

Large Space IPv4 Trial Usage Program for Future IPv6 Deployment ACTIVITIES UPDATE Vol.5

APNIC 16 Meeting / Policy SIG August 21st, 2003 at Seoul Kosuke Ito Tsukasa Ogino, Yoshiyuki Ezura, Gaku Hashimoto IPv6 Promotion Council of Japan



Topic

Update from the last report

- Result from periodical member interview
 IPv6 transition planning, etc.
- Registry system implementation for the efficient registry work
 - introduction of system
- Consideration





Interview

Conducted 3rd interview

- End of July Aug 2003
- Current members : no change at all
 - Broadband "Always-On" connection service
 - Large VoIP/ADSL service
 - Contents Delivery service (contents with IP)
 - Public Space wireless access service



Interview Results

- Traffic on "always-on" fixed-IP service is still increasing in up-streaming (user -> internet), especially
 - P2P connection and large amount of data transfer are becoming common among users in this trial
 - About 40% of total traffic is P2P
- Members start IPv6 trials
 - Wireless service uses 6to4
 - Broadband services (ADSL, FTTH) uses tunnel over IPv4



Interview Results

Goodness of this trial

- Greater freedom and simplified in design the network
 - Accommodate plenty of CoA space and plenty of HA space in each access point on Wireless service
 - Able to provide quick ID issuing service
 - Accommodate block (multiple addresses) assignment to users
 - Great ease of providing additional services such as IPphone and IPv6 transition
 - Able to simulate IPv6-era operation
 - No need to have additional mechanism such as PPPoE



Pv6 Promotion Counci

Interview Results

Side effects of this trial

- Great increase of attacks
 - Lack of knowledge about security protection at users side increases the operational side of support work
 - Port scanning, Messenger Advertise
 - Open-relay, Virus transmission, etc.
 - NOW, Blaster and MSBLAST!



Registry system





Objectives of the registry system

- Simplifying the registry operation of address management work
- Test-bed for a future IPv6 registry system
- Basic functions involved:
 - Automated IP addresses assignment information registration
 - Web-based subsequent allocation request form
 - Interlinked with WHOIS and DNS
 - Authentication of members for login
 - Sharing information between Members-IPv6PC
 - Inter-operable interface between Members-IPv6PC resource management system (TBD)

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Reasons to build this system

- Minimize the manual work for avoiding human-errors
 - So far, everything is manual
 - only e-mail based application and correspondence
 - MS-Excel based address management (^_^;;
 - Manual changes in registration



System overview (Phase-1)





Info Sharing Web I/F

- Info sharing between Members and IPv6PC
 - Evaluation Process Status monitoring
 - Log of the past applications

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Info Sharing Web I/F (cont.)

List of Registered Information

- List of IP addresses assigned
- Status of Reverse-DNS registration, etc.

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Link to the relating info services

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Consideration

- Global address service in large scale from the initial point gives ISPs a greater market with smaller overhead
 - Ease of introduce a new application such as P2P info exchange, IP-Phone, etc.
- Experience of this trial make the participating ISPs convince to adopt IPv6 service
 - Ease of designing the network with large space global IP
 - Security point of view
- Both members and IPv6PC are happy with the webbased registry system for less manual operation in result



Thank you, and We will update you next time as well.

Any question and comment?

Contact: info@v6nic.net

