LEMONADE update
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Summary

• Previous LEMONADE input to OMA
• LEMONADE Architecture
• LEMONADE Profile of MUSTs
• Relevant highlights
  – Notifications & Filters
  – Partial messages
  – Content Transformation
• Timeline
• Proposed realization of OMA requirements
Previous LEMONADE input

• What is LEMONADE?
  – OMA-MWG-MEM-2005-11 R1
• What is Internet Mail?
  – OMA-MWG-MEM-2005-12 R1
• Liaisons
  – Comments on RD, AD …
OMA Mobile Email (MEM)
Logical Architecture Model

- MEM Client
- Other Mobile Enablers
- MEM Server
- Email Server

Connections:
- I0:ME-1
- I0:ME-2
- I0:ME-3 Protocol
- Outband Notifications, Provisioning (OMA DM), ...
- Charging and Other Policies
IETF LEMONADE Model
(default IETF implementation choice)

Content Flows

Mobile Notification Magic

Wireless Protocols (WAP Push, SMS, …)

IMAP

MTA

LEMONADE IMAP Store

ESMTP

MUA

Non-IETF Stuff

IETF Stuff

LEMONADE Submit Server

URLAUTH

SUBMIT

MTA

ESMTP

ESMTP
Implementation Choice:
IETF World (pre-LEMONADE)

Content Flows

Wireless Protocols (WAP Push, SMS, …)

LEMONADE Enabler

Non-LEMONADE IMAP Store

MTA

LEMONADE Enabler

Non-LEMONADE Submit Server

MTA

Mobile Notification Magic

URLAUTH (On demand from Submit Server)

Depends on actual capabilities of IMAP Store

IETF Stuff

Non-IETF Stuff
Implementation Choice: Proprietary World With Standard Clients

Content Flows

Wireless Protocols (WAP Push, SMS, …)

IMAP

SUBMIT

“Mobile Magic Thing”

Magic Composition (On demand from Submit Server)

Depends on actual capabilities of proprietary store

MUA

“Mobile Magic Thing”

Proprietary Store

ESMTP

MTA

Proprietary Submit Server

ESMTP

MTA

Non-IETF Stuff

IETF Stuff
Profile MUST implement

**IMAP**
- STARTTLS
- CATENATE
- URLAUTH
- BURL
- UIDPLUS
- POSTADDRESS
- LITERAL+
- CONDSTORE
- IDLE

**SMTP**
- AUTH
- PIPELINING
- 8BITMIME
- CHUNKING
- BINARYMIME
- DSN
- SIZE
- ENHANCEDSTATUSCODES
Profile-bis - MUST implement

Consensus on details
- All of original Profile
- CONVERT
- Notifications & Filters
  - SIEVE
  - SEARCH WITHIN
  - VFOLDER
  - ESEARCH
  - MSGEVENTS
- RECONNECT
- BINARY APPEND
- ANNOTATEMORE
- Allow Partial URLs in trio

Details near completion
- CLEARIDLE
- Compression
  - COMPRESS
- Filter management
- Content Transformation
  - Streaming
- Firewall traversal
- Proxies
- Object encryption
- Notification encryption
- SMTP extensions…
Notifications & Filters

• Server to server
  – AF

• Server to client
  – NF – SIEVE to filter & OMA EMN as transport
  – VF - VFOLDER
  – DF - SIEVE

• NF & DF management
  – Manage SIEVE
IETF LEMONADE Notifications

Content Flows

Wireless Protocols (WAP Push, SMS, …) → IMAP

IMAP

Mobile Notification Magic

VF = View (msg and in-band event) Filter
NF = Out-of-Band Notification Filter
DF = Deposit-time Filter
AF = Administrative Filter

LEMONADE IMAP Store

MUA

Manage SIEVE

SUBMIT

LEMONADE Submit Server

URLAUTH

ESMTP

MTA

Non-IETF Stuff

IETF Stuff

Notification Stuff
Partial messages

• Already in RFC2192bis (IMAPURL)
  – Partial fetch

• Explicit forwarding of parts of messages
  – Will add support in trio
  – URLAUTH, CATENATE, BURL
Content Transformation

• Using OMA STI to indicate parameters
  – LEMONADE baseline is only HTML-to-TXT
• Static or Streaming
• Encapsulated transformations
  – Compression
  – Encryption
Timeframe

• Goals – RFC 4416
  – Published Feb 2006
• Profile – RFC xxxx
  – RFC Editor Queue
  – Publication April 2006
• Final Review of Profile-bis
  – May 2006
• Publication of Profile-bis
  – September 2006
Realization of OMA model

Content Flows

Wireless Protocols
(WAP Push, SMS, …)

MEM client
MUA

LEMONADE IMAP Store

IMAP

LEMONADE Submit Server

URLAUTH

MEM server
email server

ESMTP

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IETF Stuff
OMA Model

Other mobile enablers

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IETF Stuff
OMA Model
References

• LEMONADE Document Status Page
  http://tools.ietf.org/wg/lemonade/

• Working Group Page
  http://www.ietf.org/html.charters/lemonade-charter.html

• Mail List:
  – General Discussion: lemonade@ietf.org
  – To Subscribe: lemonade-request@ietf.org
  – In Body: in body 'subscribe'