

Laying the Foundations for Solving FOND HTN Problems: Grounding, Search, Heuristics (and Benchmark Problems)

Mohammad Yousefi, and Pascal Bercher

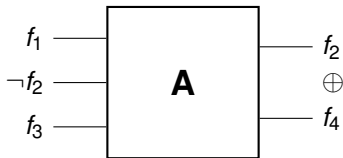
{mohammad.yousefi, pascal.bercher}@anu.edu.au
School of Computing, Australian National University

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Non-Deterministic Actions

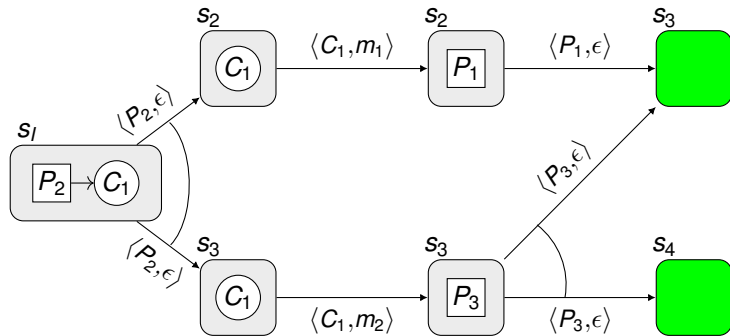


HDDL Syntax

```
(:action A
  :parameters ()
  :precondition (and (f1) (not (f2)) (f3))
  :effect (oneof (f2) (f4))
)
```

Strong (Acyclic) Solutions

A **strong solution** executes all tasks (even in the face of unfavorable outcomes) in a finite number of steps.



All-Outcome-Determinization (AOD)

Replace all non-deterministic actions with synthetic abstract tasks.

