

# CoAP Implementation Guidance

draft-kovatsch-lwig-coap-03

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# Change History

- Merged CoAP-related guidance from several places
- Added FSMs to cover all possible exchange sequences
- Restructured document and added new sections
- Editorial text improvements

# New Structure

1. Introduction
2. Protocol Implementation  
“Basics to consider”
3. Optimizations  
“Optional improvements”
4. Alternative Configurations  
“Changing defaults and recommendations”
5. References

# 2. Protocol Implementation

1. Client/Server Model
2. Message Processing
  1. On-the-fly Processing
  2. Internal Data Structure
3. Duplicate Rejection
4. Token Usage
  1. Tokens for Observe
  2. Tokens for Blockwise Transfers
5. Transmission States
  1. Request/Response Layer
  2. Message Layer
6. Out-of-band Information
7. Programming Model
  1. Client
  2. Server

# 3. Optimizations

1. Message Buffers
2. Retransmissions
3. Observable Resources
4. Blockwise Transfers
5. Deduplication with Sequential MIDs

# 4. Alternative Configurations

1. Transmission Parameters
  1. Static Adjustments
  2. Dynamic Adjustments
2. CoAP over IPv4

# Next Step

- WG adoption?
- Contributors?
  - IPv4 experience
  - Out-of-band information
  - Alternative parameters