

# International Federation - Korea Team

Myung-Ki SHIN – ETRI  
Dong Kyun KIM – KISTI, KREONET  
Sang Gyun KIM – NIA, KOREN  
Jong Won KIM – GIST, FIF

**K-GENI**



**OpenFlow@Korea**

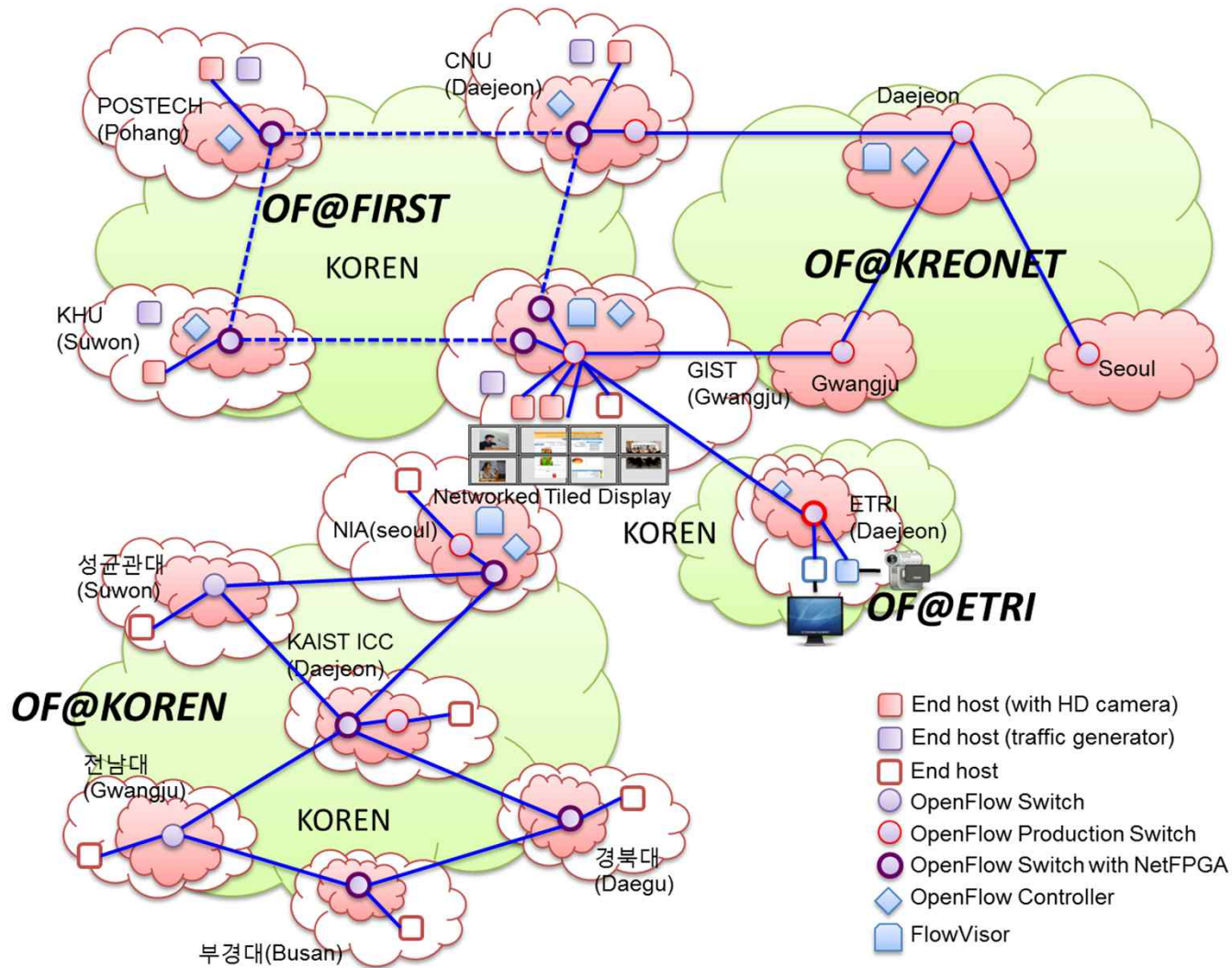
10 JULY 2012  
GEC14@Boston, MA

# Resources within Korea

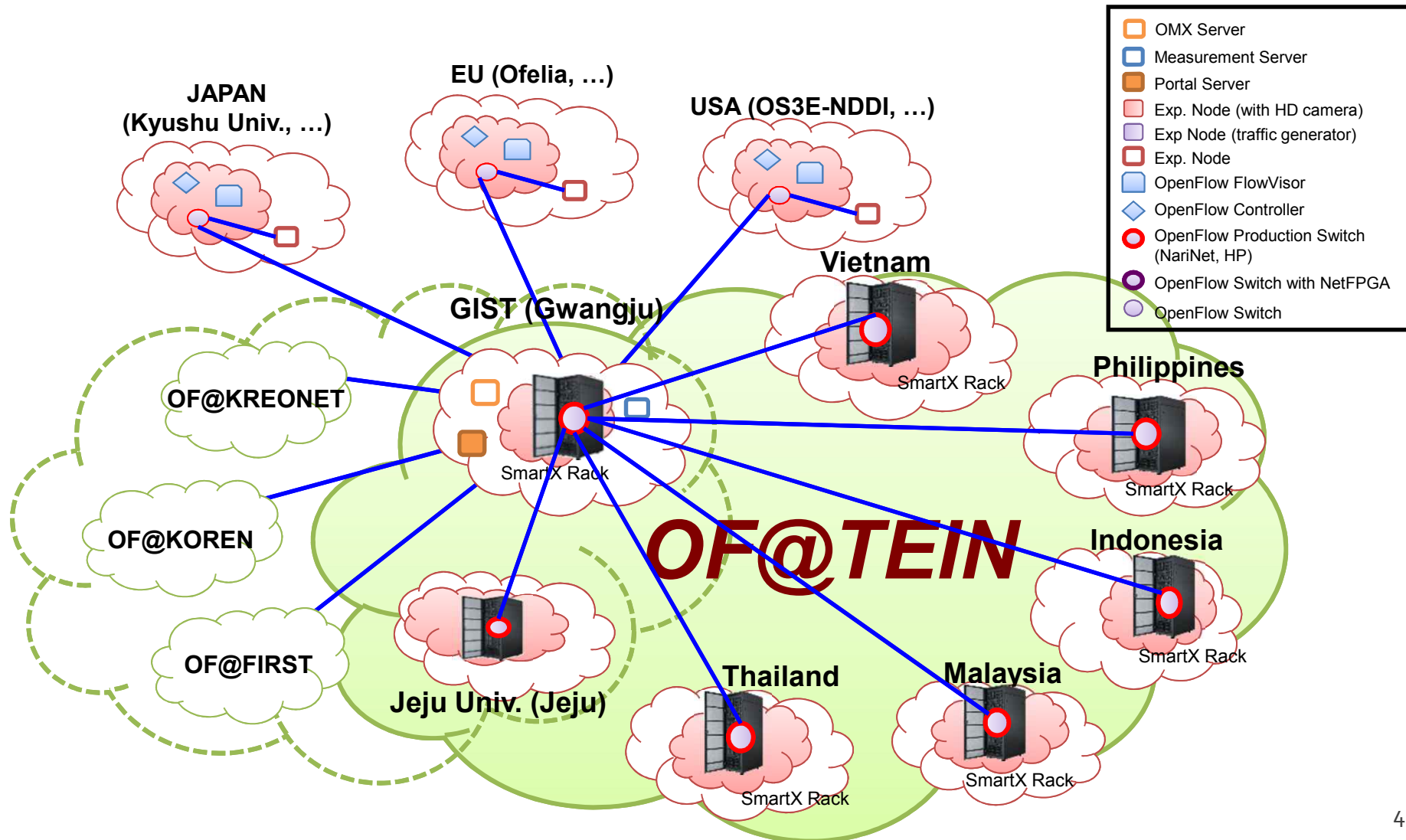
- **FiRST Platform (ETRI)**
  - Octeon NP-based hardware platform
  - OpenFlow 1.0 enabled
- **Virtual Software Routers**
  - PacketShader (KAIST)
  - Xebra (Korea Univ.)
- **Open Cloud Platform (ETRI)** *(coming soon)*
  - OpenStack with OpenFlow/SDN
- **Emulab-Korea (KISTI/KREONET)** *(coming soon)*
- **VIMS (NIA/KOREN)**
  - OpenFlow, DCN w/Dragon
- **OpenFlow@Korea (GIST, FIF, et al.)**



