

BUCKLESCRIPT

A SIMPLE HISTORY & INTRODUCTION

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June 20, 2017



WHY? (JUNE/2015)

- JavaScript platform is fantastic, I like it!
- Algebraic data type and static types are awesome
- Elm/JSOO/ScalaJS/GHCJS does not support module to module compilation
- PureScript is great, but bringing a new language to maturity takes 10 years



PURESCRIPT + GHCJS IS POSSIBLE!

- Compile OCaml into readable JS module by module: the semantics mostly match!
- I am familiar with the internals of OCaml :)



LET'S MAKE IT HAPPEN!

- shared my idea on an weekend
- Started hacking on it during weekends



IT ALMOST WORKS AFTER SEVERAL WEEKENDS!

- Shared my demo with manager Maxime
- Half of my time working on it
- Open-sourced on Jan 2016, people are interested :)
- Work on it full time, thanks to Bloomberg!!



HOW IT WORKS?

- OCaml compiler is modular, each stage is independent



PIPELINE

Source code

| parsing and preprocessing

v

Parsetree (untyped AST)

| type inference and checking

v

Typedtree (type-annotated AST)

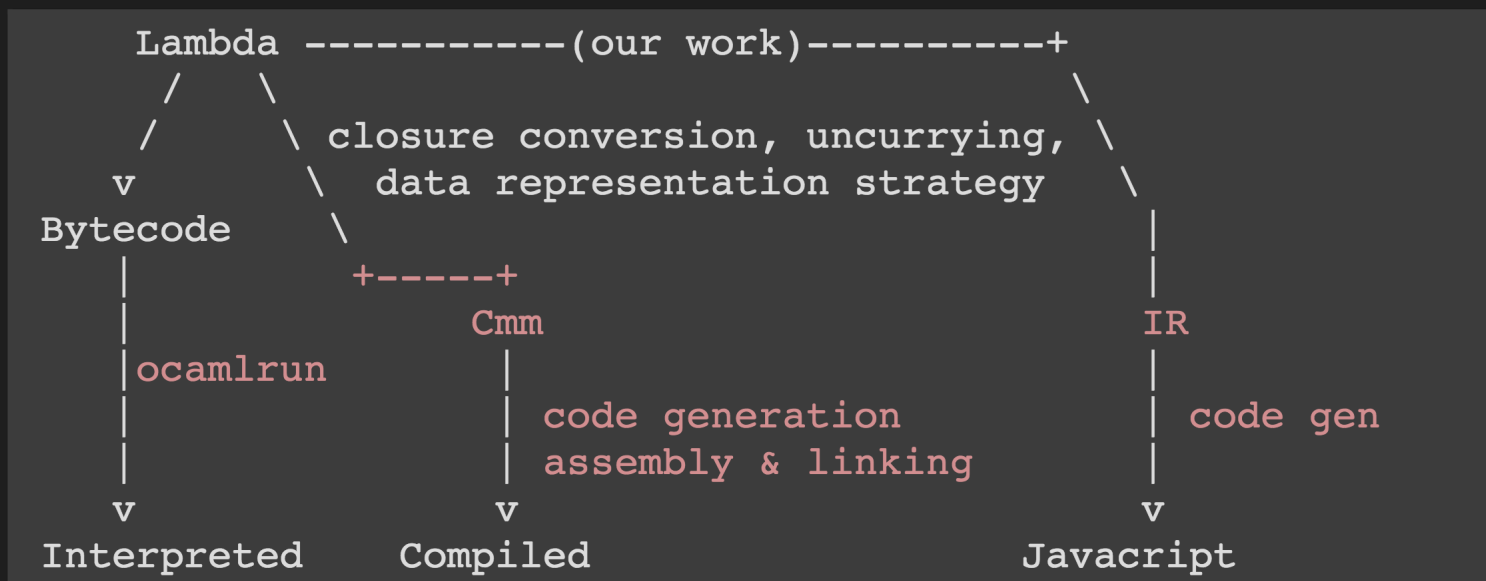
| pattern-matching compilation
| elimination of modules and classes

