

DHCPv4 and DHCPv6 Options for Access Network Query Protocol Servers

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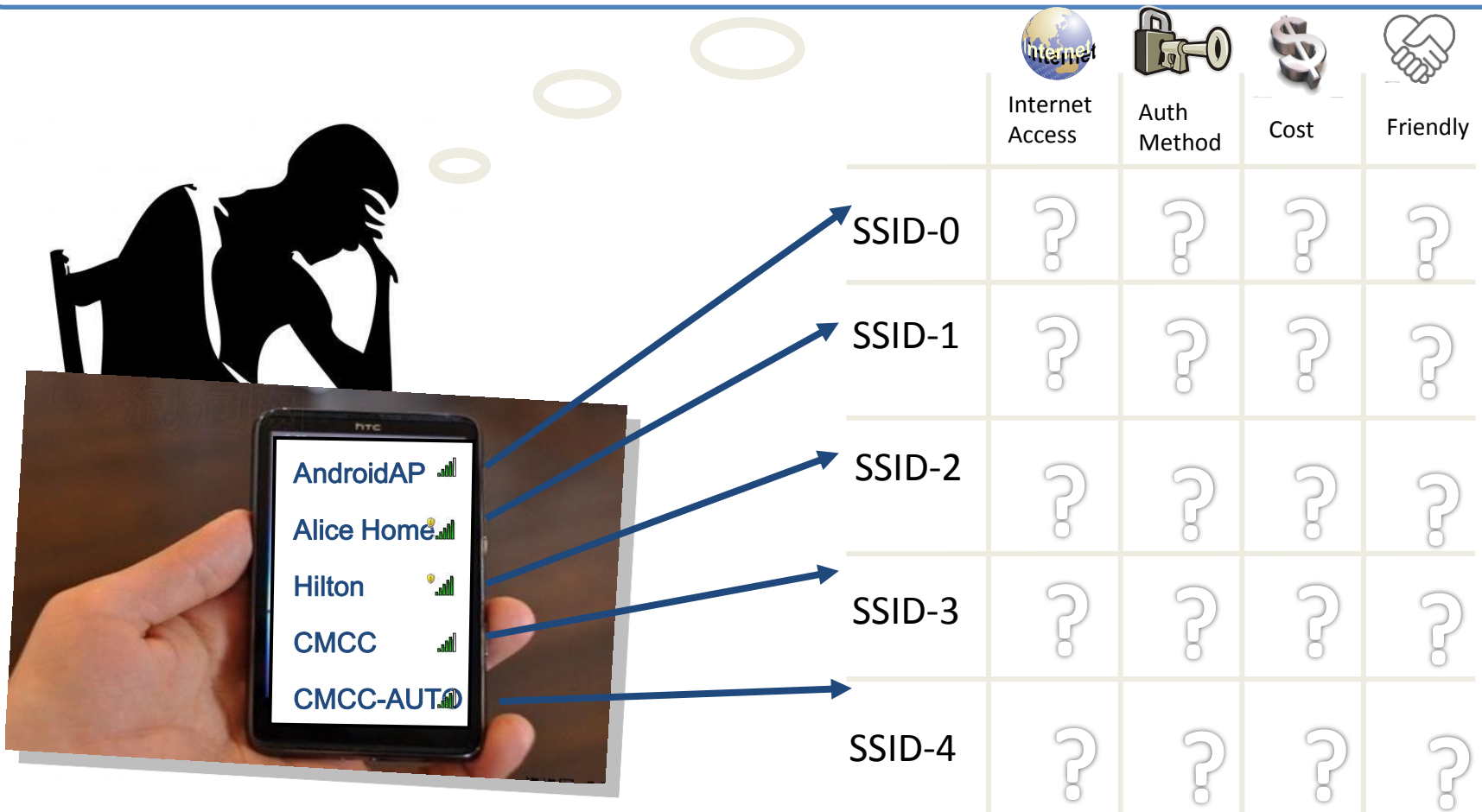
China Mobile

