

Service Identifiers List Option for DHCPv6

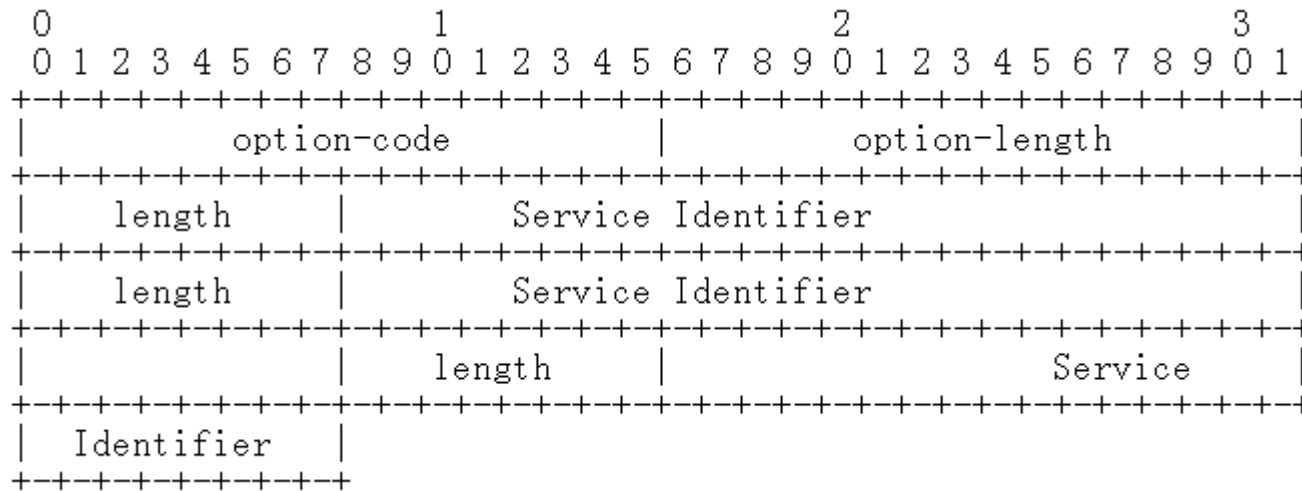
Hui. Deng, H.Liu [China Mobile]

Bernie Volz [Cisco]

Requirements from operating experience

- With the various kind of promising wireless broadband access technologies, there are more possibilities that mobile node could have multiple connections which may provide different kind of service available.
- In some cases, the operator would like to let the mobile node to know services are allowed or not allowed (not available) for the connection. It may influence network routing, policy and quality of service, et al.

Service Identifiers Supported Option



Length

- Length of the "service identifier" field in octets. For example 'ims' will be 3, 'voip' will be 4, 'p2p' will be 3.
- Port numbers can also be specified using ASCII port number string, for example length of 5 followed by "34212".

Service Identifier

- A variable length UTF-8 encoded service identifier string used to identify the requested service.
- 'ims', 'voip' and 'p2p' are valid examples of Service Identifiers. IANA requested to establish a registry for the service identifier names.
- Some other protocol identifier has been specified by <http://www.iana.org/protocols/>.
- When it need indicate the port number information, ASCII string will be used for the format like '34212'.

IANA Consideration

- This document defines two new DHCPv6 options, and IANA is requested to assign the following new DHCPv6 Option Codes in the registry maintained in <http://www.iana.org/assignments/dhcpv6-parameters>:
 - OPTION_SERVICE_SUPPORTED
 - OPTION_SERVICE_UNSUPPORTED

- Work item?