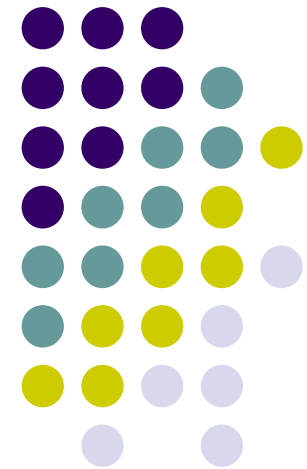


LHC Computing in Korea

2007.4.23

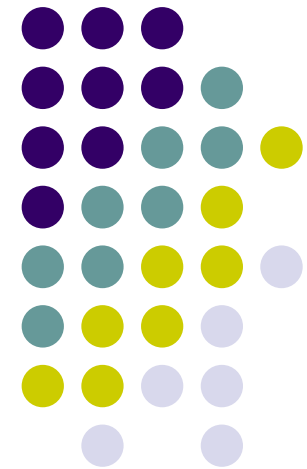
Seyong Kim

For the 1st Korea-CERN
meeting



Outline

- History of LHC Grid
Computing in Korea
- ALICE Tier 2 Center in
KISTI



Background

-(pre (Apr.2004- Mar.2006) CERN-Korea
collaboration I)



- **Non-existence** of formal Collaboration structure between Korea and CERN before 2006
- **ALICE** Physics interests of Kangnung N. University (experiment) and Sejong University (theory + computing)
- EGEE project (April 2004)
- International Cooperation program(MoST)

Background

– (Apr.2004–Mar.2006 II)



- Formation of CKSC (Chonnam–Kangnung–Sejong collaboration)
 - HEP (K.U. + S.U.) + Bioinformatics (C.U.)
 - ~100,000 Euro per year
 - 5 Prof's + ~10 students
 - NA4 activity
 - 1 computing engineer (staying at CERN)
- + grid test-bed contribution to ALICE computing

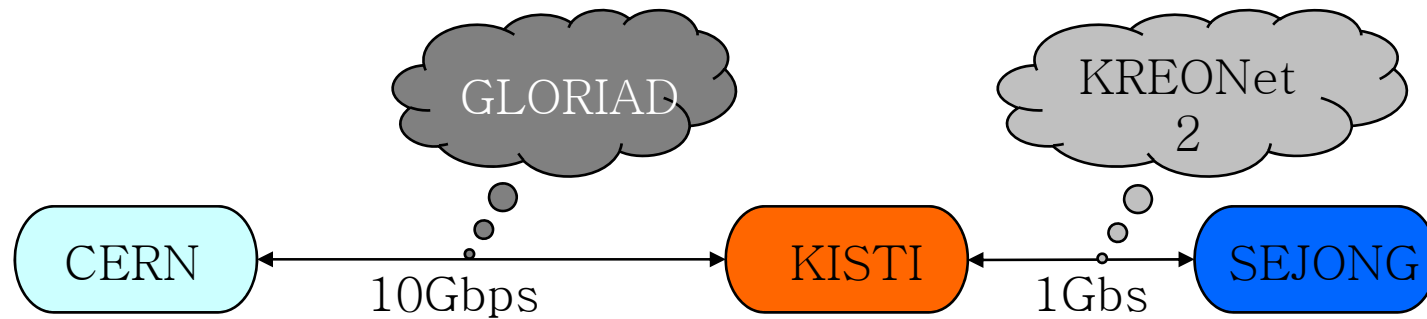


Background – (Apr.2006–Now)



