

A Case for Multi-Switch Constraints in OPAM

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OCaml'2014 Poster Session

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OPAM Today

Since 4.02.0, the *official* way to install OCaml
opam install *packages*

- Select the *switch* to use
- Build a CUDF universe with :
 - The packages available for the switch
 - The dependency constraints between these packages
- Send the universe to the CUDF solver :
 - The internal solver gives one solution
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- Apply the solution to the switch

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Multi-Switch Constraints

- Add a *switch* prefix to each package name
- Allow dependency constraints between packages with different switch prefixes
- opam install *packages*
 - Build a CUDF universe for all switches at once
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Use-Cases

- Cross-compilation (*build* and *host* switches)
- Multi-switch Packages (`ocp-indent`, ...)
- All-Switch Commands
(`opam install-all ocamlfind.1.5.2`)
- Per-Switch Repositories
- External Dependencies
(a *system* switch for conf packages)
- Application-Specific Switches
(*coq* switch extending *ocaml* switch)

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Discussion

During the poster session !