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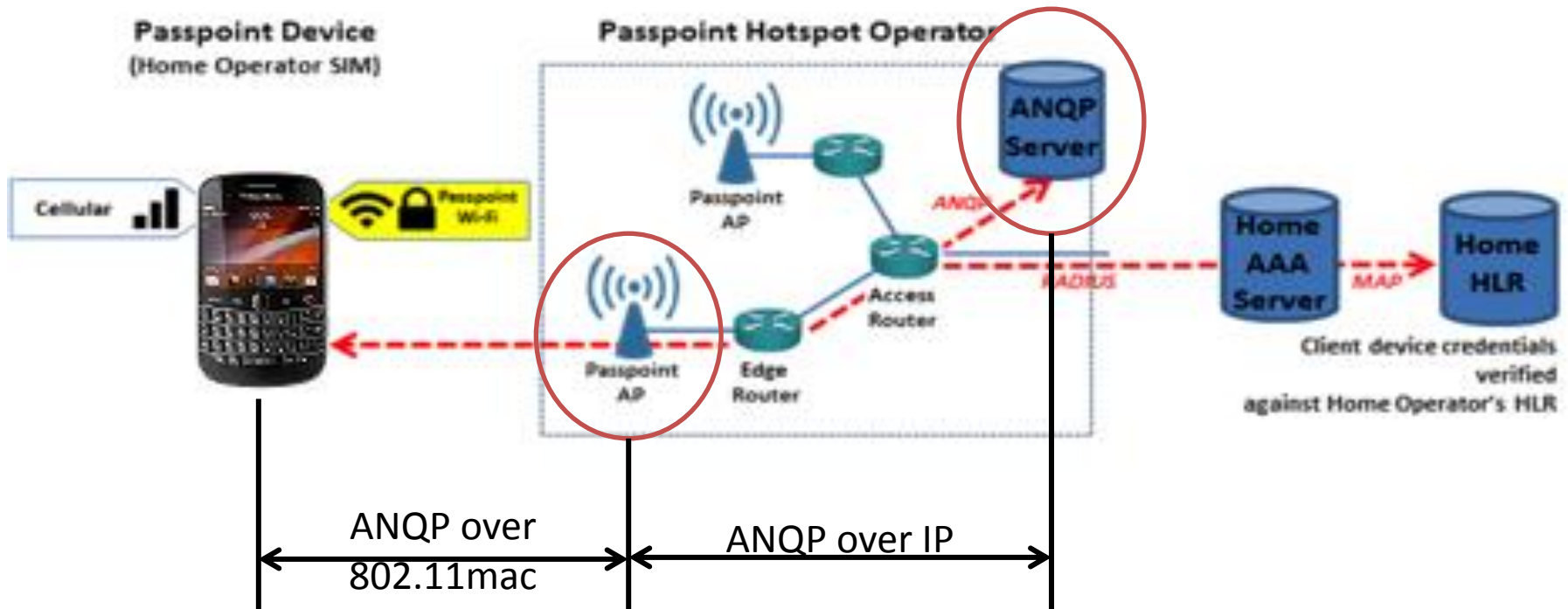
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Why do we need Access Network Query Protocol (ANQP)?

Prior to association, the user/device does not what he/she can get from what he/she will choose



IEEE 802.11/WFA's Solution: Passpoint



- In a scalable deployment environment, the ANQP server should be placed on a centralized device that serves different APs.
- There is a need for the AP to discover the ANQP server
- To make the options scalable for other advertisement servers, e.g., RLQP in 802.11af

