

# Large Space IPv4 Trial Usage Program for Future IPv6 Deployment ACTIVITIES FINAL REPORT

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**Nao Fukushima**

Tsukasa Ogino, Kosuke Ito, Yoshiyuki Ezura, Takeshi Tsukuni

**IPv6 Promotion Council of Japan**

# Report Items

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- Objective and Status
- Result of this trial
  - Overview
  - Case

# Objective and Status

- Objective of this trial
  - This trial is time-limited address leasing for...
    - New “IP version 4 address” lease policy
    - Reuse of IP version 4 address
    - Practical IP version 6 transition
    - Explore new business based on the E2E model
    - IP version 6 address management
  - Phase1: from 2001 to Dec. 2005
  - Phase2: from Jan. 2006 to Dec. 2008
  - **This Trial ended at the end of 2008.**
  
- Participants
  - CDN ASP
  - Nation-wide ADSL/VoIP service
  - L3 connectivity/IP-Phone service
  - Nation-wide FTTH service provider

etc...

# Allocation List

- Experimental space is below

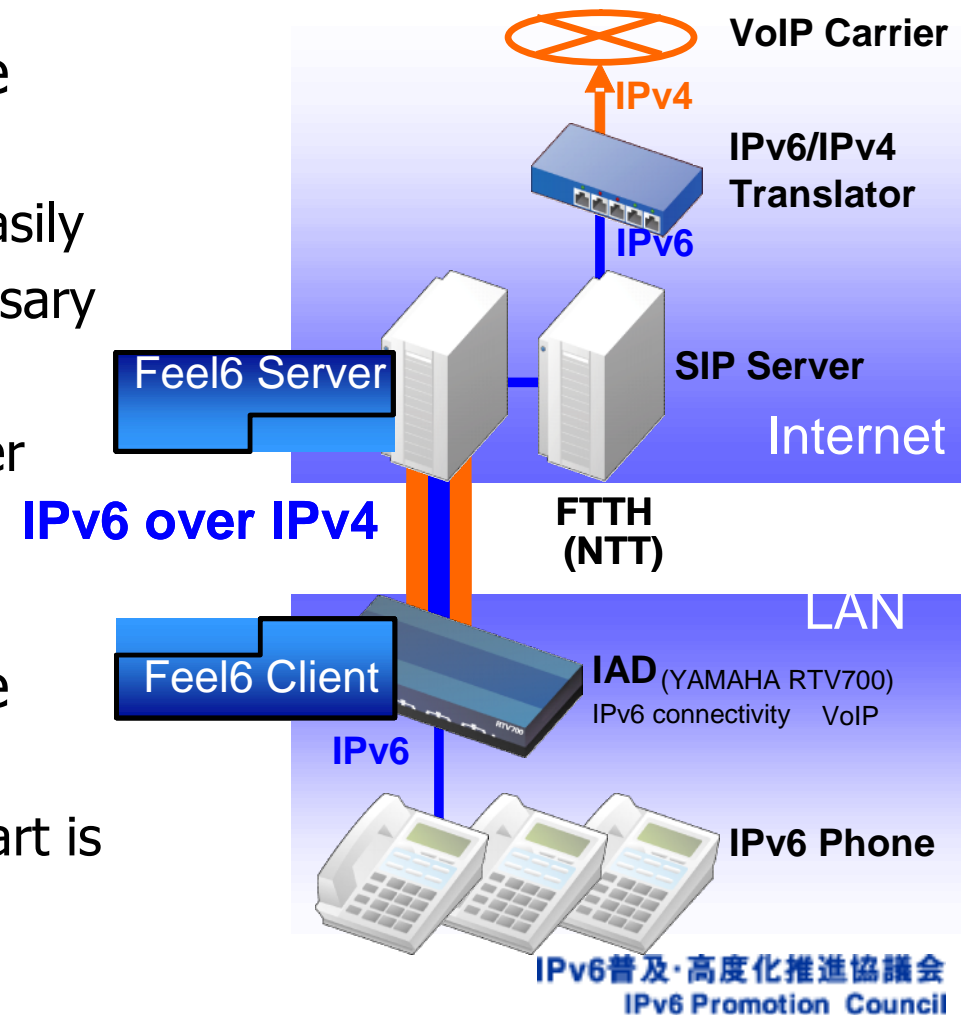
NW Address				Organization
43	224	0	0	Nation-wide ADSL/VoIP service
43	225	0	0	Nation-wide ADSL/VoIP service
43	226	0	0	Nation-wide ADSL/VoIP service
43	227	0	0	Nation-wide ADSL/VoIP service
43	228	0	0	Nation-wide ADSL/VoIP service
43	229	0	0	Nation-wide ADSL/VoIP service
43	230	0	0	Nation-wide ADSL/VoIP service
43	231	0	0	Nation-wide ADSL/VoIP service
43	232	0	0	Nation-wide FTTH service provider
43	233	0	0	Nation-wide FTTH service provider
43	234	0	0	Nation-wide FTTH service provider
43	235	0	0	Nation-wide FTTH service provider
43	236	0	0	Nation-wide ADSL/VoIP service
43	237	0	0	Nation-wide ADSL/VoIP service
43	238	0	0	Nation-wide ADSL/VoIP service
43	239	0	0	Nation-wide ADSL/VoIP service
43	240	0	0	Nation-wide ADSL/VoIP service
43	241	0	0	Nation-wide ADSL/VoIP service
43	242	0	0	Nation-wide ADSL/VoIP service
43	243	0	0	Nation-wide ADSL/VoIP service
43	244	0	0	L3 connectivity/IP-Phone service
43	245	0	0	
43	246	0	0	
43	247	0	0	
43	248	0	0	
43	249	0	0	
43	250	0	0	
43	251	0	0	
43	252	0	0	L3 connectivity/IP-Phone service
43	253	0	0	CDN ASP
43	254	0	0	IPv6 Promotion Council of Japan
43	255	0	0	

