CLAIMS:

1. A method for accessing a Constrained Application Protocol (CoAP) server in a media scene description system, comprising:

sending, by a media access engine, a CoAP request to the CoAP server to request a media resource, the media access engine comprising a Hypertext Transfer Protocol (HTTP) client and a HTTP-CoAP proxy configured to perform cross-protocol translation from HTTP to CoAP by mapping an HTTP request, which is generated by the HTTP client of the media access engine based on a media request from a presentation engine, to the CoAP request to be sent to the CoAP server; and

receiving, by the media access engine, a CoAP response from the CoAP server, the CoAP response including the requested media resource.

2. The method of claim 1, further comprising:

processing the received media resource by one of (i) a video decoder, (ii) an audio decoder, or (iii) a data compressor; and

rendering the processed media resource by the presentation engine.

3. The method of claim 1, wherein

the sending the CoAP request and the receiving the CoAP response are performed using an HTTP-CoAP proxy API.

4. The method of claim 3, wherein further comprising:

the mapping the HTTP request from the HTTP client to the CoAP request is performed using the HTTP-CoAP proxy API .

5. The method of claim 4, further comprising:

mapping, by the media access engine, the CoAP response from the CoAP server to an HTTP response using the HTTP-CoAP proxy API.

6. An apparatus for accessing a Constrained Application Protocol (CoAP) server in a media scene description system, comprising:

processing circuitry of a media access engine configured to:

send a CoAP request to the CoAP server to request a media resource, the media access engine comprising a Hypertext Transfer Protocol (HTTP) client and a HTTP-CoAP proxy configured to perform cross-protocol translation from HTTP to CoAP by mapping an HTTP request, which is generated by the HTTP client of the media access engine based on a media request from a presentation engine, to the CoAP request to be sent to the CoAP server; and

receive, by the media access engine, a CoAP response from the CoAP server, the CoAP response including the requested media resource.

7. The apparatus of claim 6, wherein the processing circuitry is configured to:

process the received media resource, and render the processed media resource by the presentation engine.

8. The apparatus of claim 6, wherein

the processing circuitry of the media access engine is configured to send the CoAP request and receive the CoAP response using an HTTP-CoAP proxy API.

9. The apparatus of claim 8, wherein the processing circuitry is configured to:

map the HTTP request from the HTTP client to the CoAP request using the HTTP-CoAP proxy API.

10. The apparatus of claim 9, wherein the processing circuitry is configured to:

map the CoAP response from the CoAP server to an HTTP response using the HTTP-CoAP proxy API.

11. A non-transitory computer-readable medium storing instructions that, when executed by a processor, cause the processor to perform a method for accessing a Constrained Application Protocol (CoAP) server in a media scene description system, the method comprises:

sending, by a media access engine, a CoAP request to the CoAP server to request a media resource, the media access engine comprising a Hypertext Transfer Protocol (HTTP) client and a HTTP-CoAP proxy configured to perform cross-protocol translation from HTTP to CoAP by

mapping an HTTP request, which is generated by the HTTP client of the media access engine based on a media request from a presentation engine, to the CoAP request to be sent to the CoAP server; and

receiving, by the media access engine, a CoAP response from the CoAP server, the CoAP response including the requested media resource.

12. The non-transitory computer-readable medium of claim 11, wherein the method further comprises:

processing the received media resource by one of (i) a video decoder, (ii) an audio decoder, or (iii) a data compressor; and

rendering the processed media resource by the presentation engine.

13. The non-transitory computer-readable medium of claim 11, wherein

the sending the CoAP request and the receiving the CoAP response are performed using an HTTP-CoAP proxy API.

14. The non-transitory computer-readable medium of claim 13, wherein the method further comprises:

the mapping the HTTP request from the HTTP client to the CoAP request is performed using the HTTP-CoAP proxy API.

15. The non-transitory computer-readable medium of claim 14, wherein the method further comprises:

mapping, by the media access engine, the CoAP response from the CoAP server to an HTTP response using the HTTP-CoAP proxy API.