

# ROOT / Reflex '07+

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# Reflex

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- Many new developments for CINT move during the last year
  - 5.13.x consolidation of this development
- Minor improvements, optimizations missing e.g.
  - Complete / faster name lookup
  - Store source file information
- ROOT I/O
  - Read / write Reflex into .root files, eg. for BOOT



# Reflex

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Development  
on longterm

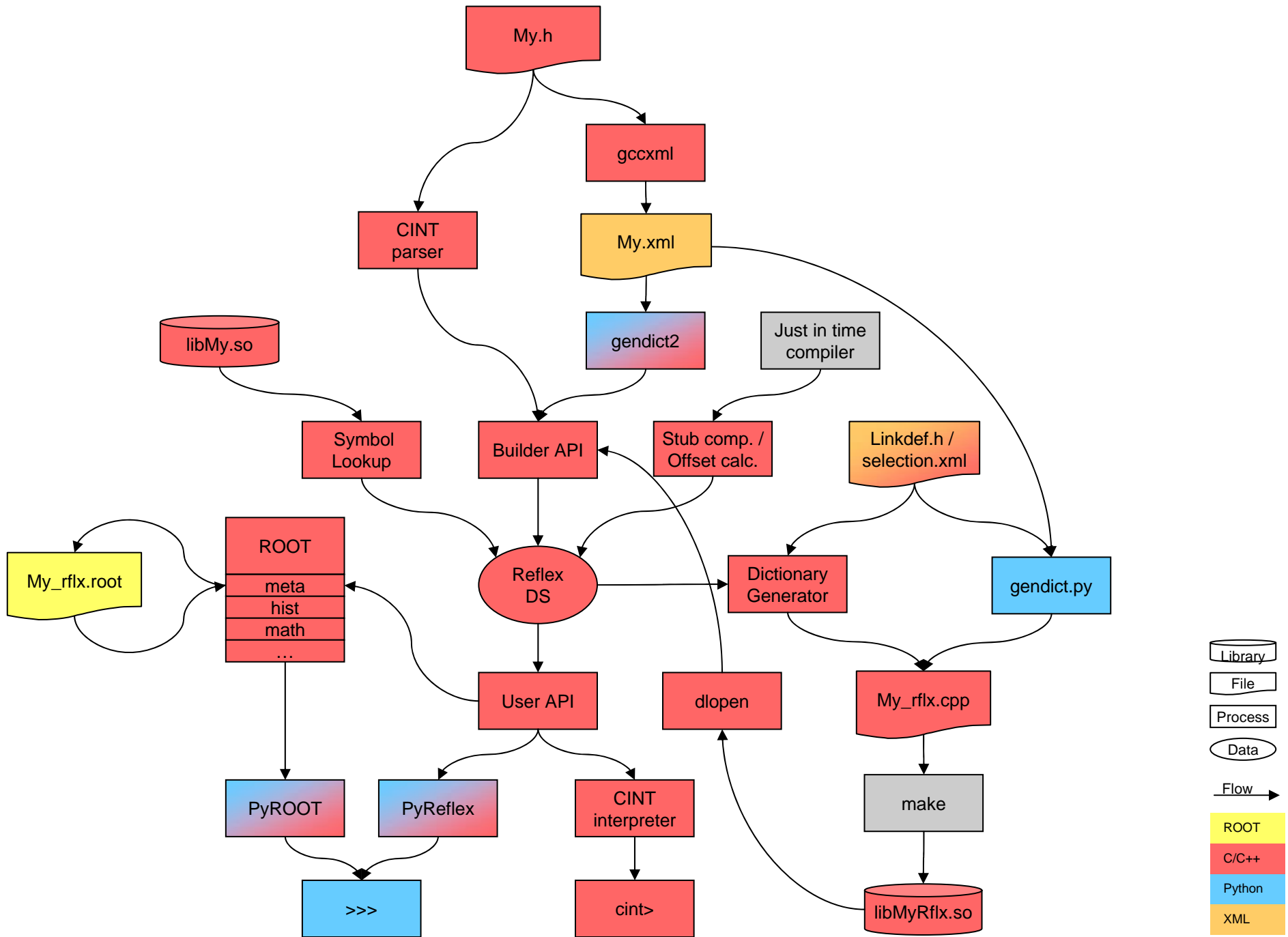
- Symbol lookup
  - For smaller dictionaries, no stub-functions needed
- C++ coverage almost complete
  - C++ bitfields missing
    - is it possible at all?
- Late loading of libraries / .root files. 2 steps:
  - 1) load declaration
  - 2) full definition
- Runtime compilation
  - Runtime dictionary generation of templates
  - Partial function compilation
- Multithreading
  - For multi core cpu
- Gendict.py replacement in C++
  - Parse gccxml output and feed into Reflex












