

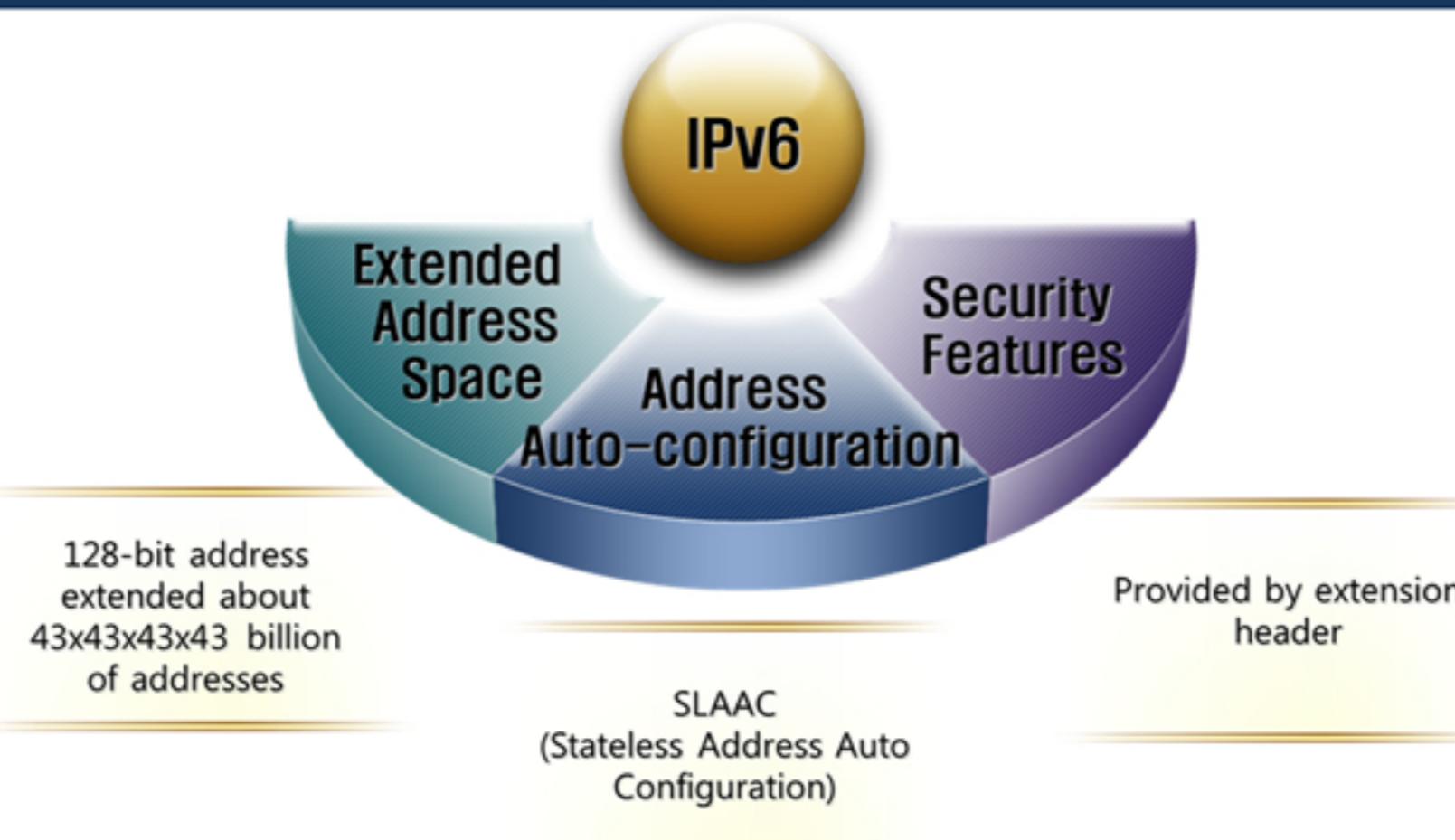
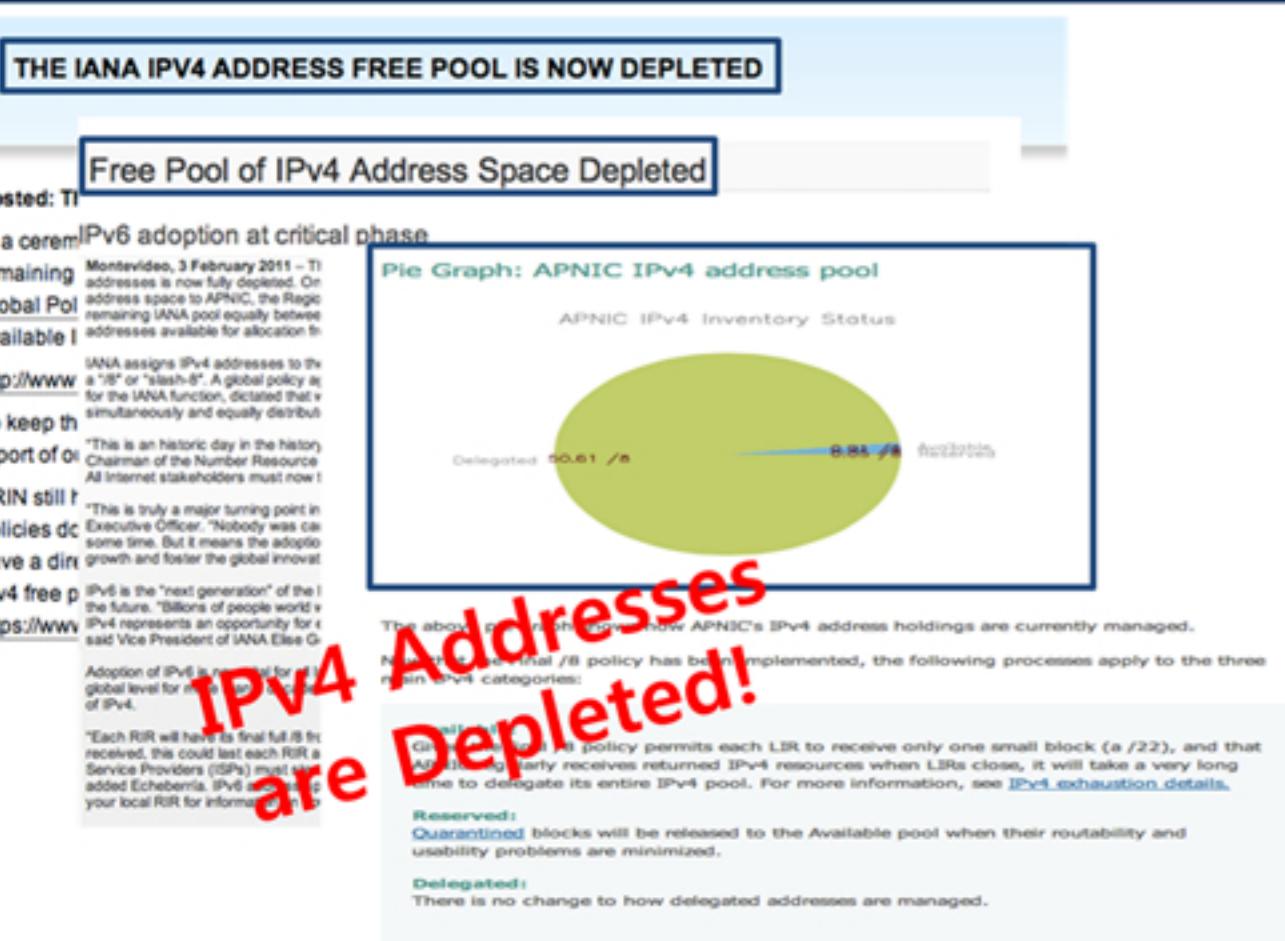
Host Address Management on IPv6 Environment

