

JPNAP Update

Feb. 2004

Internet Multifeed Co.

ishii@mfeed.ad.jp

Toshinori Ishii

All communication flows through here.

全てのコミュニケーションはここを通る



JPNAP service overview

- A commercial Internet Exchange service in JAPAN operated by Internet Multifeed
- JaPan Network Access Point
<http://www.jpnap.net/english/index.html>
- History
 - Jan. 2001 in Tokyo (trial)
 - May 2001 in Tokyo (**JPNAP**)
 - Jan. 2002 in Osaka (**JPNAP Osaka**)
 - Jun. 2002 in Tokyo IPv6 (**JPNAP6**)
 - Jan. 2003 in Tokyo supporting **10GE**, and
 - Nov. 2003 in Osaka supporting **10GE**
- Directly connected to iDC named "Multifeed"

All communication flows through here.

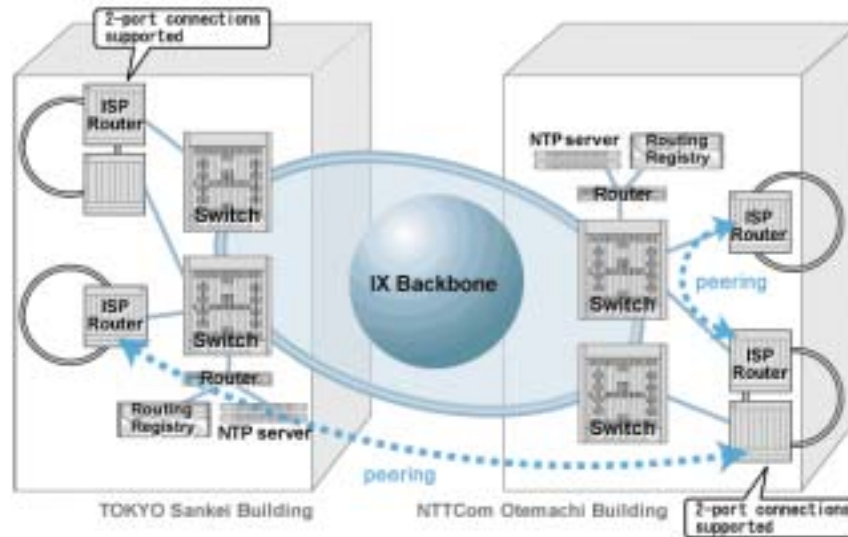
全てのコミュニケーションはここを通る

(c) INTERNET MULTIFEED CO.



JPNAP service overview

- Ethernet based Layer2 IX
- Distributed IX service
 - Interconnecting distributed two sites
 - Providing the same service at both sites



All communication flows through here.

全てのコミュニケーションはここを通る

(c) INTERNET MULTIFEED CO.

JPNAP 10G Service

- JPNAP provides 10GE Interface
 - The first commercial 10G IX in Japan since Jan 2003
 - 10GBase-LR only
 - Number of customers are increasing
 - OCN
 - IIJ
 - NTT PC Communications
 - NECand more..
- Many customers are interested in JPNAP 10G service.
- JPNAP Osaka 10G is now available

All communication flows through here.

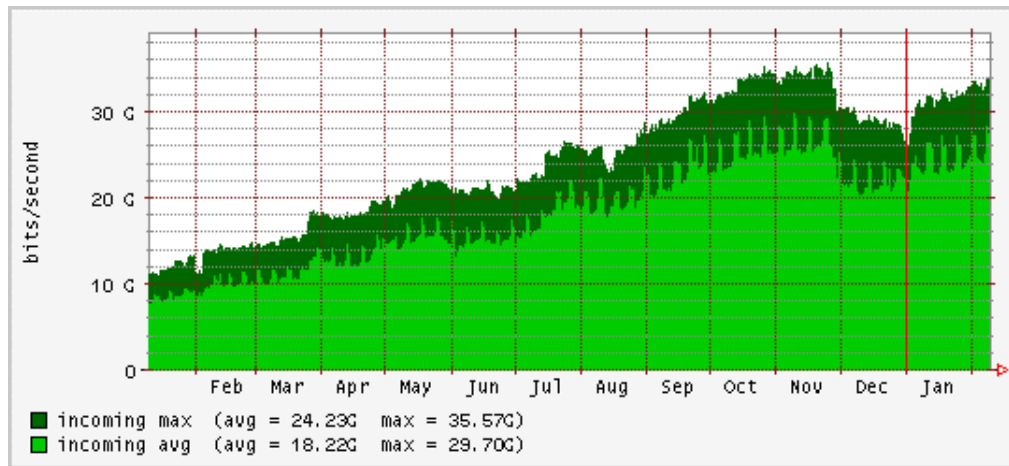
全てのコミュニケーションはここを通る

(c) INTERNET MULTIFEED CO.



