Plan Merging in the asprilo Framework

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- Combining plans for single robots

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- Used the asprilo framework and ASP

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- M-Domain of asprilo

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- M-Domain of asprilo
- Visualizer used for testing

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- Input: $occurs(object(robot, R), action(move, D), T)$

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- Position predicates: $position(R, C, T)$

Renaming of Predicates

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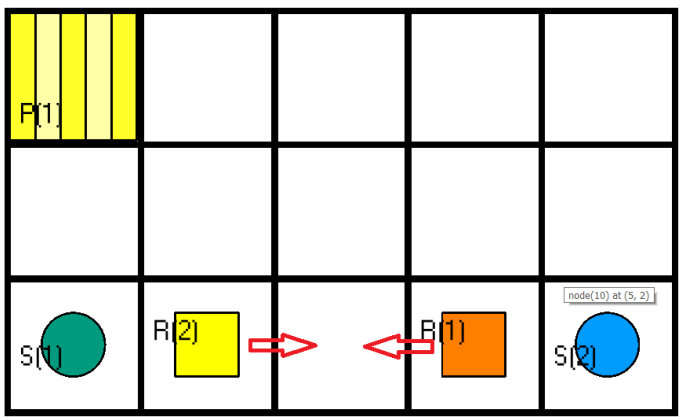
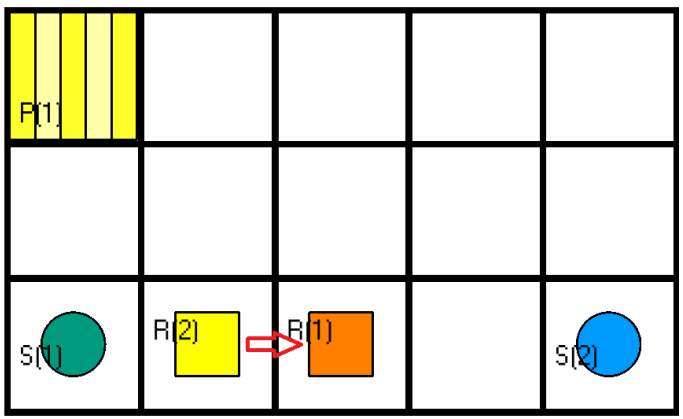
- Higher *conflict_nr* $\rightarrow$ newer plan
- $move(R, D, T) \rightarrow move(R, D, T, A)$

Conflict Detection and Selection





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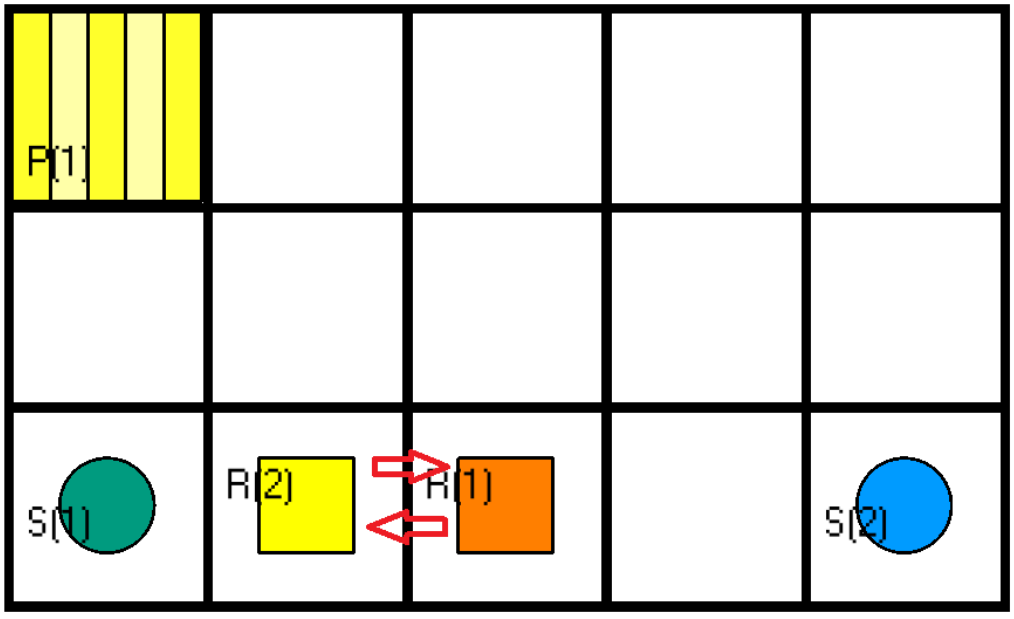

