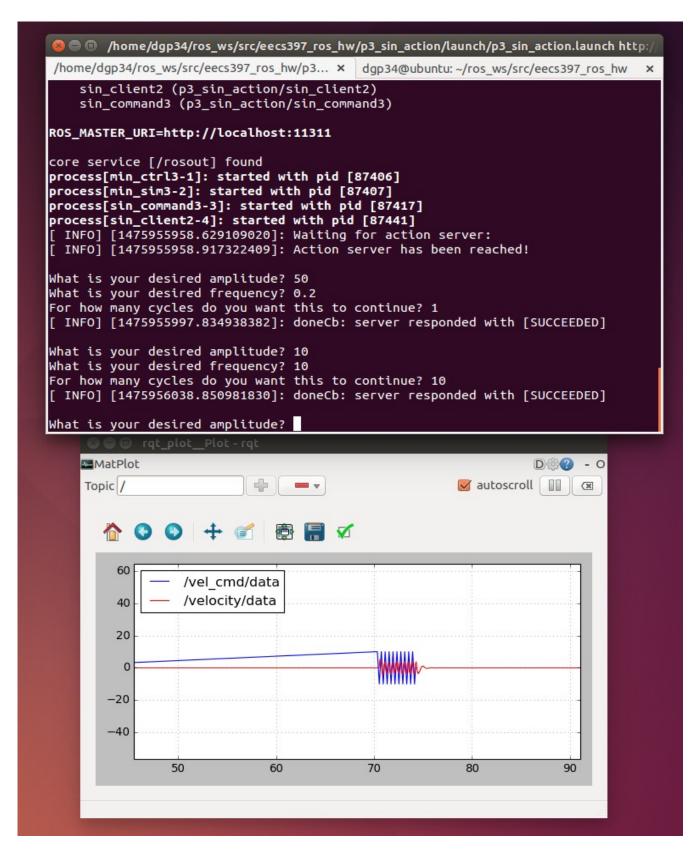


Fig. 2: Input of 10 amplitude, 10 frequency, 10 cycles. Success.

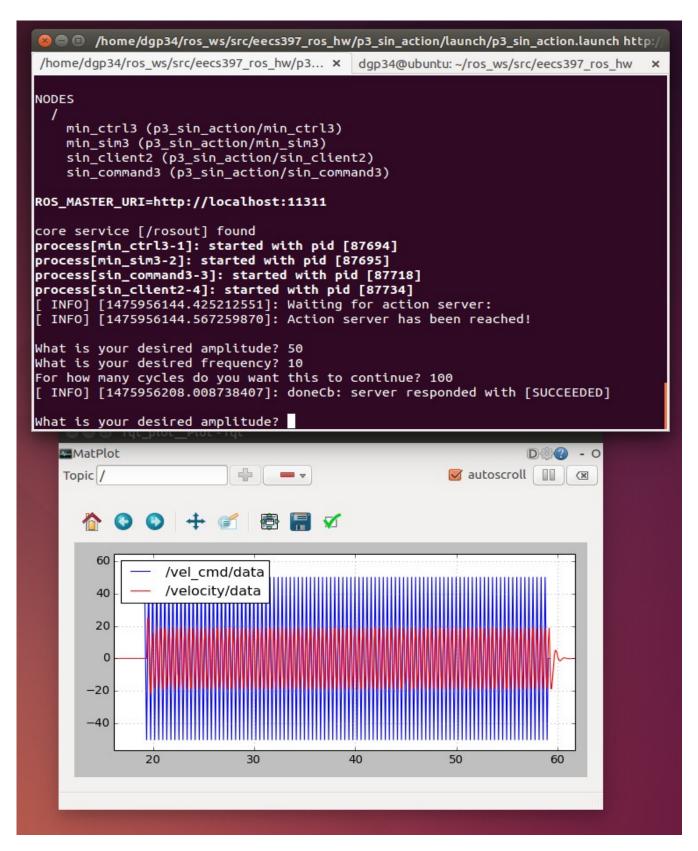


Fig. 3: Input of 50 amplitude, 10 frequency, 100 cycles. Success.