# OpenFlow@Korea

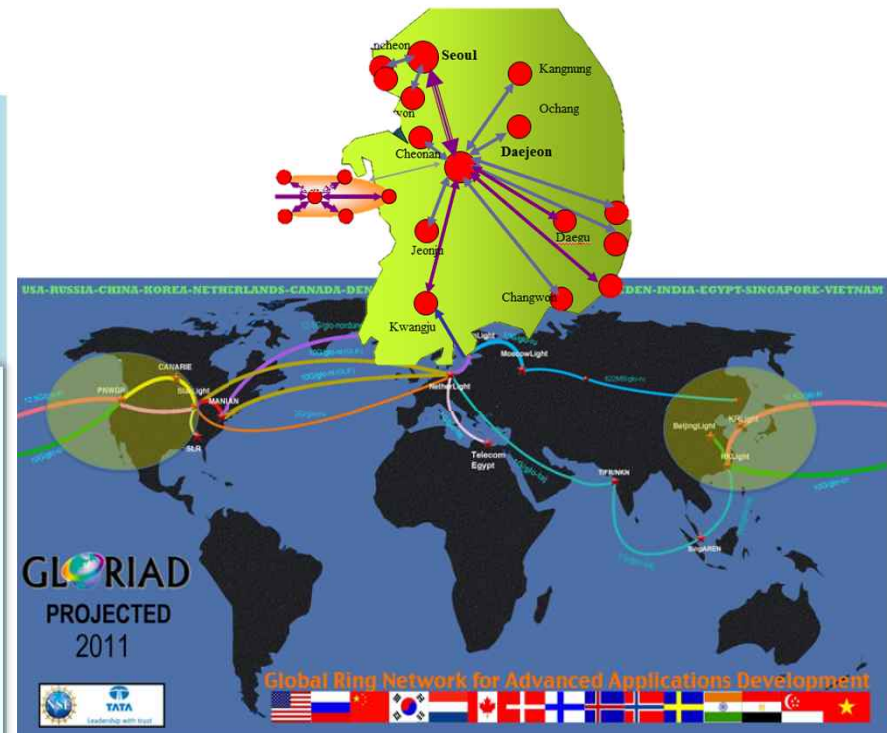
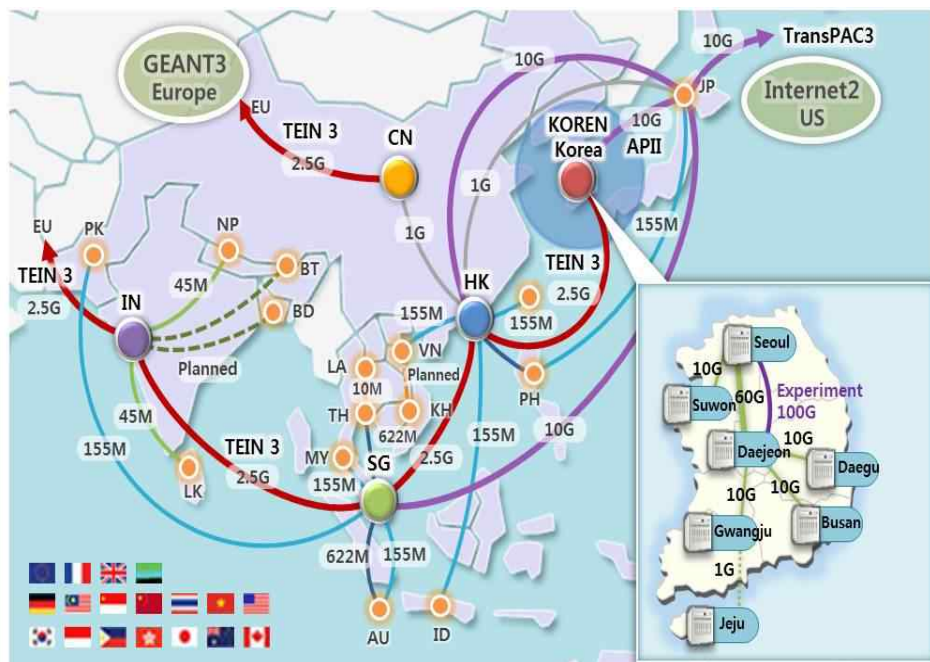


