

DHCPv6/DHCP options for LWM2M bootstrap information

draft-nalluri-dhc-dhcpv6-lwm2m-bootstrap-options-02

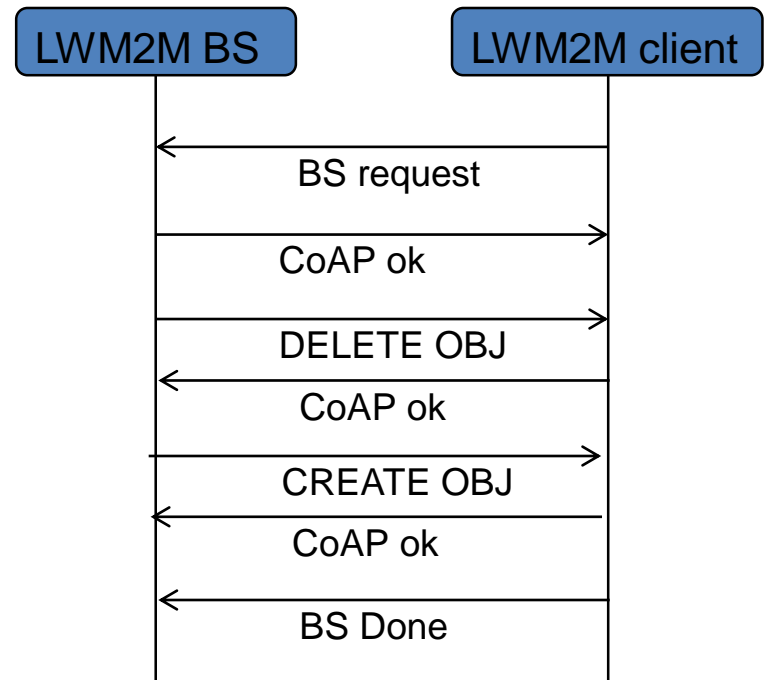
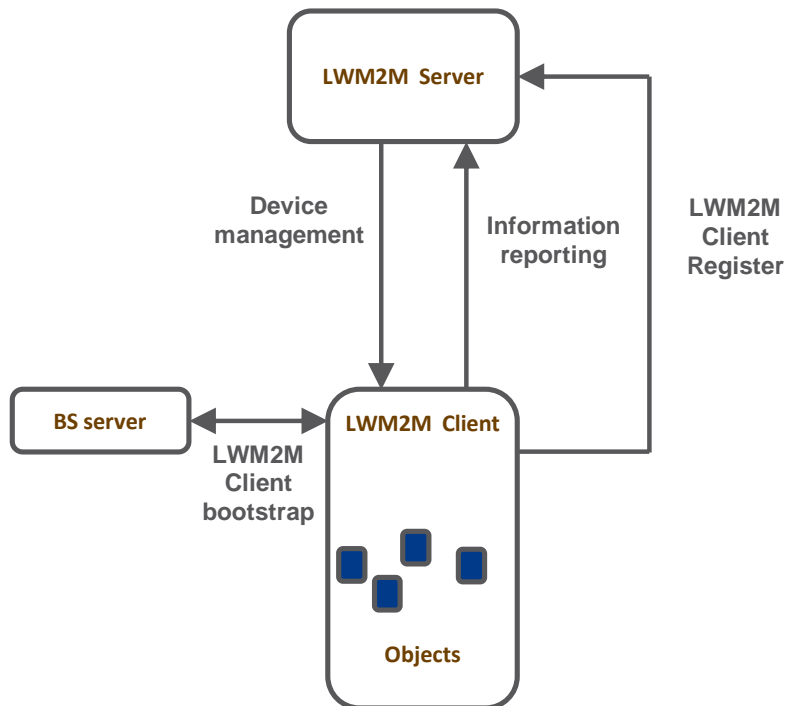
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Context

- Internet of Things
- LWM2M is popular device management protocol in IoT scenarios
- DHCPv6 remain popular in IoT networks
- Need support for more options to enable IoT services

