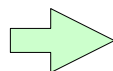


MPLS-IX - New IX Architecture -

INTEC W&G, Ikuo Nakagawa
<ikuo@intec.co.jp>

MPLS

IX



MPLS-IX

-
- IX
- LAN IX ATM IX
- MPLS IX
- MPLS
- MPLS-IX
-

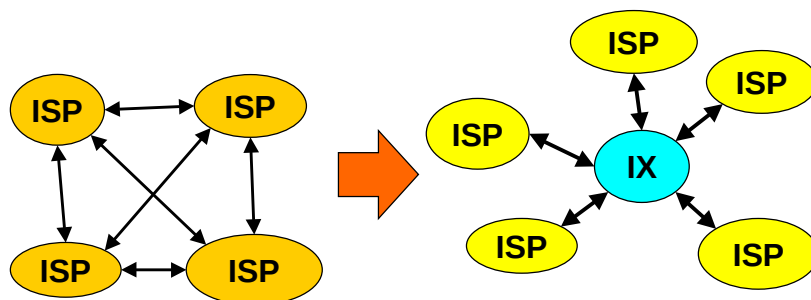
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IX - Internet eXchange

-
-
- PAIX, MAE, NAP, LINX, NSPIX, JPIX, ...



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IX

- IX
 - IX
 - IP
 - Ethernet, FDDI, GbE, ATM,
- IX
 -
 -
 -

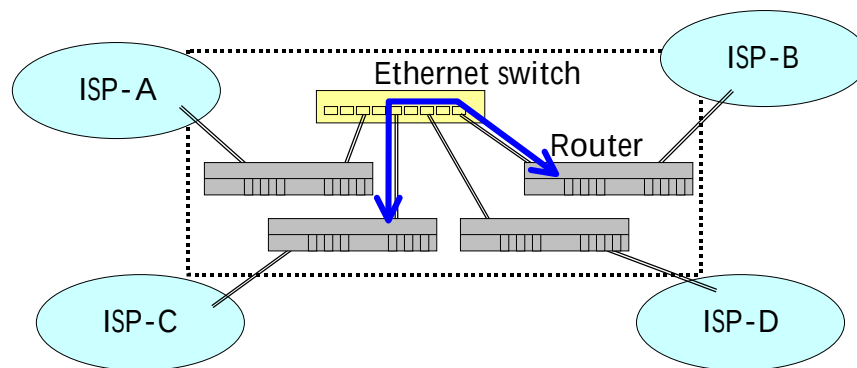
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LAN IX

- LAN
 - Ethernet FDDI



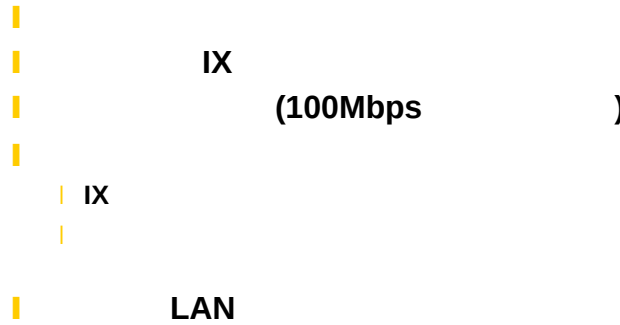
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IX (1)

■ LAN - FDDI, Ethernet, GbE, ...



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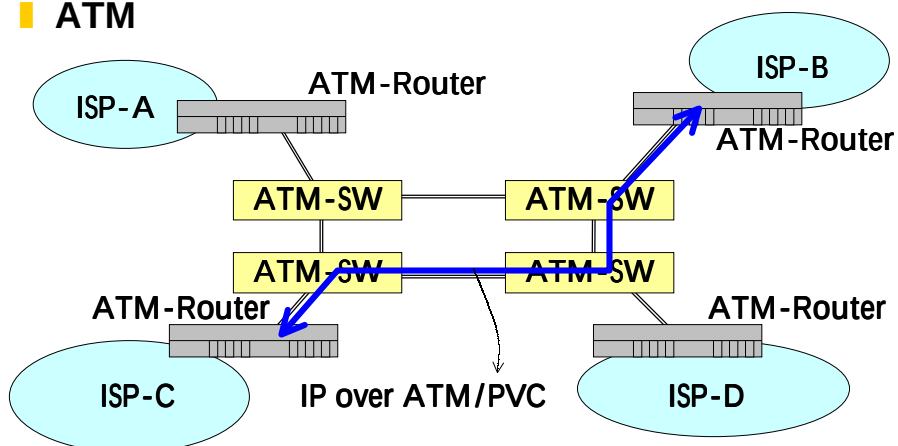
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ATM IX

