

KRNIC Update

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KRNIC of NIDA

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Result of ERX Project in Korea

□ ERX project of KRNIC

- ◆ Checked ERX records by using member's Routing Table since 2001 (IPv4 Address : 50×/16, 39×/24; ASN : 33)
- ◆ Cooperated with APNIC in 2003
 - Looked for actual organization using ERX based on the information registered in ARIN
- ◆ KRNIC started to transfer ERX resources since Dec. 2003
 - Found contacts of /16 address & ASN ERX holders, explained and recommended them to transfer ERX resources to KRNIC in 2004
 - Found contacts of /24 address holders, explained and recommended them to transfer ERX resources to KRNIC in 2005
 - Held two seminars on ERX project

Result of ERX Project in Korea

□ Result of ERX Project in Korea

- ◆ KRNIC finished the transfer at the end of 2005
 - IPv4(/16) : 49×/16, 98%, 1×/16 remains
 - IPv4(/24) : 39×/24, 100%
 - ASN : 30, 91%, 3 remains

- ◆ The result was reflected in KRNIC WHOIS
 - KRNIC fee schedule will be applied to the transferred resources in 2007

Personal Data Protection of KRNIC WHOIS

- ❑ Increasing demands on personal data protection
 - ◆ Recently people ask for their personal data protection
 - ◆ Some people are against public disclosure of their information through KRNIC WHOIS
 - Some are worried about the malicious use of their personal information
 - Some complained about showing their information to the public

- ❑ KRNIC's personal data protection policy
 - ◆ KRNIC recommended ISPs to add WHOIS policy to their contracts with customers in 2004
 - Ex) “Those who use IP address, your information could be published through WHOIS service”

Personal Data Protection of KRNIC WHOIS

□ KRNIC's personal data protection policy

- ◆ KRNIC applied 'Partial Hidden Policy' to KRNIC WHOIS in 2005
 - End users who don't wish to open their detailed information can request to hide their information through their upstream ISPs
 - In KRNIC member web-site, ISPs will be able to select 'Hidden Option' for their assignment information
 - Hidden fields : Name, detailed address, phone number
 - KRNIC doesn't hide the whole assignment information at the moment
 - KRNIC is considering to hide the whole assignment information in the future

Personal Data Protection of KRNIC WHOIS

- ❑ In case that KRNIC apply the open policy

ENGLISH

KRNIC is not an ISP but a National Internet Registry similar to APNIC.
The followings is organization information that is using the IPv4 address.

IPv4 Address : 202.133.16.0-202.133.16.127
Network Name : OSUNG
Connect ISP Name : HAIONNET
Connect Date : 20050404
Registration Date : 20050502
Publishes : **Y**

[Organization Information]

Organization ID : ORG103643
Org Name : Osung-edu
Address : Yangjae1-dong, Seocho-gu, Seoul
Detail address : 107
Zip Code : 137-891

[Technical Contact Information]

Name : Dukhwa Hwang
Org Name : Osung-edu
Address : Yangjae1-dong, Seocho-gu, Seoul
Detail address : 107
Zip Code : 137-891
Phone : +82-2-450-9421
E-Mail : domain@haion.net

Personal Data Protection of KRNIC WHOIS

- ❑ In case that KRNIC apply the partial hidden policy

ENGLISH

KRNIC is not an ISP but a National Internet Registry similar to APNIC.
The followings is organization information that is using the IPv4 address.

IPv4 Address : 211.35.70.0-211.35.70.63
Network Name : KPIN-MALSUM
Connect ISP Name : KPIN
Connect Date : 20050207
Registration Date : 20050411
Publishes : **N**

[Organization Information]

Organization ID : ORG103420
Org Name : Malsum Print
Address : Yeongdeungpo-dong4Ga, Yeongdeungpo-gu, Seoul
Zip Code : 150-034

[Technical Contact Information]

Org Name : Malsum Print
Address : Yeongdeungpo-dong4Ga, Yeongdeungpo-gu, Seoul
Zip Code : 150-034
E-Mail : kang94@119print.com

