BBIX Update

APNIC SIG-IX

BBIX, Inc.

Masaru AKAI [akai@bbix.net]

― Ver.1.0 ―

Introduction

In current Japanese Internet Environment, Data traffic heavily relies on Tokyo. On the other hand, Age of Broadband requires High quality traffic management for IP Telephony, streaming contents, online games and such.

BBIX has started Internet Exchange Service for each region of Japan to provide high quality traffic management for ISPs, CSPs, and ASPs.

Open Policy：
・BBIX is Carrier Free IX
・Any Organization that acquired Global AS number is welcomed at BBIX

About 500km

About 350km

About 200km

About 300km

Importance of regional decentralization
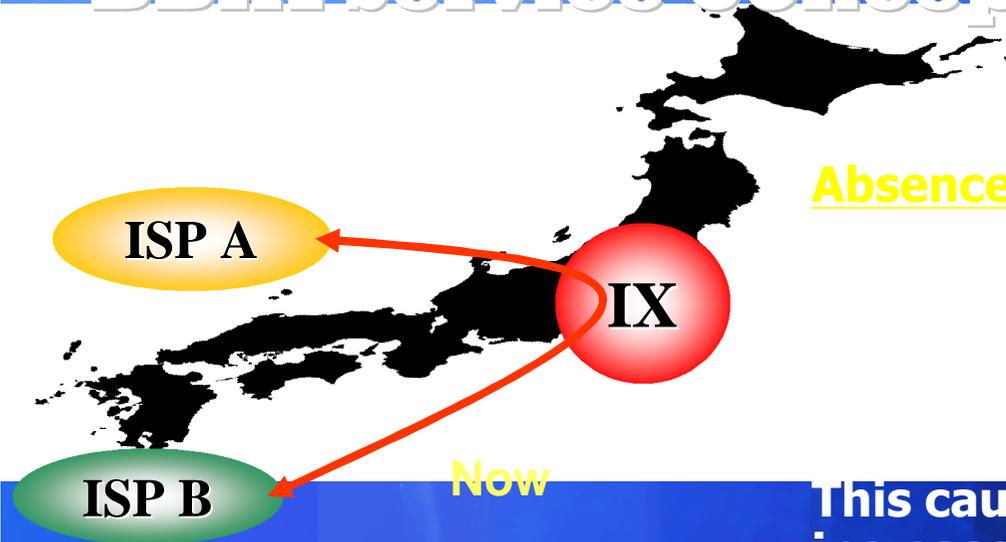
"Transmit Window Size" influences TCP performance.

- Round trip time becomes long according to becoming if the delay grows, and the throughput of TCP deteriorates.
  - In SoftbankBB, Tokyo<-->Fukuoka is about 20ms.
  - It is disadvantageous though bandwidth is used completely.

Regulations of IP Phone

- Japanese government adopted R value as a standard by which a special number of the IP telephone that starts from "050" is allocated to the telecommunications provider in 2002.
- About R value: These parameters necessary for the calculation are defined with G.107 that ITU-T recommends. R value shows the voice quality of end-to-end from the signaling terminal to the receiving terminal by the numerical value to 0-100. One with a large numerical value means the high quality.
  - If R value less than 50 (or delay limit 400ms), cannot provide IP phone.
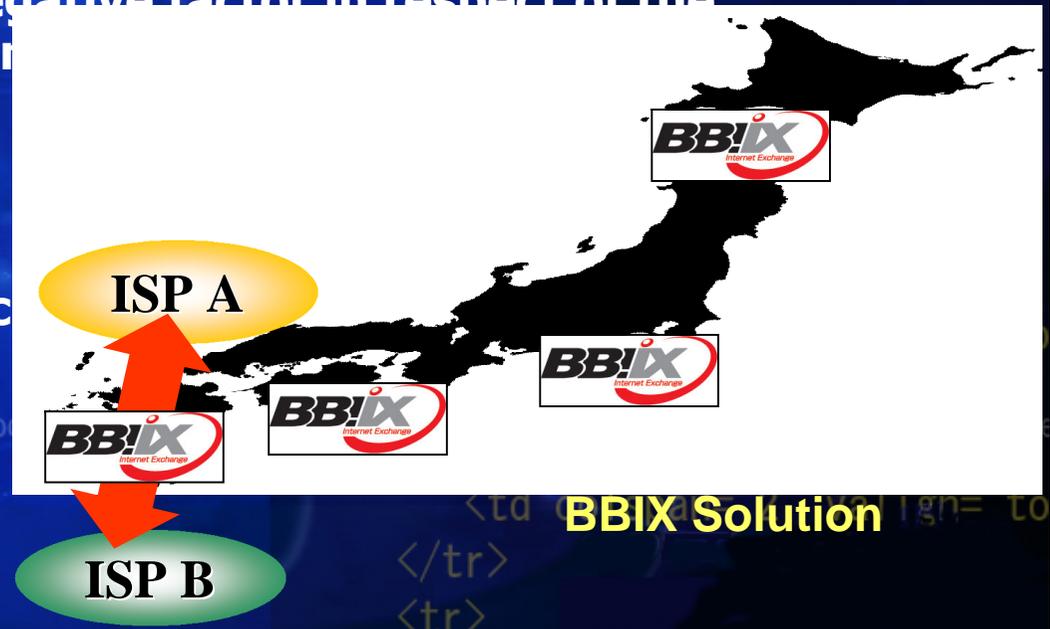
BBIX Service Concept

ISP A

IX

ISP B

Now

Absence of traffic exchange point in region

…t is ISP in the same region, The IX …tween ISP and each high rank ISP …entrated on Tokyo.

