Diameter Routing Message Priority (DRMP)

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Problem Statement

- There is currently no mechanism to influence which request messages get throttled when handling requests destined to an overloaded Diameter host.

- All requests are treated with equal priority and have equal probability of being throttled.

DRMP Use Cases

- First Responder Related Signaling

- Emergency Call Related Signaling

- Operator Defined Differentiated Services

- Application Specific Priorities

  - For example, 3GPP S6a application's ULR priority higher for MME restoration than for initial attaches.

Design Questions - 1

- Relationship with SIP Resource Priority (RFC4412)

- Should DRMP be modeled after the SIP Resource Priority mechanism?
  - Support for priority namespaces
  - Support for defined priority treatments (preemption and priority queuing)

- If so, can existing SIP Resource Priority namespaces be used?

Design Questions - 2

- Priority Encoding Method
  - Command Flag bits
  - AVPs

Design Questions - 3

- Base protocol versus application extension
- If answer to question 2 is command flag bits then it is base protocol by default
- At a minimum, need priority handling to not require different behavior for different application-ids.

Question 4

- Scope of Priority Setting
- Does priority apply to:
  - A single message
  - The Diameter transaction (same priority for request and answer messages)
  - A request message (answer messages have an implied higher priority than all request messages)

Next Steps

- Add to working group charter
- Continue work on definition of the mechanism