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Motivation



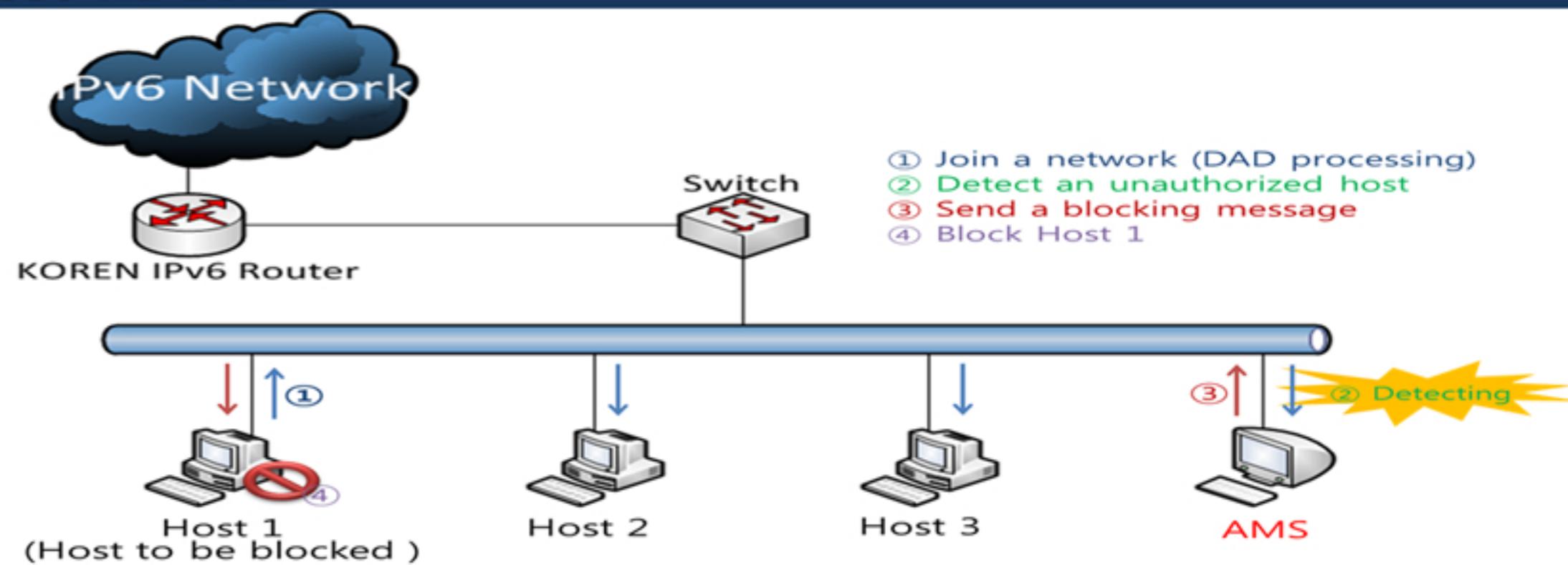
Our Goal



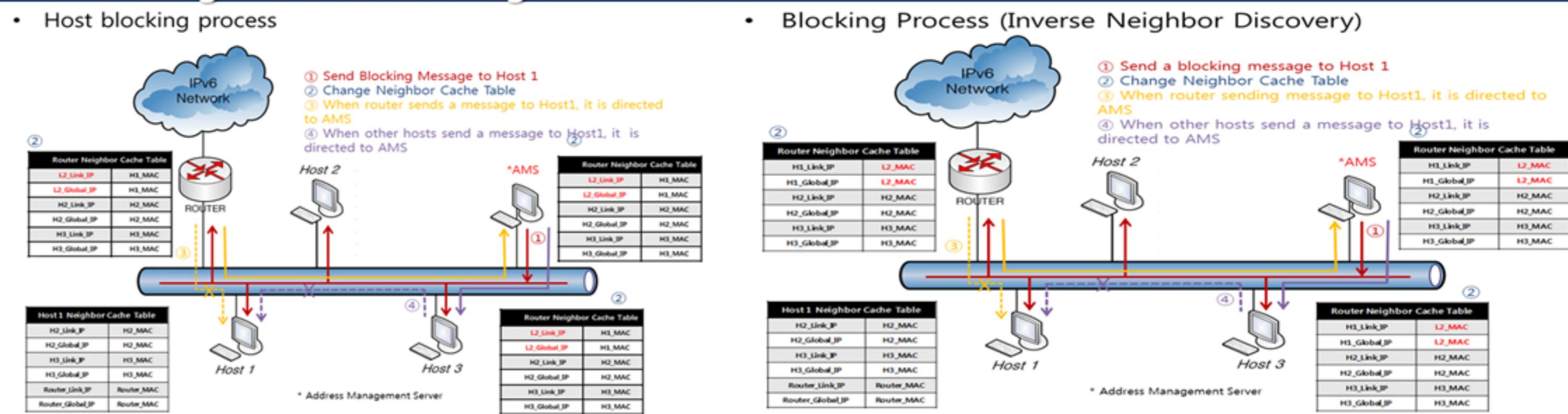
Flow Chart shows a procedure to block a host using DAD process