# OpenFlow@TEIN (Plan)



# International Connections

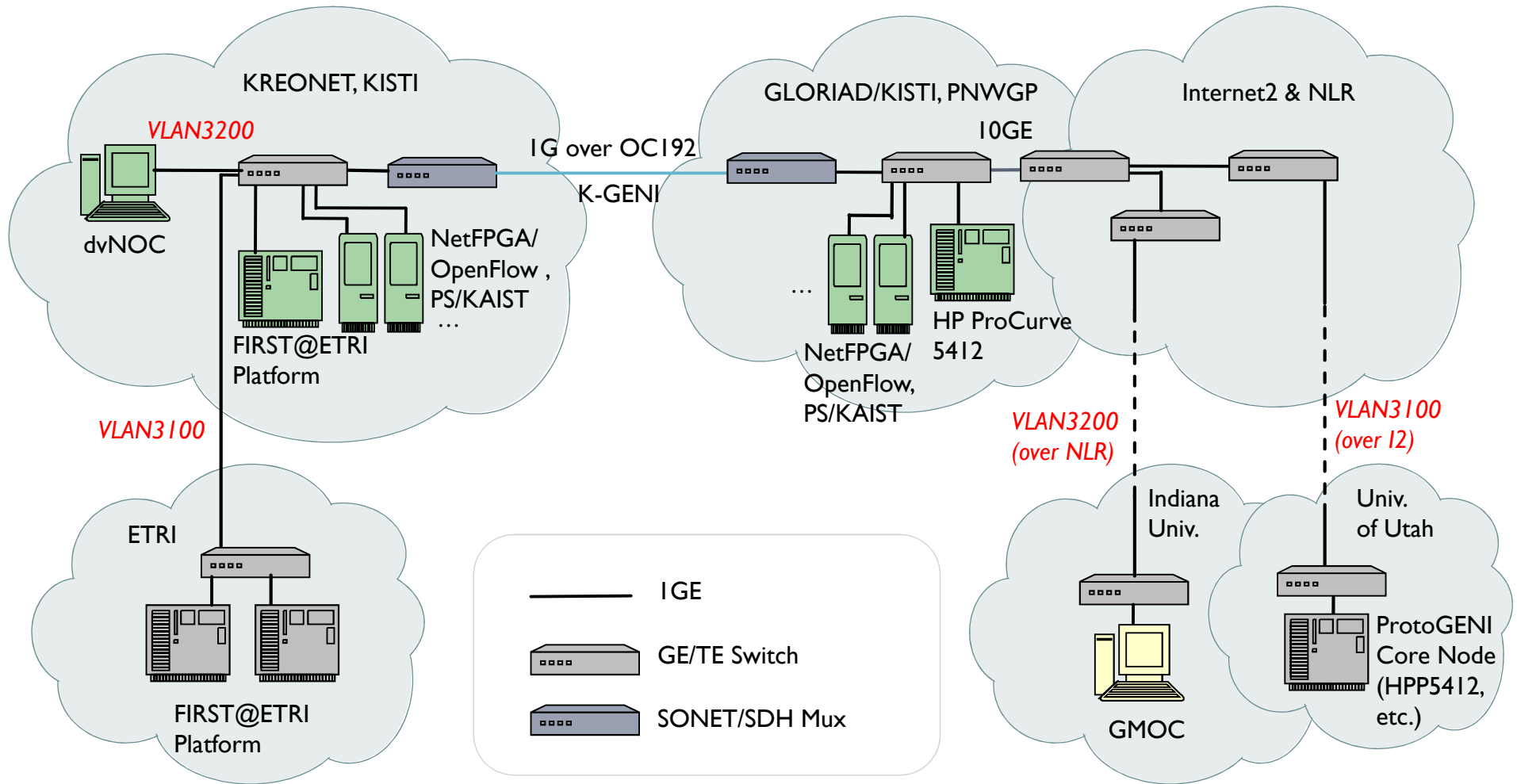
	Domestic infra	International infra	FI Testbed Connections
NIA	KOREN	APII, TEIN	JGN2+, FP7 project
KISTI	KREONET	GLORIAD, GLIF	<b>K-GENI/GENI</b>



# Korea – GENI Connection

Daejeon, Korea

Seattle, USA



Daejeon, Korea

DongkyunKim@KISTI, mirr@kisti.re.kr, April 2010 Indiana, USA SLC, USA

# Tools and Software

- dvNOC-GMOC federation (KISTI/KREONET)
- Virtual Network Management System (NIA/KOREN)
- ProtoGENI-ETRI Broker (ETRI)



# Discussion

- VLAN set-up and dynamic network stitching
- Common control framework ?
  - *GENI Wrappers*
  - OpenFlow/SDN APIs ?
- Near-term experiments ?
  - *CCN/CDN over OF/SDN*
  - *Wireless over OF/SDN ?*
- Killer services/apps ?



# For More Details

- FiRST/ETRI Projects
  - [http:// www.packetvisor.com](http://www.packetvisor.com), <http:// www.pronet.net>
  - <http://panto.kreonet.net>
- K-GENI (<http://groups.geni.net/geni/wiki/K-GENI>)
- KISTI/KREONET (<http://noc.kreonet.net/english/>)
- NIA/KOREN (<http://www.koren.kr/koren/eng>)
- FIF (<http://fif.kr>)
- PacketShader (<http://shader.kaist.edu>)
- Xebra (<http://os.korea.ac.kr/xebra>)