K-GENI & Virtualized Programmable Platform
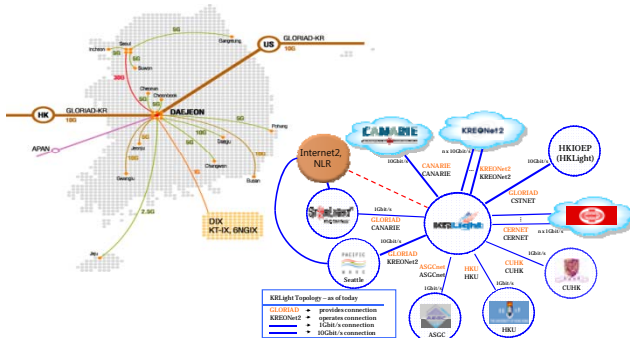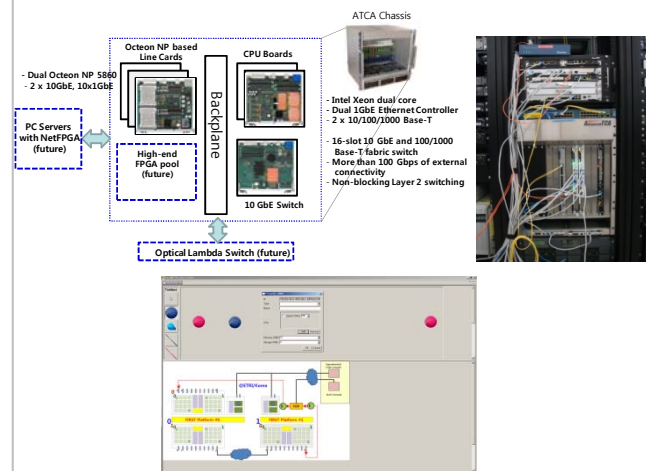
K-GENI, KREONET and GLORIAD

K-GENI : Establishment of Operational Linkage between GENI and ETRI/KISTI-Korea for International Federation (GENI Spiral-2)

• KREONET provides high performance network infrastructure for various science technologies, Supercomputing, e-Science applications.

• GLORIAD (Global Ring Network for Advanced Applications Development) is the first round-the-world high-performance networks jointly established by Korea, United States, China, Russia, Canada, the Netherlands and the 5 Nordic Countries.
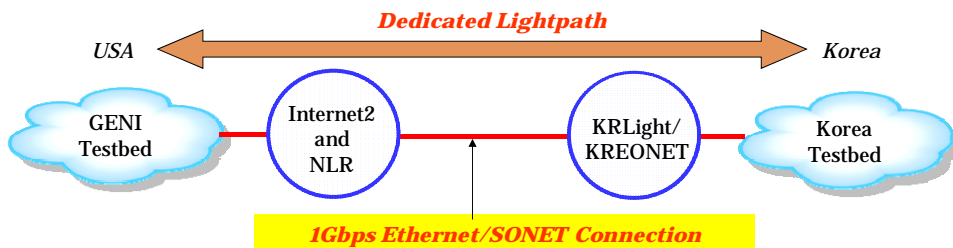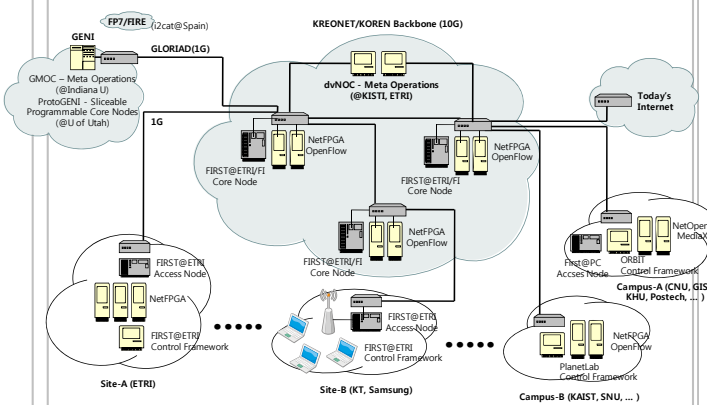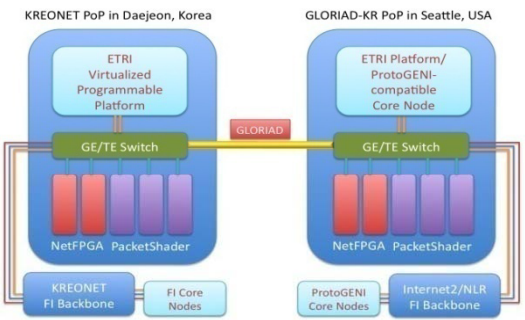

ETRI Virtualized Programmable Platform

• End-to-end slice operations on our own ATCA-based, hardware platform
• ProtoGENI compatible control framework
• Allocate Rspec to sliver and link (e.g., CPU, memory, bandwidth, etc.)
• Change Rspec during operation
• **Programming APIs for researchers**
• **Common platform interface** (e.g., Component Manager, Aggregate Manager, Slice Authority, etc.)

K-GENI (Korea – GENI Interconnection) and ETRI Platform Deployment

Dedicated Lightpath

USA ←→ *Korea*

GENI Testbed — Internet2 and NLR — KRLight/ KREONET — Korea Testbed

1Gbps Ethernet/SONET Connection

FI Node Interconnections

KREONET PoP in Daejeon, Korea — GLORIAD-KR PoP in Seattle, USA