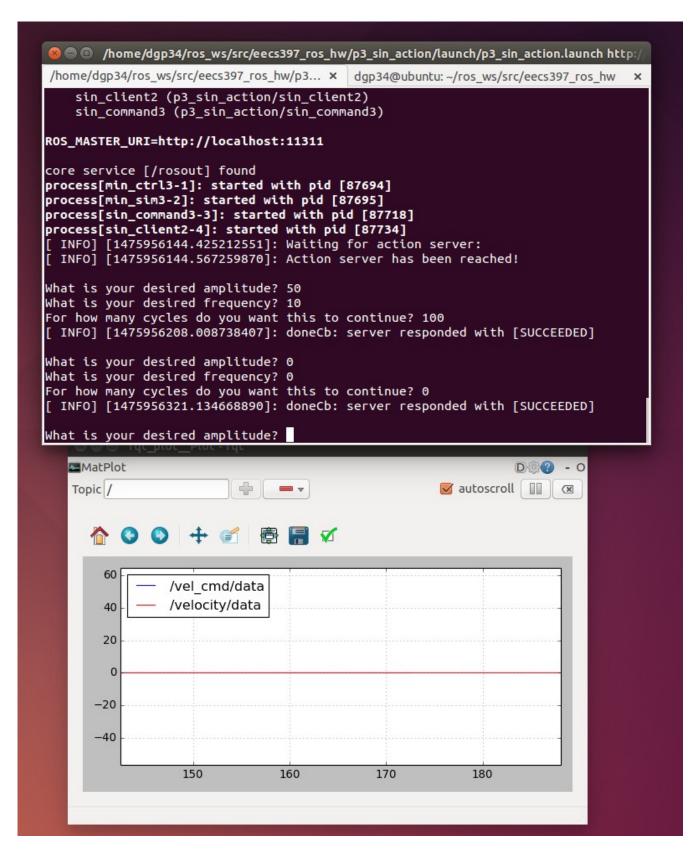


Fig. 4: Special case—Input of 0 amplitude, 0 frequency, 0 cycles.

Success.

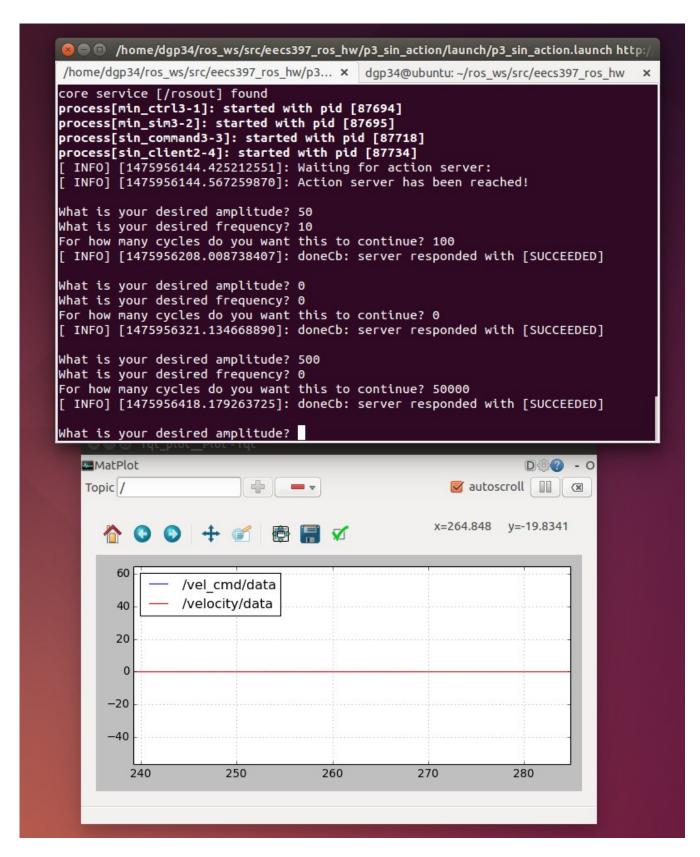


Fig. 5: Demonstration of special case—in the code, frequency is in a denominator position. However, if 0, the code is short-circuited in order to prevent errors. Input 500 amplitude, 0 frequency, 50000 cycles. Success.

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🙆 🖨 🗈 /home/dgp34/ros_ws/src/eecs397_ros_hw/p3_sin_action/launch/p3_sin_action.launch http:/
/home/dgp34/ros_ws/src/eecs397_ros_hw/p3... x dgp34@ubuntu: ~/ros_ws/src/eecs397_ros_hw
 INFO] [1475956144.425212551]: Waiting for action server:
 INFO] [1475956144.567259870]: Action server has been reached!
What is your desired amplitude? 50
What is your desired frequency? 10
For how many cycles do you want this to continue? 100
[ INFO] [1475956208.008738407]: doneCb: server responded with [SUCCEEDED]
What is your desired amplitude? 0
What is your desired frequency? 0
For how many cycles do you want this to continue? O
[ INFO] [1475956321.134668890]: doneCb: server responded with [SUCCEEDED]
What is your desired amplitude? 500
What is your desired frequency? 0
For how many cycles do you want this to continue? 50000
[ INFO] [1475956418.179263725]: doneCb: server responded with [SUCCEEDED]
What is your desired amplitude? 50
What is your desired frequency? 0.2
For how many cycles do you want this to continue? 1
[ INFO] [1475956464.409529736]: doneCb: server responded with [SUCCEEDED]
What is your desired amplitude?
   -- MatPlot
                                                               D@@ - 0
   Topic /
                                                     x=265.823 y=53.3748
      ^ ○ ○ + | ● | ● |
        60
                 /vel cmd/data
                 /velocity/data
        40
       20
        0
      -20
       -40
                    290
                                 300
                                              310
                                                           320
```

Fig. 6: Input of 50 amplitude, 0.2 frequency, 1 cycle, as in Fig. 1, just to show lack of errors after previous inputs. Success.