DHCPv4 option

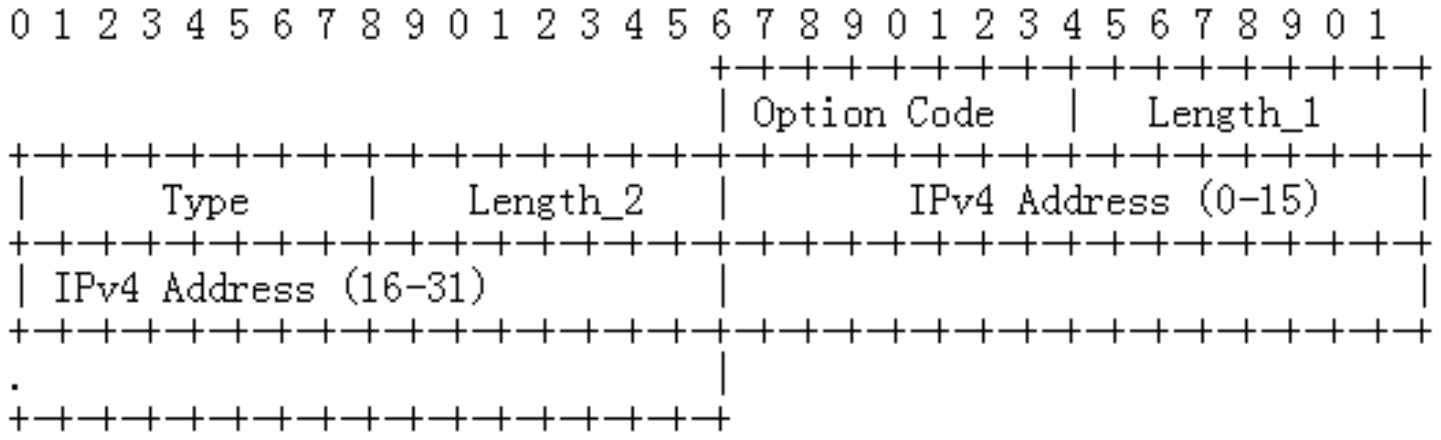
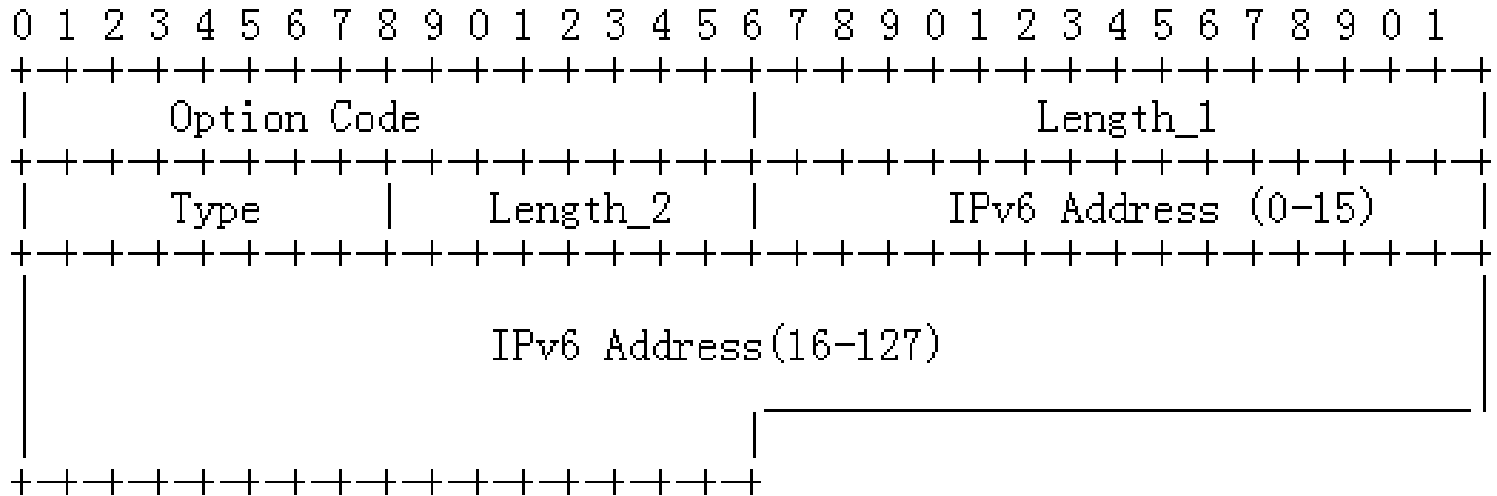


Figure 1: ANQP Server Address Option for DHCPv4

- Option Code: OPTION-IPv4_Address-Adv-Server
- Type: the type of advertisement servers, ANQP is just one case.
- Length2 is needed to accommodate different types

DHCPv6 option



- Option Code: OPTION-IPv6_Address-Adv-Server
- Type: the type of advertisement servers, ANQP is just one case.
- Length2 is needed to accommodate different types

Different types of Advertisement Servers

- Define 'Type' in order to :
 - make options defined in this document scalable to further extensions; IEEE has defined RLQP and others will be coming
 - avoid the need of an individual option code for each of such advertisement servers
- This document registers the type value for ANQP

Type	Value
Reserved	0
ANQP	1
Reserved	2-255

Questions and Comments?

- Thank you for your attention