LWM2M

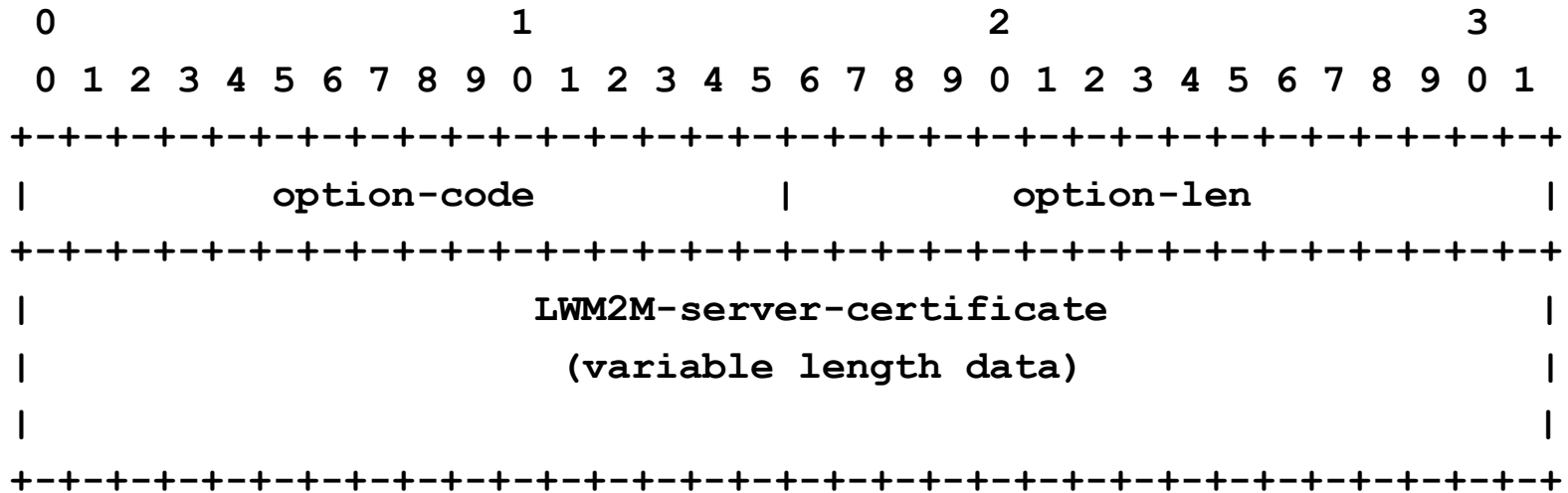
- Specification from Open Mobile Alliance for M2M and IoT device management
- Client \leftrightarrow Server model
- Runs on The Constrained Application Protocol (RFC 7252)



Summary

- Vendors are hardcoding LWM2M bootstrap server information
- DHCP/DHCPv6 need to support new options to enable LWM2M service
 - DHCPv6 option for LWM2M bootstrap server URI
 - DHCPv6 option for LWM2M server certificate
 - DHCPv4 option for LWM2M bootstrap server URI
 - DHCPv4 option for LWM2M server certificate