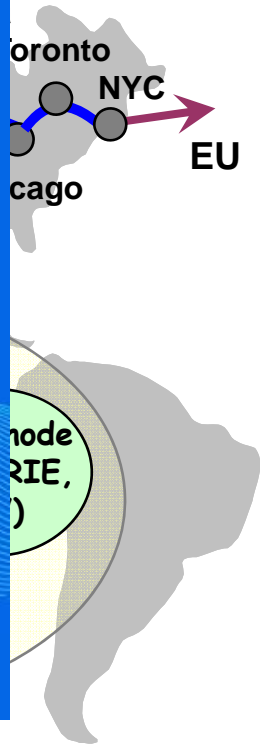
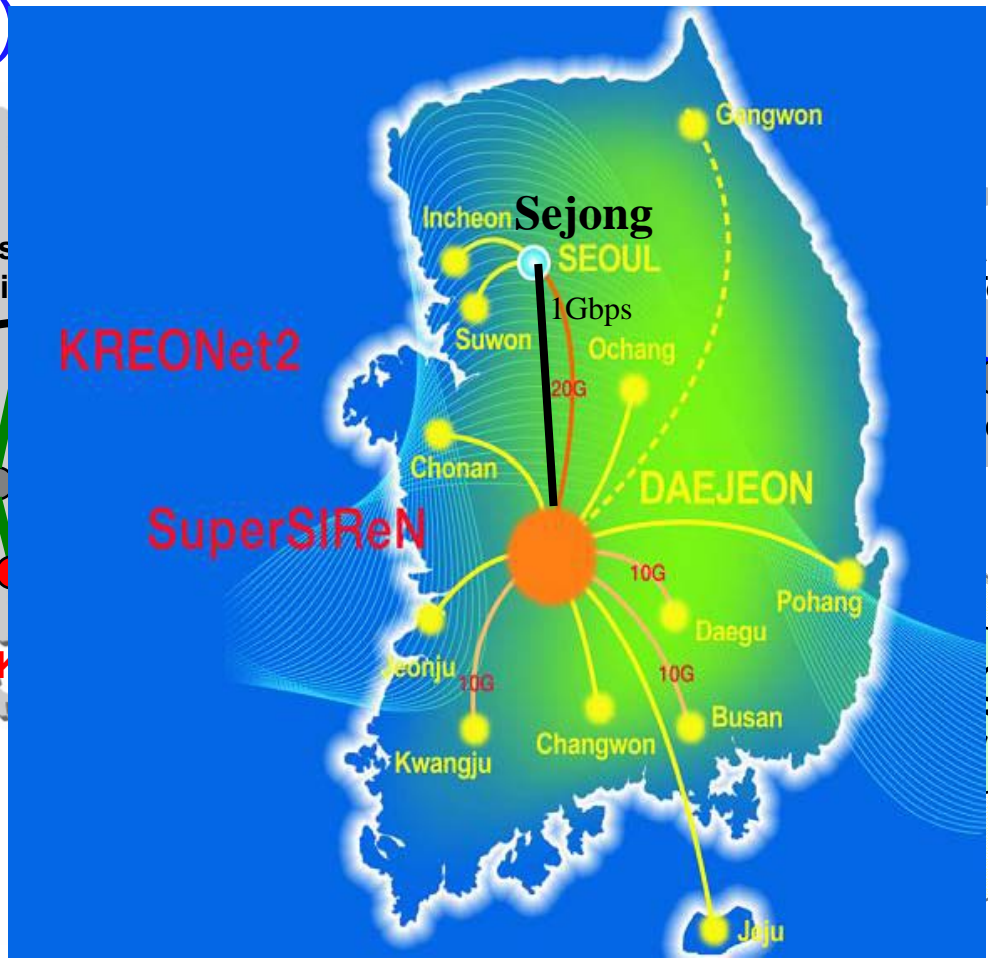
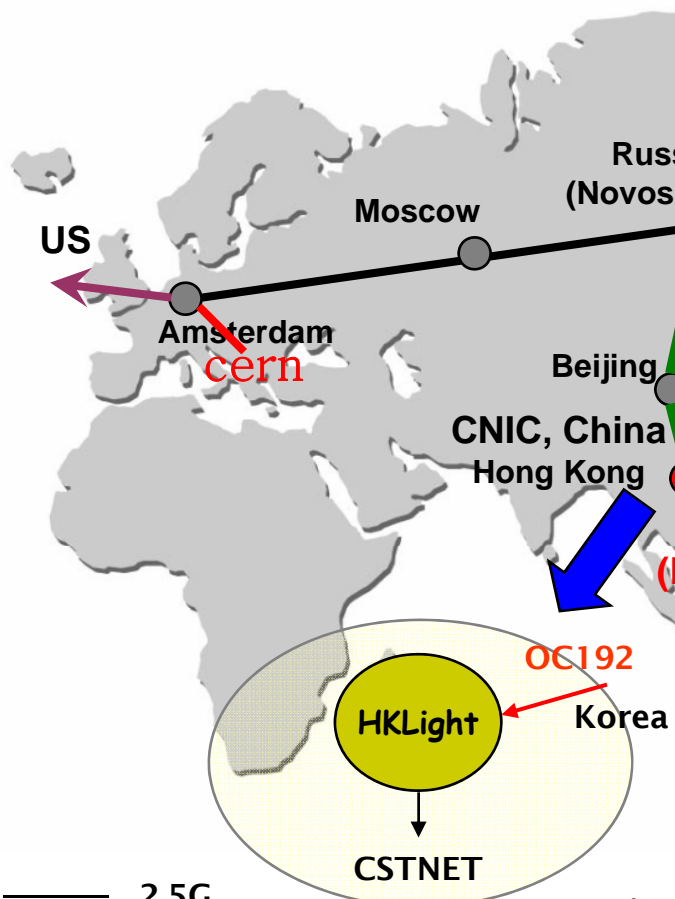
- Time of the preparation for LHC Grid Computing production environment
ALICE Tier 2 in Korea or not!
- EGEE-II (April 2006)
- Formation of Korean Consortium (KISTI + CKSC) for EGEE-II as full contracting partners
- NA4 + SA1, JRA1, NA3
- Funded (CKSC) + non-Funded (KISTI)