■ ATM/PVC

■ ATM



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IX (2)

■ ATM - PVC based IXes

- ATM (Cell Tax)
- (POS)
- PVC
 - ATM-SW
 - or
- ATM
 - ATM ATM

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IX

- ...
 - Ethernet ATM
 - POS
 - ATM ...
OC-192 POS
 - IX

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IX



IX



PVC

bilateral

Using **MPLS** technology

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MPLS

■ Multi-Protocol Label Switching



IETF



■ LSP(Label Switched Path)



(L2)



(L3)



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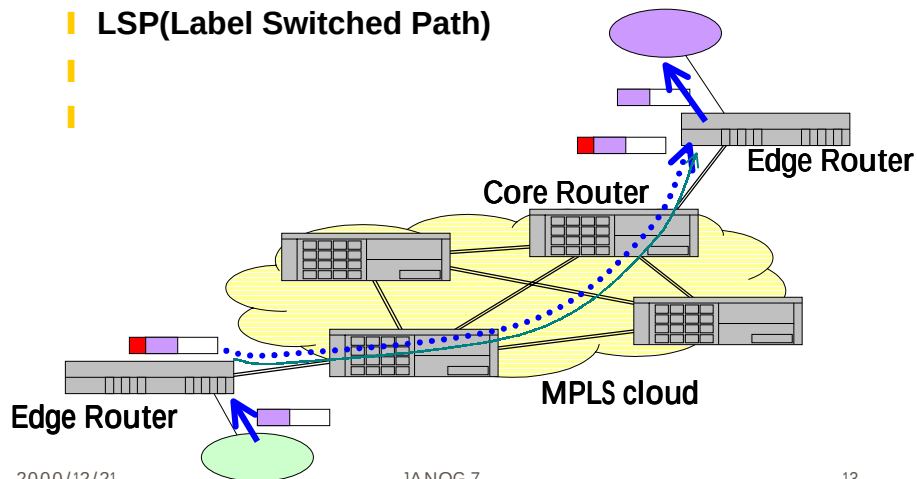
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MPLS

Multi-Protocol Label Switching

LSP(Label Switched Path)



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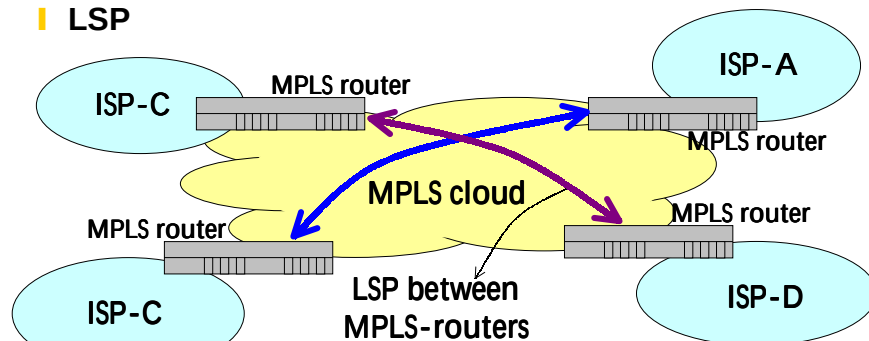
MPLS-IX

LSP(Label Switched Path)

