CSP Analysis of the Platform Agent's Manager

- The prototype soar2csp tool:
  - Targets a CSP model of, a subset of, Soar
    - E.g. the Soar productions are classified as either proposal, observational (elaboration), or application (operation)
- The generated CSP code was hand modified:
  - To define appropriate data abstractions
  - To add simulations (stubs) of its tasks (sub-goals)
  - To add a model of the environment (e.g. the capability-agent)
-
  -

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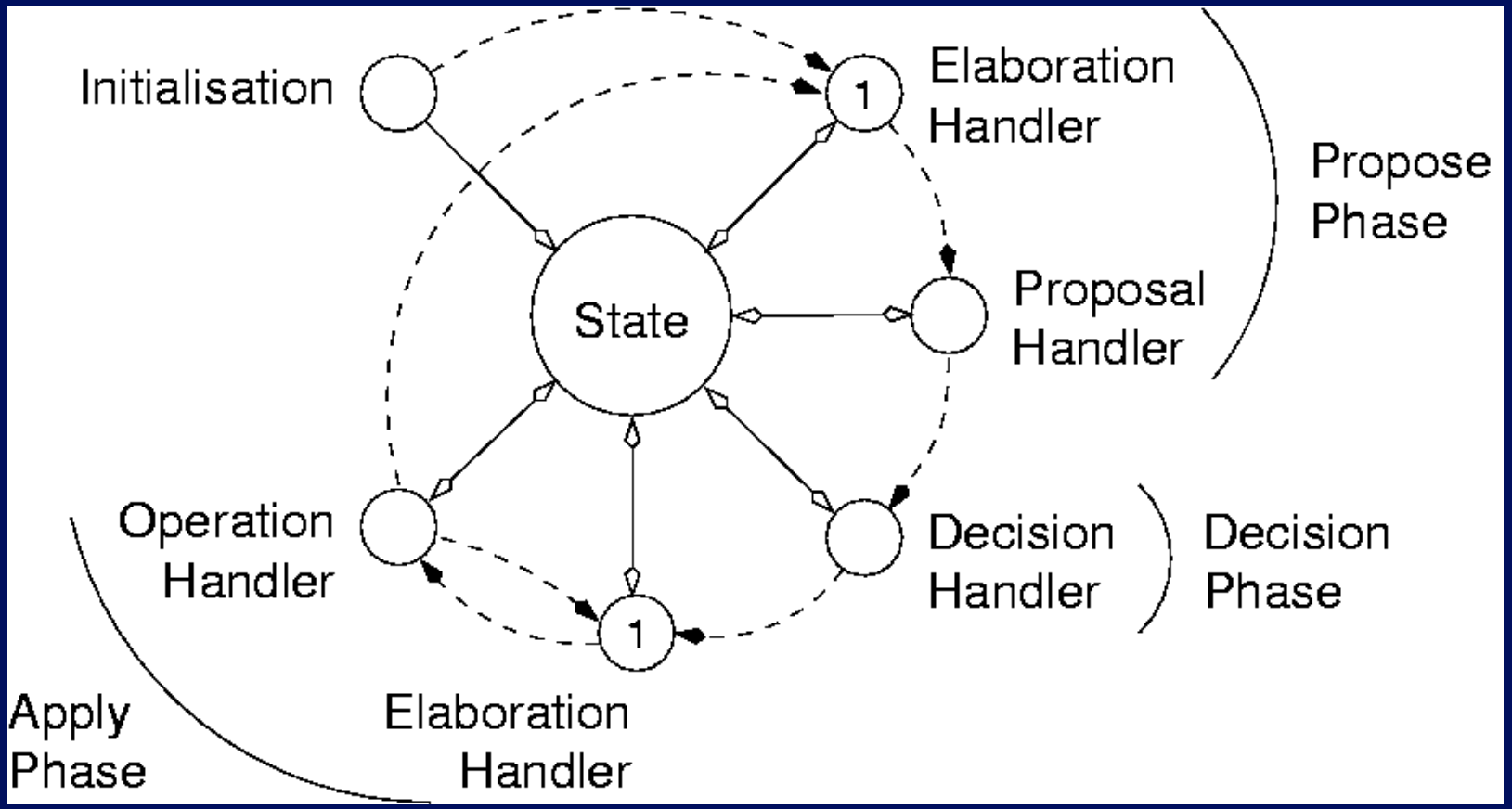
CSP model of SOAR – Basic



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Simulating sub goal “tasks” via Stubs

```
STUB_apply_sub_task_pr = {        -- set of 5 sub-goal rules
  ( STUB_apply_sub_task_rn.OP,    -- unique rule name
    { -- the set of firing conditions, i.e. the OP sub-goal is selected
      d_get.OP },
    { -- the set of results,
      -- containing the successful sub-goal completion flag
      wme.val.<task_a,status_a,complete_a>.Int_v.1 }
  ) | -- The names of the five sub-goals
  OP <-
   {attack_o,circle_o,gohome_o,refinesearch_o,search_o}
}
```

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