



**W-SEPT**

**WCET: SÉmantique, Précision, Traçabilité**

**ANR-12-INSE-0001**

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Journées Françaises de Compilation

Dammarie les Lys, décembre 2013

# Facts

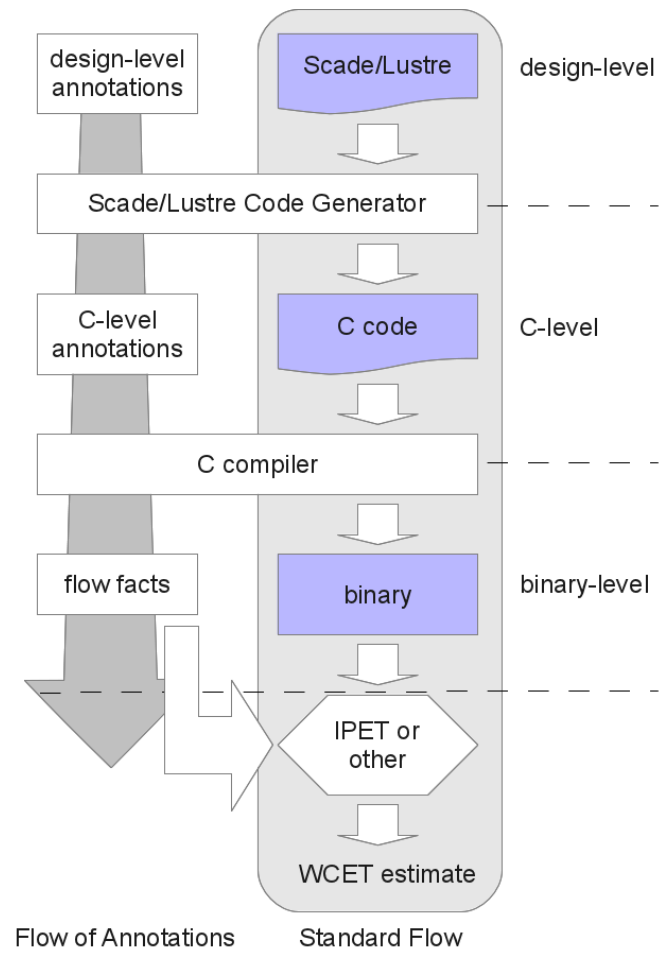
- Members
  - Verimag (coordinator)
  - IRIT
  - Inria – ALF
    - Isabelle Puaut, Hanbing Li, Erven Rohou
- Dates
  - 42 months
  - kickoff October 2012

# W-SEPT at a Glance

- Increased precision of WCET
  - characterize relevant and useful semantic properties
  - user-provided or discovered (computed)
  - revisit IPET to exploit semantic information
    - *IPET: Implicit Path Enumeration Technique*
    - *most common WCET calculation step*
  - beyond IPET

# Contribution from Inria

- Current approach
  - compile  $\rightarrow$
  - match CFG at source and binary levels
- W-SEPT
  - embed knowledge in compiler
  - enable optimizations
  - co-transform semantic information
  - also consider higher-level languages
    - such as Lustre



**Thank you for your attention!**

**<http://wsept.inria.fr>**