Proposal for Raw Data Classes

Brett Viren

Physics Department



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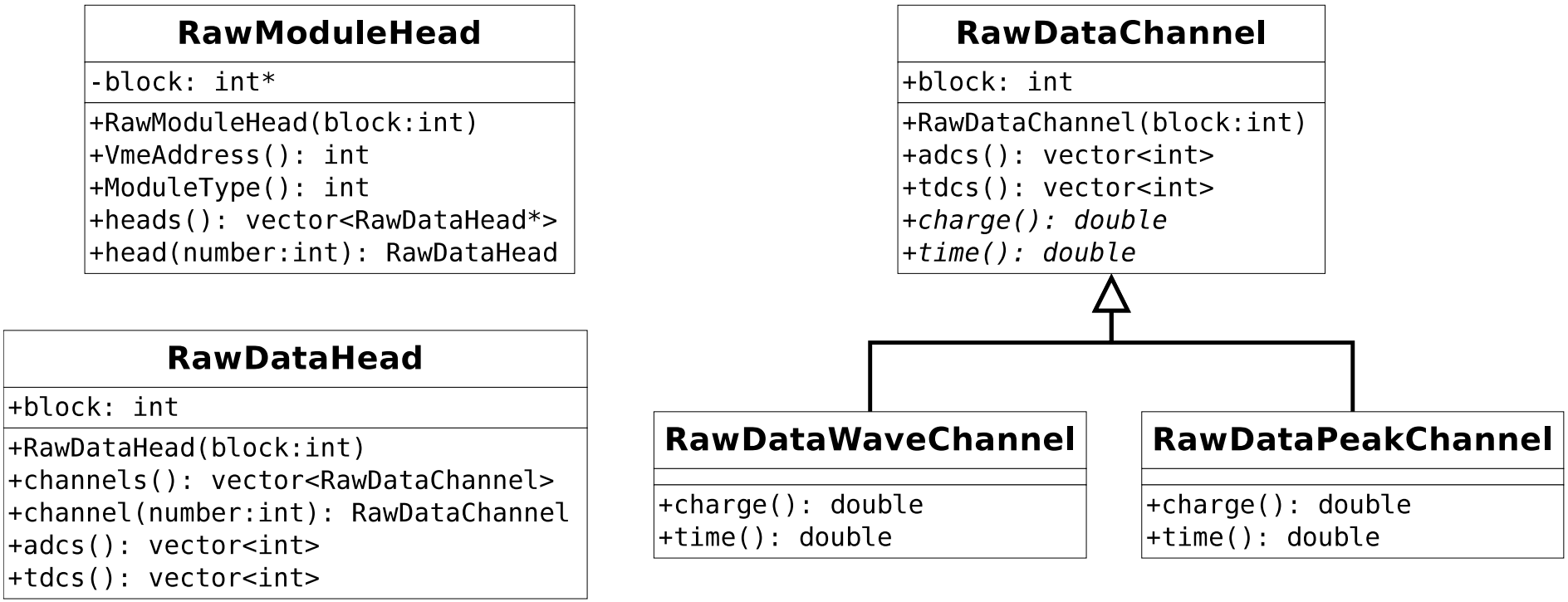
Proposed Raw Data Class Schema

Summarize proposal for offline raw data classes.

- Leave packed, raw blocks as-is.
- Supply base class for every level of data
  - Focus on DYB-doc-3618-v3, "CBLT data format"
  - Module Head, Data Head, Channel Head
- Polymorphic subclass to unpack specific data

Based on MINOS RawData suite:
`http://minos.phy.bnl.gov/software/cvs/RawData/`

Example Class Schema



Block is shared among classes, each class sees only block relevant to its domain. RawModuleHead is factory for RawDataHead which is factory for RawDataChannel. There must be something in the raw block that allows RawDataHead to choose which concrete class to create (peak vs. wave).

Benefits to this design

- Faithfully store raw data unmolested.
- Respond to inevitable changes in raw data format details by changing code, not data model.
  - Converters become trivial, no backward/forward compatibility problems
- No data inflation (beyond whatever is inherent in raw block format)
- Can deal with existing MC files by either producing packed format data or by "unpacking" the SimReadout objects.