

DHCPv6 Dynamic Reconfigure

draft-wing-dhc-dns-reconfigure-01

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Problem

- Hosts connected to a network may be IPv4-only, IPv6-only or dual-stack
- Returning generic configuration to all such hosts may not be optimal and may raise complications
- Typical examples with problems are
 - Provide a DNS server to an IPv6-only host, while DNS64 is required
 - Provide DNS64 for hosts transitioning from IPv4 to IPv6

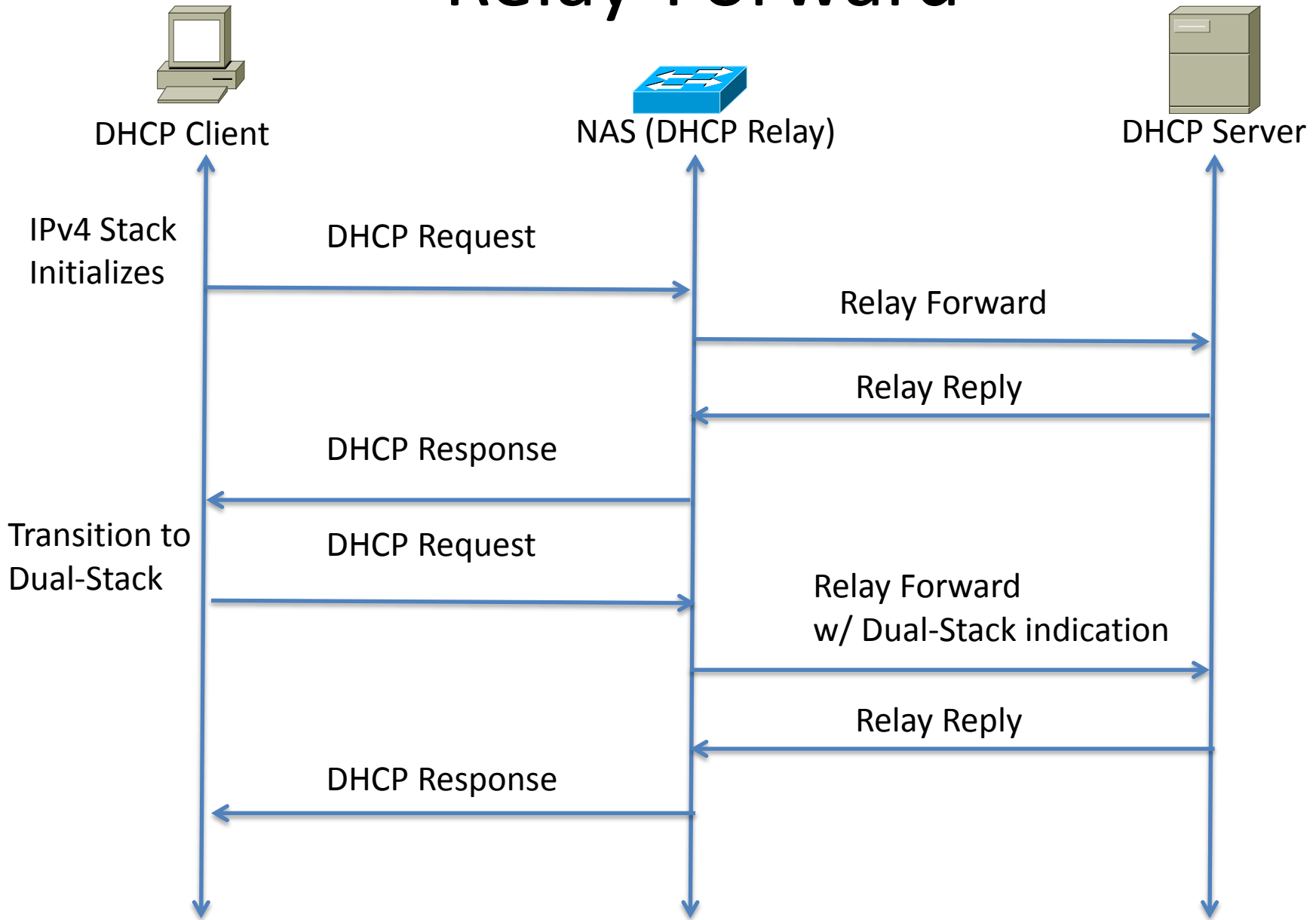
Proposed Approach

- Means to inform the DHCP server about offered connectivity
- Means to notify transitions in connectivity e.g.,
 - dual-stack to IPv6-only mode
 - IPv4-only host has now acquired an IPv6 address
- DHCPv6 server reconfigures an end point accordingly