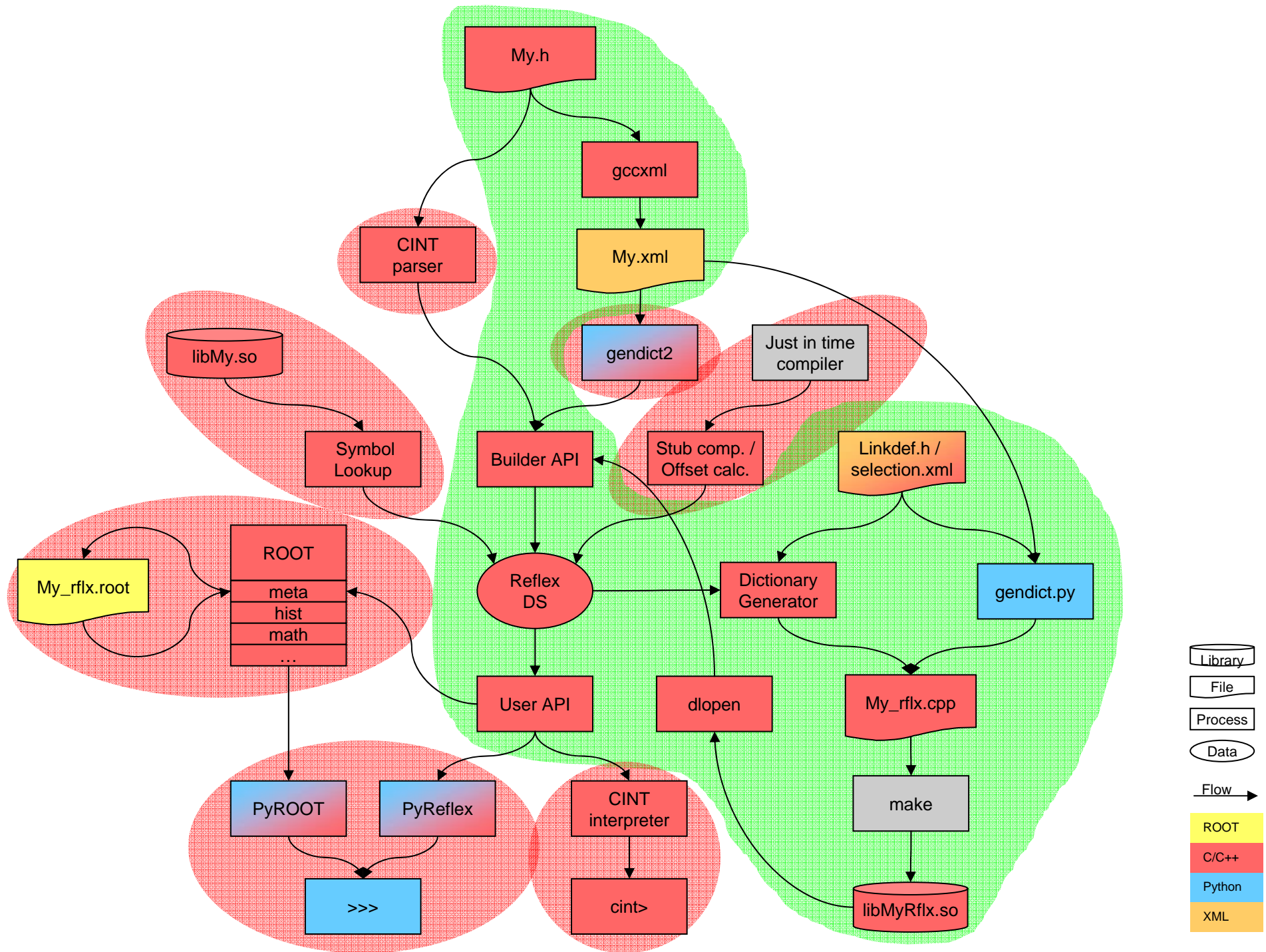
# PyROOT

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- PyROOT now moving from CINT to Reflex
- Allows easy Python usage for any C++ class
  - Non intrusive / light way of using C++ in Python
  - No Cintex needed
- Could be an entrance to ROOT for new users



-  Library
-  File
-  Process
-  Data
-  Flow
-  ROOT
-  C/C++
-  Python
-  XML





# ROOT

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- Split Dictionary / Implementation
  - Dictionaries are not always needed
  - Switch between Reflex / Cint dictionaries possible
- Schema evolution
  - Automatism unclear for me
    - what is possible what not?
  - What about making it explicit?
- Modular build of ROOT
  - Partial build can be useful
    - e.g. Online farms will not require graphics
  - Easier bug fixes
    - only parts have to re-built
- Two favors to ask
  - Spam fight for lists
    - ROOTDEV
  - Skip 6.13.xx release :-)