# Collect, Analyze, and Share for Future Internet: High-Precision Measurement and Analysis Research

10<sup>th</sup> CAIDA-WIDE 1<sup>st</sup> CAIDA/WIDE/CASFI Workshop

> 2008.8.15~16 ISI in Marina Del Rey

> > Sue Moon



## **Motivations**

- Measurement research benefits from
  - More data
  - Diverse data
  - Feedback (as always!)
- Build a community of measurement research
  - People and schools with "data"
  - Past track record of research in this field

## **Our Team**

## University Research Labs w/ data from campus networks

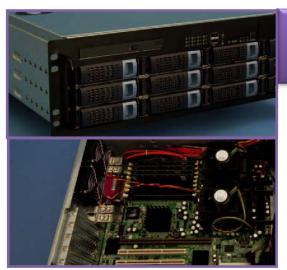
• KAIST, CNU, POSTECH all participated in CAIDA DITL 2007/2008

#### Team Members

James Hong (POSTECH)	IEEE ComSoc CNOM Chair (2005~now) NOMS, APNOMS, KNOM Steering Committee
Choong Seon Hong (Kyunghee)	APNOMS 2002, 2007 TPC Co-chair
Taek-Geun Kwon (CNU)	NP-based high-speed pkt processing system SKT P2P/VoIP detection system
Youngseok Lee (CNU)	5+ years of KOREN traffic measurement & analysis Wireless LAN and IPv6 traffic m & a

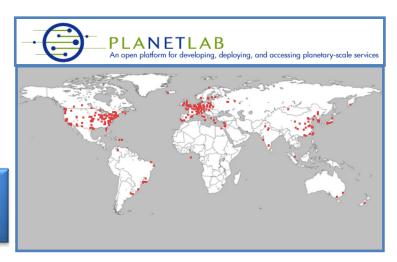


# **Equipments/Infrastructures of Our Teams**

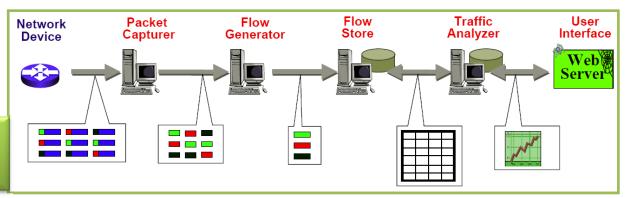


KAIST owns 4 DAGMONs

1<sup>st</sup> PlanetLab in Korea at KAIST



NG-MON based on DAG Card at POSTECH



## **Funding Agency**

- Originally,
  - MIC (Ministry of Information and Communications)
    - → MKE (Ministry of Knowledge Economy)
  - IITA (Institute for Information Technology Advancement)
  - Technology Development Track for World-Class
     Wide-Area Integrated Network Infrastructure
  - IT Core Technology Development
- 5-year, \$2 million, 5 profs + 10+ students
  - March 2008 to Febrary 2013



# **Expected Deliverables**

#### **User Behavior Analysis**

- Basic research for new service development
- High-speed packet capture technology: marketable immediately

## **Data Sharing Platform**

• Platform for international collaboration and leadership

#### **Future Internet Design**

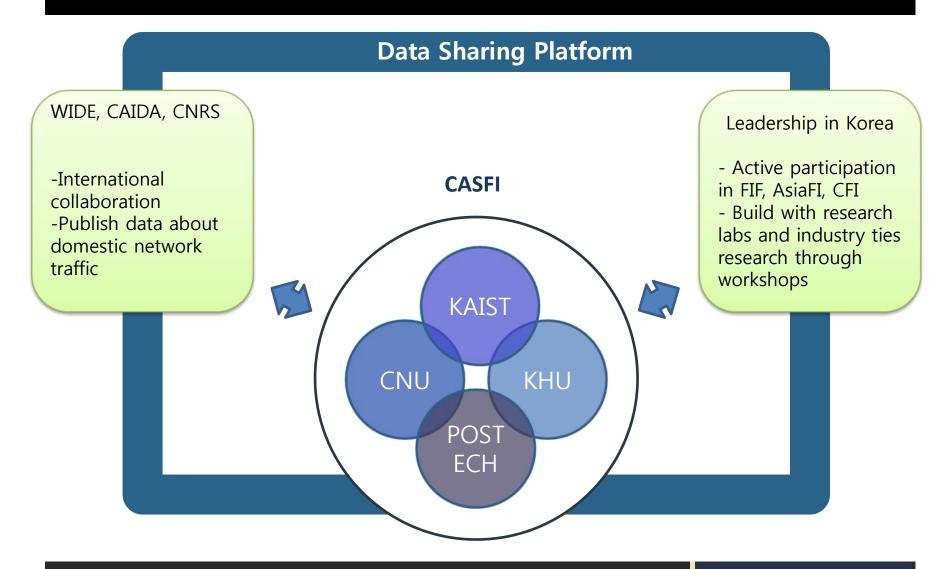
• Basic research in network manageability issues

# Research Topics of 2008-2009

## KAIST

- User behavior analysis
- KAIST backbone traffic analysis
- Data sharing platform development
- POSTECH/KHU
  - Review manageability issues in Future Internet
- CNU
  - Flow/contents identification at 1GB or higher speed
  - VoIP identification in 3G/3.5G

## **Project Management Structure**



http://casfi.kaist.ac.kr