# Progress on High Energy Physics Team KISTI, Daejeon, Korea Metadata System

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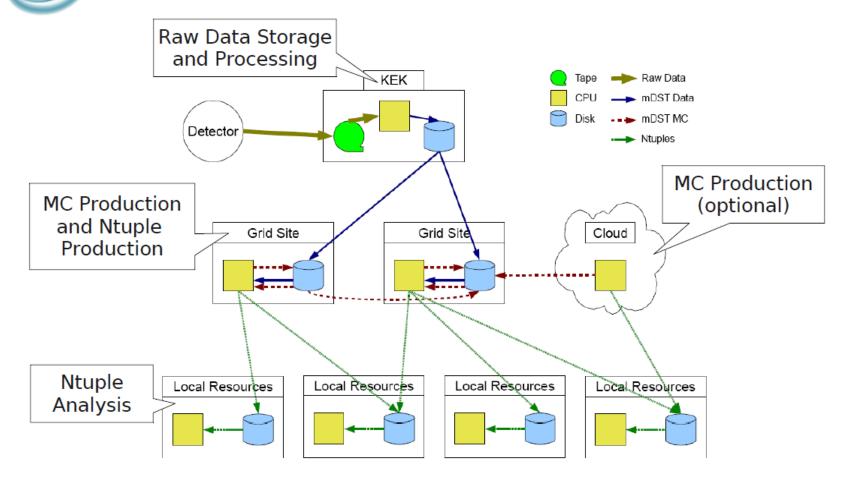


**KOREA Belle Meeting 2011.08.24** 



- 1. Belle II computing model
- 2. User created dataset
  - 1) Investigation of Belle II data
  - 2) Scenario of Belle II Data
- 3. Registeration system
- 4. Summary and Next step

#### Belle II Computing model





## Belle II Computing model

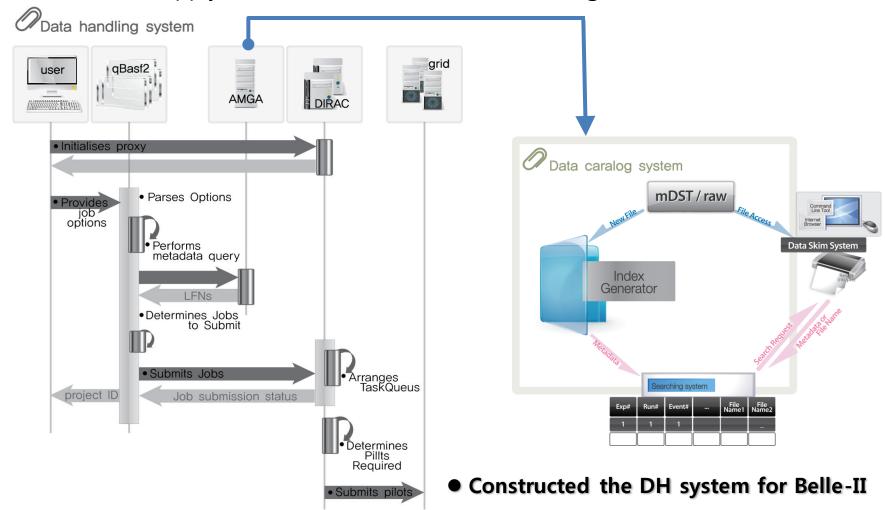
Non-grid Sites	Grid Sites	KEK	
		Storage and Processing of Raw Data	Main
	Experiment-specific Services	Experiment-specific Services	Center
	Monte-Carlo Production	Monte-Carlo Production	Grid
	Data Analysis	Data Analysis	
Ntuple-level Analysis	Ntuple-level Analysis	Ntuple-level Analysis	Local
User Interface	User Interface	User Interface	Resources



DESY Computing Seminar 14.06.2010

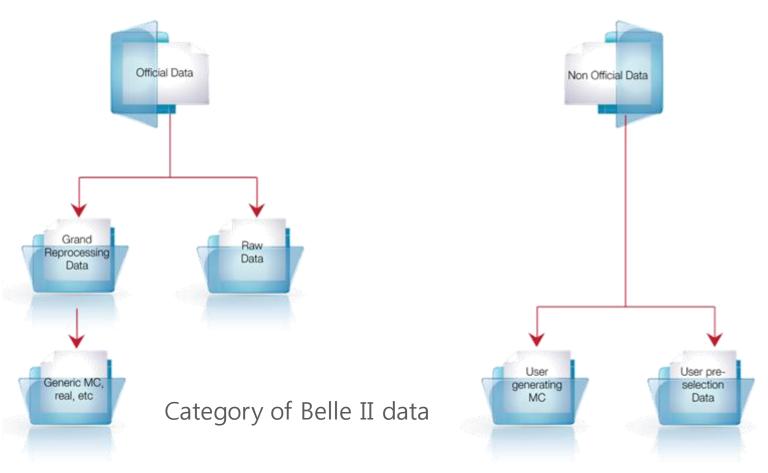
#### Investigation of Bell II Data

- To improve the scalability and performance
- We apply AMGA which is middle ware for gLite



