

Oct. 6, 2011

Belle II DH working Group Meeting, KEK, Japan

Status of Belle II Data Handling Group

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Production

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The Embedment of a Metadata System at Grid Farms at the Belle II Experiment

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In order to search for new physics beyond the standard model, the next generation of B-factory experiment, Belle II will collect a huge data sample that is a challenge for computing systems. The Belle II experiment, which should commence data collection in 2015, expects data rates 50 times greater than that of Belle. In order to handle this amount of data, we need a new data handling

- Published paper
 - “The embedment of a Metadata system at Grid farms at the Belle II Experiment”
 - JKPS, Vol 59, No. 4 (2011.10.14)



Korea Belle/Belle II Meeting at KISTI (8.24.2011)

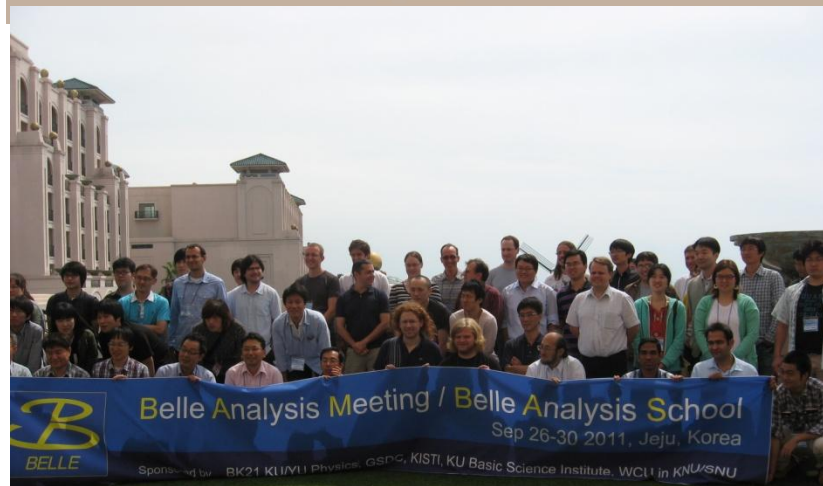
Meetings

- BAM/BAS Meeting
 - <http://hep.korea.ac.kr/bam2011>
 - Sep. 26-30, 2011
 - Lotte Hotel,
 - Jeju Island, Korea
- KISTI Belle II DH Meeting
 - Oct. 4, 2011 17:00-18:00
 - Soonwook Hwang, Taesang Huh, Junghyun Kim, Kihyeon Cho, etc.
 - Discussion on Progress



Belle Analysis Meeting / Belle Analysis School, Jeju Island, Republic of Korea, Sep 26-30 2011