Network connection Between CERN and Sejong (1)



- GLORIAD (GLObal RIng Network for Advanced Applications Development) with 10/40Gbps Optical lambda networking
- KREONet2(Korea Research Environment Open NETwork)

Network connection Between CERN and Sejong (2)



— 2.5G

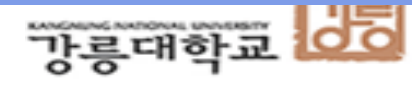
— 10G
KiSTi
 www.kisti.re.kr

Korea Institute of Science and Technology Information

- * TGN (Tyco Global Network) : Korea to US
- * FNAL (FLAG North Asia Loop) : Korea to HK

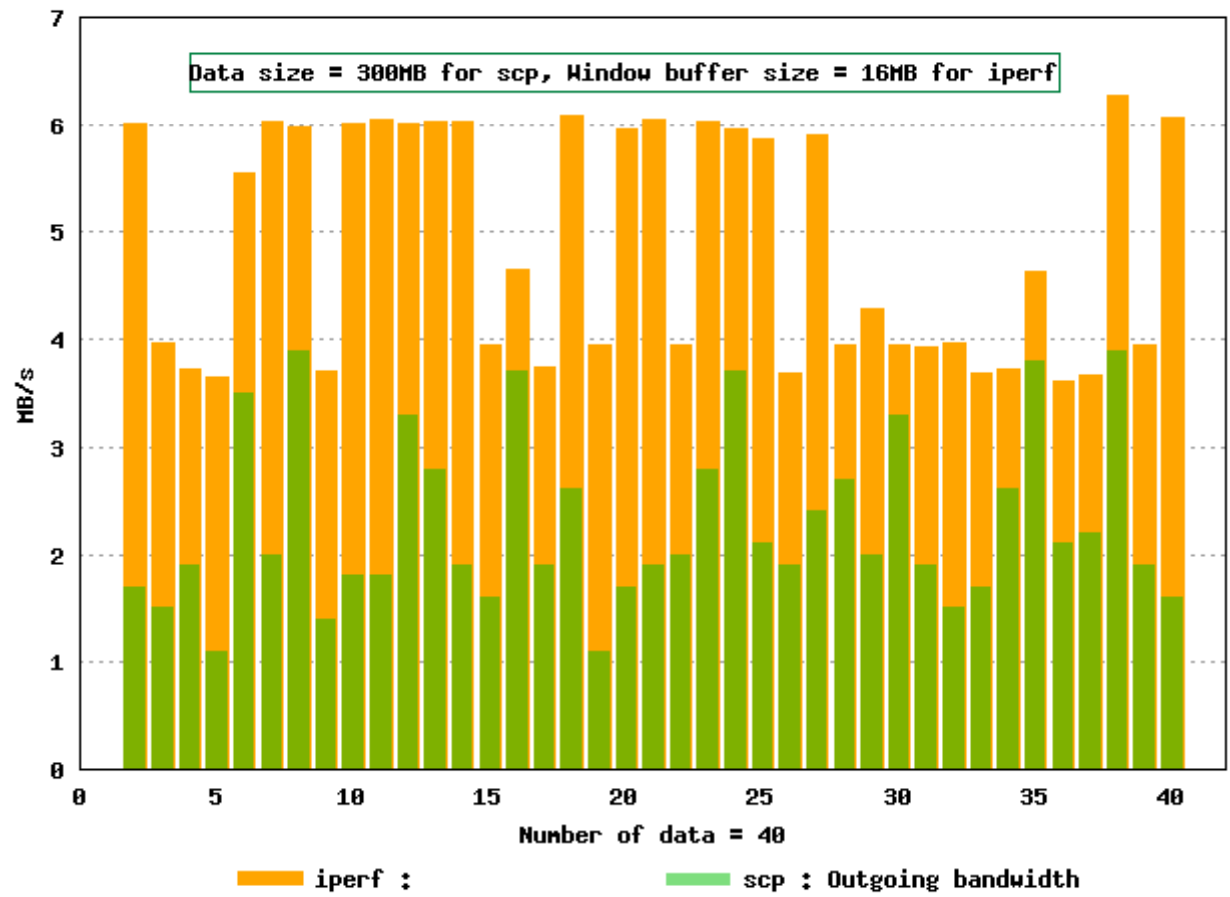


Picture from KIST





Worth of network speed performance (From 2006.11.27 10:00 to 2006.11.28 05:00)





Conclusion

- KISTI – ALICE Tier 2 center in Korea
 - Signing WLCG MoU in October
 - Securing support personnel for the level of Tier 2 center activity
- Sejong U. – make an effort to maintain current level of activity

	2007	2008	2009	2010
CPU	50	100	150	150
disk	15	30	50	50