

Commonroad Information for the HLC

The HLC can receive some information from the Middleware, loaded from a Commonroad scenario, after starting the simulation.

Goal States

Please take a look at https://git.rwth-aachen.de/CPM/Project/Lab/software/-/blob/master/cpm_lib/dds_idl/CommonroadDDSGoalState.idl

The definition of goal states was done similarly to the specification in Commonroad. Goal states themselves are part of a planning problem, which may include several goal states, and one planning problem may consist of several planning problem "elements".

Because we could not encapsulate this definition of planning problems in DDS without causing memory problems, we send each goal state individually instead. You need the following three information to associate them with their original definition:

```
PlanningProblem:
- planning_problem_id
- sequence of planning problem elements:
-> at position planning_problem_pos within that sequence: planning problem with
    - sequence of goal states:
    -> at position goal_state_pos within that sequence: goal state
```

So the identifiers `planning_problem_id` `planning_problems_pos` `goal_state_pos` tell you which goal state you are currently working with. All other information should be self-explanatory or are similar to the Commonroad specs.