

JPIX “Updates”

Japan Internet Exchange Co., Ltd.



Establishment of JPIX in July 1997

- ◆ Necessity of **commercial IX**
 - Joint venture invested by major ISPs in Japan

- ◆ To provide reliable interconnection Environment
 - **24H / 365days** monitoring and operation
 - Collocation service

- ◆ To provide value added services
 - Statistics for customer traffic
 - Route Server/Route Registry(Routing Confirmation)
 - Route Server (Automated Peering System)
 - NTP Server

Main Services by JPIX

◆ IX ports

- 10Gigabit Ethernet port (10Gbps)
- Gigabit Ethernet port (1Gbps)
- Fast Ethernet port (100Mbps)
- Link Aggregation (GbE)

◆ Remote access

ATM, FE, GbE, Dark Fiber

◆ Collocation Service

To provide a full rack for customer ISPs routers

◆ In-house cabling

IPv6-IX Experimental Service

◆ History

- Experimental service since Jan, 2002

◆ Service Conditions

- Port Charge: free
- For JPIX customers only
- Port I/F: Fast Ethernet
- IPv6 IP address: assigned by APNIC
- SW location: KDDI Otemachi
- Stand alone: not dual stacked

◆ No. of customer ISPs connected : 16

Optional Service (Free of Charge of course)

- ◆ Route Confirmation Service
 - provides route comparison with IRR database
- ◆ Route Server for Exchanging the routes
 - provides routes that connects to RS automatically
 - Free of charge
 - no need of peer negotiation
- ◆ NTP Server(Stratum1) connection
- ◆ Net News Server
- ◆ Snmp traffic counter measure for each customer
- ◆ sFlow traffic analysis page for customer

