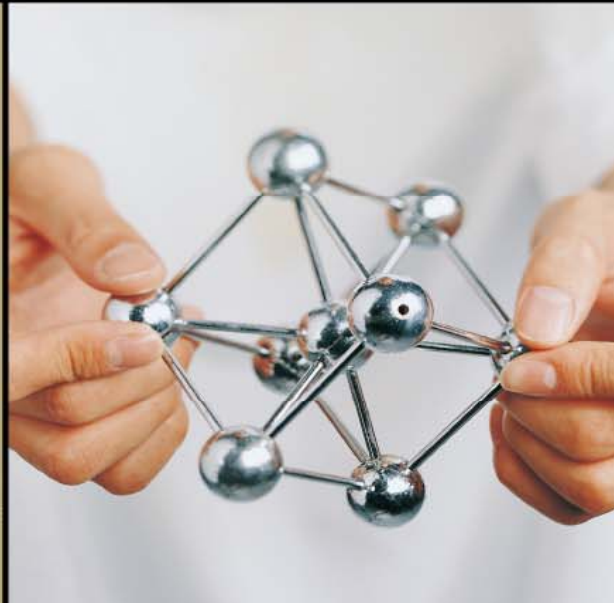


TAIWANLight Update

□ Li-Chi Ku
NCHC, Taiwan



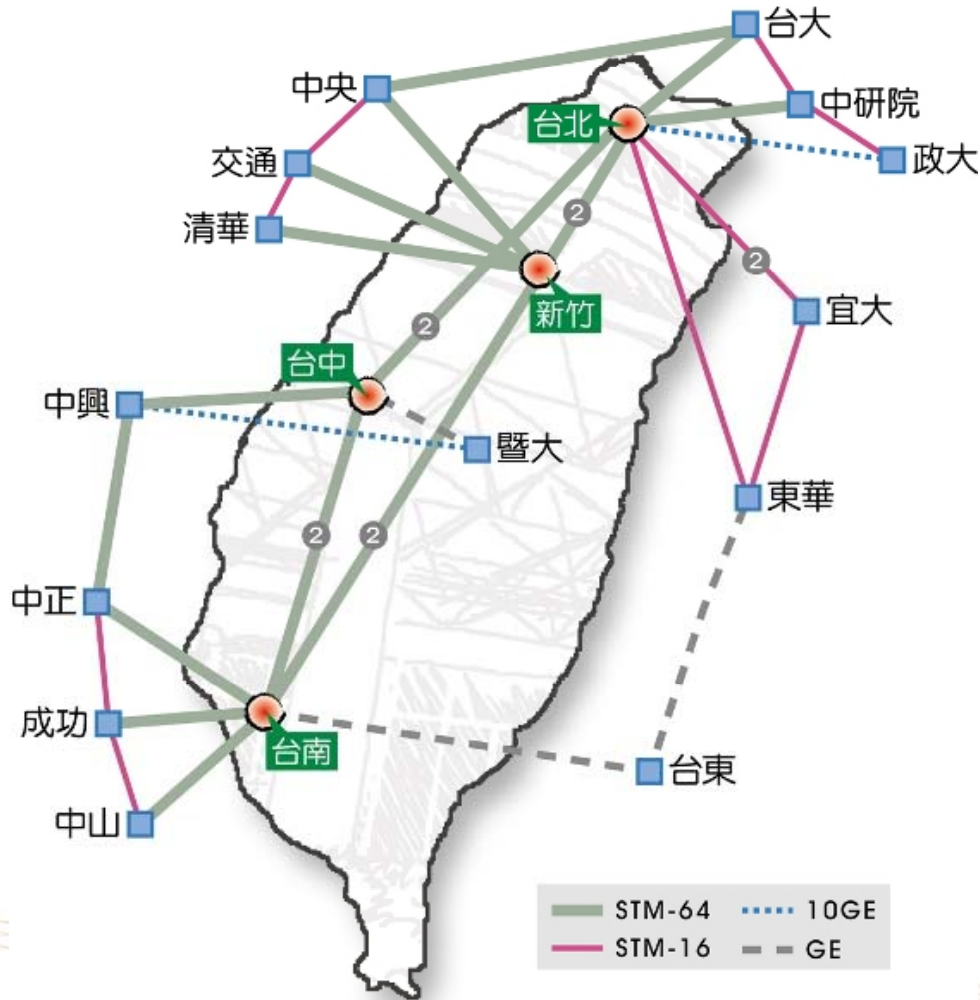
National Center for High-Performance Computing
www.nchc.org.tw/en/