DHCPv6 option for LWM2M server certificate

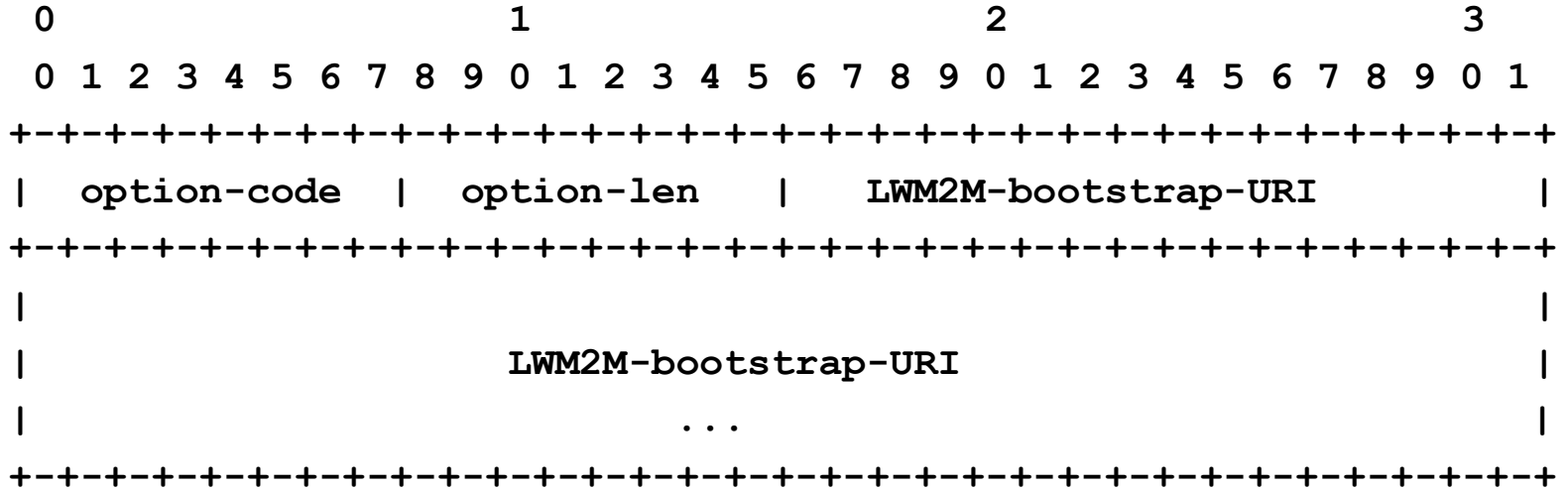


option-code: `OPTION_LWM2M_SERVER_CERTIFICATE`

option-len: Length of the 'LWM2M-server-certificate' field in octets

LWM2M-server-certificate: Digital certificate of LWM2M server as defined in Section 3.6 of [RFC7296]

DHCPv4 option for LWM2M bootstrap server URI

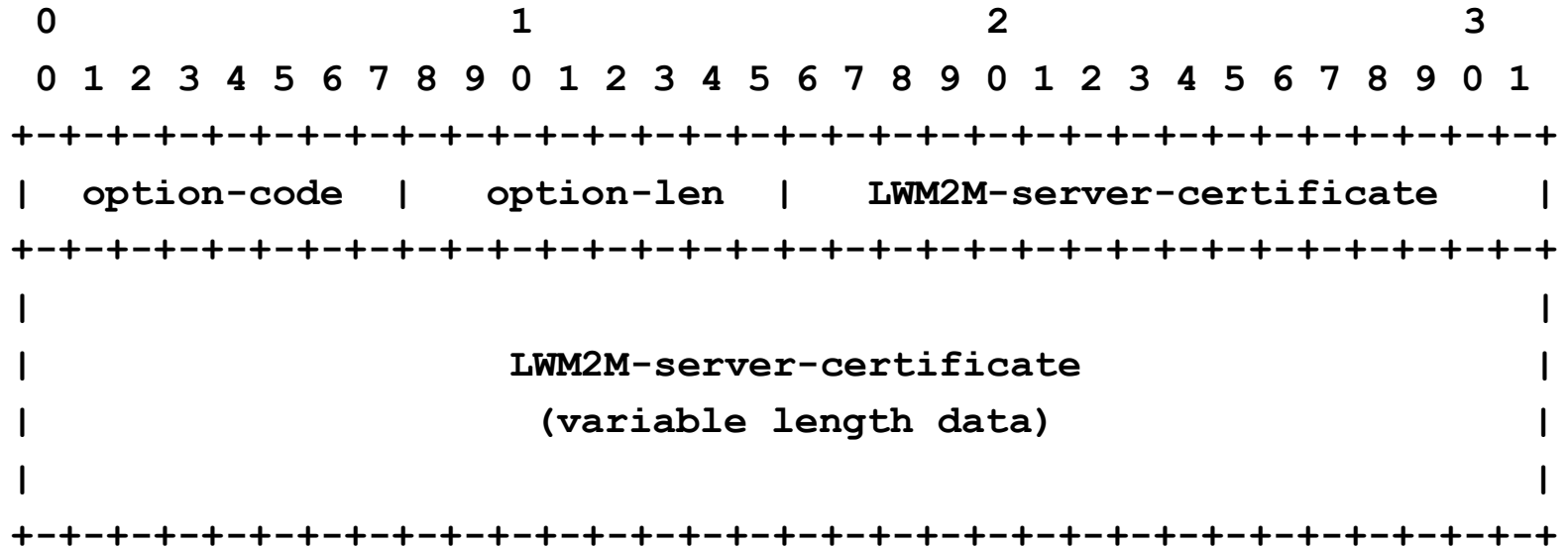


option-code: `OPTION_LWM2M_BOOTSTRAP_URI`

option-len: Length of the 'LWM2M-bootstrap-URI' field in octets

LWM2M-bootstrap-URI: This string is URI of LWM2M bootstrap server.
The string is not null-terminated.

DHCPv4 option for LWM2M server certificate



option-code: `OPTION_LWM2M_SERVER_CERTIFICATE`

option-len: Length of the 'LWM2M-server-certificate' field in octets

LWM2M-server-certificate: Digital certificate of LWM2M server as defined in Section 3.6 of [RFC7296]

Next Steps

- Any inputs and comments?
- DHC adoption request

Thank you