KRNIC UPDATE

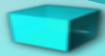## AUG 28, 2012

YOUNGSUN LA (rays@kisa.or.kr)

Contents

KRNIC Resource Status

IPv6 Related Activities

KRNIC Resource Status

KISA

# of IPv4s	112 M
# of IPv6s	5,223 × /32
# of ASNs	1,015
# of ISPs	122

v6webmaster@kisa.or.kr

IPv6 Related Activities

1   2012 KOREA IPv6 Day

2   Education and Consulting

3   Mutual Cooperation

4   IPv6 Exchange Point Operation

5   IPv6 Deployment Index

2012 Korea IPv6 Day

Korea IPv6 Day is an event to promote IPv6 in Korea, and
to share IPv6 experience with others

Overview

⬤ Time : May 31, 2012

⬤ Participants : ISPs, Portals, Contents Providers, Manufactures(22 org. participated)

	Participation Contents
ISP	o **Provide partial IPv6 network and IPv6 users**
Contents Provider	o **IPv6 accessible contents**
Manufacture	o **IPv6 ready equipment**

4

2012 Korea IPv6 Day

IPv6 Traffic

6NGIX

2012 Korea IPv6 Day
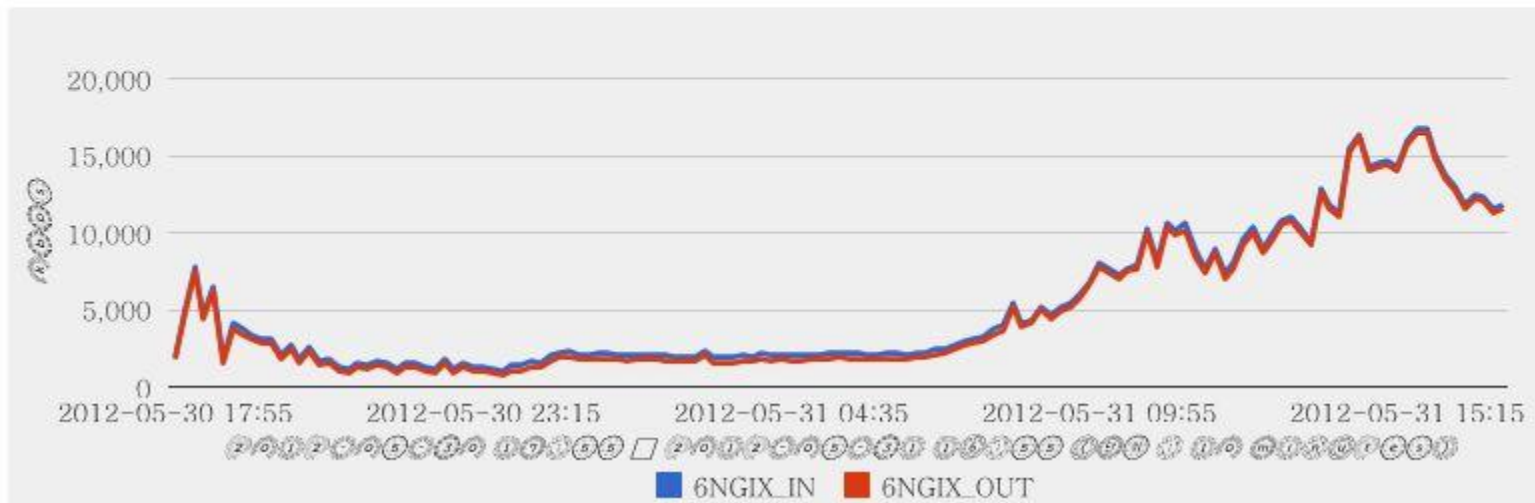
Participating Site List

> Service Provider(Portals, CP, etc.)

Web site	DNS Setting (AAAA)	IPv6 Connection	IPv4 Connection
www.daum.net	ok	ok	ok
www.naver.com	ok	ok	ok
www.vsix.kr	ok	ok	ok
www.kisa.or.kr	ok	ok	ok
www.gnj.kr	ok	ok	ok
www.newsen.com	ok	ok	ok
ydfc.com	ok	ok	ok
aniframe.com	ok	ok	ok

IPv6 Educations

- **Provided different levels of IPv6 education**

General Education	Visit and Educate (1day)	For executives and staffs of small companies and organizations
	IPv6 General Education (1day)	For executives and staffs of small companies and organizations
Special Education	IPv6 Strategy Plan (1day)	For CTOs and IT Planners
	IPv6 Network Management (3day)	For Network managers
	IPv6 S/W development (2day)	For S/W developers
	IPv6 Server Management (2day)	For server managers