Domestic Network: TWAREN

TaiWan Advanced Research and Education Network



- 4000 schools, 96 colleges / research organizations

- 5 million users

- ◆ 4 core nodes

- ◆ 20G backbone

- ◆ 12 GigaPops

- ◆ 1 access node

- ◆ Connects HPC resources in North and South Taiwan

- ◆ Built-in fault-tolerance



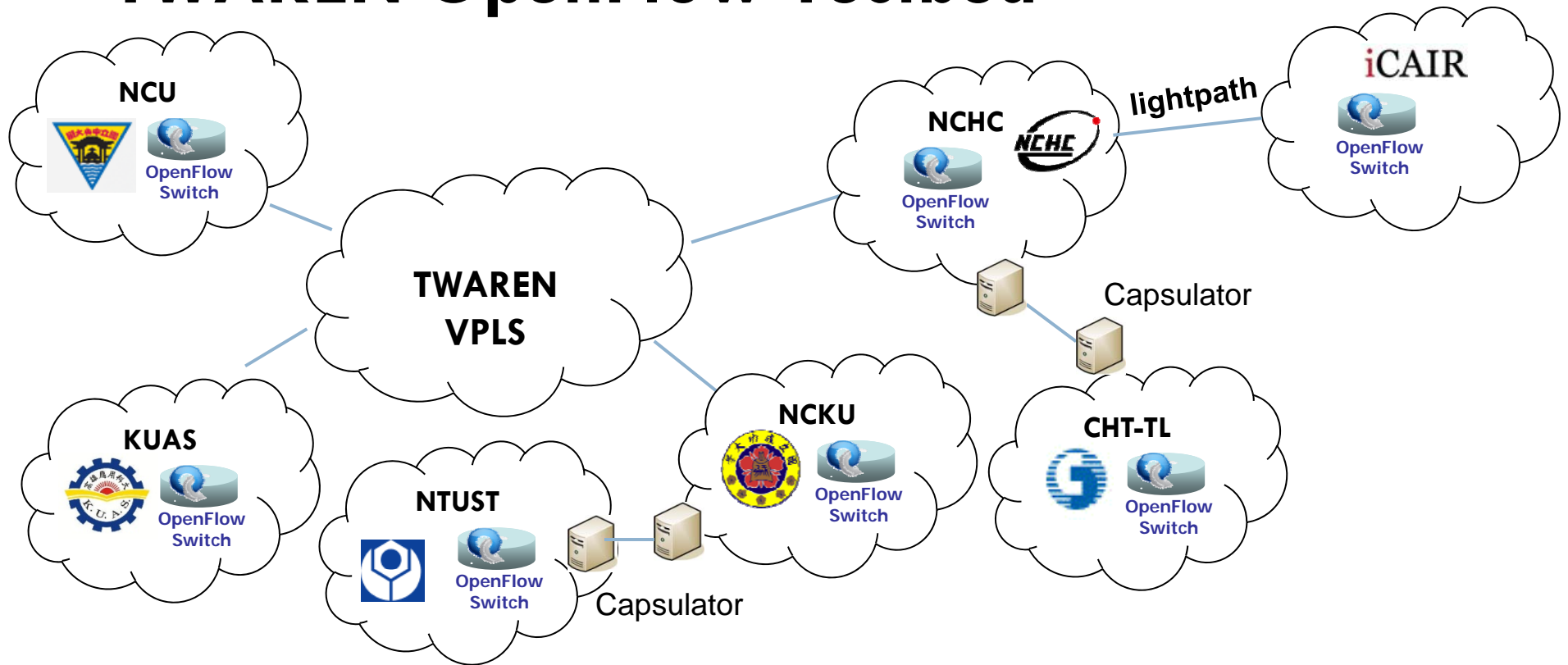
TWAREN's International Connections

- 5 Gbps Pacific Crossing to USA's west coast
- Connections between LA, Chicago, and New York are 2.5 Gb/s
- Connects to the rest of the world via the U.S.'s Abilene Network
- Connection expanded to Europe in 2006 (622 Mbps)





