

DIME WG

IETF 83

Diameter Design Guidelines

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Once upon a time...

- First version of the draft: May 2007...
- Last major update in Nov 2008! ☹️
- At this time, decision to postpone till the completion of RFC 3588 bis
- Since this time:
 - RFC 3588 bis "almost" published
 - Agreement on new IANA rules
 - Feedback from operational deployment

What it should be about...

- Key deliverable to be used:
 - by Diameter application designers
 - From IETF, vendors, SDOs
 - to clarify and/or reassess existing rules/recommendations that could be spread across specifications
 - to answer to the most frequent questions
 - Raised during application design or
 - Based on implementation and operational feedback
 - to avoid repeating misbehavior/error from the past in the future

Re-usability of applications

- What it DOES imply when one wants to re-use an existing application id
- What you can do and cannot do
- Trade-off between "twisting" an existing application and creating a new one
 - According to the "new" IANA rules

Re-usability of command codes

- What it DOES mean when one wants to re-use an existing application id
- What you can and cannot do with existing command codes
 - According to the initial purpose of the command
 - according to the ABNF description
- Trade-off between "twisting" an existing command code and creating a new one
 - According to the "new" IANA rules

Re-usability of AVPs

- What it DOES mean when one wants to re-use an existing AVP code
- What you can and cannot do with existing AVP codes
 - According to the initial purpose of the AVP
 - According to the format of the AVP
 - According to the setting of the AVP flags
- Trade-off between "twisting" an existing command code and creating a new one
 - According to the "new" IANA rules

One or two "Things" to consider..

- When designing a new Diameter application
 - Diameter used as AAA protocol or transport protocol?
 - What kind of Diameter application
 - IETF standard vs vendor-specific application?
 - For Internet community, SDOs, vendor-specific solution?
 - Transport and security choices based on the deployment environment
 - TCP, SCTP?
 - TLS, IPsec, DTLS,... nothing?
 - Functional architecture
 - Roaming, need for Diameter Agents, Dynamic discovery, etc.
 - Command code definition, AVP flag setting and AVP data format
 - Tips to preserve protocol extensibility

Questions

- deleting an AVP with M-bit set
 - current assumption: new application required
 - why?
- should we add a section on RADIUS-Diameter interworking?
- Should we add considerations on “intermediary” nodes and impacts on Diameter?

Next Step

- -13 submitted... with no major change
- -14 submitted right after IETF 83
- New version includes:
 - reshaping of the document
 - better readability of the document
 - Update the current content based on the work completed on RFC 3588bis and IANA rules
 - Add some proposition on missing information

Objectives

- I' m EDITOR of the document.
- The content of this draft should reflect WG position.
- Feedback from the WG is required
- Launch a WGLC in May 2012
- the draft should be submitted to IESG just after

Thank you...

- No QUESTION
- No COMMENT
- Just... HELP
 - Volunteers in this key topic are welcome... even if not paid for that.