

July 22, 2010

Belle II DH Working group, KEK, Japan

Plan for Belle II Data Handling Group

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Products

● Conference talks

1. *The Advanced Data Searching System with AMGA at the Belle II Experiment*

- CCP2009, Gaushung, Taiwan, Dec., 2009
- **The draft has been accepted in** CPC (Computational Physics Communication)
- English correction done by **Martin => To resubmit tomorrow**

2. *Data Cache System at Belle II experiment*

- CCP2010, Trondheim, Norway, June 2010

3. *Belle II Data Management system*

- CHEP 2010, Taipei, Taiwan, Nov. 2010
- **Accepted as oral talk**

● Draft

1. *Design of the advanced metadata service system with AMGA for the Belle II experiment*

- To submit to JKPS (Journal of the Korean Physical Society)
=> Next month, we will distribute it to the collaboration.

Plan and Status



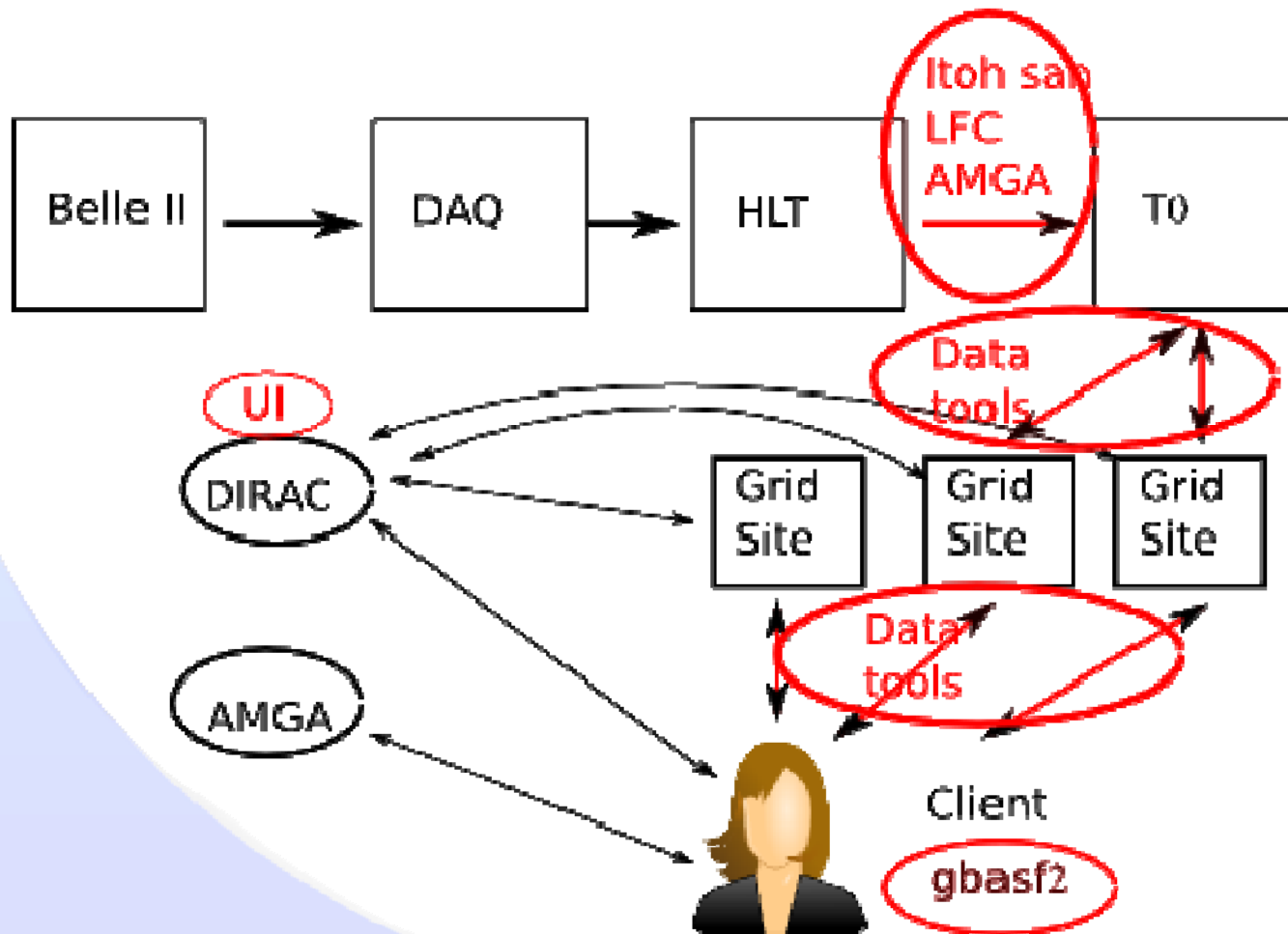
- To construct Belle II Data Handling System ☹️
- To test Large Scale Data Handling
 - Belle Data at NSDC farm at KISTI ☹️
 - Belle II Data (Random data) =>
realistic test => doing around August 15
 - Belle Data at KEK => will do
- Data Handling and Job Management for Belle II Grid
 - **Junghyun gave the scripts to Poland and Melbourne.**

Realistic test

- Because in real life we will have simultaneous write access to AMGA from raw data taking and MC production, and queries from user jobs, we want to simulate both.
- Our estimate is to have about one raw data file per second.
Taking a safety factor of two, which includes contributions from MC production, we decided to have a process in our test that adds entries to AMGA at a rate of 2 Hz.
- At the same time we want to run queries (e.g. for all files of an experiment) against AMGA. The idea is to do this for various frequencies (meaning to issue a query each $1/x$ seconds for a frequency of x Hz) and then measure the response time after the system has stabilized. Then we can make a plot of response time versus query frequency.

=> Will test around on August 15, 2010

The missing pieces



The interface between HLT and T0



- Need the information of frequency
=> Will test
- Two different AMGA systems(?)
 - One is HLT and T0
 - The other is metadata

The 3rd Belle II Computing Workshop

- Date: November 22–24 2010
 - 1st day (Monday): Off–line and HLT software / Banquet
 - 2nd day (Tuesday): Distributed Computing and Data Handling
 - 3rd day (Wednesday)
 - Morning – Overflow
 - Afternoon– Excursion
- Place: KISTI, Daejeon, Korea
- Hosted by HEP team @ KISTI



Thank you.

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