

# An implementation of CoAP protocol for Arduino and ESP8266

SemIoT project - Semantic technologies for Internet of Things <sup>1</sup>

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<sup>1</sup><http://semiot.ru>

# CoAP://

RFC 7252 Constrained  
Application Protocol

- ▶ REST model
- ▶ resources available under a URL
- ▶ access through GET, PUT, POST, and DELETE methods
- ▶ working via UDP protocol

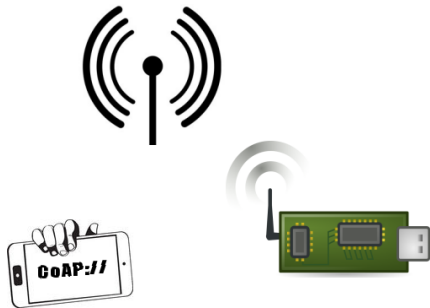
# /microcoap

A C implementation that can  
be compiled for Arduino

- ▶ Implemented CoAP features:
  - ▶ CoAP GET, PUT, POST and DELETE methods
  - ▶ Initial clients support
  - ▶ Initial endpoints setup
- ▶ CoAP features required implementation:
  - ▶ Resource subscribe option
  - ▶ Full-fledged CoAP clients support
  - ▶ Appropriate endpoints setup



**Future Plans:** wireless device configurations tools  
(mobile application).



# SemIoT project



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for Internet of Things