JPNAP traffic trend in Tokyo

- Started commercial service in May 2001
- The traffic volume has been increased rapidly
- Major ISPs send/receive more than 5Gbps peak traffic



<- 35.5Gbps peak

Total traffic of JPNAP

All communication flows through here.

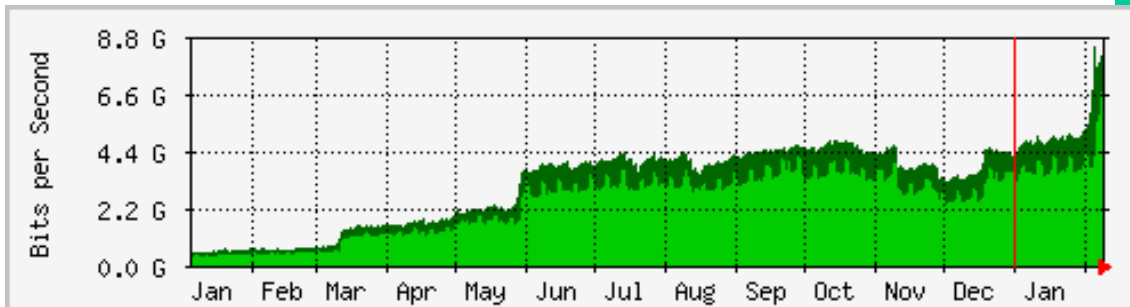
全てのコミュニケーションはここを通る

(c) INTERNET MULTIFEED CO.



JPNAP Osaka

- Since Jan 2002
- Not connected with JPNAP at Tokyo
 - Redundancy in case of disaster in Tokyo area
 - Hot-potato routing using JPNAP and JPNAP Osaka
- The traffic volume has been increased
- Osaka also supports 10G IF



Osaka Traffic

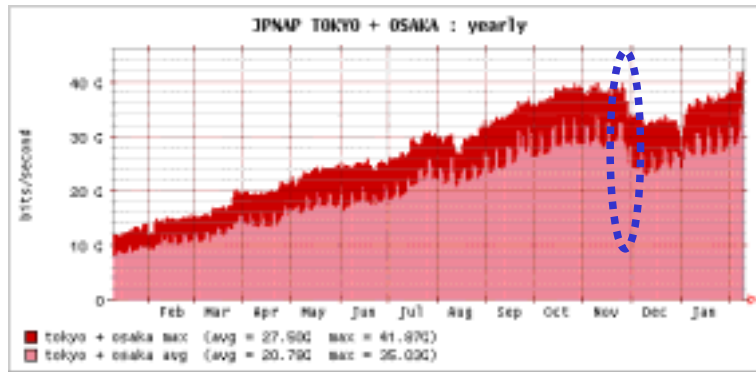
All communication flows through here.

全てのコミュニケーションはここを通る



Recent traffic movement

- Peak traffic of JPNAP Osaka is growing as well as Tokyo
- Two P2P users were arrested on copyright piracy by Japanese police
 - They used same P2P software named Winny.
 - Peak traffic was reduced by 6Gbps from that day.



< Winny shock
27 Nov.

Total traffic of JPNAP (Tokyo + Osaka)

All communication flows through here.

全てのコミュニケーションはここを通る

(c) INTERNET MULTIFEED CO.



JPNAP6 (in Tokyo)

- IX service supporting IPv6
- Not dual stacked
- Since Jun 2002
- Customers
 - OCN,NTT/VERIO
 - IIJ
 - DTI
 - BIGLOBE
 - MEX
 - XePhion/WAKWAKand more..

All communication flows through here.

全てのコミュニケーションはここを通る

(c) INTERNET MULTIFEED CO.



JPNAP Users' Meeting

- Closed meeting for JPNAP users
- Every 4 months
- The past topic
 - 10GE Users Panel
 - Specification of 10 Gigabit Ethernet IEEE802.3ae
 - Introduction of WDM equipmentetc...
(We are looking for the next topics ;-)
- Have a social gathering after the meeting

Internet Multifeed Co.

- A Data Center company in JAPAN
 - Established in Sep. 1997
 - Joint venture of IJ, NTT, Japanese major ISPs and ICPs
- “Multifeed” concept
 - Direct broadband connection to the backbone of major ISPs
 - The best place for delivering content to the Internet
- “JPNAP” the Internet Exchange service
 - Launched in Jan. 2001

All communication flows through here.

全てのコミュニケーションはここを通る

(c) INTERNET MULTIFEED CO.