LDP(Label Distribution Protocol) LSP

LSP BGP4

LSP



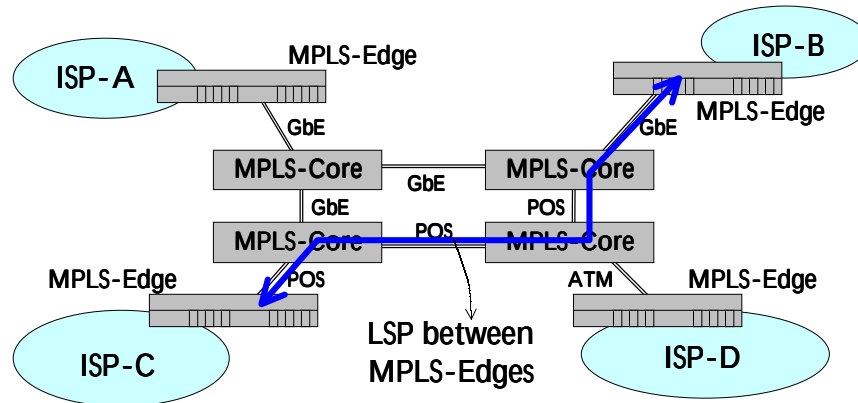
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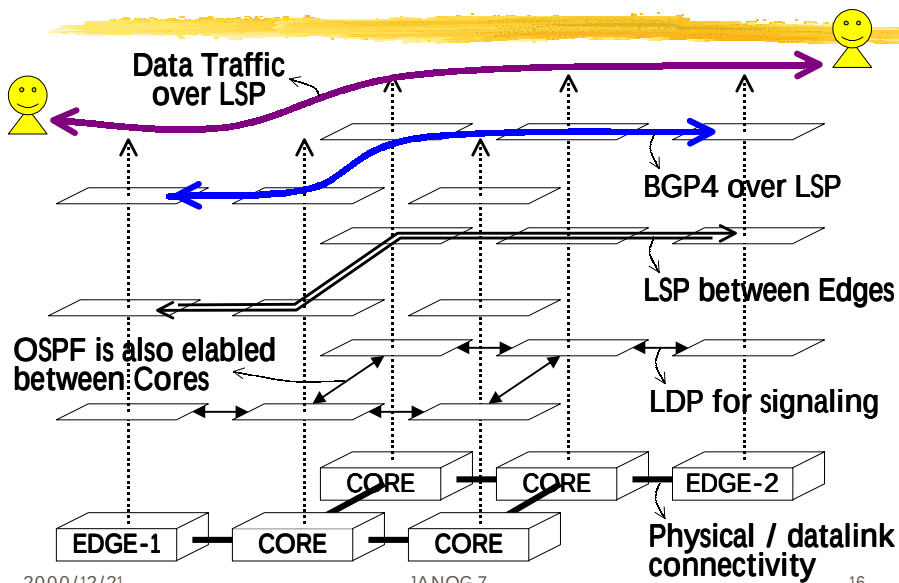
14

MPLS IX

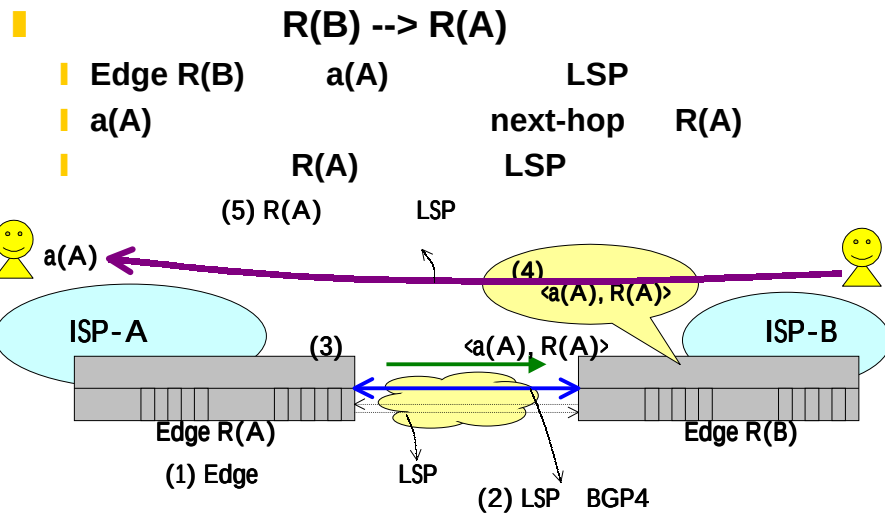
LSP(Label Switched Path)