v

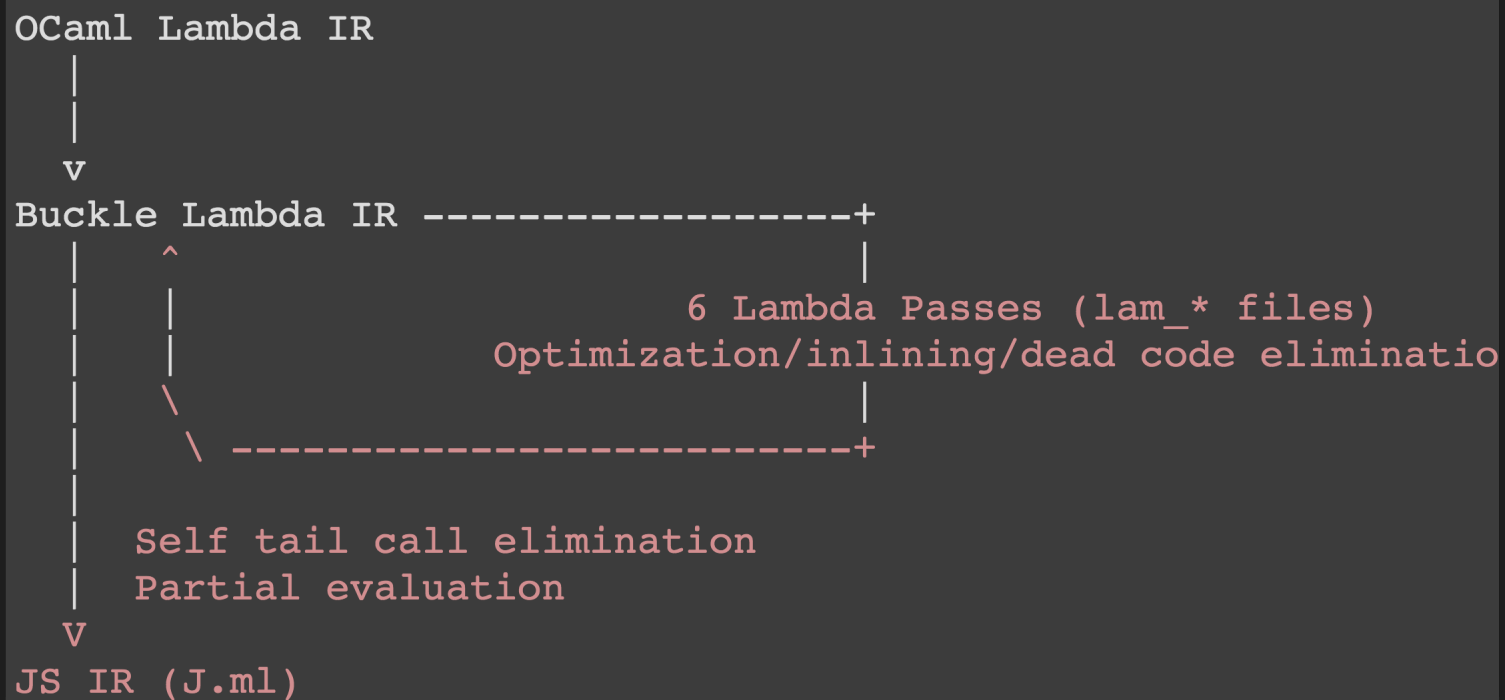
Lambda



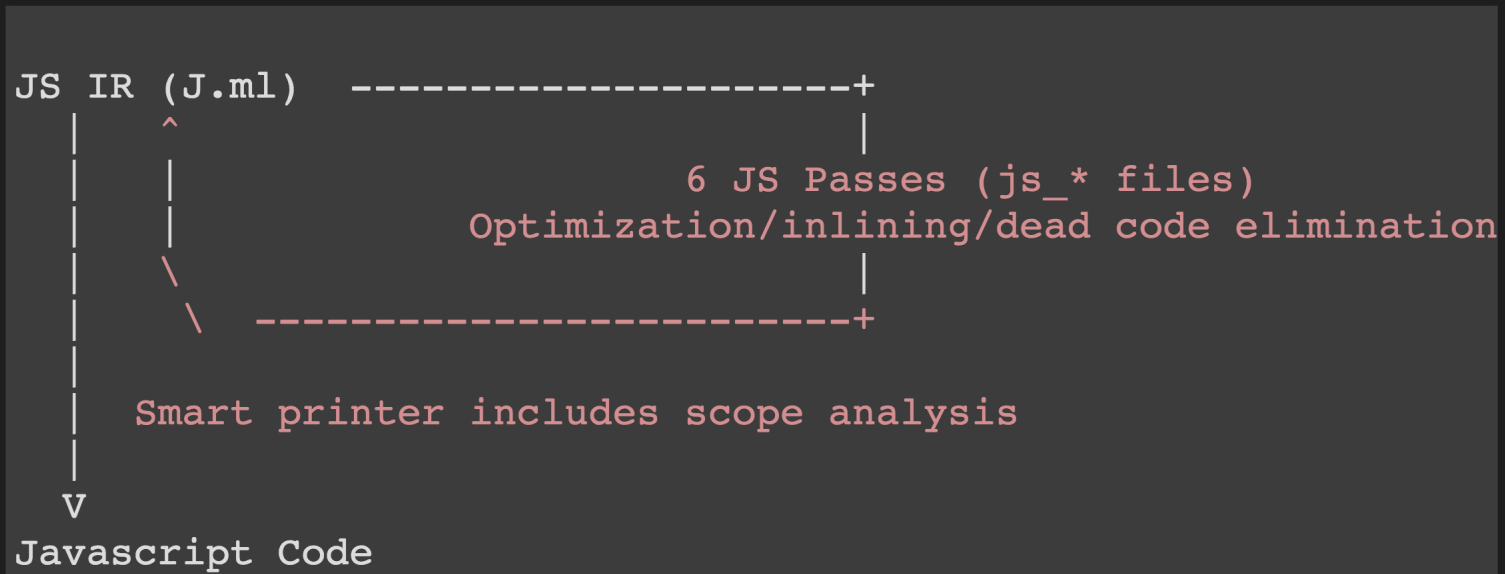
PIPELINE



PIPELINE



PIPELINE



HOW TO SUPPORT REASONML

One core part of reasonML is an alternative parser, in the first stage of the pipeline



Thank you!

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