Name, Detailed address, Phone number are not published

Internet Resource Management System Upgrade

□ Main Upgrade Points

◆ Real Time WHOIS Updates

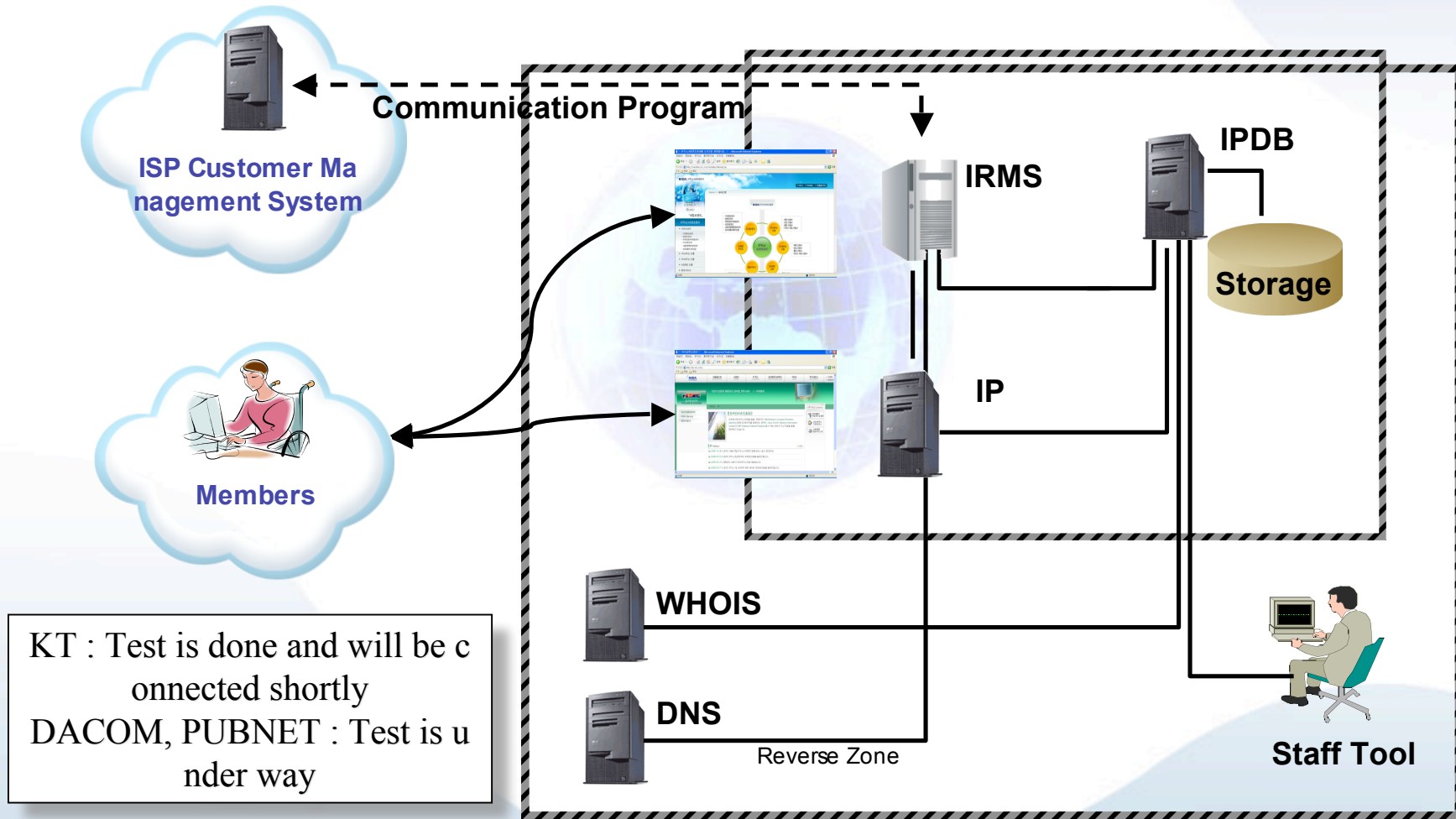
- Developed 'Communication Program between KRNIC and ISPs'
- Providing 'Automation Basis' for WHOIS Update
 - When ISPs update their customer DB, the changes will be reflected to KRNIC WHOIS DB through 'Communication Program' real-time

◆ IP address & ASN management Interface for member

- ISPs can manage their IP address through KRNIC member web-site
- ISPs will take advantage of the IP address & ASN management Interface for easy WHOIS Update

Internet Resource Management System Upgrade

❑ Upgraded Internet Resource Management System



Internet Resource Management System Upgrade

□ IP address & ASN management Interface

The screenshot shows a Microsoft Internet Explorer browser window displaying the login page for the IP address and ASN management system. The browser's address bar shows the URL <http://member.nic.or.kr/>. The page title is "로그인 | LOGIN". The main content area features a blue header with a key icon and the text "IP주소/AS번호관리". Below this is a login form with two input fields labeled "아이디" (ID) and "비밀번호" (Password), and a "로그인" (LOG-IN) button. A callout box on the right side of the form contains the text "Only member can login". Below the login form, there are two numbered instructions: 01: 본 웹 페이지는 NIDA 관리대행자, 독립사용자, AS번호사용자만 사용 가능합니다. (관리대행자 또는 AS번호 사용자가 되고자 할 경우에는 <http://ip.nida.or.kr/>를 참조 하십시오.) 02: 로그인ID와 패스워드는 한국인터넷진흥원(NIDA)로부터 부여 받으셔야 하며 잊어버리셨을 경우에는 hostmaster@nic.or.kr로 문의하여 주십시오. At the bottom of the page, there is a NIDA logo and contact information: 137-857 서울특별시 서초구 서초2동 1321-11 KTF빌딩 대표번호 : 02-2185-4500 / 팩스 : 02-2186-4494 Copyright©2005 한국인터넷진흥원, All Rights Reserved.