#### Investigation of Bell II Data

1 Suggestion of user created data set



- Estimation for user created dataset

We permit to make the duplication for user created data set by the other users

- ✓ Thomas estimation (< 70MB)
- ✓ User generating MC is OK

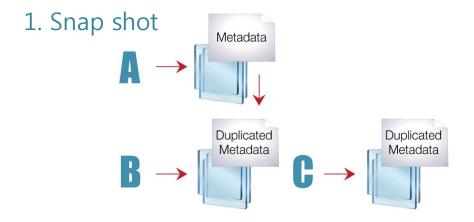
We estimated the other situation for increasing user created dataset size

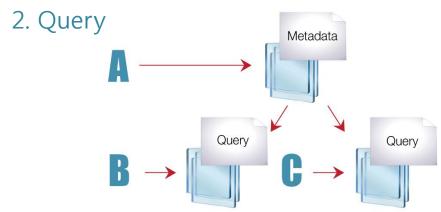
When we permit to make the duplication for the official data. When users make the pre-selection files.

- Those lead to increase the metadata size

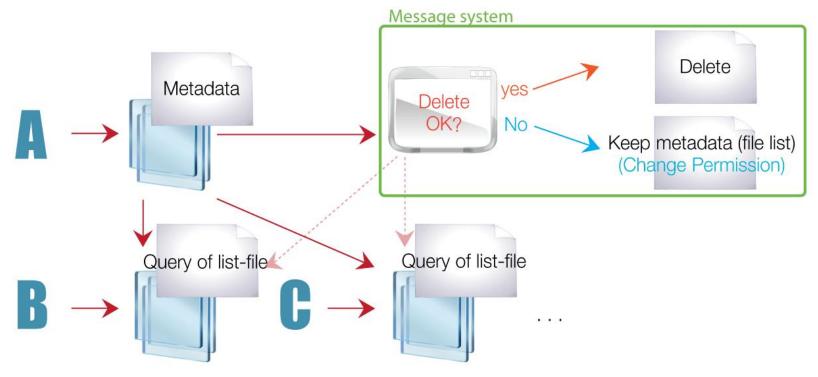
#### Suggestion for user created dataset

- To reduce the metadata size





#### 3. Snapshot-like Method

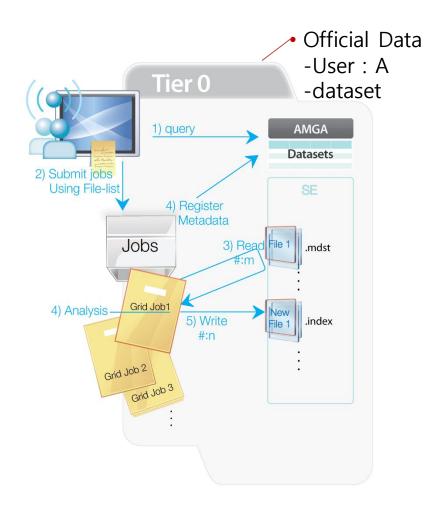


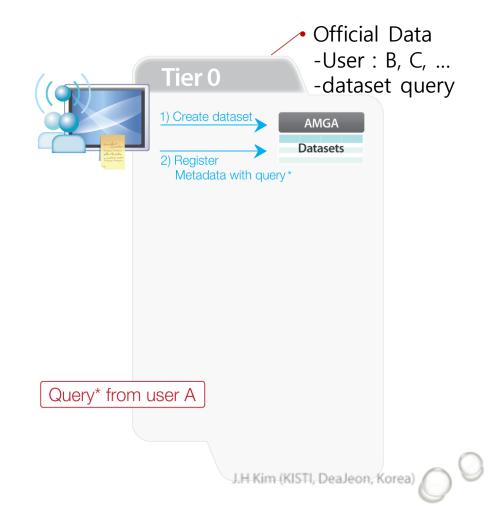
- Snap-shot style real snap-shot like style for user created data
- To store queries which are not duplicated
- To keep the metadata for old data

