

Ideas for a Dictionary Loading API

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Minimal functionality Dictionary must provide

- ◆ Names and types of the data members.
- ◆ Sizes and offsets (not easy at all)
- ◆ “new” and “delete” methods. It is absolutely needed for I/O
- ◆ Access to some methods of the classes (user defined streamers)

Input and Output of Dictionary

- ◆ .h files and list of needed classes (ROOT/CINT and gdb approach)
- ◆ Files with class description in some simplified format (IDL approach)
- ◆ On output shared library with classes describing classes

API classes

- ◆ API classes should be independent of the technology being used. They could be interfaces with hidden implementation. Instantiation via “factory”
- ◆ Initialization class with methods:
 - ◆ Set .h file name(s)
 - ◆ Set .idl file name(s)
 - ◆ Set directory path (-I)
 - ◆ Set list of the class names
 - ◆ Run. This method runs Makefile with given information which creates the needed shared library and probably loads it.
- ◆ Set of classes with description of the classes, methods, inheritance and data members. Also access to “new” “delete” and some other needed methods.

Implementation

- ◆ Implementation classes for ROOT/CINT technology rather easy. Makefile is already done and tested. All other classes could be made with time scale of weeks. Then they could be announced to user community and improved.
- ◆ Implementation classes of IDL technology could be made also easily as soon as such technology will be ready.