# Result of the trial - overview

- Merit of Large IP Address Space
  - Reduction of overhead when IP address designed
  - Individual management of equipment by fixed IP address
  - Scale can be flexibly expanded
- Problem to IPv6 deployment
  - Lack of demand
  - Access network doesn't support, ISP cannot support too.
- Procedure of IPv6 deployment
  - Need to pass IPv4/IPv6 dual period by the shift to IPv6
  - Necessary to get over IPv4/IPv6 dual period by using the last IPv4 space

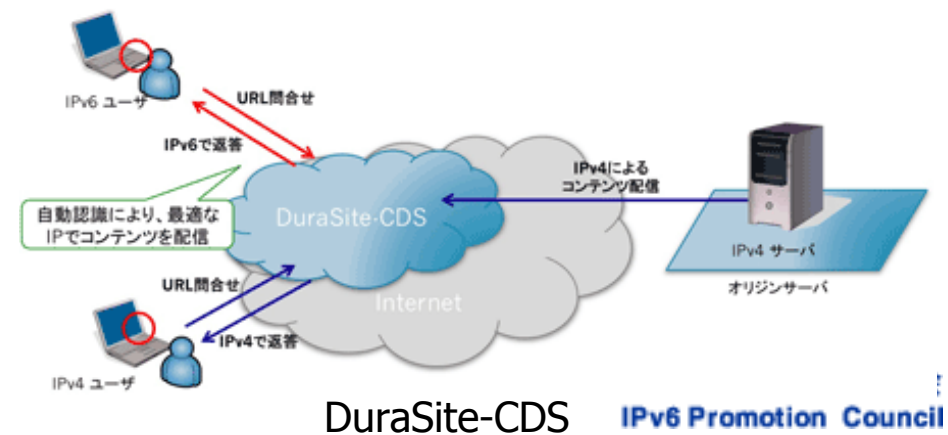
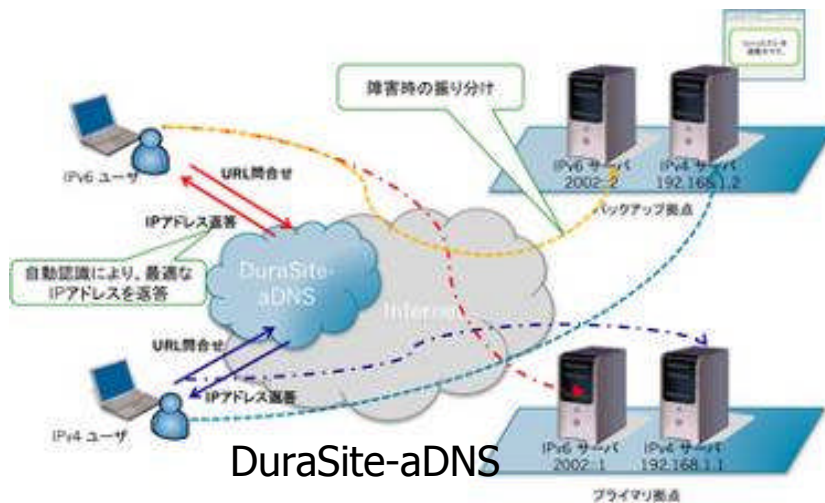
# Result of the trial - case1

- IP Phone Service
  - IPv6 is useful for large-scale service development
    - Address design is rough easily
    - Address setting is unnecessary
      - RA use
      - > may not send engineer
      - > cost save
  - IPv6 is useful for large-scale service operation
    - Discovery of the trouble part is easy
      - > effect of fixed address



# Result of the trial - case2

- Contents Delivery Network for IPv4/IPv6 dual support (DuraSite-CDS)
  - This CDS is useful for IPv4/IPv6 dual period
    - Contents can be delivered from the IPv4 network to the IPv6 network by the automatic operation
  
- Intelligent DNS service for IPv4/IPv6 dual support (DuraSite-aDNS)
  - This DNS service is useful for IPv4/IPv6 dual period
    - Offer to distribution function to server corresponding to IP (IPv4/IPv6) that user is using



- This APNIC community's support made this trial program happen and successful.
- From this trial, many lessons for IPv6 transfer have been obtained and shared with this community.
- IPv6 PC will continue to support IPv6 promotion in AP region.



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Thank you and Any Question?

Contact: [v6info@v6pc.jp](mailto:v6info@v6pc.jp)