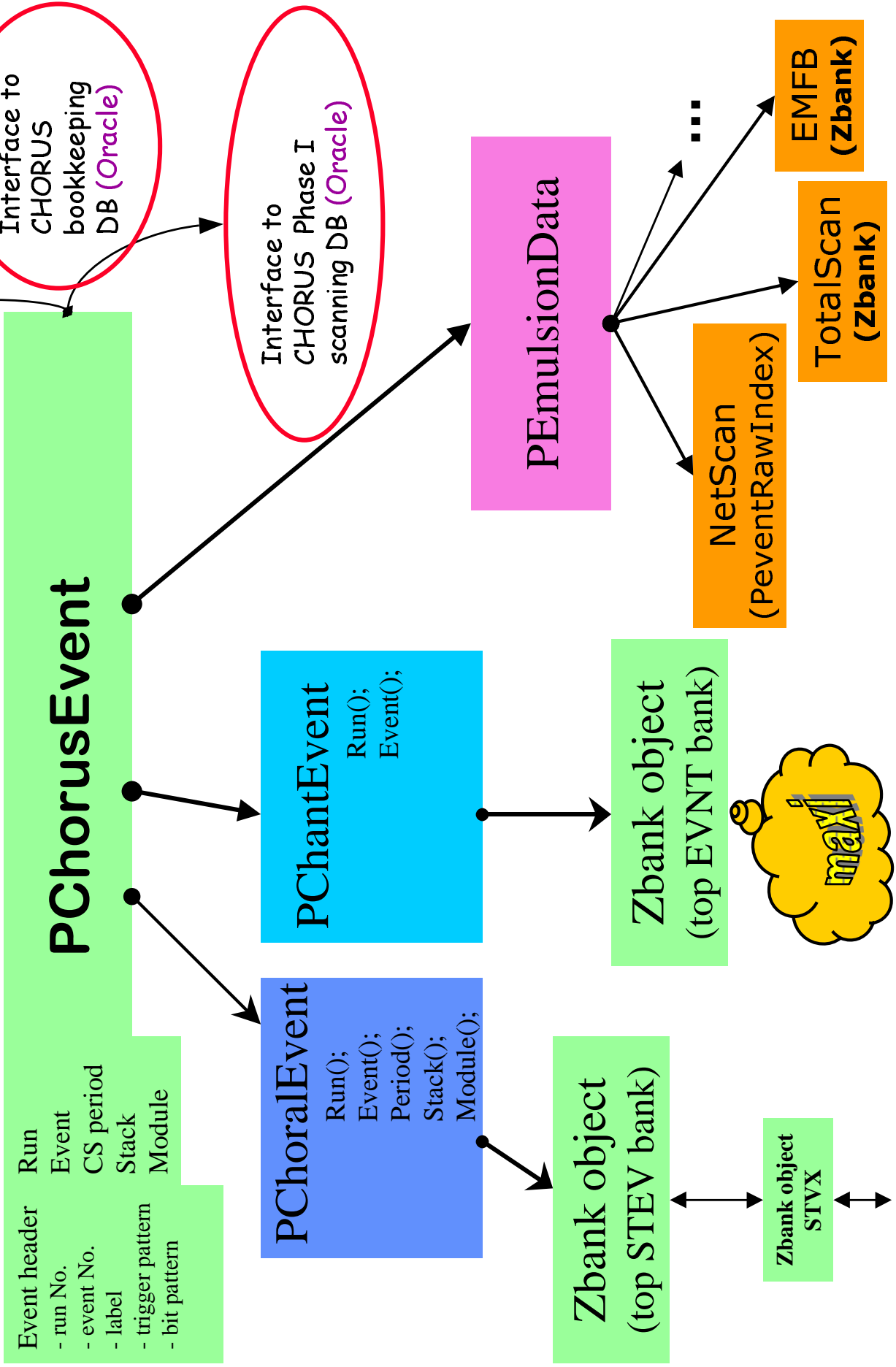




ChorusDB: status report and hints for use

Roumen TSENOV,
Chorus Collaboration meeting
CERN, 24-25 July 2000

ChorusDB schema



Netscan data

PEventRawIndex

Vertex...

(array of...; one per plate)

PEmulsionPlates

2 alignment objects

(array of...; one per plate)

