BIAbis(RFC3338bis)
BISbis(RFC2767bis)

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Slide 6/4 translation on a host
from Dave Thaler 20090520
An IPv4 application to IPv6 Internet/Network
Let’s assume that IPv4 application could be regarded as IPv4 Network
- Uses well-known IPv4 prefix (RFC 1918), LIR IPv6 prefix

- Name resolution synthesizes IPv4 address only if IPv6-only response
BIA (RFC 3338)

- Uses well-known IPv4 prefix (0.0.0/24), LIR IPv6 prefix

- Name resolution synthesizes IPv4 address only if IPv6-only response
Conclusions from Dave’s slide

- v6/4 translation [v4 mapped socket] is already common in hosts and will only become more so

- App-layer issues (e.g., referrals, etc) are independent of whether translation is in host or network
Supporting legacy IPv4 applications

Scenario 1: IPv6 only end to end peer network, dual stack server (private IPv4)

Application class:
1: Work through NAT w/o ALG
2: Do name resolution
RFC 3338 bis (BIAbis)

1. IPv4 address pool use private address
2. Handling other record types should be consistent with DNS64/DNS46 (eg PTR)
3. Adding an possibility for DNS stub resolver to refer to server on the same host and do the DNS ALG there
RFC 2767bis (BISbis)

1. Handling other record types should be consistent with DNS64/DNS46 (eg PTR)

2. Adding an possibility for DNS stub resolver to refer to server on the same host and do the DNS ALG there
Work item?

• Behave re-charter to cover the issues in host-based translation?

• BIA and BIS have lots of similar text, should we consider to unify BIAbis and BISbis document into one document?