PJ 23: New Generation Ethernet Transport/Control Technologies

L2SC Multi ASON/GMPLS domains interworking demonstration

by Keio University
KDDI R&D Laboratories
NICT

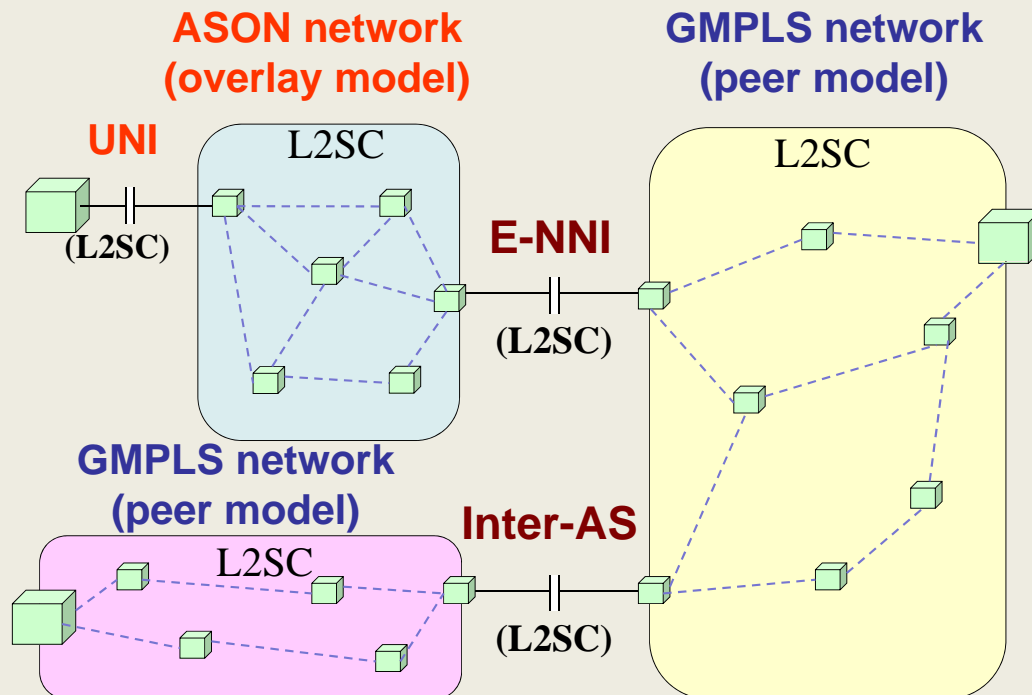## Developing
- **L2SC Multi-domain GMPLS protocols.**
  - **GMPLS controlled Ethernet Label Switching.**
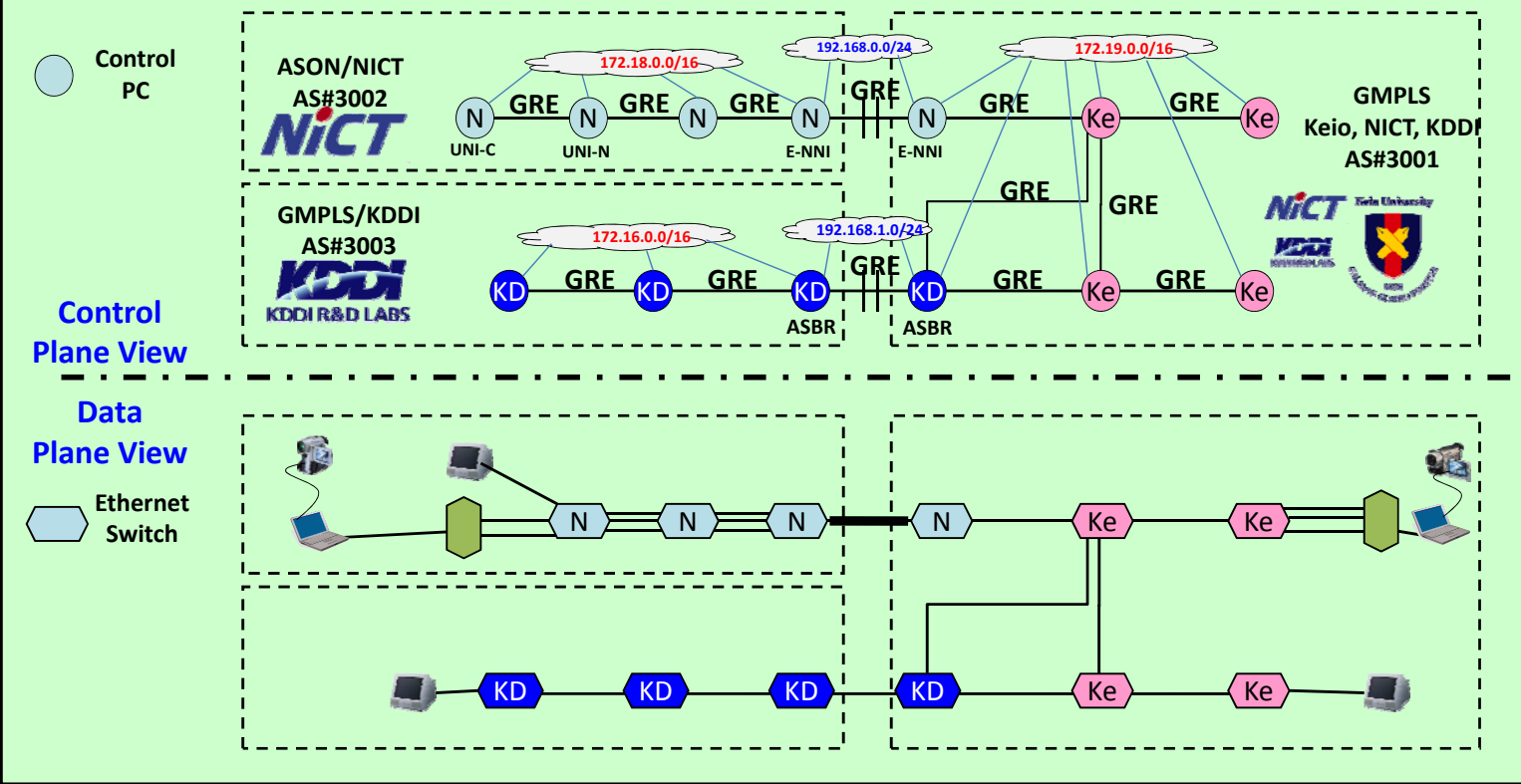 - **ASON/GMPLS network domains interworking.**

