Cloud Computing
• Provide many services via the Internet
• High electricity consumption of DCs

Live Data Center Migration
• Functions (VMs) of DC are transferred to other DCs
• Expand Live Migration technology into Wide Area
• Smart use of electricity

Live Migration of VM
• VMs are transferred to another server without stop

Problems
A) Set up network among DCs
B) Switch routes between users and DCs
Concept of Proposal Network

A) Network among DCs is set up over NGL2 network with GMPLS
B) 1. DAT via the Internet (Change destination of packet)
   2. NGL2 SW via NGL2 Network (Insert VLAN tag into frame)

Experimental Environment

① Default VLAN path setup
   (User2⇔Server1, User2⇔Server2)
② Set up VLAN path just before migration
   (Server1⇔Server2)
③ VM Live Migration
④ Notify completion of migration to DAT and Gateway NGL2 SW
⑤ Switch another route

Challenge
• Merge Intelligent Cloud Network technology

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