Internet Resource Management System Upgrade

□ IP address & ASN management Interface

The screenshot shows the NIDA IP address/ASN management interface. The browser title is "IP주소/AS번호관리에 오신것을 환영합니다. ::: - Microsoft Internet Explorer". The address bar shows "http://member.nic.or.kr/". The page content includes a navigation menu on the left, a main content area with a circular diagram, and a footer with the NIDA logo.

Navigation Menu (Left):

- 내정보관리
- IP주소/AS번호관리
 - 내정보관리
 - 기관정보관리
 - 망정보관리
 - 하위담당자계정관리
 - AS번호관리
 - 사업자등록증정보관리
 - 관리대행자해지신청
 - IPv4주소 신청
 - IPv6주소 신청
 - AS번호 신청
 - 정보서비스

Main Content Area (Circular Diagram):

The diagram is centered around "IP주소/AS번호관리". It branches into several categories:

- 내 정보관리** (My Information Management):
 - 기관정보관리
 - 망정보관리
 - 하위담당자계정관리
 - AS번호관리
 - 사업자등록증정보관리
 - 관리대행자해지신청
- IPv4주소 신청** (IPv4 Address Application):
 - 배정 신청서
 - 반납 신청서
 - 할당 신청서
 - 인버스 위임 신청서
- IPv6주소 신청** (IPv6 Address Application):
 - 배정 신청서
 - 반납 신청서
 - 할당 신청서
 - 인버스 위임 신청서
- AS번호 신청** (ASN Application):
 - Request ASN
- 도움말 (FAQ)** (Help/FAQ)
- 정보서비스** (Information Service)

Callouts:

- "Request&manage IPv4/IPv6" points to the IPv4 and IPv6 address application sections.
- "Request ASN" points to the ASN application section.

Internet Resource Management System Upgrade

□ IP address & ASN management Interface

Microsoft Internet Explorer window showing the NIDA IP address/ASN management interface. The browser address bar displays 'http://member.nic.or.kr/'. The page title is 'IP주소/AS번호관리에 오신것을 환영합니다.' The main content area shows 'IPv4 주소 현황' with a table of IP blocks and their usage percentages. A red arrow points to the '할당현황' column in the table.

시작주소	프리픽스	할당일	할당현황	사용율
203.251.0.0	/18+ /17	19941201		80%
203.236.44.0	/20	19951101		56%
203.236.60.0	/22	19951101		75%
203.236.64.0	/18	19951101		73%
203.234.128.0	/17	19960301		68%
203.232.0.0	/17	19960322		78%
203.228.0.0	/17	19960601		84%
203.229.128.0	/17	19960601		70%
210.126.0.0	/17	19961101		75%
210.123.0.0	/17	19961201		75%
210.123.128.0	/18	19970201		72%
210.121.128.0	/17	19970401		76%
210.123.192.0	/19	19970501		86%
210.113.0.0	/18	19970601		73%
210.113.192.0	/18	19970601		70%
210.113.64.0	/17	19970701		74%

Internet Resource Management System Upgrade

□ IP address & ASN management Interface

The screenshot shows a web browser window displaying the NIDA IP address/ASN management interface. The page title is "IP주소/AS번호관리에 오신것을 환영합니다. ::: - Microsoft Internet Explorer". The address bar shows "http://member.nic.or.kr/". The page content includes a navigation menu with "Home", "SiteMap", and "도움말(FAQ)". The main content area is titled "IPv4 주소 현황" and displays a table of IPv4 address blocks with their usage percentages. A red arrow points to the "할당현황" column in the table.

