COQ DEVELOPMENT TEAM SESSION

Coq Development Team
Coq Workshop 2019
Portland
Sep 8th, 2019

OUTLINE

1. Coq 8.10
2. Coq 8.11
3. Q & A

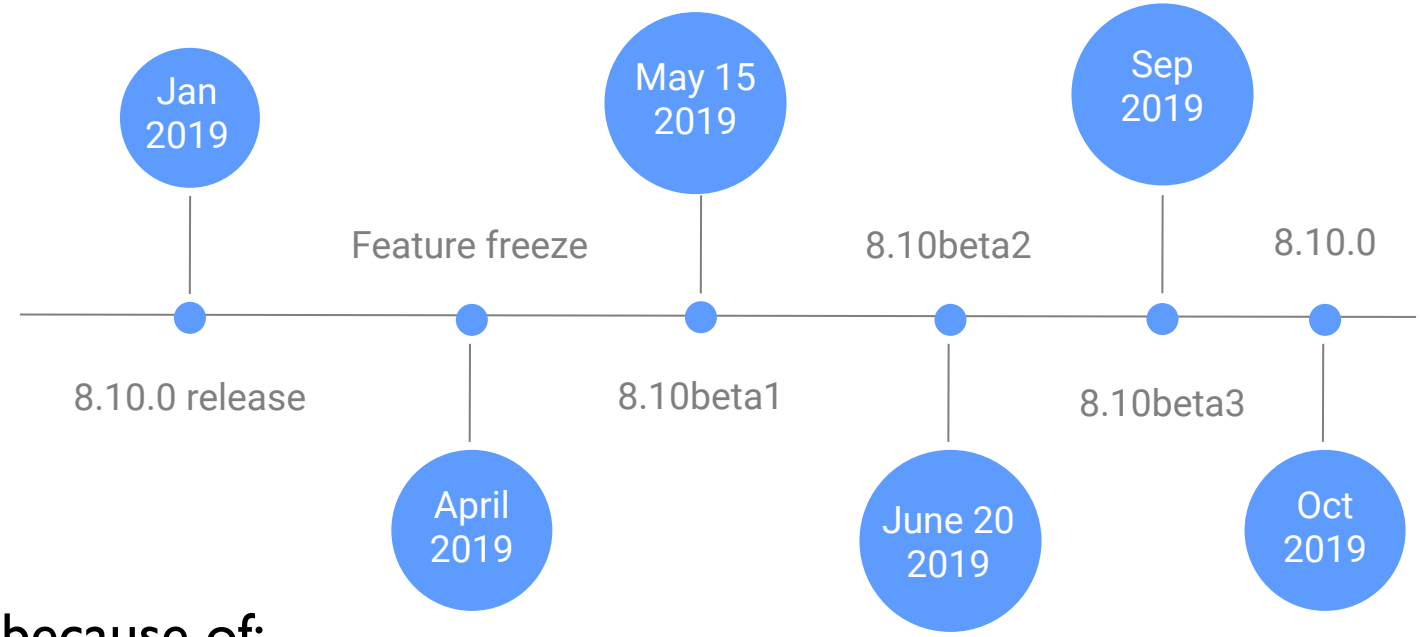
Coq 8.10

- New Features:
  - Proof-irrelevant propositions SProp (G. Gilbert)
  - 63-bit machine integers (M. Dénès, B. Grégoire, V. Laporte, L. Théry)
  - Numeral notations for strings (J. Gross) and decimals (P. Roux)
- Improvements:
  - More complete termination checking (E. Tassi)
  - Simplex-based algorithm for lia, nia, lra, nra (F. Besson)
  - New intro patterns in ssreflect (+, [^foo], >, /ltac:foo, ...) (E. Tassi)
  - New ssreflect tactic under (E. Martin-Dorel, E. Tassi)
  - Combined Scheme in Type (T. Winterhalter)
  - GTK3 port of CoqIDE (H. Herbelin) based on lablgtk3 (J. Garrigue)
  - Ltac backtraces (P-M. Pédrot)

Coq 8.10

- ~2500 commits
- ~650 PRs merged
- 150+ issues closed
- 61 contributors

Coq 8.10 Schedule



Delays because of:

- CoqIDE stability issues (fixed by M. Soegtrop)
- Soundness bug in template polymorphism (WIP by M. Sozeau)

Coq 8.11

- Ltac2 (P-M. Pédrot, integration by M. Dénès)
- Primitive floating point numbers* (G. Bertholon, E. Martin-Dorel, P. Roux)
- Compiled interfaces (A. Charguéraud)
- Bidirectionnality hints (M. Dénès)
- Disabling termination/positivity checking (S. Boulier)
- Better extraction of strings* (X. Leroy)
- Improved ambiguous coercion path warning (K. Sakaguchi)
- Stricter syntax for disjunctive patterns (G. Gonthier)
- Better control on canonical projections (V. Laporte)

(*) Not integrated yet

Q&A

Ask any Coq-related question!

Thank you!