



APNIC Open Address Policy Meeting

Special Interest Group Session

March 2nd, Korea, Seoul



Problem Definition

*Should it be mandatory to use
name-based web hosting where
technically feasible?*



Motivation and Background

- Rapid growth of web hosting
 - “Virtual web” or “virtual domain” services now common
- Impact on free pool
 - Potential to rapidly affect rates of IP address consumption



Motivation and Background

- Implementations of hosting
 - Name based hosting
 - Single IP address assigned to physical server that hosts several virtual hosts
 - IP based hosting
 - Single unique IP address assigned to each virtual host



Motivation and Background

- Name based hosting
 - Conserves address space
 - Requires
 - Support of “Host:” headers in HTTP requests eg. HTTP1.1 compliant browsers, and some earlier versions eg. IE3+, Netscape 2.0+
- Technical exceptions
 - SSL certificates
 - Virtual ftp domains with anonymous login
 - Others?



Current Status

- APNIC
 - IP based hosting
 - Use of $> /22$ requires submission of URL and IP address list OR registration in APNIC database
 - Use of $< /22$ verification in infrastructure
 - Name-based hosting
 - Verification in infrastructure (APNIC-065)
 - APNIC does not **require** name-based hosting, but strongly **encourages** it



Current Status

- ARIN
 - Both IP and name-based hosting
 - List of IP addresses and corresponding URL
- RIPE NCC
 - Similar to APNIC but
 - Need to renumber to name-based when capable browsers widely deployed
 - After community feedback considering to promote name-based hosting as requirement



Discussion

- Most APNIC members
 - Do name-based hosting
 - Rarely use more than a /22 for IP based
- Limitation for name-based
 - E-commerce/SSL increase
 - May change with new HTTP/1.1 upgrades to TLS
 - [draft-ietf-tls-http-upgrade-05.txt](#)
 - E-commerce is increasing with virtually hosted sites



Recommendations

- Monitor
 - Growth of IP-based hosting and SSL usage
 - Technical developments through community feedback
- No change
 - Name-based hosting not mandatory
 - May need to redefine current policy regarding acceptable threshold (/22)