

Belle II DH group

2010.06.03
Kihyeon Cho

New Member

- New member: Dr. YoungJin Kim
 - As of June 1, 2010,
 - Moved from KEK to High Energy Physics Team @ KISTI
 - Please add his information to Belle II and Belle II computing group
 - YoungJin Kim (yjkim@kisti.re.kr, +82-42-869-0824)
- Today, JungHyun Kim come back to office from hospital due to lung operation.

Contributions

- Draft for JKPS
 - “Design of the Advanced Metadata Service System with AMGA for the Belle II Experiment”
 - Sunil Ahn, J.H. Kim, K. Cho, S.W.Hwang et al.
 - On the review
 - The goal is to publish within this year.
- CCP2010, Trondheim, Norway, June 23-26
 - “The Data Cache System at the Belle II Experiment”
Oral talk by Kihyeon Cho
 - Practice talk will be held during Belle II computing workshop at Krakow

Belle II Computing workshop

- Four talks from Belle II DH group
 1. Report on Belle II Data Working Group (Kihyeon Cho)
 2. The Data Cache System at the Belle II Experiment (Kihyeon Cho) – CCP2010 practice talk
 3. Belle II Data Handling test (JungHyun Kim)-EVO
 4. AMGA system (Soonwook Hwang) - EVO

Current Status of Large Scale DH Test

- To finish whole process from data extraction to grid
 - Transfer - done
 - Extraction 4/8-4/18
 - Scalability test 4/19 – 5/7
 - Generating the random meta data for scalability for Belle II 5/18 - done
 - LFC - Melbourne => by Tom
 - SE(KEK) – Melbourne => by Tom
 - Grid – Melbourne => by Tom
- Plots will be shown at Belle II computing workshop by JungHyun.
- AMGA team
 - Used Large DH system for Belle metadata system
 - Now, ready for Belle II metadata system

Belle LSDH & NSDC

Belle Data Transfer	<ul style="list-style-type: none"> • KEK → KISTI • Currently, 147TB data are archived 	<ul style="list-style-type: none"> • 93% of planned done
Metadata Extraction		
Scalability Test		
Metadata Replication		
Grid-awaring of Belle data	<ul style="list-style-type: none"> • SRMDoor & Disk Pool (SEDPM) • File registration to SE without copy • Registration to LFC • Co-test with SE & LFC 	<ul style="list-style-type: none"> • SRM Door & Disk Pool → Done • File Registration to SE → Done • Registration to LFC → Done for KEK & NSDC • Test with SE & LFC → Simple test done
Test on Grid Env.	<ul style="list-style-type: none"> • Job submission to Grid (with access to AMGA, SE, LFC) 	<ul style="list-style-type: none"> • Every Testers should have grid cert. and Belle VO membership
What Next ?	<ul style="list-style-type: none"> • ??? 	

Resources for LSDH

- Disk Pool
 - dpmp1.sdfarm.kr
 - by GPFS, 170TB (147TB is occupied by bdata)
 - gLite 3.2
- SRM Door
 - se1.sdfarm.kr
 - 1G connection to outside & disk pool
 - gLite 3.2, DPM_mysql
 - Around 290,0000 entries
- LFC
 - kek2-lfc.cc.kek.jp
 - lfc.sdfarm.kr (gLite 3.1, mysql base)
 - Both LFCs have identical entries which are mapped to se1.sdfarm.kr
- Computing Element
 - ce02.sdfarm.kr is tuned to accept Belle VO jobs

Planned resource architecture

- Will be done within the end of June
- New storage and PFS will be deployed during next week
- Belle data will be moved to new PFS (IBRIX)
- The detail architecture will be explained in coming meeting at Poland

Discussion

- Belle II DH meeting
 - First and third Thursday 5:00 PM
 - Let us arrange date during computing workshop

Thank you.