

Notable requests at the workshop

- Large bore, high field magnet (up to 5T)
 - VTX and tracking groups
- ILC beam time structure (1ms beam + 199ms blank)
 - VTX, TRK and CAL electronics
- Mimicking hadron jets
 - VTX, TRK and CAL

- Common DAQ hardware and software
- Common online and offline software
 - Reconstruction and analysis software

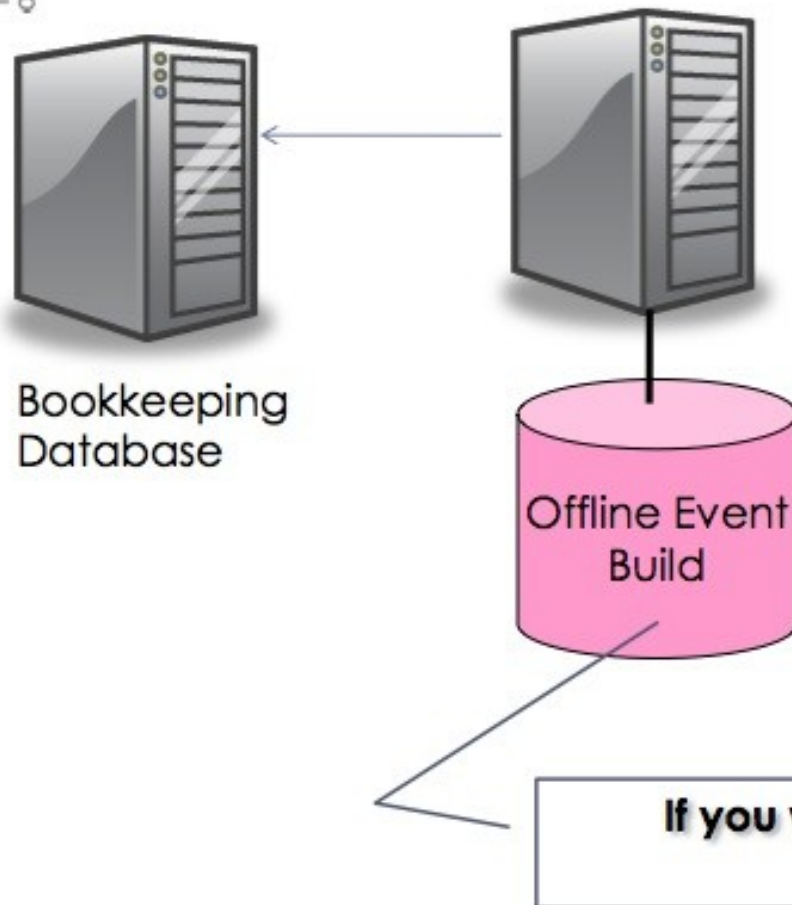
- Next generation Prototypes and DAQ systems will move close to what will be realized at the ILC
- Ideal testing ground to establish 'real' data processing and identify problems
- Various testbeam projects have expressed their readiness to use LCIO for their purposes

Development of strategies to handle 'low level' data
Close collaboration with software developers

- Successful Analysis of testbeam data requires access to 'beam relevant parameters

Testbeam facilities are requested to provide convenient interfaces

Event Assembly



- ▶ **Building EVENTS from the bunch train**
 - ▶ Almost certainly non-trivial at the beginning
 - ▶ This is the first place in the data chain where the concept of an event starts to make sense
 - ▶ This is the first time that “real consumers” of the data get their hands on it

Decision to be taken: Event Building integral part of DAQ chain or separate entity

Interface Definition !!!!

Remarks on Infrastructure – Apart from actual testbeam site

- Testbeam data taking has a lot in common with real data taking

Need to store and handle Conditions Data

ILC institute to provide database service (as DESY for Calice)

- Testbeam efforts are organized in Collaboration
+ combined testbeams which join R&D groups

Data need to be distributed to collaboration members

This is the place where the Grid comes in – Virtualisation of Resources

Testbeam collaboration may identify one principle site and organize the interplay with other sites (again Calice to some extent shows the way)

- Elaboration of Physics Results in close collaboration with authors of simulation packages