Expansion of JPIX

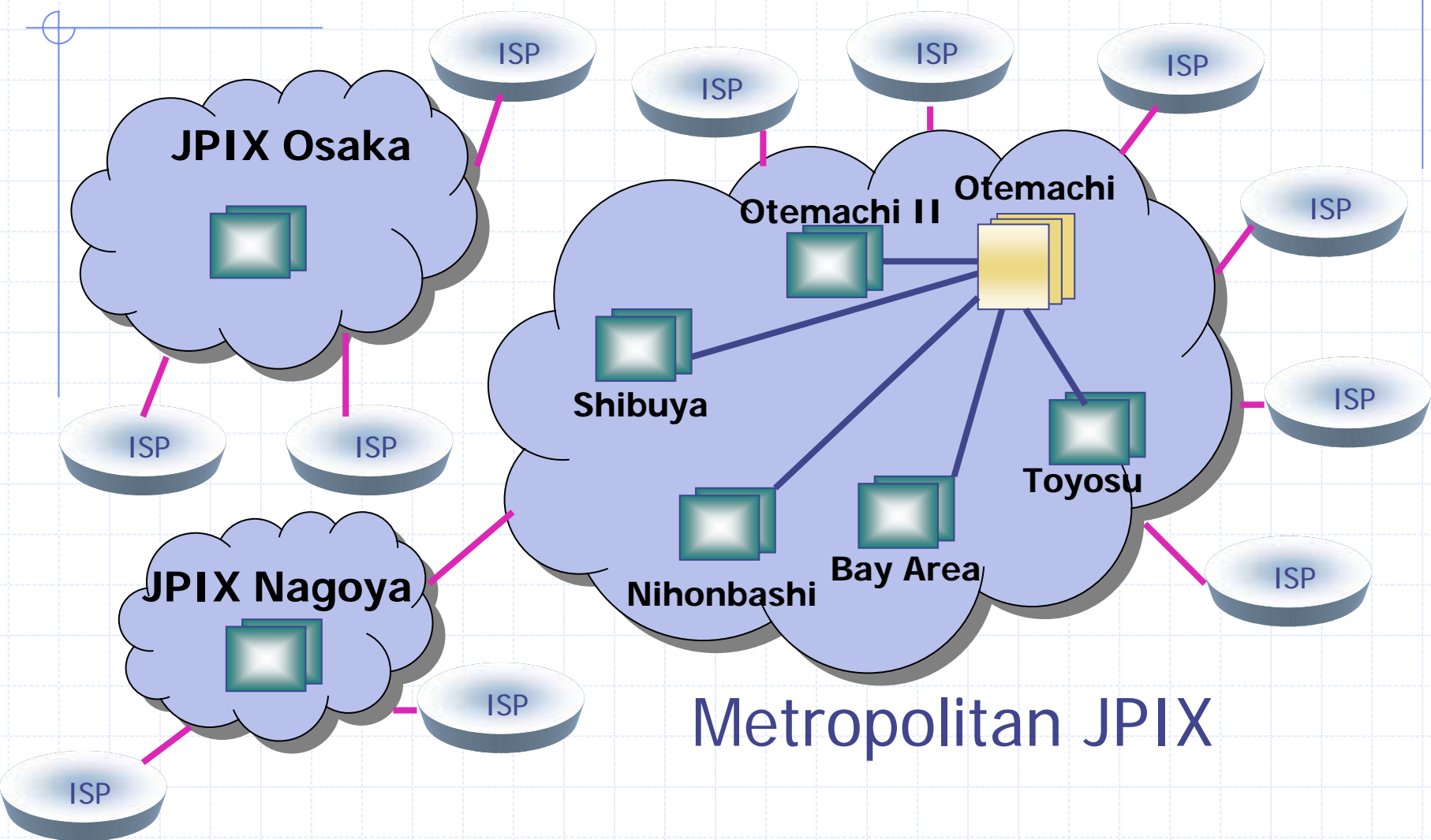
◆ Metropolitan JPIX

- To install IX switches in metropolitan area as distributed Ixs
- JPIX Otemachi (MainSite): from July, 1997
- JPIX BayArea: from December, 2000
- JPIX Otemachi II: from November, 2001
- JPIX Toyosu: from May, 2002
- JPIX Shibuya: from July, 2002
- JPIX Nihonbashi: from April, 2004