TWAREN OpenFlow Testbed

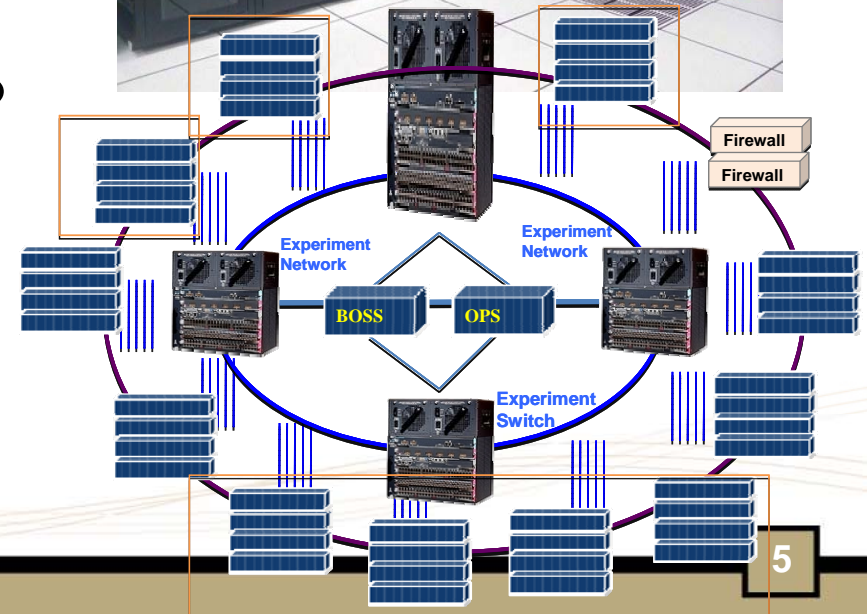
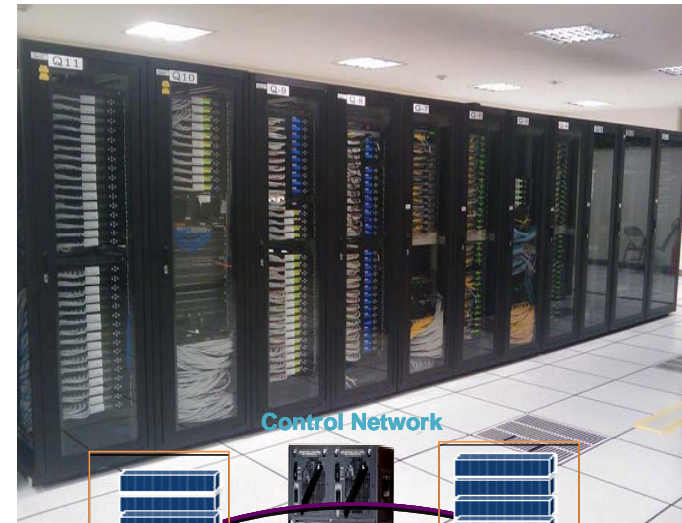


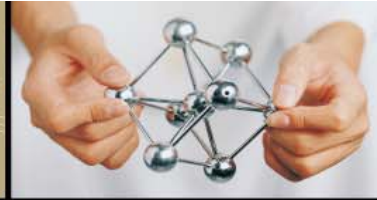
- NCKU, KUAS, NTUST, NCU and CHT-TL joined the Testbed.
- The OpenFlow Testbed is extended to iGENI@iCAIR and HPDMnet