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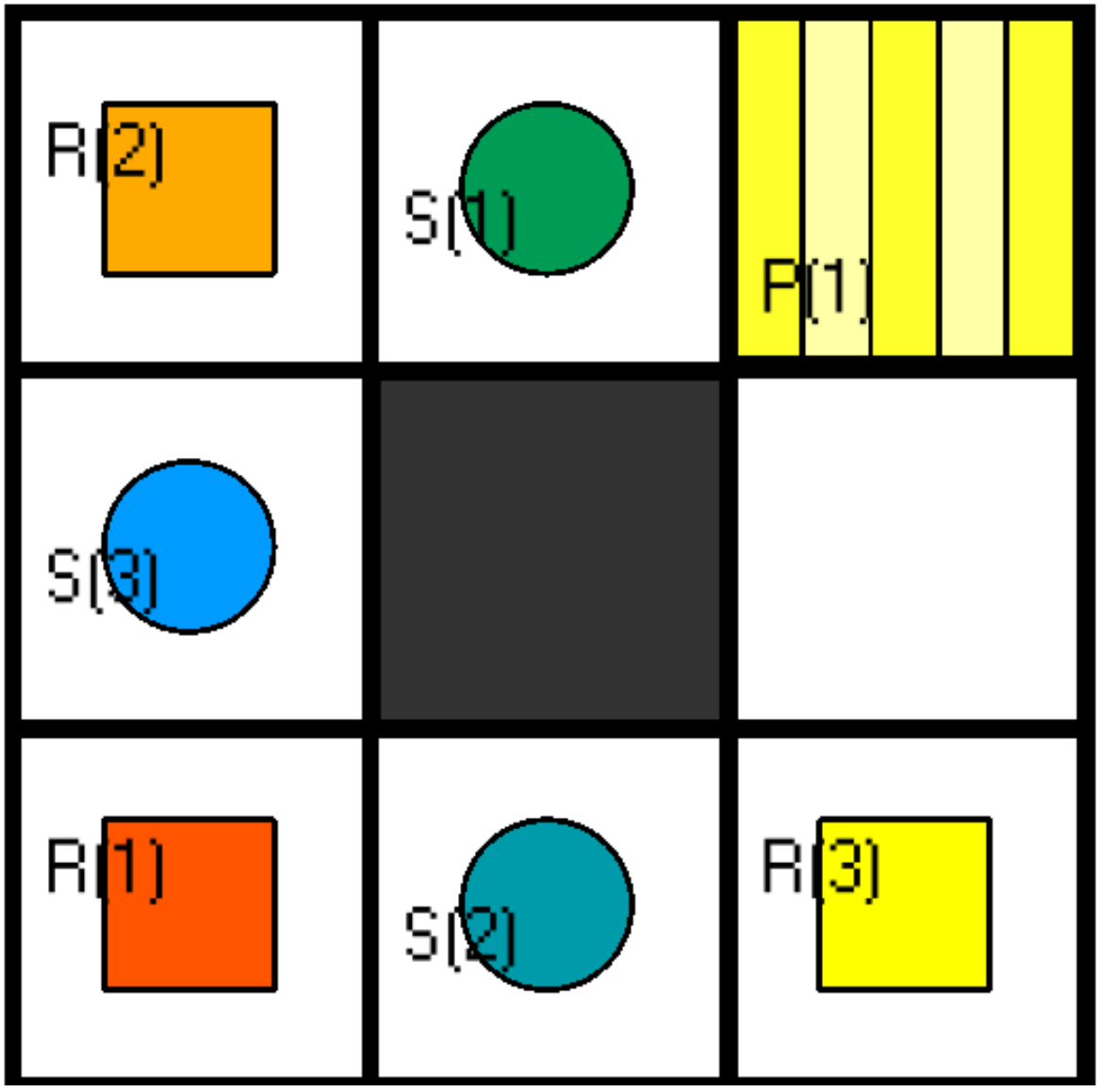
- Dodge: go back at random time step

