

# Lemonade

## IETF 62

**Eric Burger**

[eburger@brooktrout.com](mailto:eburger@brooktrout.com)

**Glenn Parsons**

[gparsons@nortel.com](mailto:gparsons@nortel.com)

# Note Well

**Any submission to the IETF intended by the Contributor for publication as all or part of an IETF Internet-Draft or RFC and any statement made within the context of an IETF activity is considered an "IETF Contribution". Such statements include oral statements in IETF sessions, as well as written and electronic communications made at any time or place, which are addressed to:**

- the IETF plenary session,
- **any IETF working group or portion thereof,**
- the IESG or any member thereof on behalf of the IESG,
- the IAB or any member thereof on behalf of the IAB,
- any IETF mailing list, including the IETF list itself, any working group or design team list, or any other list functioning under IETF auspices,
- the RFC Editor or the Internet-Drafts function

**All IETF Contributions are subject to the rules of BCP 78 and BCP 79.**

**Statements made outside of an IETF session, mailing list or other function, that are clearly not intended to be input to an IETF activity, group or function, are not IETF Contributions in the context of this notice.**

**Please consult BCP 78 for details.**

# Scribes and Transcribes

?? for Wednesday

?? For Thursday

## JABBER details

**Room:** lemonade

**Server:** ietf.xmpp.org

**Logs:** <http://www.xmpp.org/ietf-logs/lemonade@ietf.xmpp.org/>

## mp3 details

**Wednesday:** <http://videolab.uoregon.edu/events/ietf/ietf628.m3u>

**Thursday:** <http://videolab.uoregon.edu/events/ietf/ietf627.m3u>

# Chair's Agenda

## Wednesday

- Status review
  - Goals, S2S Notification, MMS, Future Delivery,
  - Pull Trio (cooked and updated)
- Profile (phase 1)
- Security
- Media Conversion
- Deployment Challenges (L3/L7 Interaction)

## Thursday

- Goals (phase 2)

# Status Update

## Chairs

# Lemonade Charter Review

- LEMONADE Goals
- IMAP4 extensions for VM playback
- IMAP4/SUBMIT extensions for forwarding
- IMAP4 extensions & profile for diverse endpoints
- Server-to-Server Notification Protocol
- Translation to and from other messaging systems

# WG Deliverables

- LEMONADE Goals  
draft-ietf-lemonade-goals-05.txt
- IMAP4 extensions for VM playback  
*draft-ietf-lemonade-imap-channel-02.txt*
- IMAP4 extensions for forwarding  
draft-ietf-lemonade-burl-00.txt  
draft-ietf-lemonade-urlauth-05.txt  
draft-ietf-lemonade-catenate-04.txt
- IMAP4 extensions & profile for diverse endpoints  
draft-ietf-lemonade-reconnect-02.txt  
draft-ietf-lemonade-futuredelivery-01.txt  
draft-ietf-lemonade-profile-01.txt
- Server-to-Server Notification Protocol  
draft-ietf-lemonade-notify-s2s-00.txt
- Translation to and from other messaging systems  
draft-ietf-lemonade-mms-mapping-02.txt

# WGLC Status

- Goals
  - RFC Editor Queue
- Server-to-Server Notification Requirements
  - IETF Last Call Closed, Should be Informational, Needs Chair Write-Up
- MMS Mapping
  - IETF Last Call Closed, No Comments, Needs Chair Write-Up
- Future Delivery
  - WGLC Closed, Nits Review Needed
- Catenate
  - WGLC Happened; Enough Comments to Need New WGLC After Next Draft
  - WGLC Should Be Closed, But Enough Will Change to Keep Open
- URLauth
  - WGLC Closed (will send note to list), Need New Draft
- BURL
  - WGLC Closed, Nits Review Needed



# Lemonade Profile

Stéphane Maes  
Alexey Melnikov

# Security Models

Glenn Parsons

Eric Burger

Pete Resnick

# Security AD Comments

- State recovery at apps layer
  - Persistent session layer instead
- Security model
  - e2e, access all keys, per message key
  - This needs protocol work with S/MIME or PGP WGs
- Security credentials for streaming
  - Negotiate keys, use TLS/SASL or SDP

# Reconnect

- Principles
  - Cannot Reduce IMAP Security
  - Cannot Break IMAP Security Model
- Acceptable Approach
  - Network-side Server
  - Proxies Full IMAP Authentication Handshake
  - Holds IMAP Session, Passing Cookie towards Client
  - Client May Use Cookie to Authenticate on Reconnect

# Reconnect Properties

- Since Network-side Server Holds IMAP State, No Need for Re-Sync on Reconnect
- Theory, Want Scheme for All Related Protocols (e.g., http, sip)
- Practice: Unnecessary
  - Retrieval protocols have concept of “Start at block/time X”
  - Retrieval protocols do not have re-sync problem
- Although Proposed as a Proxy Model, Should We Build-In to Server? Decomposition a Local Matter / Implementation Detail?

# Transcoding

- Turns Out e2e Security is Possible
  - S/MIME and PGP Take Body, Generate Session Key, and Encrypt Session Key with Public Key
  - Recipient Uses Private Key to Decrypt Session Key, not Body
- Process
  - Server Hands Encrypted Session Key to Client
  - Client Decrypts Session Key
  - Client Hands Key to Server for Document Processing
- Requires New Protocol Mechanism for Passing Keys

# Streaming

- Streaming Has More Complex Trust Relationships
  - IMAP Server <-> IMAP Client
  - IMAP Client <-> Streaming Server
  - Streaming Server <-> IMAP Server
- Do Not Want to Impose Additional Requirements on Client
  - E.g., If Client Infrastructure is all SASL, Don't Want to Impose X.509 TLS on Client <-> Streaming Server Connection
- Passing Session Keys in SDP OK Approach

# Deployment Challenges

Media conversion  
Intermediaries  
Transport optimization  
S2C notifications



# Media Conversion

Michael Wener

# Intermediaries

Stéphane Maes

# Transport Optimization

Needs Work

# Next Steps

- Volunteers for Nits
- Volunteers for WG Write-Ups
- Media Conversion Strategy

# Charter Dates

## Goals and Milestones:

- Oct 04 Submit LEMONADE goals and use-cases specification to the IESG
- Oct 04 Submit server to server notification requirements to the IESG
- Nov 04 Submit translation to other messaging systems to the IESG
- Nov 04 Submit IMAP/SUBMIT extensions for forward without download to IESG
- Jan 05 Submit IMAP4 extensions for streaming multimedia to the IESG
- Feb 05 Submit IMAP4 profile for mobile devices to the IESG
- Mar 05 Submit server to server notification protocol to the IESG

# Thanks!

- Mail List:
  - General Discussion: [lemonade@ietf.org](mailto:lemonade@ietf.org)
  - To Subscribe: [lemonade-request@ietf.org](mailto:lemonade-request@ietf.org)
  - In Body: in body 'subscribe'
  - Archive: <ftp://ftp.ietf.org/ietf-mail-archive/lemonade/>
- Supplemental Work Group Page
  - <http://flyingfox.snowshore.com/i-d/lemonade/>