MPLS-IX architecture

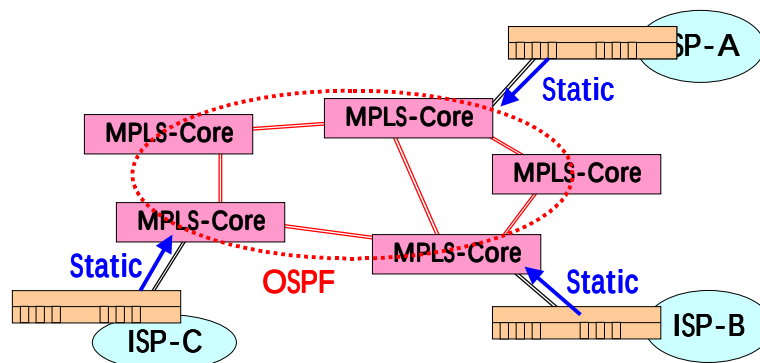


LSP



MPLS-IX

- MPLS
- ISP (Edge)
- Core OSPF



MPLS-IX

- - POS, ATM, GbE, FDDI, PPP
 - OC-192 POS
 -
- IX
 - Core-Core POS
 - ISP POS / ATM
 - ISP

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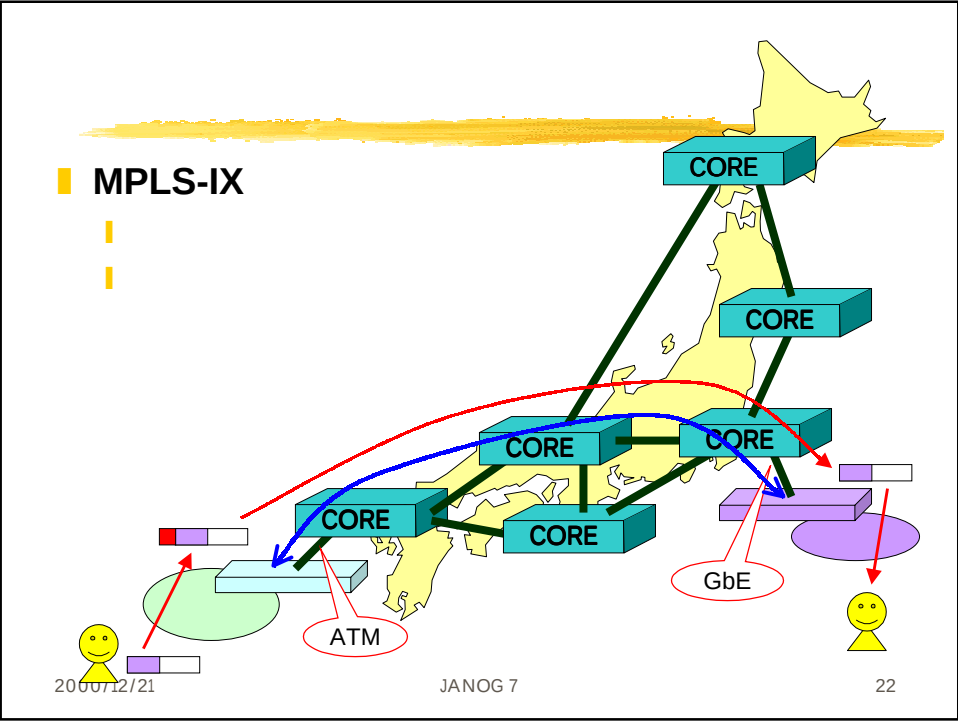
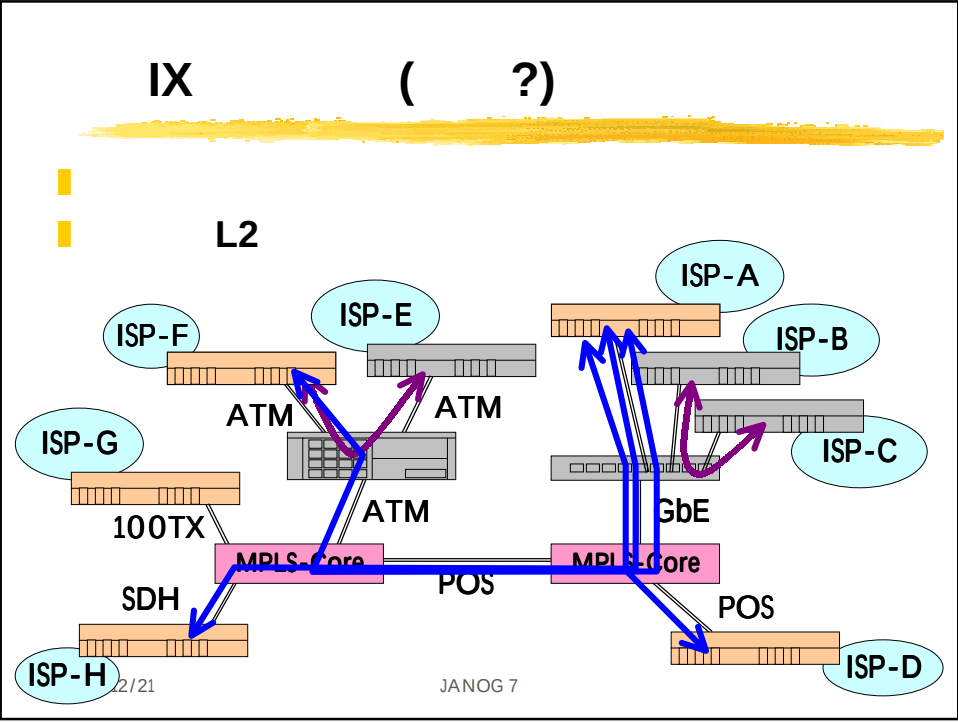
MPLS-IX

- - MPLS IP
 - IX
 -
- - Core
 - Edge peer BGP4

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MPLS-IX

■ MPLS

■

■ QoS/CoS - DiffServ

■ MPLS Domain

■

■

■

■ etc...

IX

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■

■

■

MPLS

■

...

■

■

■ RIBB

MPLS-IX

■

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Notes



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