

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

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# Topic

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- 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 3<sup>rd</sup> 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 IP-phone and IPv6 transition
      - Able to simulate IPv6-era operation
  - No need to have additional mechanism such as PPPoE

# Interview Results

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- 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

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# 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)

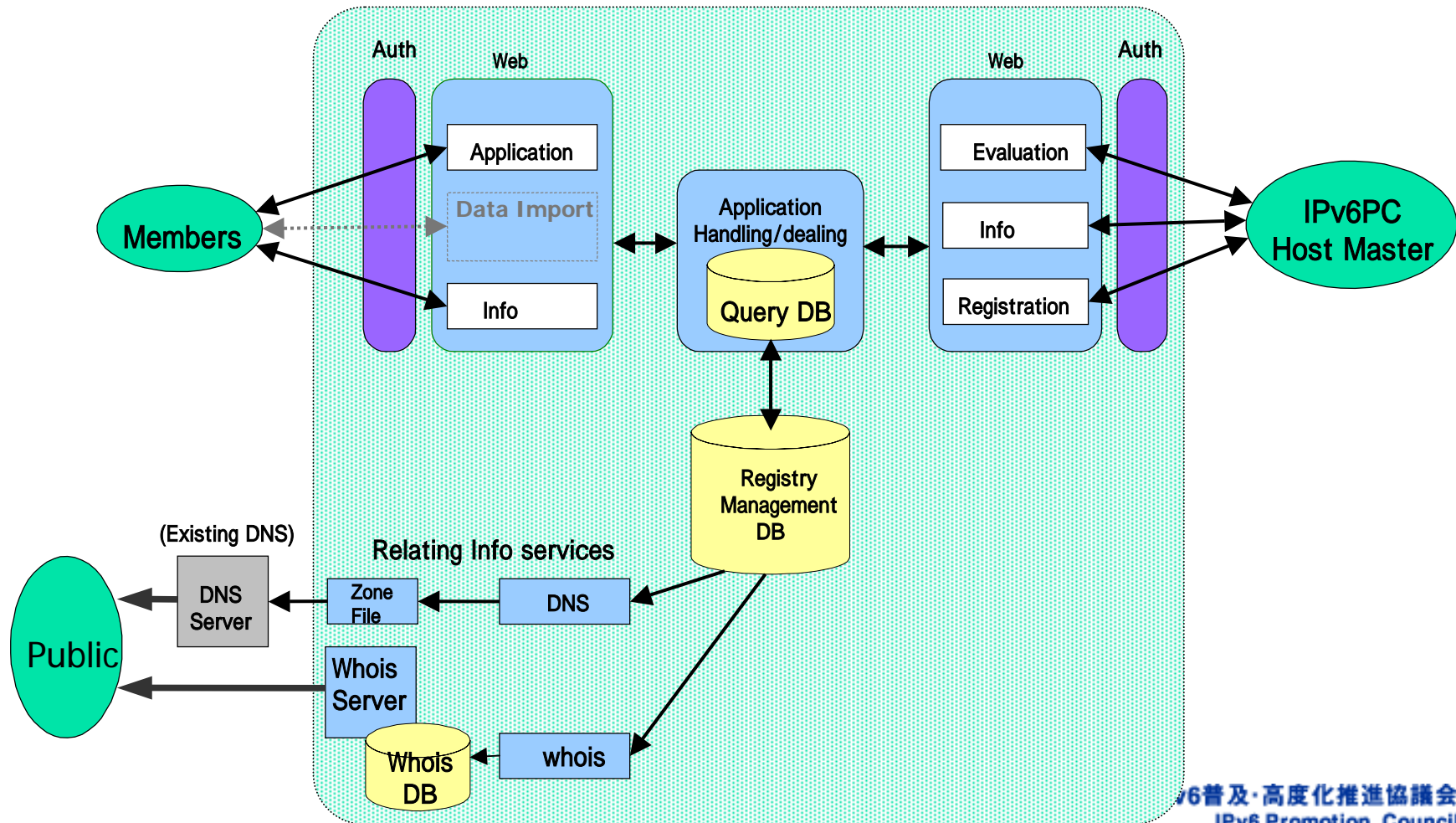




# Reasons to build this system

- 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



# Info Sharing Web I/F (cont.)

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



# Link to the relating info services

- WHOIS and DNS

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Terminator
File Edit Setup Control Window Help

NetBSD 1.6.1 (GENERIC) #1: Tue Apr 8 12:06:52 UTC 2003
Welcome to NetBSD!

> whois -h whois.vnic.net 48.254.0.0
[whois.vnic.net]

OrgName: IPv6 Promotion Council
OrgID: V6PC
OrgPostalCode: 101-8347
OrgAddress: Eikussai-kogyo-kanda Bldg. 6F, 2-3-4, Ichikanda, Chiyoda-ku, Tokyo, 101-8347, Japan
OrgMail: v6address@vnic.jp
OrgUpdated: 2003-03-26 20:59:58

Network: 48.254.0.0/16
NetUpdated: 2003-03-22 10:18:28

Enter help for additional hints on searching Whois databases.
>
```



# 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 web-based registry system for less manual operation in result

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

Any question and comment?

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