

# RADIUS Attributes for Dual Stack Access

draft-yeh-radext-dual-stack-access-01

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# Deployment Scenario (eg.)

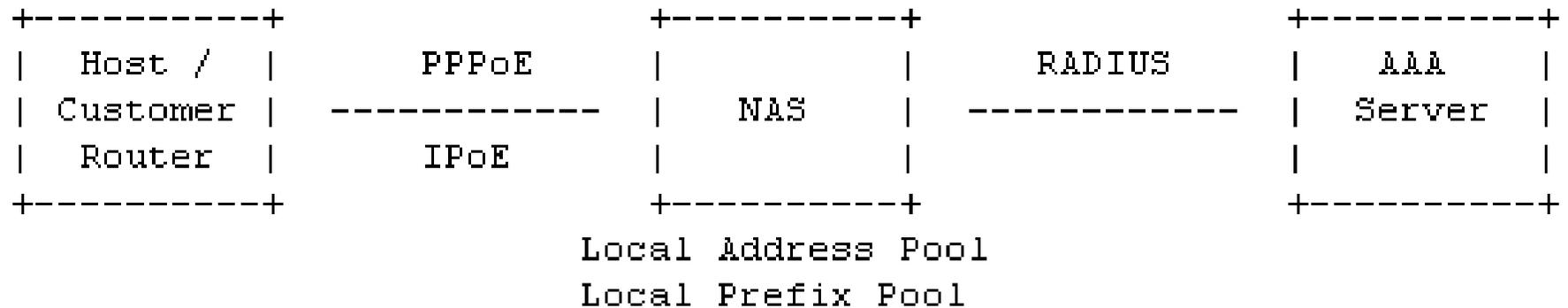


Figure 1: Deployment Scenario for various types of the users

- Do we need new attributes for Dual-Stack Access?

# User-Type - for the use case of Dual-Stack, IPv6-only & IPv4-only - 1

- Purpose of this attribute in the service deployment scenarios
  - Proper indication for different configuration or assignment mechanisms when the resource pools located at NAS.
  - Proper definition of the reporting set for different user type.
  - Support access method of either PPPoE or IPoE

# User-Type - for the use case of Dual-Stack, IPv6-only & IPv4-only - 2

- IPv4-only – Host - Framed-IP-Address
- IPv6-only - Host(Numbered by SLAAC) – Framed-IPv6-Prefix
- IPv6-only - Host(Numbered by DHCPv6) – Framed-IPv6-Address
- IPv6-only - Customer Router(Unnumbered) - Delegated-IPv6-Prefix
- IPv6-only - Customer Router(Numbered by SLAAC) - Delegated-IPv6-Prefix + Framed-IPv6-Prefix
- IPv6-only - Customer Router(Numbered by DHCPv6) - Delegated-IPv6-Prefix + Framed-IPv6-Address
- Dual stack - IPv4 Host + IPv6 Host(Numbered by SLAAC) - Framed-IP-Address + Framed-IPv6-Prefix
- Dual stack - IPv4 Host + IPv6 Host(Numbered by DHCPv6) - Framed-IP-Address + Framed-IPv6-Address
- Dual stack - IPv4 Host + IPv6 Customer Router(Unnumbered)  
- Framed-IP-Address + Delegated-IPv6-Prefix
- Dual stack - IPv4 Host + IPv6 Customer Router(Numbered by SLAAC)  
- Framed-IP-Address + Delegated-IPv6-Prefix + Framed-IPv6-Prefix
- Dual stack - IPv4 Host + IPv6 Customer Router(Numbered by DHCPv6)  
- Framed-IP-Address + Delegated-IPv6-Prefix + Framed-IPv6-Address

## User-Type - for the use case of Dual-Stack, IPv6-only & IPv4-only - 3

- Discussion
  - Does the IPoE users need another set of codes (17-27) in User-Type?
  - Code of the defined attribute (eg. NAS-Port-Type or Framed-Protocol) for the indication of the IPoE users?

# Traffic Statistics Attributes - for the use case of Dual-Stack - 1

- Purpose of these attributes in the service deployment scenarios
  - Requirement defined in BBF TR-187 (Section 9.4) for the separated IPv4 & IPv6 traffic
    - Separated Counters in the differentiated forwarding planes
    - Separated Queues for the differentiated QoS polices
  - Support the differentiated accounting polices for the separated IPv4 & IPv6 traffic

# Traffic Statistics Attributes - for the use case of Dual-Stack - 2

- Acct-Input-IPv4-Octets
- Acct-Output-IPv4-Octets
- Acct-Input-IPv4-Packets
- Acct-Output-IPv4-Packets
- Acct-Input-IPv4-Gigawords
- Acct-Output-IPv4-Gigawords
  
- Acct-Input-IPv6-Octets
- Acct-Output-IPv6-Octets
- Acct-Input-IPv6-Packets
- Acct-Output-IPv6-Packets
- Acct-Input-IPv6-Gigawords
- Acct-Output-IPv6-Gigawords

# Proposal

- Is it a good idea for a WG item?

## Qs?

on the I.D.

- Necessity of User-Type attribute for the right configuration or assignment?
- Necessity of the statistics attributes for the separated Ipv4/Ipv6 traffic ?