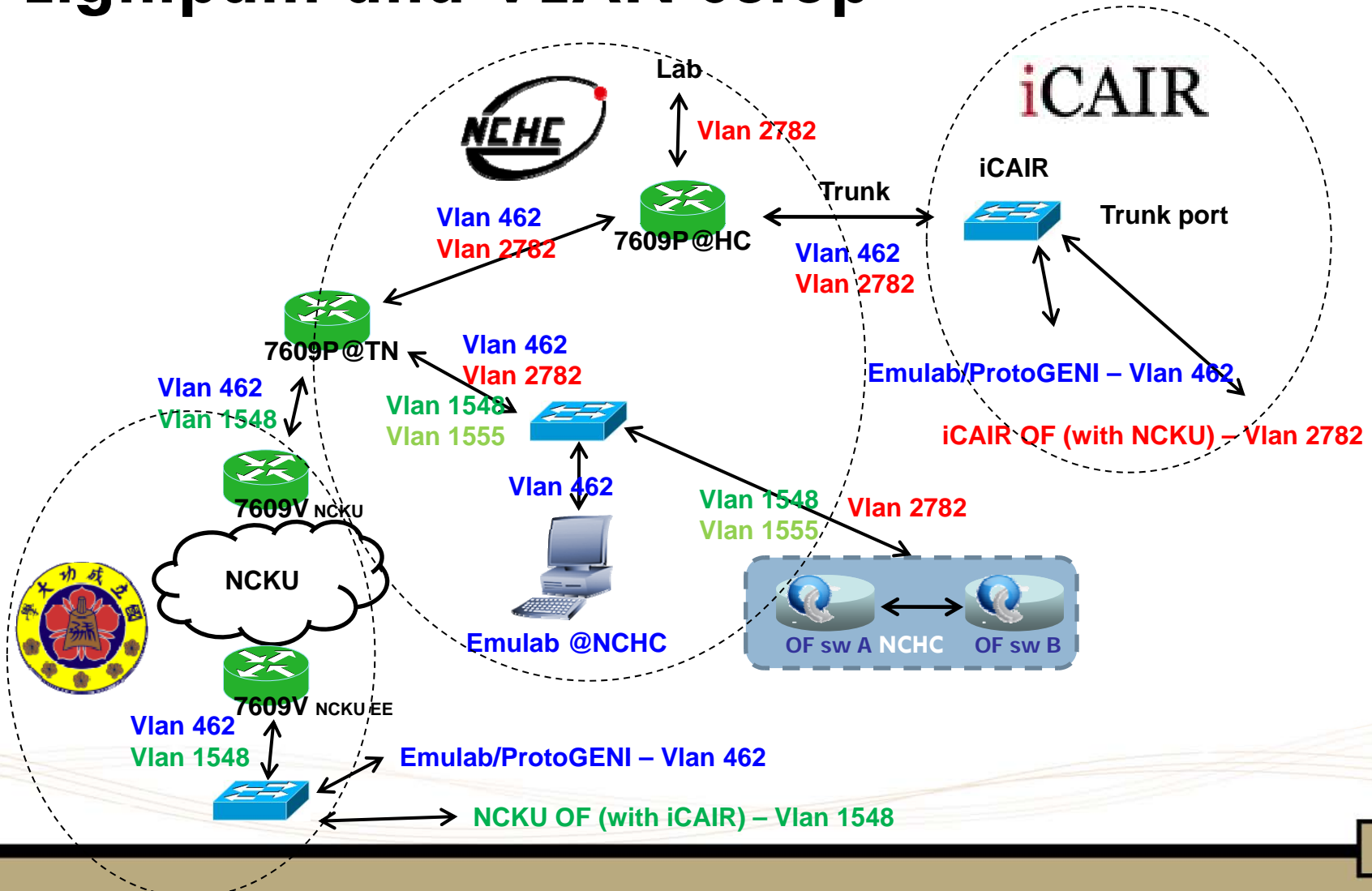
Emulab/ProtoGENI Testbed

- TWISC (Taiwan Information Security Research and Education Center) operates 206 nodes of Emulab Testbed in Taiwan.
 - ▣ Third largest Emulab in the world
 - ▣ Testbed@TWISC is operated by NCKU team and co-located in NCHC
- A portion of the testbed is planned to try ProtoGENI test with University of Utah.
 - ▣ A lightpath is provisioned between NCHC and iCAIR shared by both OpenFlow and Emulab/ProtoGENI