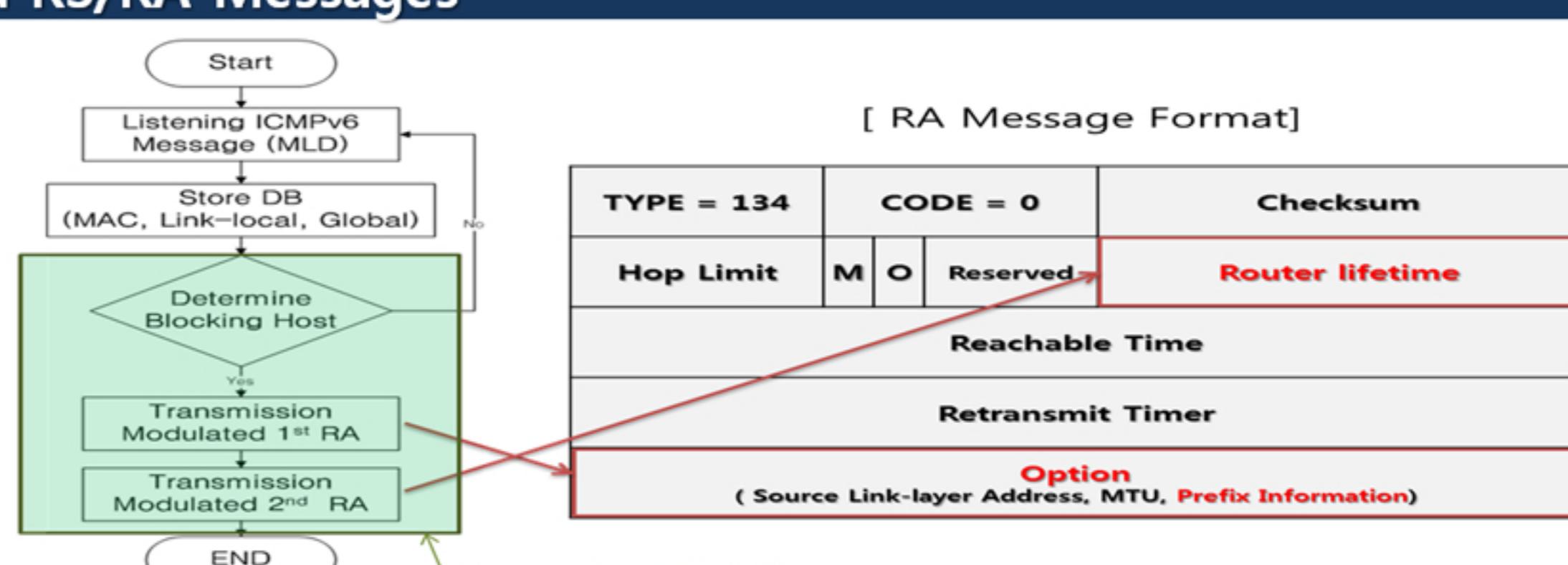
