

#### LHC Computing in KISTI: **Current Status**

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# Outline

KISTI-EGEE-II Collaboration
ALICE-LCG Tier-2 Center in KISTI





#### Introduction to KISTI-EGEE II Collaboration

#### Official EGEE-II Partner

- Contracting partner since the EGEE-II started
- Interesting Activities:
  - SA1 (Grid Operation and Management)
  - JRA1 (Middleware Reengineering)
  - NA3 (Training)
- Focusing on Grid operation and management
  - Working with ASGC (Academia Sinica Grid Computing Center) in Taiwan
- Cooperating with CKSC team, another EGEE-II partner in Korea





# Goal of EGEE Collaboration

- Gain experience in the EGEE middleware and Grid operation procedures
  - Install EGEE middleware (e.g., glite, lcg) on KISTI site and provide EGEE services tightly connected with other WLCG/EGEE sites
- Facilitate joint research activities between Korea and EU based on EGEE infrastructure
  - HEP, FusionGrid,...
    - Currently, we are working with the ALICE group in CERN
- Investigate the feasibility of EGEE infrastructure on which to build many e-Science applications other than HEP





#### EGEE-II Collaboration: Current Status

- May, 2006
  - Bob Jones, EGEE-II Project Director, visited KISTI to discuss collaboration between EGEE-II and KISTI in the areas of Grid infrastructure and applications.
- June, 2006
  - Linux Cluster preparation for EGEE middleware deployment
  - gLite installation and configuration
- July, 2006
  - Internal deployment on gLite installation and configuration
- September, 2006
  - Register to AP-ROC for EGEE certification
- October, 2006
  - Installation and configuration of LCG components (lcg-RB, lcg-CE)
- Since January, 2007
  - KISTI site has been approved as an EGEE-certified site, operating production run on a daily basis





#### KISTI as EGEE certified site



Source: https://goc.grid-support.ac.uk/gridsite/gocdb2 April 25, 2007



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### 3D Real Time Monitor@EGEE



April 25, 2007



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gLite M/W Deployment





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# KISTI Testbed for EGEE Deployment



 Before October, 2007











# **KISTI** Testbed Specification

- OS: Scientific Linux 3.0.4
- CPU: Intel® Pentium-IV 2.0GHz
- Memory: 2GB per CE, all WN nodes
- Disk: 40GB per all nodes
  - 500GB RAID server shared by CE and all WN as user home directory
  - 2TB RAID server for DPM backend storage
- Network: 1Gbit Ethernet



#### ALICE-LCG Collaboration: Current **Kisti** Status

- August, 2006
  - Internal deployment of ALICE experiment SW (Aliroot,...)
- September, 2006
  - Dr. Federico Carminati, visited KISTI to discuss the construction of ALICE Tier2 Center in KISTI
- October, 2006
  - ALICE VOBOX installation and configuration
- December, 2006
  - Participated in the WLCG Tier-2 workshop in Asia held in Mumbai, presenting the status of KISTI ALICE Site
- Feb, 2007
  - Approved as an ALICE-LCG site
- Oct, 2007
  - LCG MoU between MoST and CERN



#### Plan to Be Pledged for WLCG Resources



Korea, KISTI	2007		2008	2009	2010
	Before	After			
	October	October			
CPU (kSI2K)	30	50	100	150	150
DISK (TBytes)	5	15	30	50	50