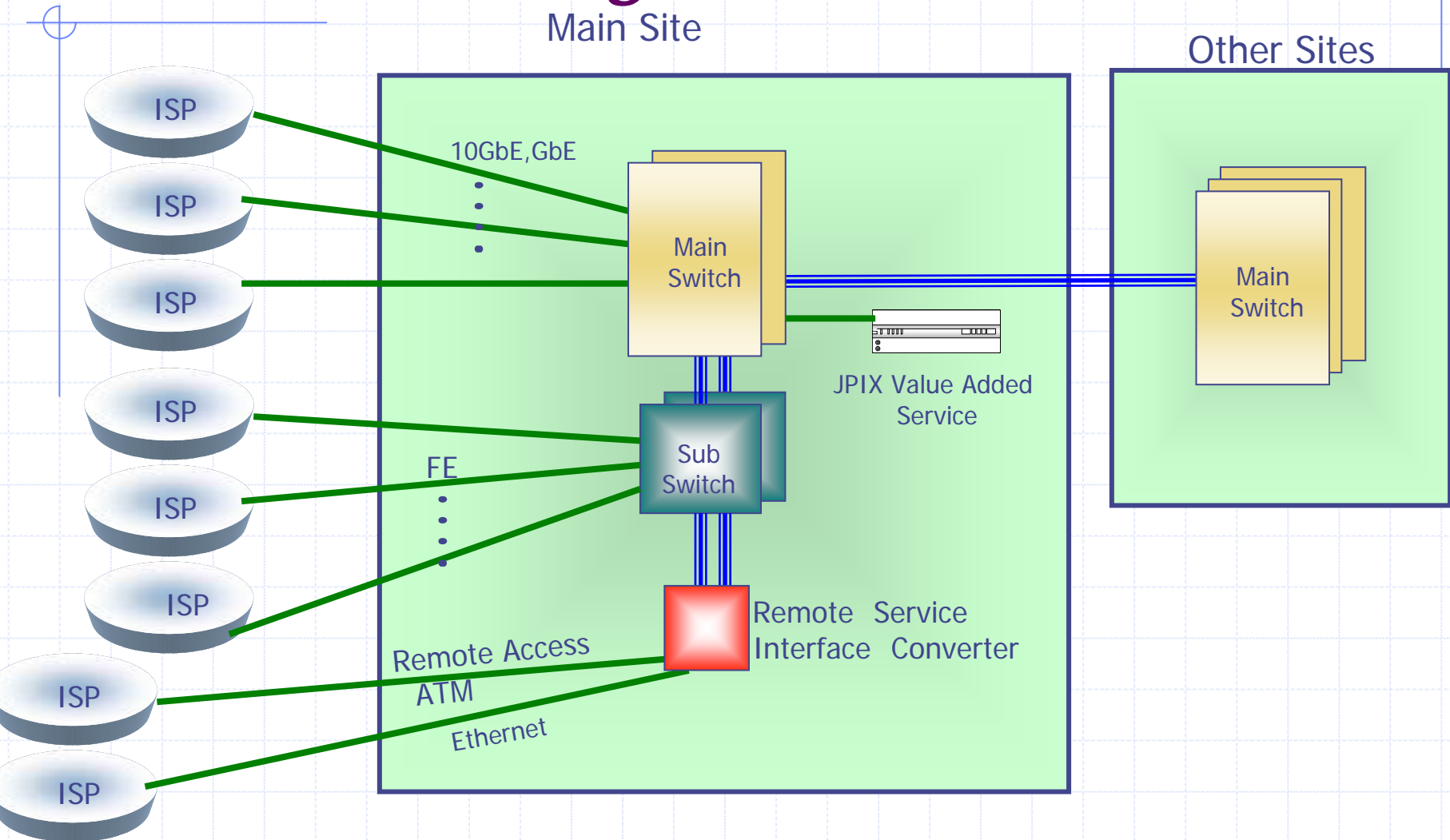
◆ Regional JPIX

- To install a local IX switch and/or a circuit concentrator connected to Metropolitan JPIX
- JPIX Nagoya: from April, 2001
- JPIX Osaka: from April, 2002