### Data access scenario

- Official Data

#### Scenario I



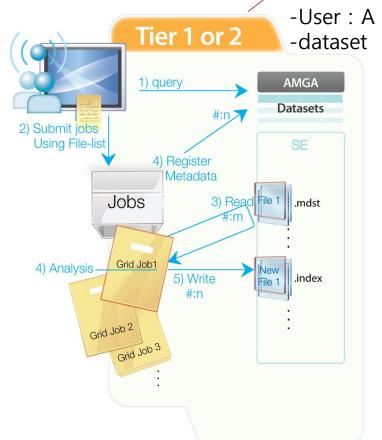


#### Data access scenario

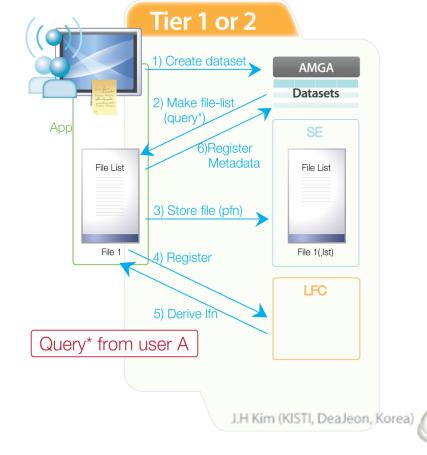
- Non Official Data

**Scenario II** 

Non Official Data



Non Official Data-User : B, C, ...-dataset query



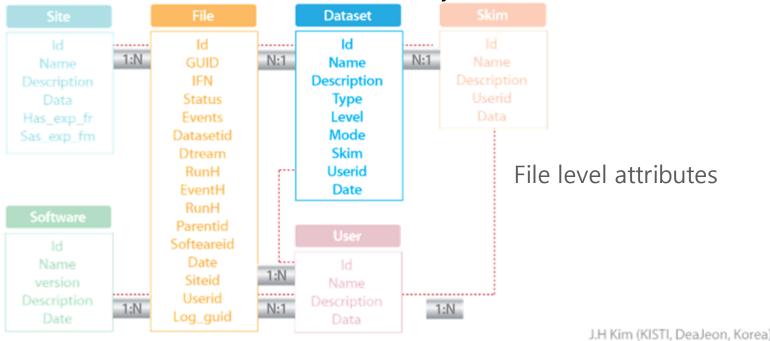


Registeration of Metadata

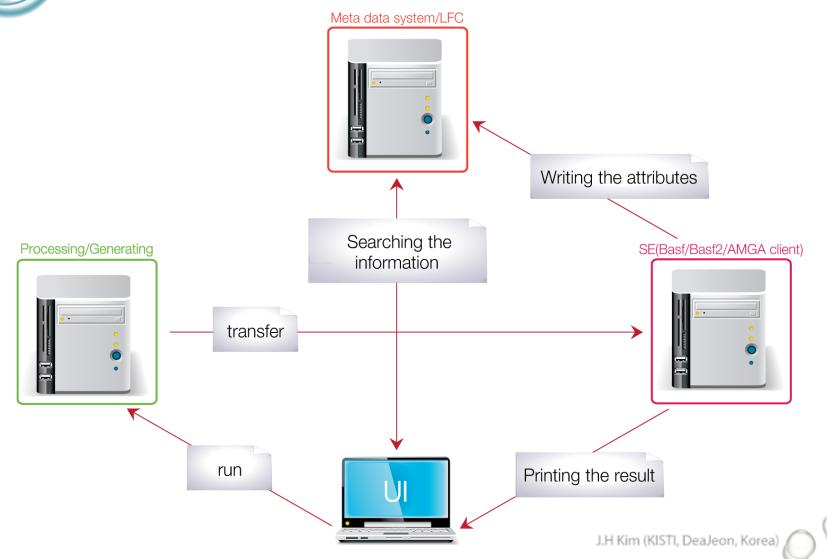


A data set registration is required for the real Bell II data analysis on the distributed computing.

We need to understand the Belle II analysis framework.

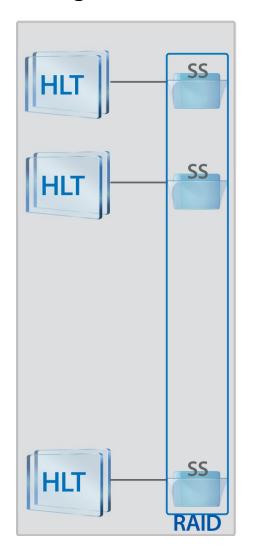


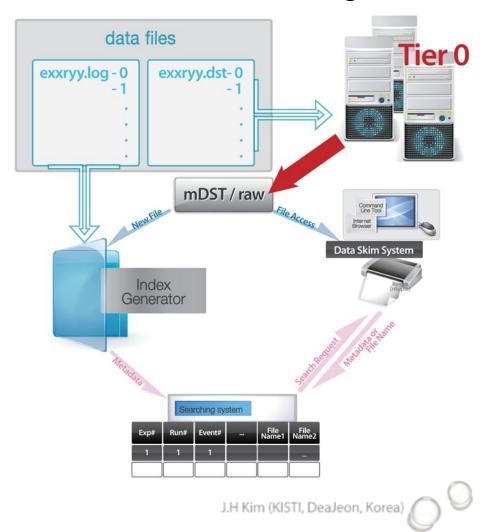
## Workflow of registeration



#### Handling the raw data in meta data system

We will register the meta data with the file location and log files.







- ✓ Performing the framework.
- ✓ Analizing log information
- ✓ Return the information: We will give it such as the parameters.
- ✓ Opening in LFC and metadata system.
- ✓ Registeration metadata system.
- ✓ Closing metadata system.

### To install basf2

- ✓ We have a problem for the full local installation.
- ✓ Although following the instruction, we have warning message for root and geant4 installation.
- ✓ We need to fix the problem or use the central release software.
- ✓ Help us to fix it.

## Summary and Next Step

We suggest the idea to reduce the metadata size.

We want to make the registeration system automatically.

We need your help for understanding basf2

## Progress on



## Metadata System