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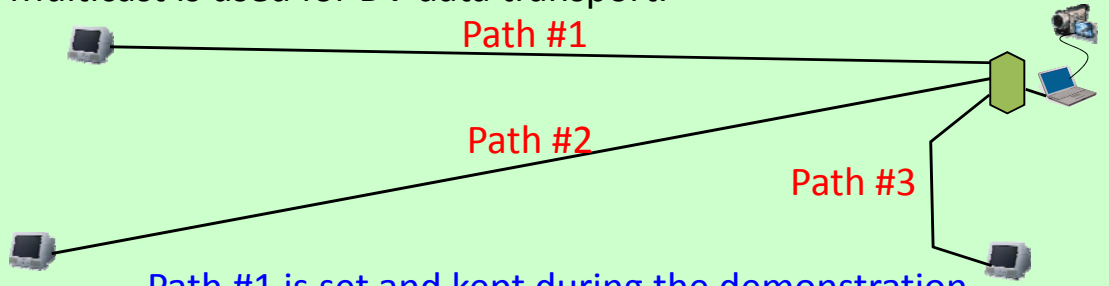
Interoperability Working Group2.0

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Demonstration Network

Control PC

ASON/NICT AS#3002
NICT

172.18.0.0/16
192.168.0.0/24
172.19.0.0/16

N — GRE — N — GRE — N — GRE — N — GRE — N — GRE — Ke — GRE — Ke
UNI-C   UNI-N   E-NNI   E-NNI

GMPLS Keio, NICT, KDDI AS#3001

GMPLS/KDDI AS#3003
KDDI R&D LABS

172.16.0.0/16
192.168.1.0/24

KD — GRE — KD — GRE — KD — GRE — KD — GRE — Ke — GRE — Ke
ASBR   ASBR

GRE   GRE

Control Plane View

Data Plane View

Ethernet Switch

N — N — N — N — Ke — Ke

KD — KD — KD — KD — Ke — Ke

Demonstration Scenario

100 Mbps BW Ethernet Paths are set among the DV camera server and receivers.
- IPv4 Multicast is used for DV data transport.

Path #1

Path #2

Path #3

- Path #1 is set and kept during the demonstration.
- Path #2 and #3 are set according to the schedule.
- Path #2' and #3' are set using common network resources of the Path #2 and Path #3.

  * If there are Path#2 and #3, Path #2' and #3' will be blocked.

Path #3'

Path #2'

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