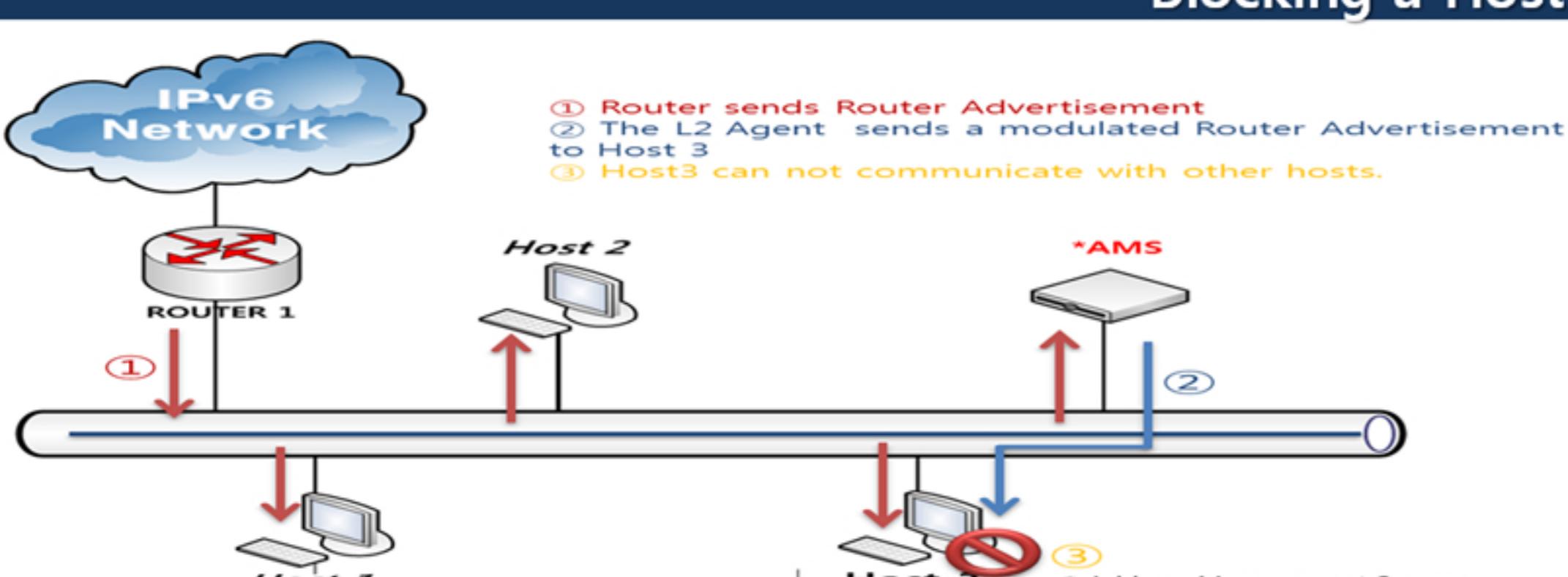
Blocking a Host via DAD