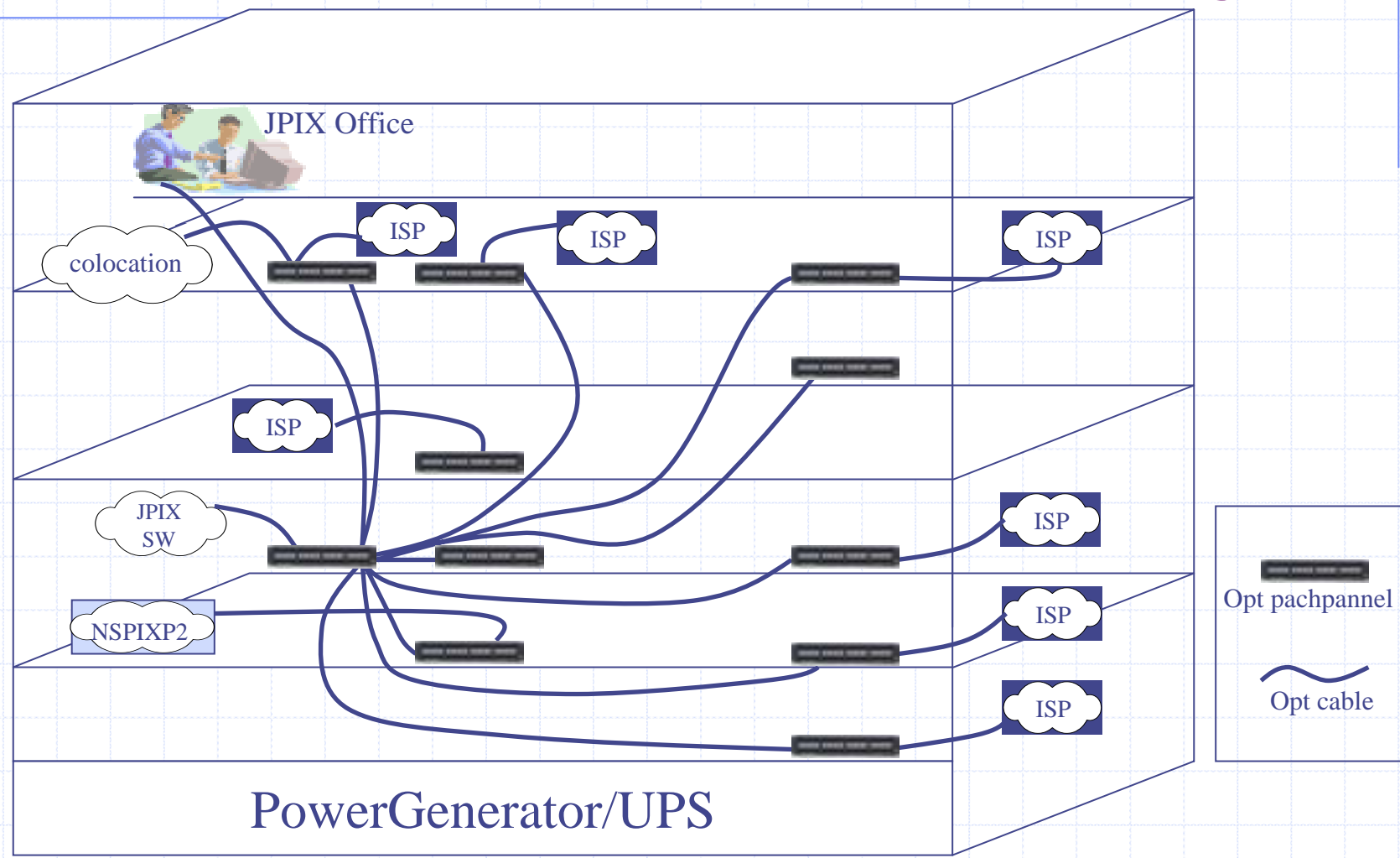
Expansion of JPIX



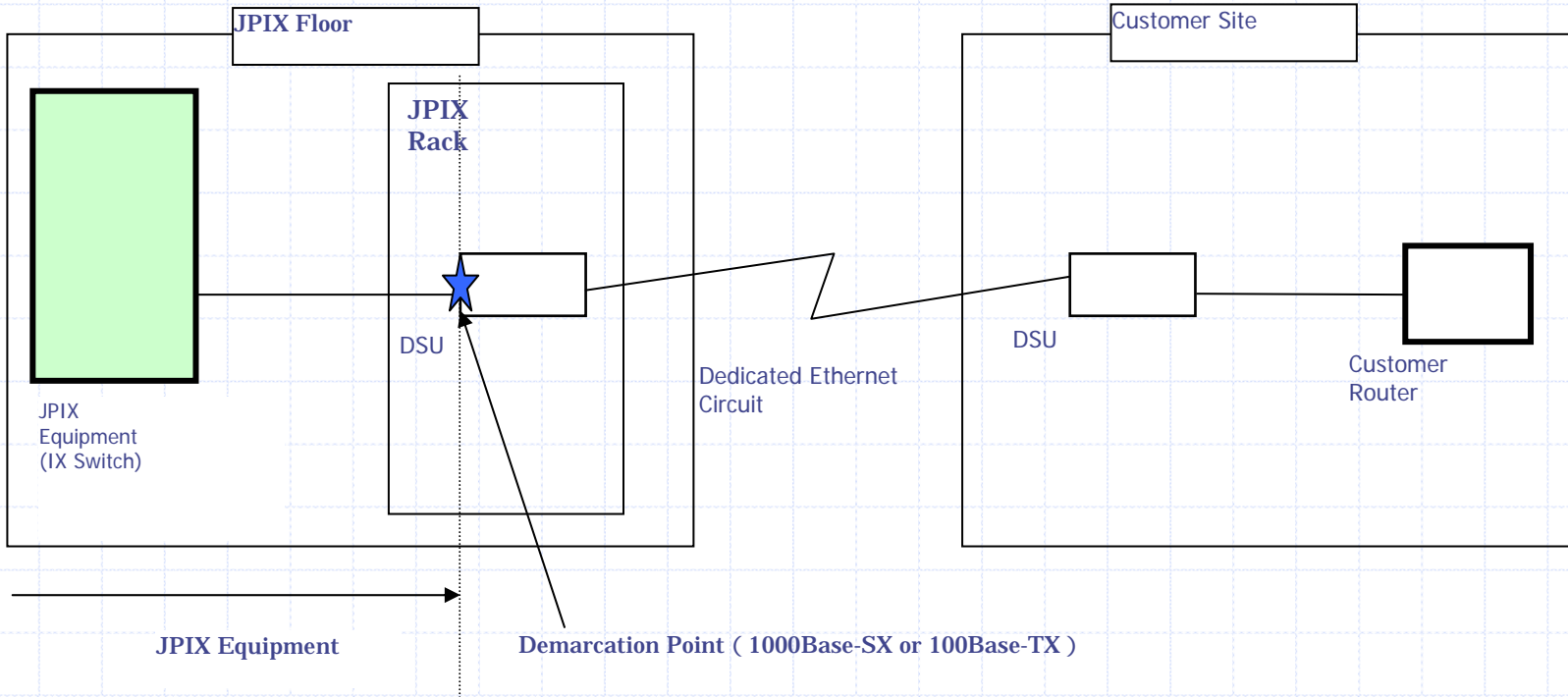
Network Configuration



JPIX Otemachi (KDDI Otemachi Bldg.)



Remote Connection Diagram (1000Base-SX or 100Base-TX)



