

# DOIC Restructuring

# Restructuring Purpose

- Improve readability
- Separate informative from normative text
- Isolate loss abatement algorithm behavior into a single section
- Minimal new text
  - Added to complete loss algorithm
  - Added in some introductory sections
  - Goal was to not change agreed-to behaviors

# Mapping of old to new structure

1. Introduction (non normative)
  - Existing Text from section 1. --
2. Terminology and Abbreviations (non normative)
  - Existing Text from section 2. --
3. Solution Overview (Non normative)
  - Existing text from section 3. --
  - 3.1 Overload Control Endpoints (Non normative)
    - New text leveraging text from existing section 5.1 --
  - 3.2 Piggybacking Principle (Non normative)
    - Existing text from existing section 5.2, with enhancements --
  - 3.3 DOIC Capability Discovery (Non normative)
    - New text leveraging text from existing section 5.3 --
  - 3.4 DOIC Overload Condition Reporting (Non normative)
    - New text --
  - 3.5 DOIC Extensibility (Non normative)
    - New text leveraging text from existing Section 5.4 --
  - 3.5 Simplified Example Architecture (Non normative)
    - Existing text from section 3.1.6, with enhancements --
  - 3.6 Considerations for Applications Integrating the DOIC Solution (Non normative)
    - New text --
    - 3.6.1. Application Classification (Non normative)
      - Existing text from section 3.1.1 --
    - 3.6.2. Application Type Overload Implications (Non normative)
      - Existing text from section 3.1.2 --
    - 3.6.3. Request Transaction Classification (Non normative)
      - Existing text from section 3.1.3 --
    - 3.6.4. Request Type Overload Implications (Non normative)
      - Existing text from section 3.1.4 --
4. Solution Procedures (Normative)
  - 4.1 Capability Announcement (Normative)
    - Existing text from section 5.3 --
    - 4.1.1. Reacting Node Behavior (Normative)
      - Existing text from section 5.3.1 --
    - 4.1.2. Reporting Node Behavior (Normative)
      - Existing text from section 5.3.2 --
    - 4.1.3. Agent Behavior (Normative)
      - Existing text from section 5.3.3 --
  - 4.2. Overload Report Processing (Normative)
    - 4.2.1. Overload Control State (Normative)
      - Existing text from section 5.5.1 --
    - 4.2.2. Reacting Node Behavior (Normative)
      - Existing text from section 5.5.2 --
    - 4.2.3. Reporting Node Behavior (Normative)
      - Existing text from section 5.5.3 --
    - 4.2.4. Agent Behavior (Normative)
      - Existing text from section 5.5.4 --
  - 4.3. Protocol Extensibility (Normative)
    - Existing text from section 5.4 --
5. Loss Algorithm (Normative)
  - New text pulling from information spread through the document --
  - 5.1. Overview (Non normative)
    - New text pulling from information spread through the document --
  - 5.2. Reporting Node Behavior (Normative)
    - New text pulling from information spread through the document --
  - 5.3. Reacting Node Behavior (Normative)
    - New text pulling from information spread through the document --

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## 6. Attribute Value Pairs (Normative)

-- Existing text from section 4. --

### 6.1. OC-Supported-Features AVP

-- Existing text from section 4.1 --

### 6.2. OC-Feature-Vector AVP

-- Existing text from section 4.2 --

### 6.3. OC-OLR AVP

-- Existing text from section 4.3 --

### 6.4. OC-Sequence-Number AVP

-- Existing text from section 4.4 --

### 6.5. OC-Validity-Duration AVP

-- Existing text from section 4.5 --

### 6.6. OC-Report-Type AVP

-- Existing text from section 4.6 --

### 6.7. OC-Reduction-Percentage AVP

-- Existing text from section 4.7 --

### 6.8. Attribute Value Pair flag rules

-- Existing text from section 4.8 --

## 7. Error Response Codes

-- New text based on resolution of issue --

## 8. IANA Considerations

-- Existing text from section 7. --

### 8.1. AVP codes

-- Existing text from section 7.1 --

### 8.2. New registries

-- Existing text from section 7.2 --

## 9. Security Considerations

-- Existing text from section 8. --

### 9.1. Potential Threat Modes

-- Existing text from section 8.1 --

### 9.2. Denial of Service Attacks

-- Existing text from section 8.2 --

### 9.3. Non-Compliant Nodes

-- Existing text from section 8.3 --

### 9.4. End-to-End-Security Issues

-- Existing text from section 8.4 --

## 10. Contributors

## 11. References

### 11.1. Normative References

### 11.2. Informative References

## Appendix A. Issues left for future specifications

### A.1. Additional traffic abatement algorithms

#### A.2. Agent Overload

#### A.3. DIAMETER\_TOO\_BUSY clarifications

#### A.4. Per reacting node reports

## Appendix B. Examples

### B.1. Mix of Destination-Realm routed requests and Destination-Host routed requests