ILU (Inter-Language Unification) & Modula-3

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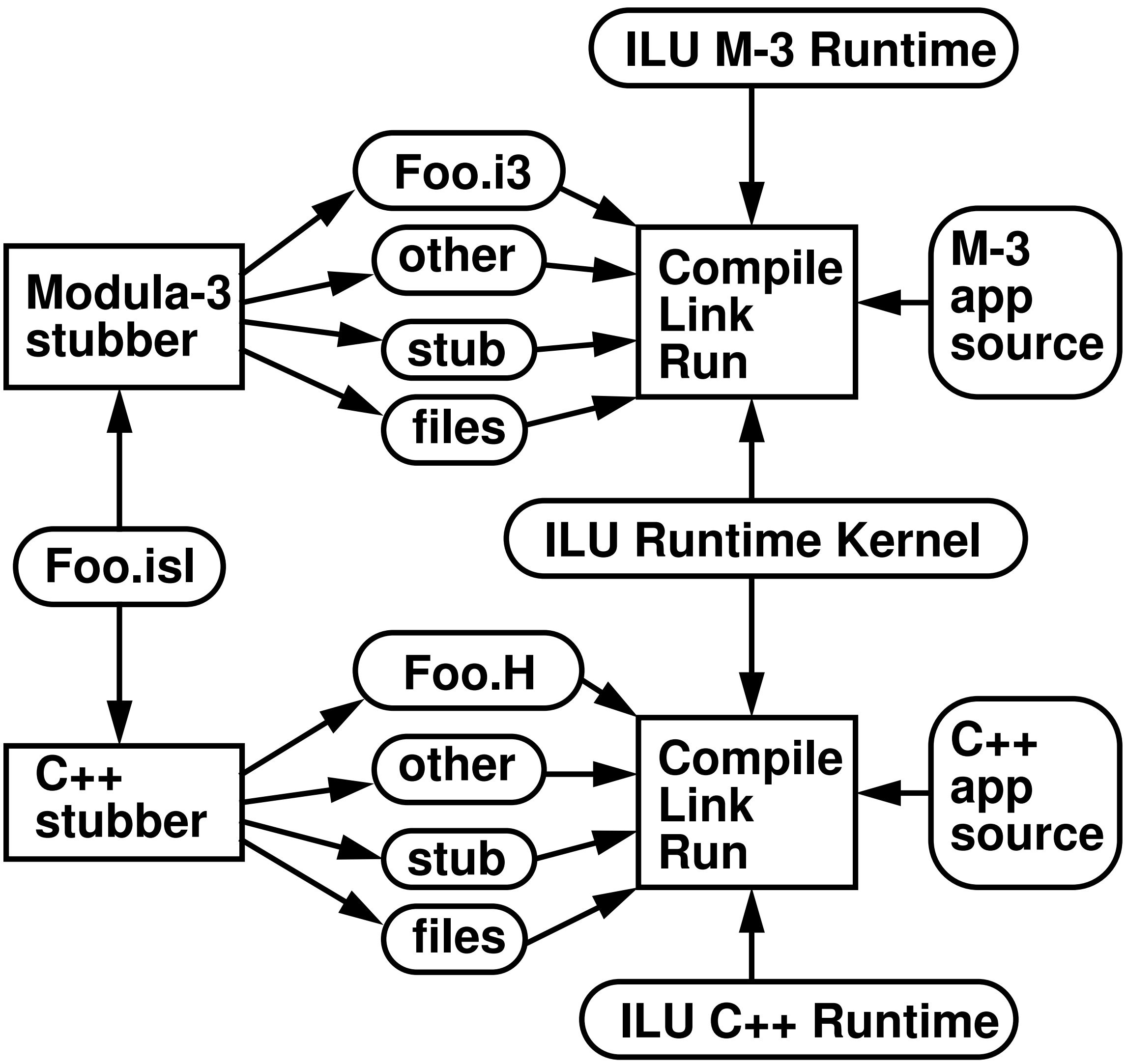
ftp://parcftp.parc.xerox.com/pub/ilu/ilu.html

ILU: The Picture



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ILU Interfaces
(vs. Modula-3's)

- **Ifc has types, constants, exceptions;**
  - no variables, procedures, opaques.

- **Integers (signed/not, 3 sizes), floats, chars, enumerations;**
  - no subrange constructors.

- **Fixed and open arrays, records, tagged unions, untagged union with nothing, object types;**
  - no references, procedures, sets, packs.

ILU Object Types (vs. Modula-3's)

- **May or may not be GCed**
- **May use authentication**
- **Multiple Inheritance (really multiple subtyping)**
- **IN, OUT, INOUT method parameter modes**
- **May restrict parameters to SIBLING**

ILU vs. CORBA

- **CORBA:**
  - Has Ifc& Impl Repositories
  - Persistence requirement for objects
  - Objects have attributes (get & set methods)
  - Interfaces can be nested, or omitted
  - Lacks GC, real “import”
  - C++ style

- **ILU**
  - Is layered over existing transport & RPC protocols
  - Is extensible to new transport & RPC protocols
  - M3 style

ILU vs. Network Objects

- **Different GC technique**
  - (we're not strongly wedded to ours)

- **N.O. uses M3 interfaces**
  - recall ILU vs. M3

- **ILU extensible in RPC & transport protocol**
  - (might be able to interoperate with N.O. that way)