This causes unnecessary traffic to be increased in the backbone of Japan, it's a negative factor in respect of the cor…

Regional decentralization

Abolish over-concentration traffic on Tokyo and to achieve the traffic exchange in each region,
BBIX develops IX with nationwide various places.

ISP A

ISP B

BBIX Solution

Three site of BBIX Tokyo

Two base decentralization in BBIX Tokyo

It operates it in two base（Otemach and Nihonbashi）.
Even if it is a different base traffic can be exchanged in BBIX Tokyo

The IX service of BBIX Tokyo is provided in Equinix Tokyo IBX

Customers colocating within the Equinix TokyoIBX
will be able to acquire BBIX's IX Connect Service
through the Equinix Exchange service.
U.S. and Asia-Pacific companies colocating at Equinis's date center
will be able to directly access a significant portion of the Japanese
broadband end-user market via the Yahoo!BB Service's broadband
network provided by BB Technology.
In addition, by utilizing the IX Connect Service users will be able to
establish peering with other participants at BBIX Tokyo.

Feature of BBIX Services

For IX Connect Service Subscribers

BBIX guarantees Unconditional Peering with BB Technology/AS 17676*1 (No.1 Broadband Service Provider in Japan)
Meaning, BBIX will provide environment to directly exchange traffic with nearly 5 million Broadband Users in Japan.

*1 Subscriber for BB Technology Transit service will not be subject of unconditional peering

Benefits of Link Aggregate Service

With recent explosive increase of Internet Traffic, it is highly probable that Single Gigabit Ethernet Port could not hold the traffic.
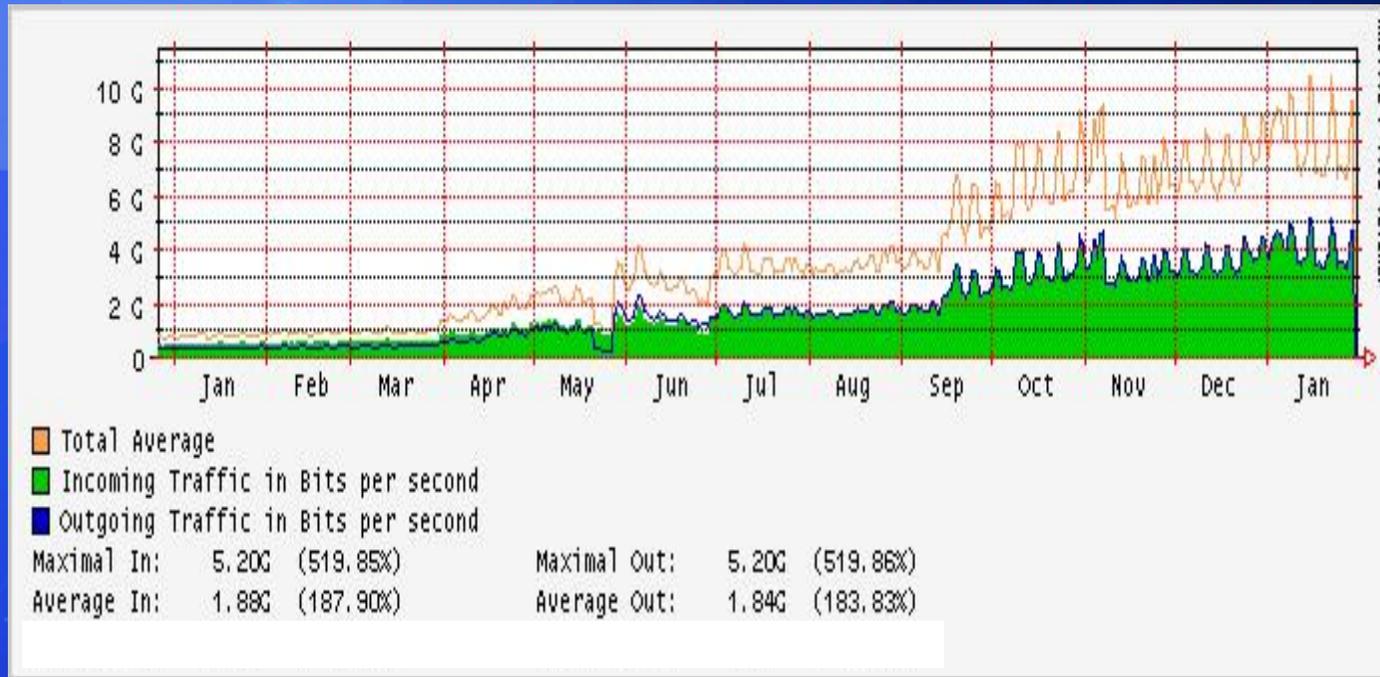Simple addition of circuit will increase Router and Circuit Cost and resulting harder traffic control.
At this time and point BBIX believe upgrading to 10 Gigabit Ethernet will be rarely effective considering the cost.
Link Aggregate Service can provide 2-8Gbps bandwidth depending the real traffic and provide high TCO.

BBIX Tokyo Traffic

Yearly Graph (1 Day Average)

BBIX Location

BBIX Tokyo(Otemachi & Nihonbashi & Heiwajima)

-NTT Data Otemachi Building B1F

-Global Access Com Space 1 2F

-Equinix Tokyo IBX

BBIX Osaka

-NTT Data Dojima Building 11F

BBIX Nagoya

-KDDI Nagoya 4F

BBIX Sendai

-Meiji Seimei Sendai Itsutsubashi Building 7F

BBIX Fukuoka

-Meinohama Denki Building 7F

BBIX Sapporo / BBIX Hiroshima etc..(**Under Consideration**)

Questions?

If you have any questions,
Please mail us!
sales@bbix.net

Thank you!