

Kent Leung

Alpesh Patel

George **Tsirtsis**

Espen Klovning

Background

- Mobile Node needs additional configuration beyond home IP address to set up Mobile IP interface
- Host configuration from the home network required for the MN
- Method to obtain the host configuration lacking in specifications
- Solution needed for Mobile IPv4 deployment

Issues

- Current host configuration methods are insufficient
 - PPP/IPCP typically provides foreign network information
 - DHCP typically provides foreign network information
 - Access router does not need to obtain home network's host configuration or integrate AAA and DHCP/IPCP
- Seek a solution
 - Host configuration parameters in Mobile IP registration messages

Overview

- Introduced skippable Cisco vendor specific extensions in Registration Request and Reply
- "Request Host Configuration" NVSE in the Registration Request used by MN to solicit for host configuration information
- Defined several Host Configuration NVSEs in the Registration Reply used by HA to include host configuration in response

Registration Request NVSE

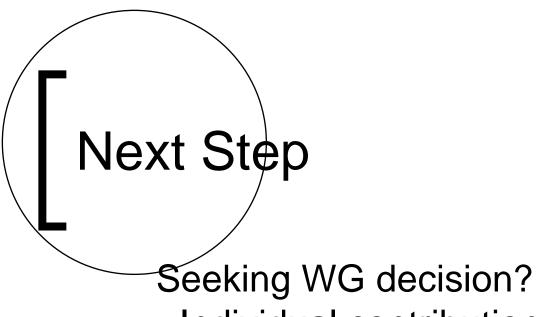
- Host configuration subtype
 - Request

Registration Reply NVSE

- Host configuration subtypes
 - Home network prefix
 - DNS server
 - DHCP server
 - DHCP client ID
 - Default gateway
 - DNS suffix
 - Configuration URL

Sample Scenario

- Mobile Node sends RRQ with Request NVSE Foreign Agent
- 2. Foreign Agent relays the RRQ to Home Agent
- 3. Home Agent authenticates RRQ and detects Request NVSE
- Home Agent sends RRP with Host Configuration NVSEs
- 5. Foreign Agent relays RRP to Mobile Node
- 6. Mobile Node obtains the host configuration to set up the Mobile IP interface



- Individual contribution
- Informational status