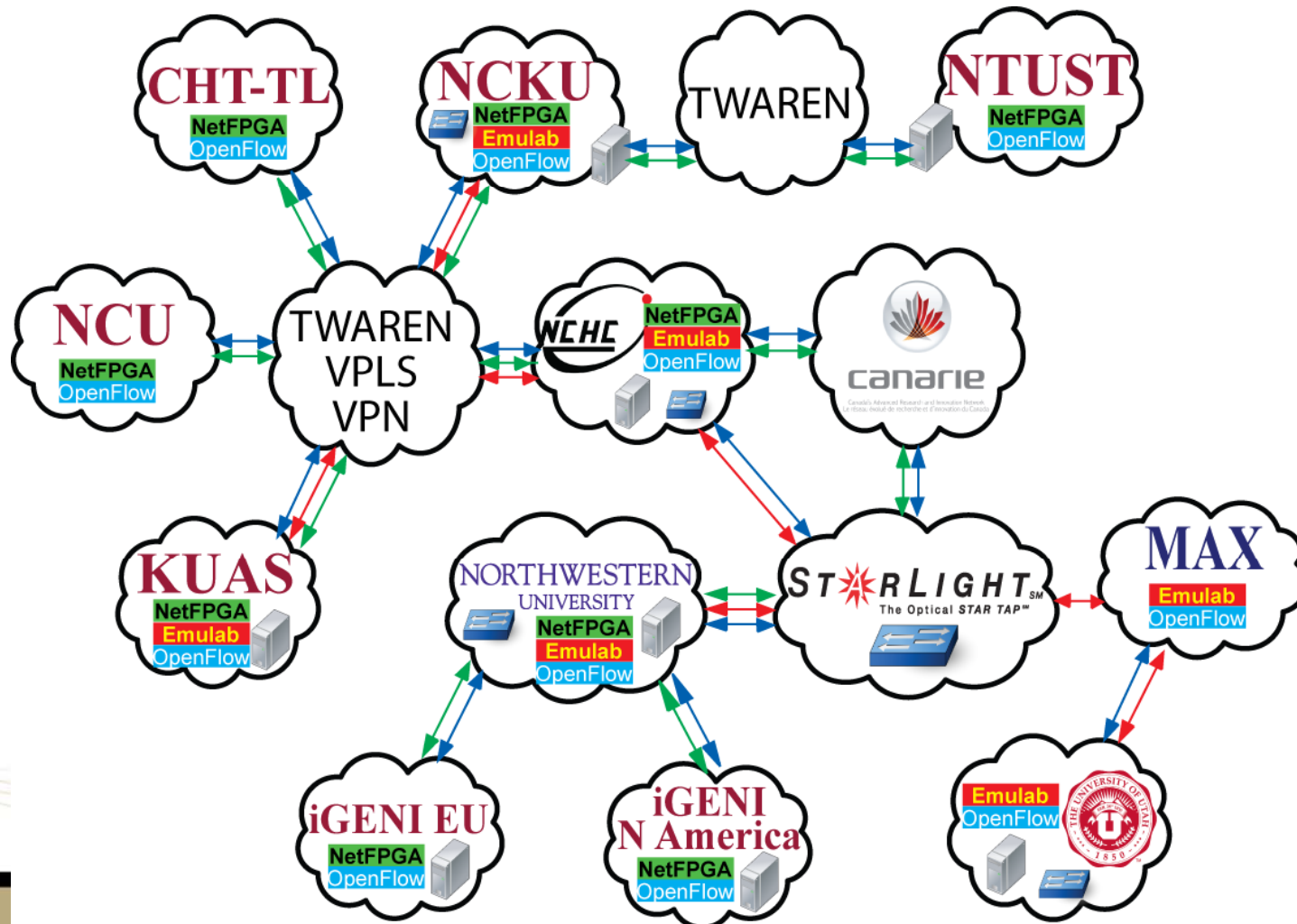


Lightpath and VLAN setup





iGENI - Taiwan Integrated Research Network





Thank You
Questions?

www.nchc.org.tw