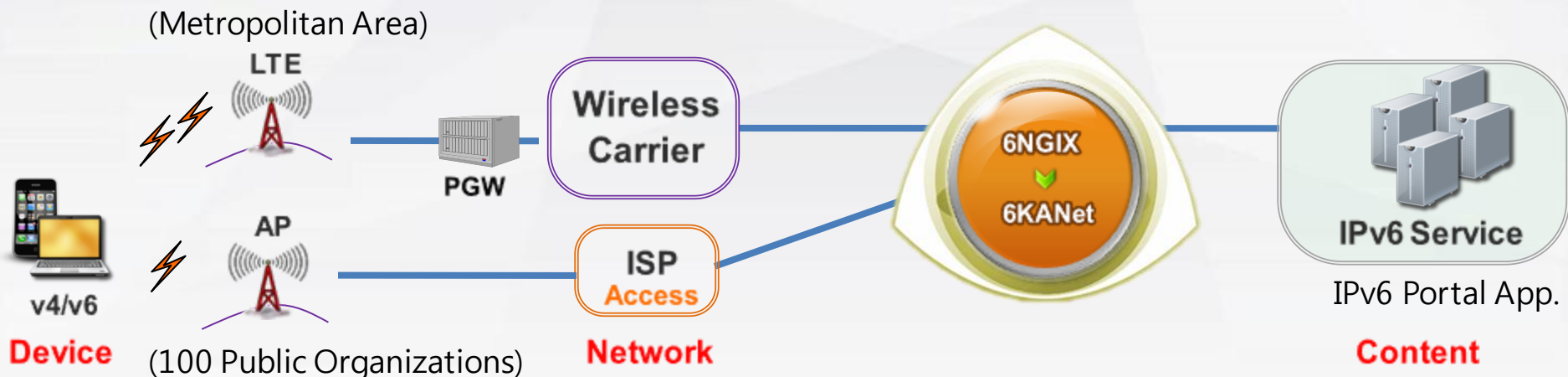So far we educated 2,500 executives and staffs.(from 2008)

7

We provide consulting service since 2011.

If requested, experts visited the company and analyzed their network.

We provided detailed guideline to change their network to IPv4/IPv6 network.

Last year, we consulted 10 organizations.

Collaboration project with SKT

(Metropolitan Area)

LTE

Wireless Carrier

PGW

AP

ISP
Access

6NGIX

6KANet

IPv6 Service

IPv6 Portal App.

v4/v6

Device

(100 Public Organizations)

Network

Content

Set up IPv6 Infrastructure on LTE and WiFi, we will select particular region,

not the whole country.

We will test IPv6 capable device and IPv6 contents

Expected result:

IPv6 contents can be accessed through LTE with mobile device.

9

Collaboration project with web hosting company

- **Setting IPv6 Infrastructure on one of web hosting providers in Korea**

  - We are asking the company to set up IPv6 service facilities

  - We are asking more than 50 IPv6 accessible web pages and DNS settings

  - We are asking for a guideline to share their experiences with other web

    hosting companies

Expected Result:

- We will have IPv6 accessible web pages, and facility

- IPv6 experienced staffs will be trained

- a guideline for other web hosting will be published

10

IPv6 Internet Exchange

- **6NGIX provides IPv6 exchange point for major ISP in Korea and overseas.**

  - Hurricane Electric(US), BT(UK), HINET(TW), KT, SKT, LGU+ etc.

  - 26 members

  (* 6NGIX : IP<u>v6</u> <u>N</u>ext <u>G</u>eneration <u>I</u>nternet e<u>X</u>change)

- **6KANET provides IPv6 connectivity to local organizations**

  - 30 organizations are connected

  (* 6KANET : IP<u>v6</u> <u>K</u>orea <u>A</u>dvanced <u>NET</u>work)

- Method : Tunneling, Leased Line

IPv6 Deployment Index(draft)

	Readiness Index	Usage Index
ISP	D : Rate of IPv6 capable link between ISP-Subscriber $F : R_{ISP} = \dfrac{\sum \text{\# of IPv6 capable Subscriber(i)}}{\sum \text{\# of Subscriber(i)}}$ • Subscriber | Organization | Hi-speed Internet Subscriber • If it's hard to calculate No. of subscriber, we could get the value by researching edge router of ISP.	D : Rate of IPv6 enabled link between ISP-Subscriber $F : U_{ISP(i)} = \dfrac{\sum \text{\# of IPv6 enabled Subscriber(i)}}{\sum \text{\# of Subscriber(i)}}$ * Subscriber | Organization | Hi-speed Internet Subscriber
CSP	D : Rate of IPv6 capable internet services $F : R_{CSP} = N/A$	D : Rate of IPv6 enabled internet services $F : U_{CSP} = \dfrac{\text{\# of IPv6 enabled Domain}}{\text{\# of Domain}}$
USER	D : Rate of IPv6 capable terminals among internet terminals $F: R_{USER} = \dfrac{\text{\# of Terminals IPv6 capable OS installed}}{\text{\# of internet terminals}}$	D : Rate of IPv6 enabled terminal with IPv6 address $F : U_{USER} = \dfrac{\text{\# of IPv6 address installed terminals}}{\text{\# of internet terminals}}$

Thank you