Belle Collaboration

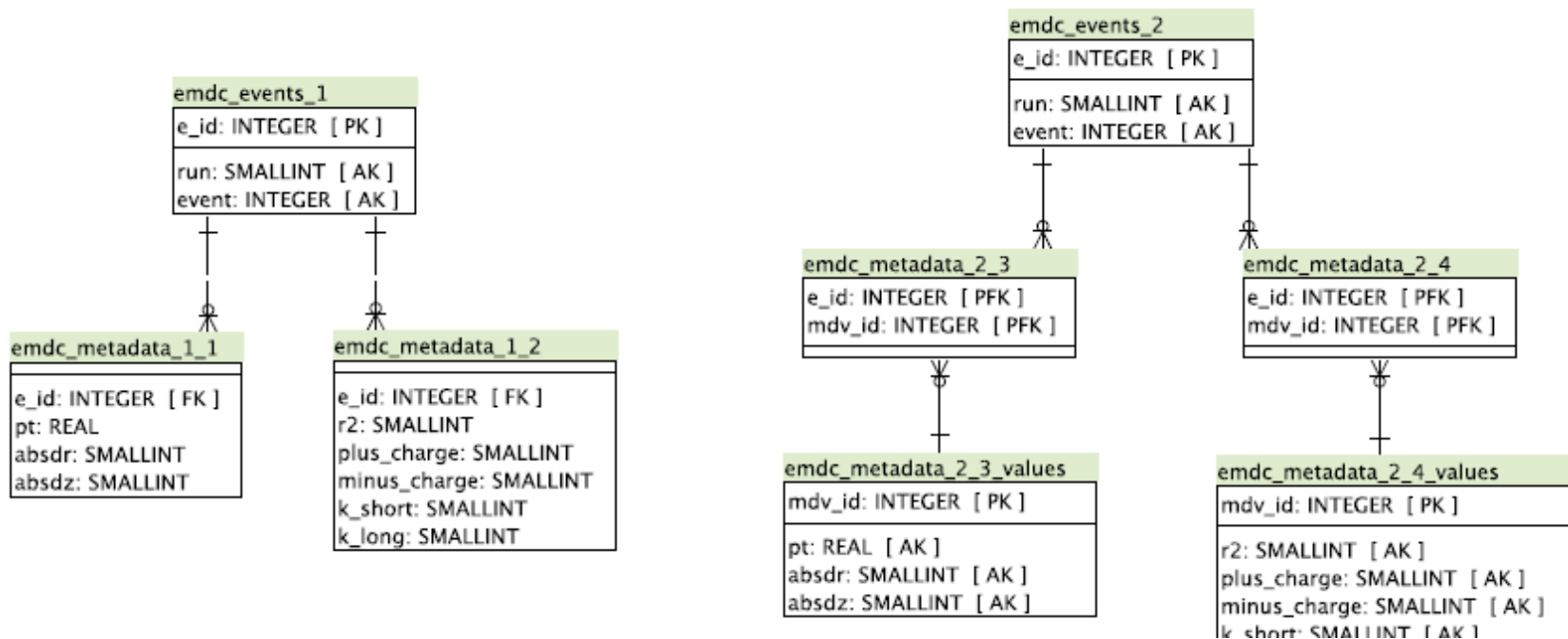
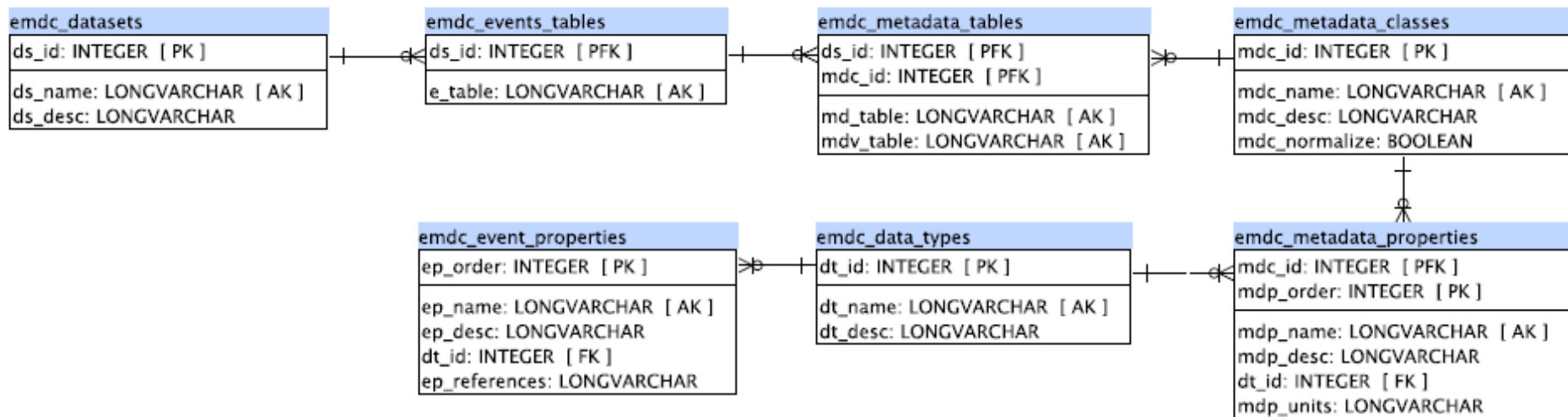


Questions on Sep. 20

- How to access AMGA manager for user base?
 - Can we write AMGA data on grid?
 - Belle VO, Belle II VO level
 - Yangliang Han requested writing privilege for KISTI.
 - Can you put AMGA server on Grid base?
- => Taesang Huh will give a talk today.

EMDC (Event MetaData Catalog) by Brian's mail on Oct. 6

- The LDRD funding also ended at the end of September.
- The basic design does have a bit more disk space overhead than the ones you describe in your paper(JKPS) due to the multiple "metadata class" tables.
- However, it does lend itself nicely to asynchronous data loads and distributed file processing. It would also fit into the AMGA's directory structure like view (i.e. .../E##/EC/metadata_class/properties)...
- https://engineering.arm.gov/~ermold/docs/doxygen/EMDC/html/group__EMDC.html
- The definition tables (in blue) and auto-generated event/metadata tables (in green). The emdc_events_2 tables were for testing the normalization option (which I never got to).



Plan

- We will check Brian's EMDC idea.
- Feedback from registration tool kit on basf => basf2
- AMGA server and manager will be updated.

Junghyun's code vs. Milosz's (status)

Junghyun's code		Milosz's code
Both extraction and registration of metadata (Automatically)	Contents	Registration of metadata only (Manually)
C++	Code Language	Python
basf2 (to do list) basf (done)	Embedment	gbasf2
data_handling	Software directory	gbasf2

- It is suggested to call Junghyun's code for the extraction in metadata in Milosz's code => Co-work needed
- **Currently, Milosz is working on Cloud computing**

Thank you.