Switching capacity

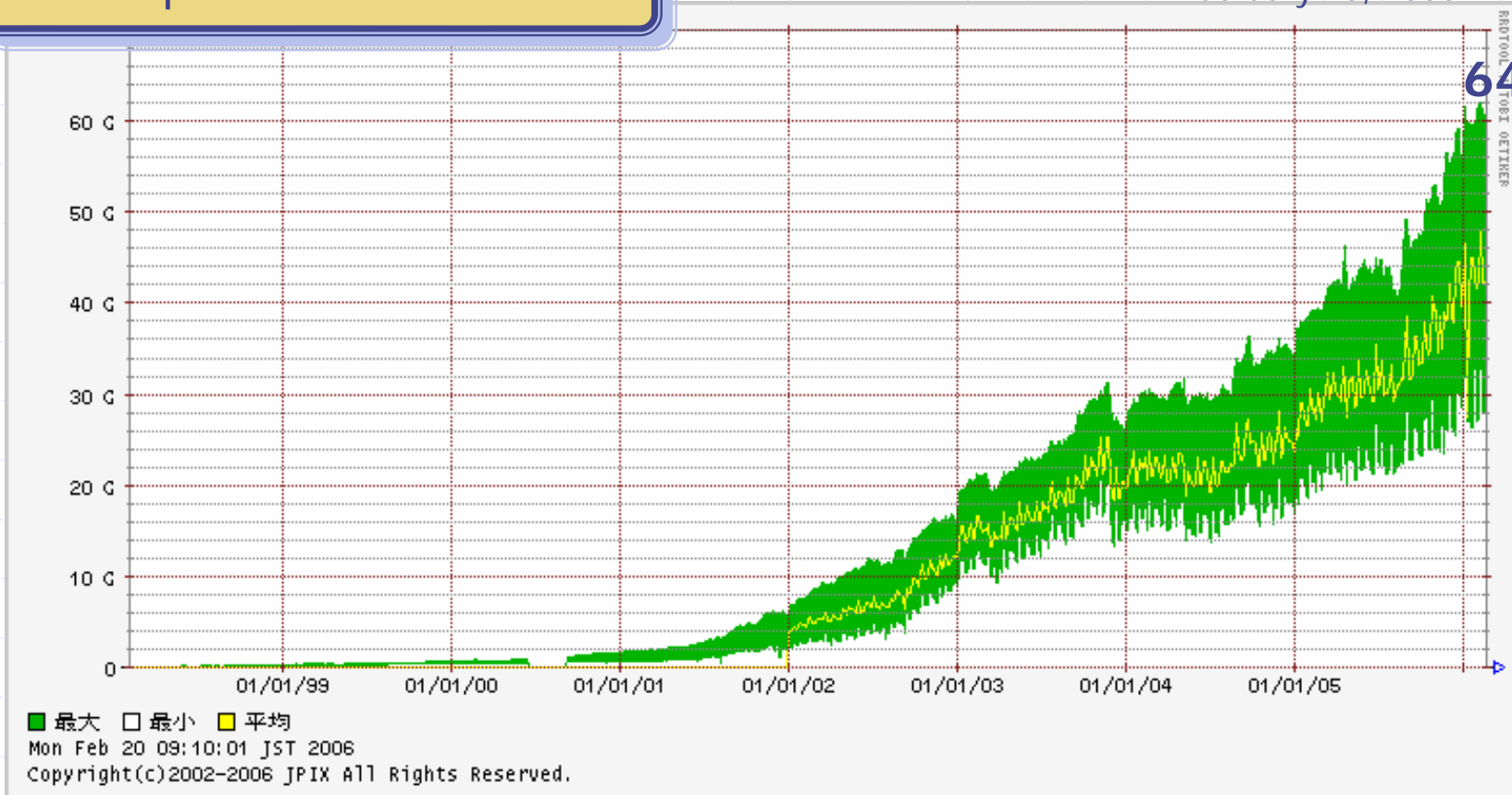
- ◆ To handle very rapidly growing Broadband traffic we are offering 10GbE port since Sept. 2003.
- ◆ Aggregate switching fabric throughput of 1.68 Tbits/s.



