IETF 60 – Lemonade
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Lemonade Profile and Related Mobile Drafts

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Overview of Drafts

- IMAP profile
  - draft-ietf-lemonade-profile-00.txt
- Server-client notifications (not in charter yet...)
  - draft-maes-lemonade-server-to-client-notifications-00.txt
    - (was: draft-ietf-lemonade-server-to-client-notifications-00.txt)
- Other enhancements (not in charter yet...)
  - draft-maes-lemonade-command-extensions-00.txt
  - draft-maes-lemonade-http-binding-00.txt
- P-IMAP update:
  - draft-maes-lemonade-p-imap-03.txt

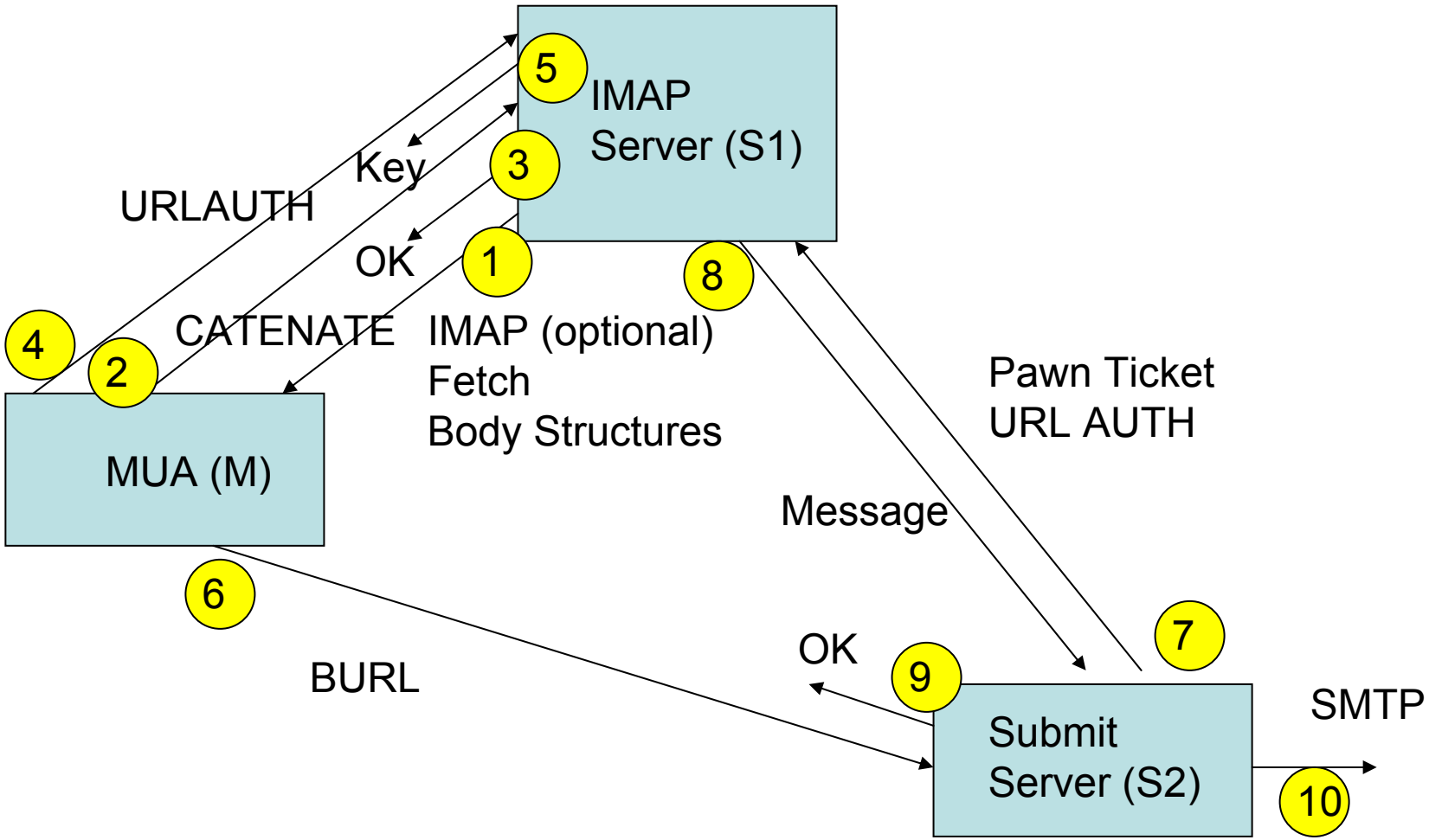
Lemonade Profile

- draft-ietf-lemonade-profile-00.txt (S. H. Maes, A. Melnikov):
  - Lemonade Pull Model:
    - draft-ietf-lemonade-burl-00.txt - Chris Newman
    - draft-ietf-lemonade-urlauth-00.txt - Alexey Melnikov & Mark Crispin
    - draft-ietf-lemonade-catenate-01.txt - Pete Resnick

