

Protocol for part_a_scenario_1

1. About the scenario:

This is first scenario used to test our ECNP implementation for transport domain. It consists of just 1 agent and three tasks. The tasks come at different times and in the order opposite to preferences of the agent. Additionally task nr. 0 that comes as first, is furthest away from the agent and has lowest priority for him. Since there are no other tasks at time unit nr. 0, agent bids for that task, offering an expected value of 5 (4 units for moving + 1 unit for charging). At following time units additional tasks come, that have higher priority for the agent and are placed nearer to him, so he should include them on his way to task nr. 0, in the end being able to get contracted for all three tasks and still stay at the overall cost of 5.

This scenario tests ability of our implementation to introduce multiple tasks at different times, and make it possible for at least one agent to bid for them.

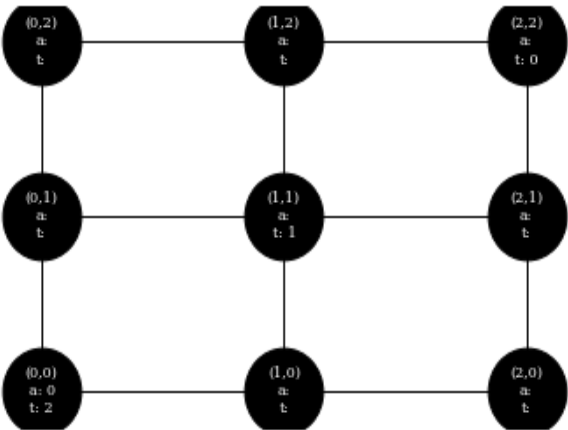
2. Tasks used in the scenario:

id	time	target position
0	0	(2, 2)
1	1	(1, 1)
2	2	(0, 0)

3. Agents used in the scenario:

id	position	preferences	capacity	rest time	speed
0	(0, 0)	[2, 1, 0]	3	1	1

4. grid world used in the scenario:



5. Actual results:

Step	Task	Agent nr. 0 offers:
0	0	5
1	0	5
1	1	2
2	0	5
2	1	2
2	2	0
3	0	5
3	1	2
3	2	0
4	0	5
4	1	2
4	2	0

Task nr 0 contracted to: Agent nr 0
Task nr 1 contracted to: Agent nr 0
Task nr 2 contracted to: Agent nr 0