Traffic Volume

IX backplane Max/Min Traffic

February 20, 2006

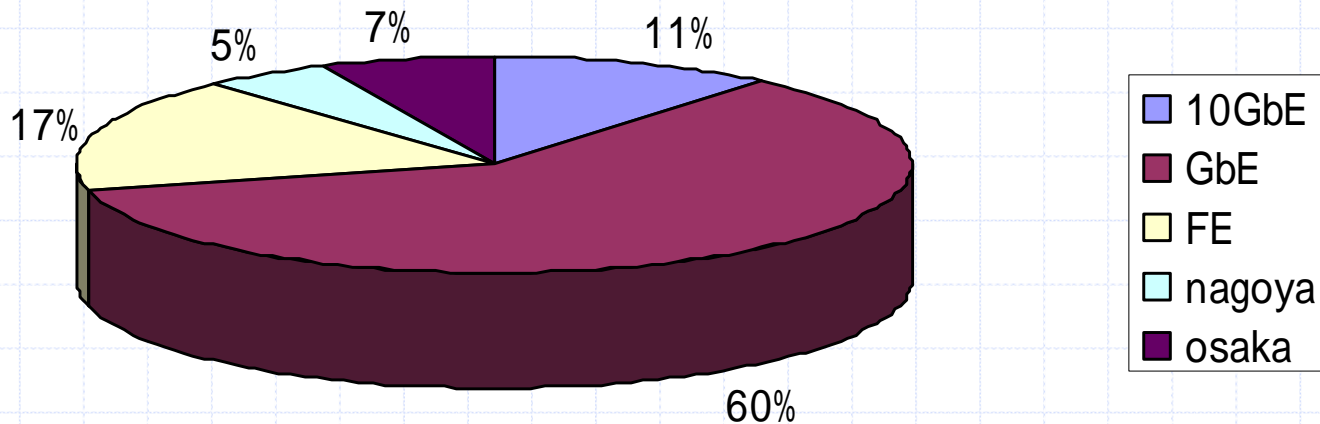


JPIX customers and ports

(mid of Jan. 2006)

◆ No. of customer ISPs : 109

JPIX Port Ratio



Thank you

jp**ix**

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