    Based on:
    - draft-crispin-lemonade-pull-01.txt
  - Mobile Optimization:
    - draft-maes-lemonade-server-to-client-notifications-00.txt
    - draft-maes-lemonade-command-extensions-00.txt
    - draft-maes-lemonade-http-binding-00.txt
    - draft-ietf-lemonade-reconnect-00.txt

    Based on:
    - draft-maes-lemonade-p-imap-03.txt

Lemonade Pull model overview: “forward without download”



6,7,8,9 are synchronous

Flow for “forward without download”

- M: {to S1 -- Optional} The client uses IMAP Fetch of body structures (See [RFC3501])
- M: {to S1} The client invokes CATENATE
  - (See [CATENATE] for details of the semantics and steps – this allows the MUA to create messages on the IMAP using new data combined with body structure already present on the IMAP server.
- S1: {to M} OK (See [CATENATE]).
- M: {to S1} The client uses GENURLAUTH command to request and
- URLAUTH URL (See [URLAUTH]).
- S1: {to M} The IMAP server returns URLAUTH URL suitable for later retrieval with URLFETCH (See [URLAUTH] for details of the semantics and steps).
- M: {to S2} The client connects to the submission server and starts a new mail transaction. It uses BURL to let the submit server fetch the content of the message from the IMAP server (See [BURL] for details of the semantics and steps – this allows the MUA to authorize the submit server to access the message composed as a result of the CATENATE step).
- S2: {to S1} The submission server uses URLFETCH to fetch the message to be sent (See [URLAUTH] for details of the semantics and steps. The so-called "pawn-ticket" authorization mechanism uses a URI which contains its own authorization credentials.).
- S1: {to S2} Provides the message composed as a result of the CATENATE step).
- S2: {to M} OK (2XX)

Lemonade Mobile Optimizations

- Server to Client Notifications:
  - Server to Client Notifications:
    - draft-maes-lemonade-server-to-client-notifications-00.txt
  - Command extensions
    - draft-maes-lemonade-command-extensions-00.txt
  - Optional HTTP Bindings
    - draft-maes-lemonade-http-binding-00.txt
  - Fast Reconnect:
    - Intended to be: draft-ietf-lemonade-reconnect-00.txt

Server to Client Notifications

- Server to Client Notifications:
  - draft-maes-lemonade-server-to-client-notifications-00.txt
    - Event-based Synchronization
    - In-band and out of band notifications
    - Server-side Filtering
    - IMAP revisions:
      - UID
      - Mobile repository
      - IDLE
      - LEMONADESETPREF and LEMONADEGETPREF
      - LEMONADEFILTER
    - Event Payload

Command Extensions

draft-maes-lemonade-command-extensions-00.txt

[1] Compression – Lemonade allows for compression of responses to a command.

[2] Sending emails - The Lemonade server can be used to send email, thus eliminating the need for the Lemonade client to connect to a separate SMTP server.

[3] Support for unstable mobile connections – After a client drops a connection, the Lemonade server can temporarily maintain the session for the mobile client. During this time, the server caches any events concerning the mobile repository while the client is disconnected, which it can then send to the client upon reconnection.

[4] Longer periods of inactivity tolerated - A Lemonade server should wait at least 24 hours before logging out an inactive mobile client and ending its session.

[5] Attachments forward/reply behavior - When forwarding/replying to a message from the Lemonade client, the end user may choose to reattach the original's message attachments by just specifying the UID of the original message. The client need not download the attachments of the original message itself.

[6] Attachments conversion - The Lemonade server can convert attachments to other formats to be viewed on a mobile device.

[7] PIM - The protocol also provides support for updating personal information on a client device, even when these changes are initiated from another client (i.e. a personal assistant connects to an end user's account from a desktop and

Command Extensions

- Command Extensions:
  - draft-maes-lemonade-command-extensions-00.txt
    - IMAP revisions:
      - UID
      - Mobile repository
      - The CAPABILITY Command
      - Lemonade Session Login
      - LEMONADEENCRYPTED
    - Lemonade Command Extensions Responses
      - LEMONADEPROVISION
      - LEMONADESETPREF & LEMONADEGETPREFS
      - LEMONADEFILTER
      - LEMONADEZIP
      - LEMONADEDELIVER
      - LEMONADECONVERT & LEMONADEUIDCONVERT
      - LEMONADEPSEARCH

HTTP Bindings

- draft-maes-lemonade-http-binding-00.txt

Fast Reconnect

- Will be draft-ietf-lemonade-reconnect-00.txt

P-IMAP 03

- draft-maes-lemonade-p-imap-03.txt
  - Editorial fix + typo fixes of draft-maes-lemonade-p-imap-02.txt
- Functionally equivalent to: draft-maes-lemonade-server-to-client-notifications-00.txt, draft-maes-lemonade-command-extensions-00.txt and draft-maes-lemonade-http-binding-00.txt