PLinkedTracks

array of PSegRaw

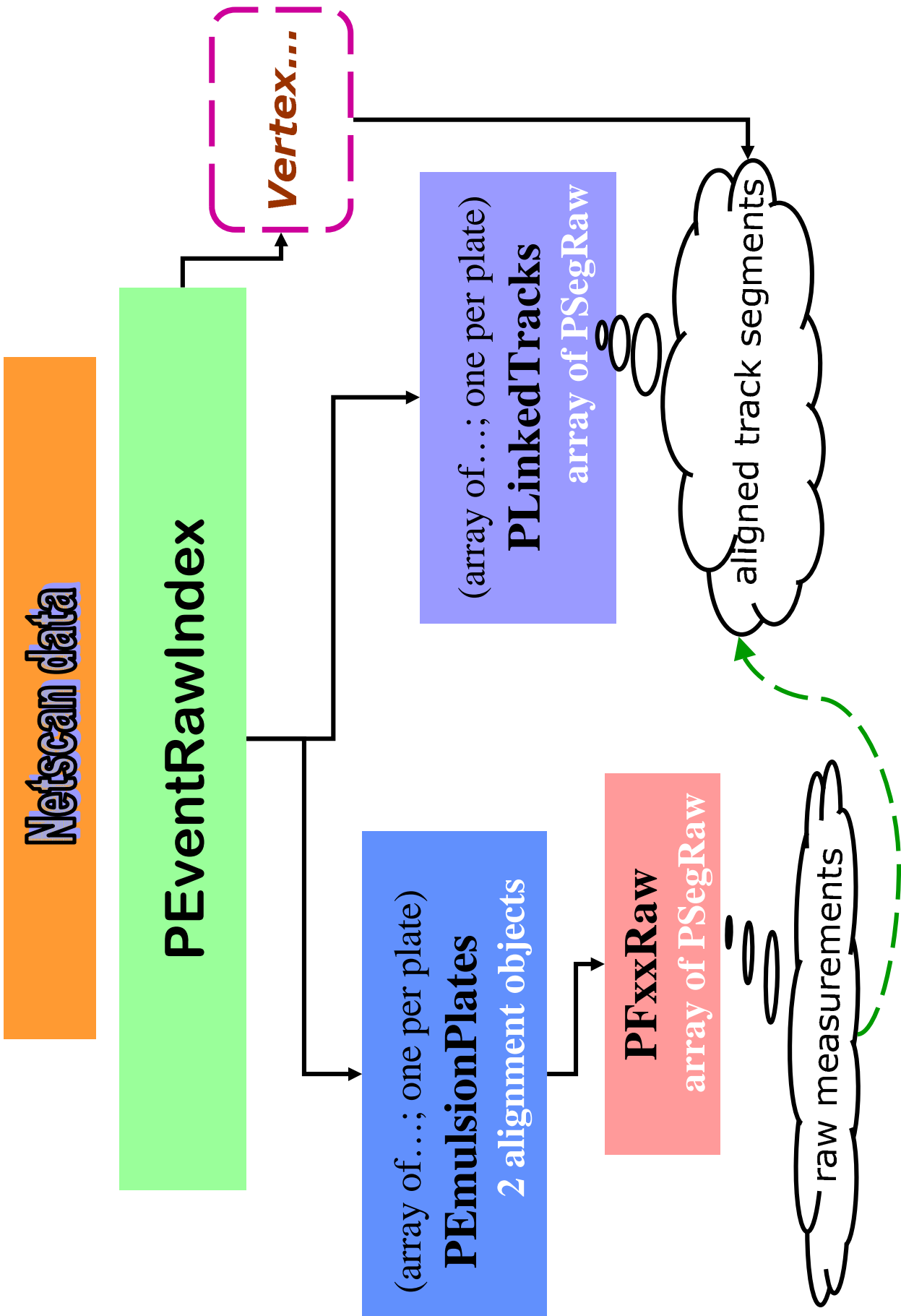
PFxxRaw

array of PSegRaw

raw measurements

aligned track segments

align + copy (~10% of segments)



Points of progress

- ◆ Full event structure build up in the data-base
- ◆ **CHANT** frame is capable to access **ChorusDB** as input stream. Tools for that successfully tested. (+A.A.) *\$CHORUS/dev/bin/chantDB*, see *CHANT manual*
<http://choruswww.cern.ch/Offline/Chant/public/CHANTmanual/CHANTmanual.html>
- ◆ All available data can be retrieved from within Fortran application (except NetScan, coming soon) linked against:
 - > *\$CHORUS/dev/lib/libchlib.a*
 - > *\$CHORUS/dev/lib/chorusdb/lib.* (few libraries).a
 - > *Objectivity libraries*
- ◆ **EMFB (Bari) events can be loaded (+G.C.)**
- ◆ **Web page installed, see:**
<http://choruswww.cern.ch/Offline/offline.html>

Data available now

- ◆ All events - 225708
- ◆ Choral events - 224832
- ◆ Chant events - 1244 *(for which NetScan data exists; from the list of K.K.)*
- ◆ Events with emulsion data - 1189
 - of them:
 - with NetScan data - 893
 - with EMFB data - 296

How to use

- ◆ **Read** <http://choruswww.cern.ch/Offline/ChorusDB/ChorusDB.html>
- ◆ **If you use CHANT frame:**
 - proceed as a CHANT user, following the manual (*has to be read!*)
 - write your own analysis code, keeping in mind that:
 - = EVNT is a top level bank (as usual in CHANT)
 - = STEV is a daughter of OTHR branch
 - = EMFB, NSEV etc. emulsion banks are daughters of OTHR
 - “source” /\$CHORUS/dev/src/chorusdb/setup.sh to set (in current shell) environment variables for Objectivity
 - link your own executable
 - run it with appropriate CHANT input cards
- ◆ **If you use C++ directly**
 - copy the sources from \$CHORUS/dev/src/chorusdb/chorusdb_cvs
 - read ./doc/README (*to be prepared...*)
 - write your own analysis code; look for examples of DB access in ./src/tasks
 - link and run the code

Next tasks

- ◆ **Make aligned NetScan track segments available through Fortran application** (*next week ?*)
- ◆ **Optimize the data-base with respect to I/O speed and space; internal renumbering of DBs;**
- ◆ **Attach all available DBs with raw NetScan Data, align and link track segments there;**
- ◆ **Load all Choral mini-DST (STEV bank) there;**
- ◆ **Interface to Chorus metadata (hepdb).**
- ◆ **TotalScan data (Salerno)** (*September ?*)
- ◆ **Interface to CHORUS Phase I scanning DB (Oracle) ?**
- ◆ **Protection of data in Objectivity/DB**