

CoAP Transport For CMPv2 and Light Weight CMP Profile

[draft-msahni-ace-cmpv2-coap-transport](#)

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Background

This draft is an extension of the LAMPS WG draft [draft-ietf-lamps-lightweight-cmp-profile](#), which is an effort to profile the CMPv2 protocol ([RFC 4210](#)) for the use case of managing the certificates of devices in an Industrial and IOT scenario.

Since most of the IOT devices are constrained devices, this draft bridges the gap of supporting CoAP transport, a preferred transport for low powered devices, for “CMPv2 Protocol” and “Light Weight CMP Profile”.

This draft follows RFC 6712 (HTTP transport for CMPv2 protocol) in general.

Some key points

- CMPv2 being transport agnostic, the use of CoAP transport is similar to HTTP transport for CMPv2 (RFC 6712).
- Use of Block wise transfer (RFC 7959) helps avoiding Fragmentation over UDP.
- Use of a “CoAP to HTTP proxy” (RFC 7252), at the boundary of constrained device networks, eliminates the need for any changes to the existing PKI infrastructure.
- For added secrecy “CoAPS://” can be used which uses DTLS for transport.

CoAP Transport for CMPv2 and Ace WG

Based on discussions related to the “Light Weight CMP Profile” draft in LAMPS working group, this part was excluded from the “Light Weight CMP profile” draft as ACE working group, being focused on Constrained devices, seems to be a better place to come up with the specifications for the use of CoAP transport for CMPv2 protocol.

In order to adopt draft-msahni-ace-cmpv2-coap-transport in ACE WG, we may need to recharter it.