Unsolvable Benchmarks



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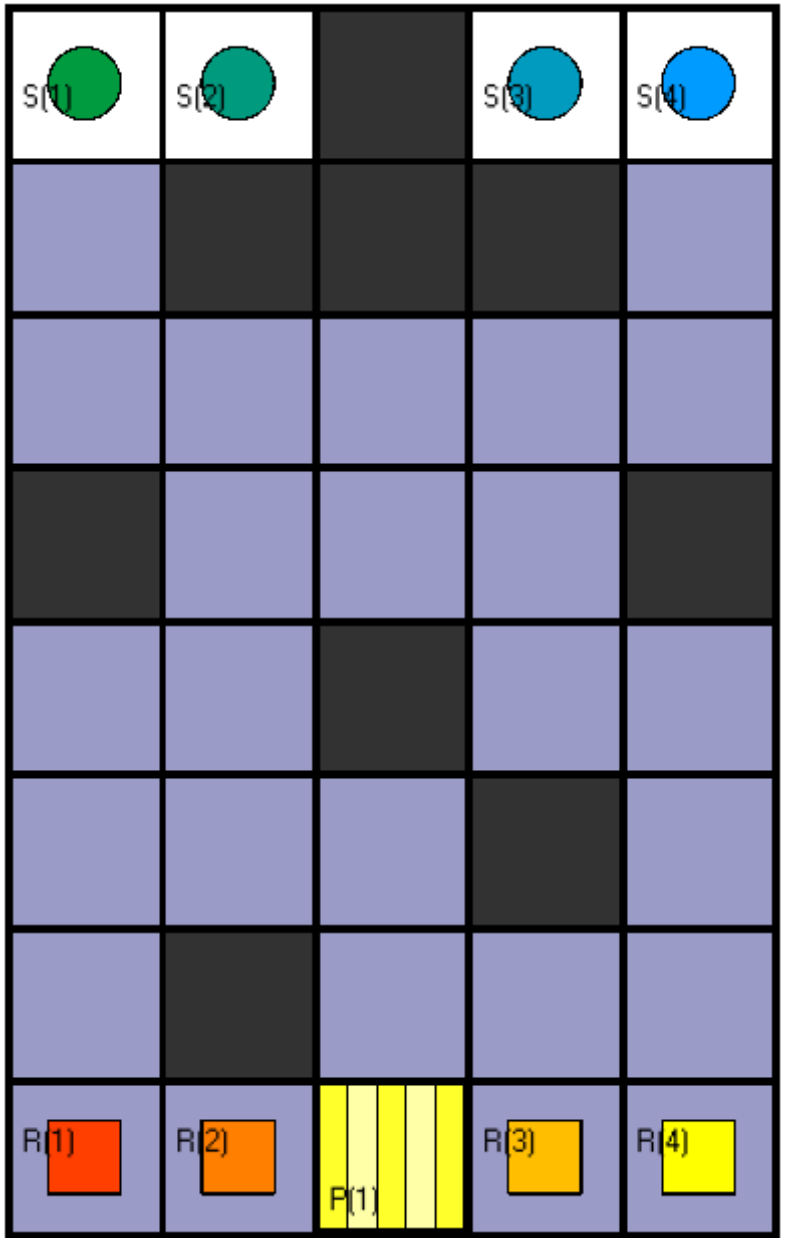

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Comparison with other Approaches

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- One other approach better in every way

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