

# **DHCPv4 and DHCPv6 Access-Network-Identifier Options**

(draft-ietf-dhc-access-network-identifier-01)

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# Overview: Access Network Information(ANI)

- Primary Access Network Information
  - Access-Network-Type – 802.11, Ethernet etc.
  - Network-Identifier – e.g. SSID, Access Point name, BSSID/AP MAC address
  - Operator-Identifier – e.g. the realm of the access network operator using domain name encoding.

# Access Network Information in DHCP

- The draft defines new option in DHCPv4, to be inserted by:
  - Client : access network information option with sub-options
  - Relay : Option 82 Sub options to carry - Access-Network-Type, Network-Identifier, Operator-Identifier
- New options in DHCPv6
  - To carry access network information
  - Can be added either in Relay-Forward or Client initiated messages by Relay and Clients respectively

# Motivation/Use Case

- In many deployments there is a need to provide differentiated services based on the access network attachment. For example:
  - a) The service treatment may be different when a node is attached to a access network owned by the home operator than when owned by a roaming partner.
  - b) The service treatment can also be different based on the configured SSID in case of IEEE 802.11 based access networks.
  - c) Shared access networks i.e. radio access & access points owned and possibly operated by other entity than the owner of a access gateway .

**This draft defines DHCP options to relay this information from access towards the gateway and server.**

# Changes from 00-01

- Added DHCPv6 option and DHCPv4 sub-option to carry Access Point's BSSID

# Next Steps..

- Request review from workgroup
- Prepare for workgroup last call?