시작주소	프리픽스	할당현황	사용율
203.251.0.0	/20	<div style="width: 85%;"></div>	85%
203.251.16.0	/20	<div style="width: 74%;"></div>	74%
203.251.32.0	/20	<div style="width: 77%;"></div>	77%
203.251.48.0	/20	<div style="width: 89%;"></div>	89%
203.251.64.0	/20	<div style="width: 89%;"></div>	89%
203.251.80.0	/20	<div style="width: 82%;"></div>	82%
203.251.96.0	/20	<div style="width: 83%;"></div>	83%
203.251.112.0	/20	<div style="width: 81%;"></div>	81%
203.251.128.0	/20	<div style="width: 56%;"></div>	56%
203.251.144.0	/20	<div style="width: 81%;"></div>	81%
203.251.160.0	/20	<div style="width: 76%;"></div>	76%
203.251.176.0	/20	<div style="width: 90%;"></div>	90%

Internet Resource Management System Upgrade

□ IP address & ASN management Interface

Microsoft Internet Explorer window showing the NIDA IP address/ASN management interface. The browser address bar displays `http://member.nic.or.kr/`. The page title is "IP주소/AS번호관리에 오신것을 환영합니다." The main content area shows "IPv4 주소 현황" (IPv4 Address Status) with a table of IP blocks. A callout box on the right indicates "Register, Change, Delete" actions.

시작주소	끝주소	할당기관	할당일	할당신청
203.251.0.0	203.251.0.255	한국통신	20031208	<input type="button" value="변경"/> <input type="button" value="삭제"/>
203.251.1.0	203.251.1.255	한국선급	20040906	<input type="button" value="변경"/> <input type="button" value="삭제"/>
203.251.2.0	203.251.2.255	한국통신	20031208	<input type="button" value="변경"/> <input type="button" value="삭제"/>
203.251.3.0	203.251.3.1	미할당		<input type="button" value="신규"/> <input type="button" value="추가"/> <input type="button" value="인프라"/>
203.251.3.2	203.251.3.2	엘지씨엔에스	20040906	<input type="button" value="변경"/> <input type="button" value="삭제"/>
203.251.3.3	203.251.3.3	에이엔티	20031208	<input type="button" value="변경"/> <input type="button" value="삭제"/>
203.251.3.4	203.251.3.4	이미경	20031208	<input type="button" value="변경"/> <input type="button" value="삭제"/>
203.251.3.5	203.251.3.5	유성관광	20040906	<input type="button" value="변경"/> <input type="button" value="삭제"/>
203.251.3.6	203.251.3.6	미할당		<input type="button" value="신규"/> <input type="button" value="추가"/> <input type="button" value="인프라"/>
203.251.3.7	203.251.3.7	박승찬	20040906	<input type="button" value="변경"/> <input type="button" value="삭제"/>

Internet Resource Management System Upgrade

- ❑ IP address & ASN management Interface
 - ◆ Demonstration
 - <http://member.nida.or.kr>



Internet Resource Management System Upgrade

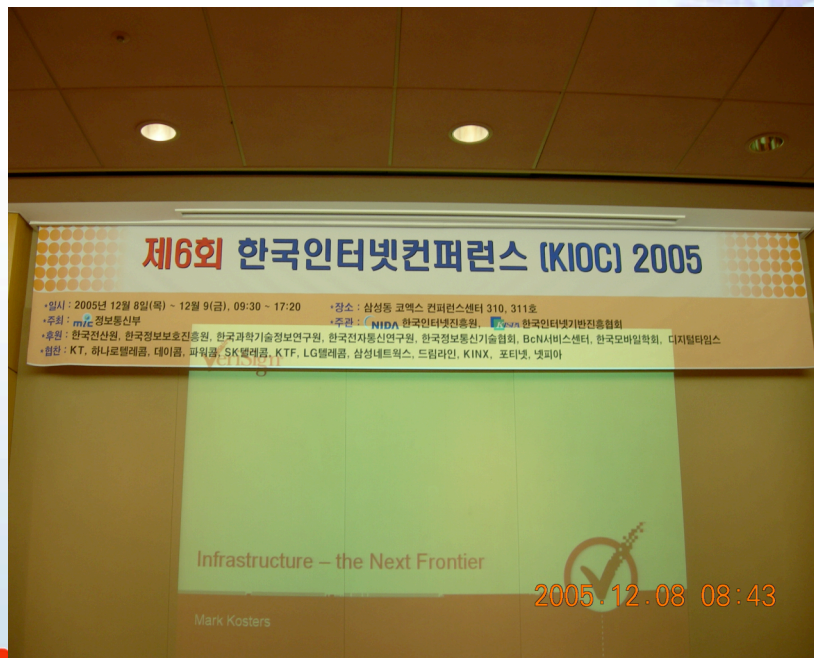
❑ Expected result

- ◆ More Convenient for IP address & ASN management
- ◆ More Accurate of WHOIS information
- ◆ Effective cooperation between KRNIC and ISPs by Automation and Simplification

Other Activities

❑ Korea Internet Operation Conference 2005 (KIOC2005)

- ◆ Dec. 8, 2005 ~ Dec. 9
- ◆ About 320 attendees
 - Including ISPs, Vendors, students
- ◆ BcN, VoIP, IPTV, IPv6, FTTH/C, Internet Governance





Thank you !