Blocking a Host via Neighbor Cache

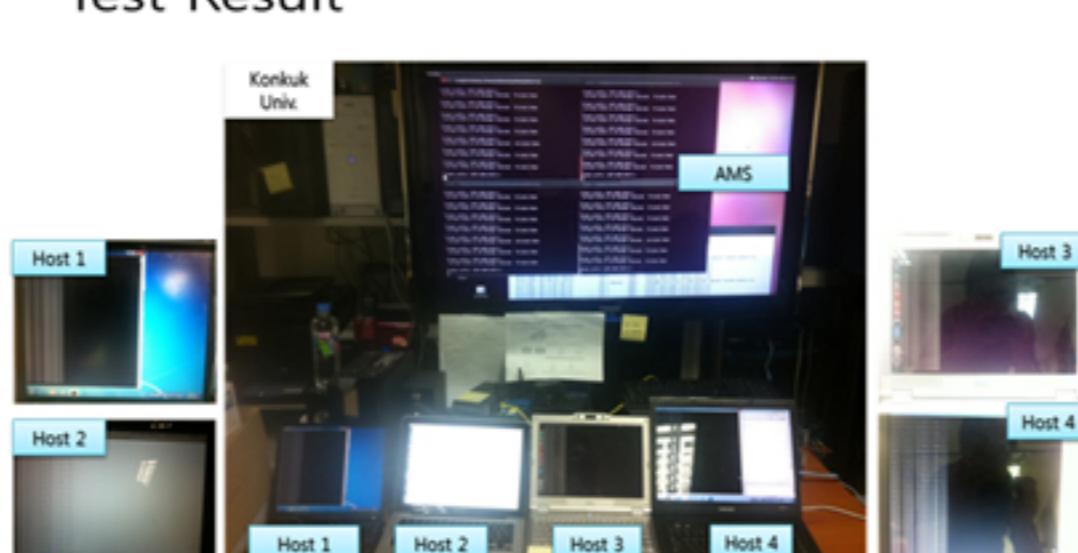


Blocking a Host via RS/RA Messages

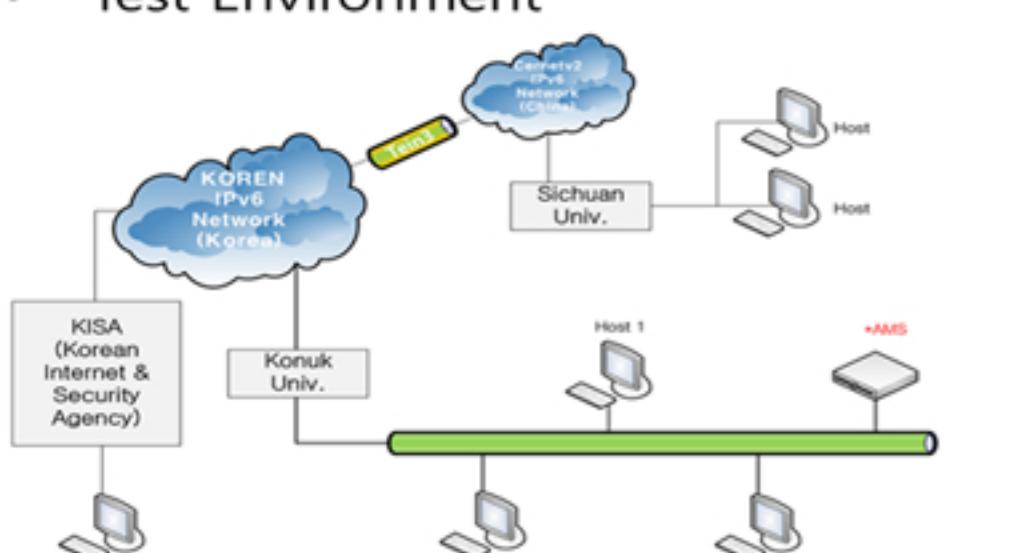


Result

Test Result



Test Environment



Conclusion

IPv6 is a solution to the IPv4 address depletion problem. It introduces wide address deployment that enables addressing of most devices in the world. However addressing is very complex in IPv6 and IP address management is difficult. This study proposed three mechanisms to block unauthorized hosts. These mechanisms are based on DAD process, Neighbor Cache Table and RS/RA. Our proposed mechanisms manage a local network efficiently and effectively. In addition to address management our proposed approach also address network security.

ACKNOWLEDGMENT

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