Diameter Application for Authentication and Authorization in Web Applications

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Diameter WebAuth

Diameter WebAuth authentication and authorization between Diameter server and Web server.

HTTP basic and digest access authentication (RFC 2617) between Web server and browser.

Figure: Diameter WebAuth overview
Diameter WebAuth - Example

User Client
(Web Browser)

| HTTP(S) | Web Application
(Diameter Client) |
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>(1) GET /protected.html</td>
<td>(2) AA-Request</td>
</tr>
</tbody>
</table>
| (4) 401 Unauthorized
(incl. WWW-Authenticate Header) | (3) AA-Answer
(incl. HTTP-Digest-Challenge) |
| (5) GET /protected.html
(incl. Authorization Header) | (6) AA-Request
(incl. HTTP-Digest-Response) |
| (8) 200 OK | (7) AA-Answer
(DIAMETER_SUCCESS) |

Identity Provider
(Diameter Server)

Figure: Diameter WebAuth - HTTP digest example
Version -01

Support for basic/digest authentication (RFC 2617)

Basic authorization attributes: URI, Service, Remote-User, User-Name, Remote-Address

Diameter counterpart for “RADIUS Extension for Digest Authentication” (RFC 5090)
Open-source implementation of Diameter WebAuth
• Diameter base library
• Diameter server including WebAuth module
• Apache httpd 2.x modules that implement WebAuth clients
• http://circum.sourceforge.net/
Further implementation work

- WebAuth implementations for
  - OpenDiameter
  - waaad daemon
  - PHP
  - ...

possibly as student projects at University of Goettingen if people are interested in it
Why WebAuth is interesting for the IETF

- Diameter benefits from attractive applications to expand deployment
- Diameter is ideal candidate for authentication/authorization back-end for web applications
- Draft is small and simple
- Implementation already available
- Closes a gap between RADIUS and Diameter
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