

Authentication Extensions for the Dynamic Host Configuration Protocol

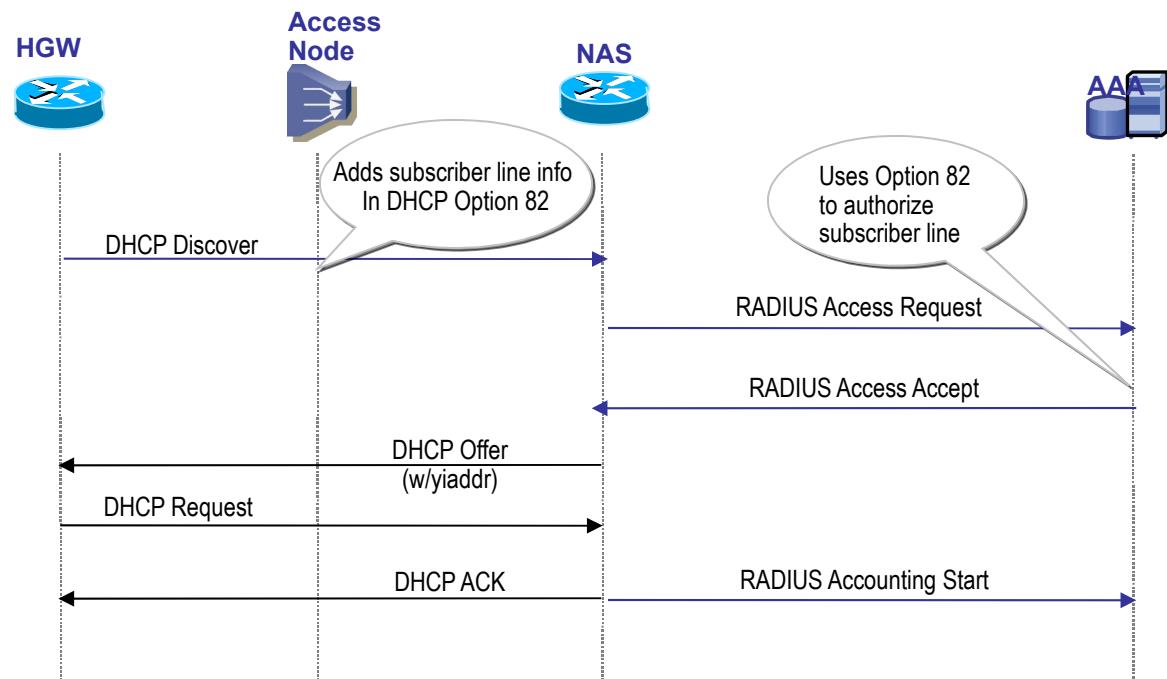
draft-pruss-dhcp-auth-dsl-06

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Quick reminder of “DHCP Proxy” to AAA*

Host configuration provided by centralized AAA systems
RADIUS subscriber attributes are mapped to DHCP Options
Driven by the need to protect massive investments in custom AAA systems and back-end infrastructure



* This function is available from a number of NAS vendors today

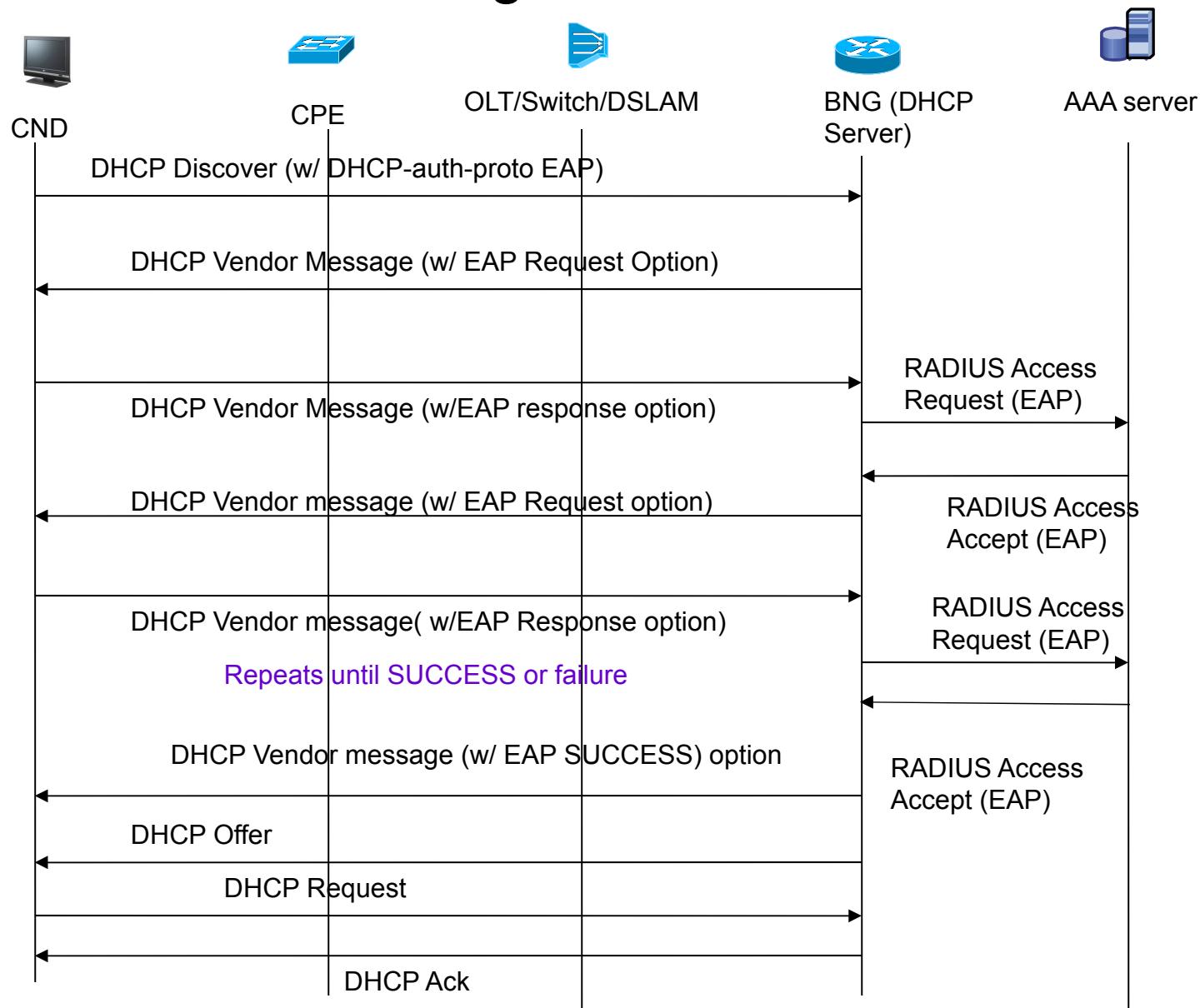
Relying on option 82 marking may not be sufficient in some cases:

- Migration existing Username/Password systems
- End user controlled retail ISP selection (@domain)
- Subscriber nomadicity
- Line information at the Access Node may not always be reliable

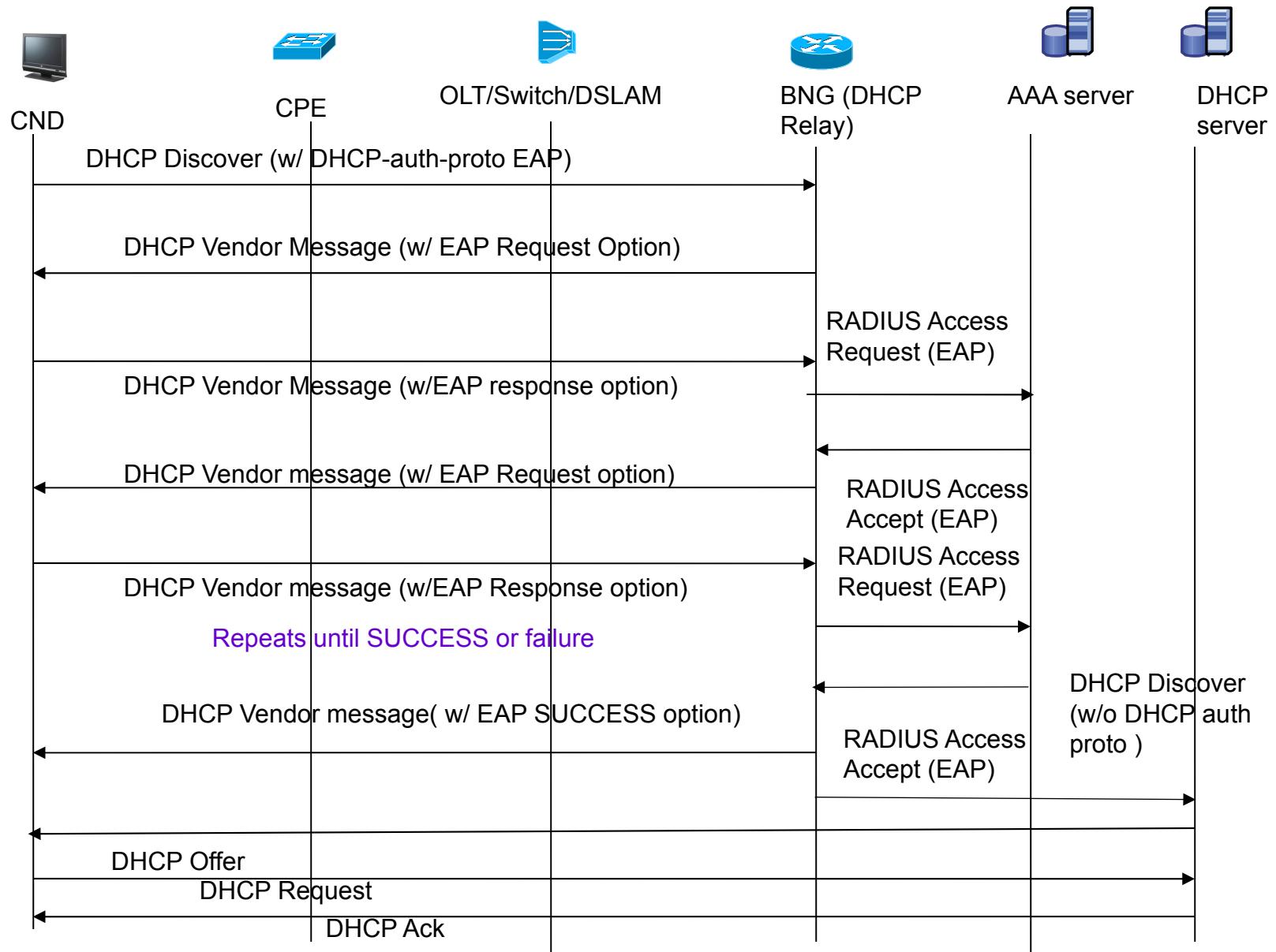
Message Flows with EAP

- DHCP v4 message flow with BNG acting as server
- DHCP v4 message flow with BNG acting as relay

BNG Acting as DHCPv4 Server



BNG acting as DHCPv4 Relay



Implementations

- Server and relay – Major network vendor
- Client – Linux / *BSD – low-end AP

Q&A