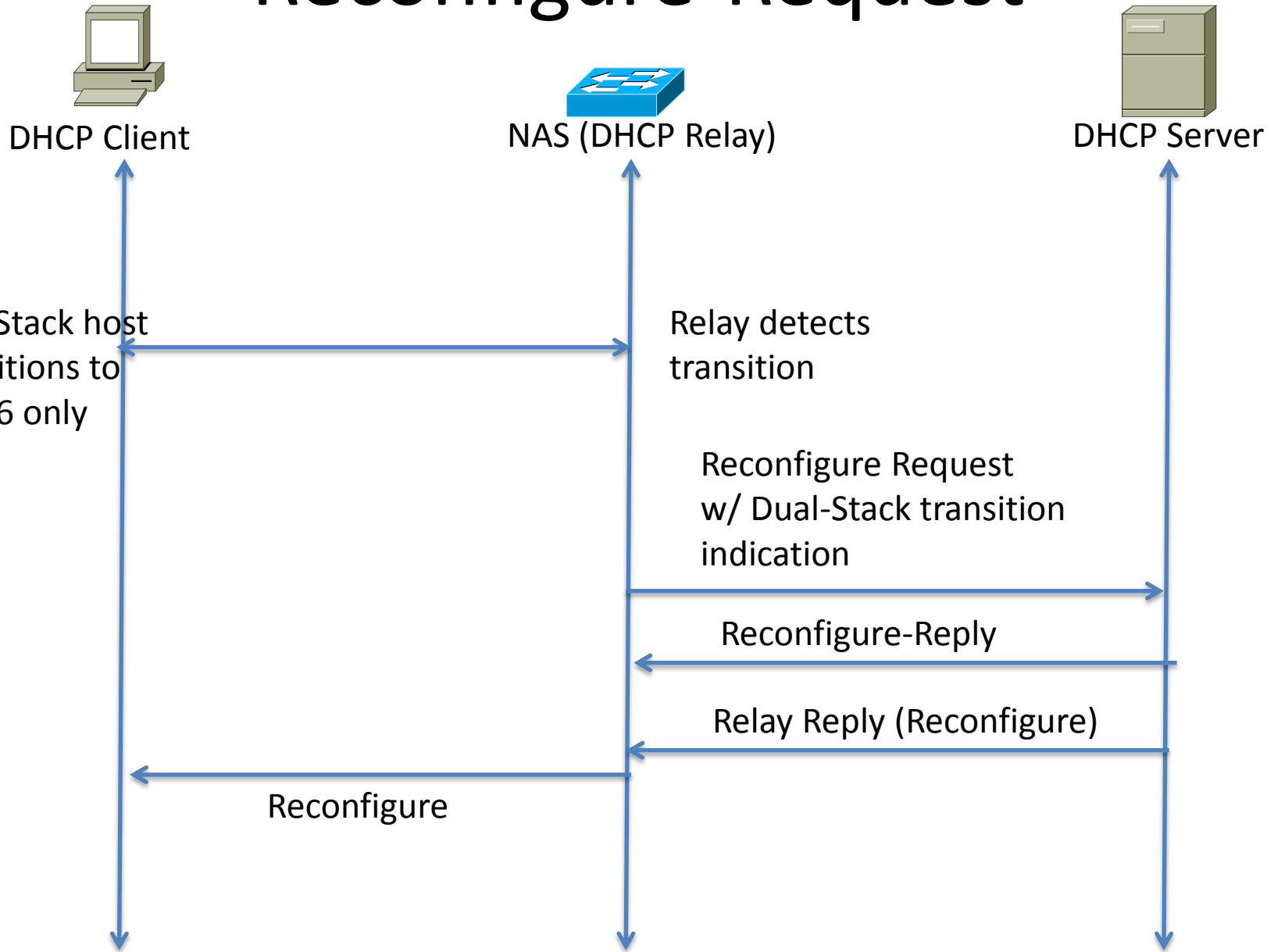
Theory of Operations

- Option from Relay in Relay-Forw to indicate if client is single/dual stacked
- Generic message from Relay to indicate host mode transitions to the server
- DHCPv6 Server acts accordingly on the generic message
- Follows RFC6977

Relay-Forward



Reconfigure-Request



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Is this mechanism helpful in winding down 'IPv4' support?