Internet Unified Messaging Requirements to Support Diverse Clients

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Draft: draft-wong-umcli-01.txt
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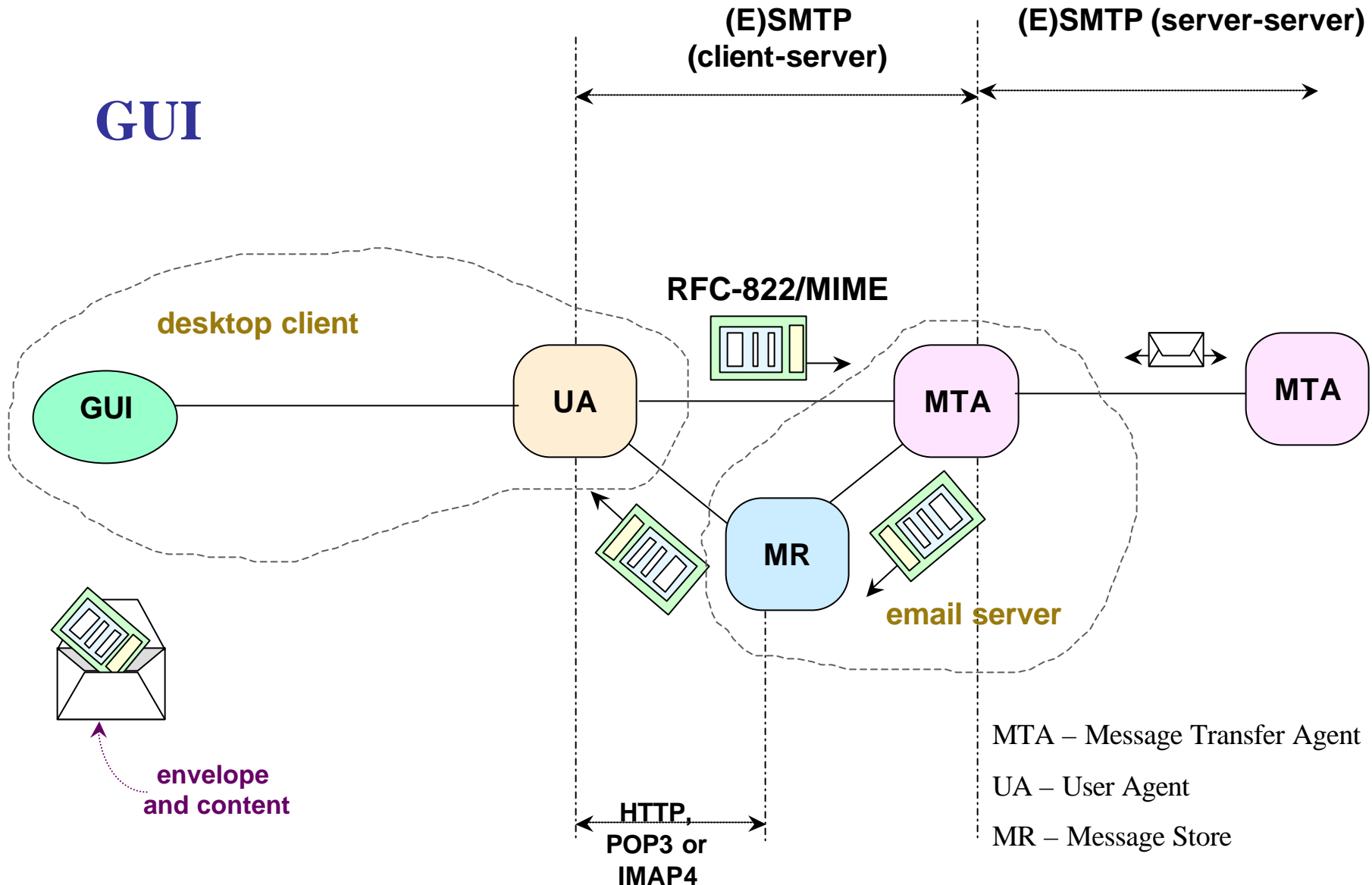
Draft History

- compiled from:
  - draft-burger-um-reqts-00.txt
  - draft-vaudreuil-um-issues-00.txt
  - draft-wong-umcli-00.txt

- 4 sections:
  - E-mail standards evolution survey
  - Client Models for E-mail profiles
  - General UM Design Principles
  - Detailed Requirements
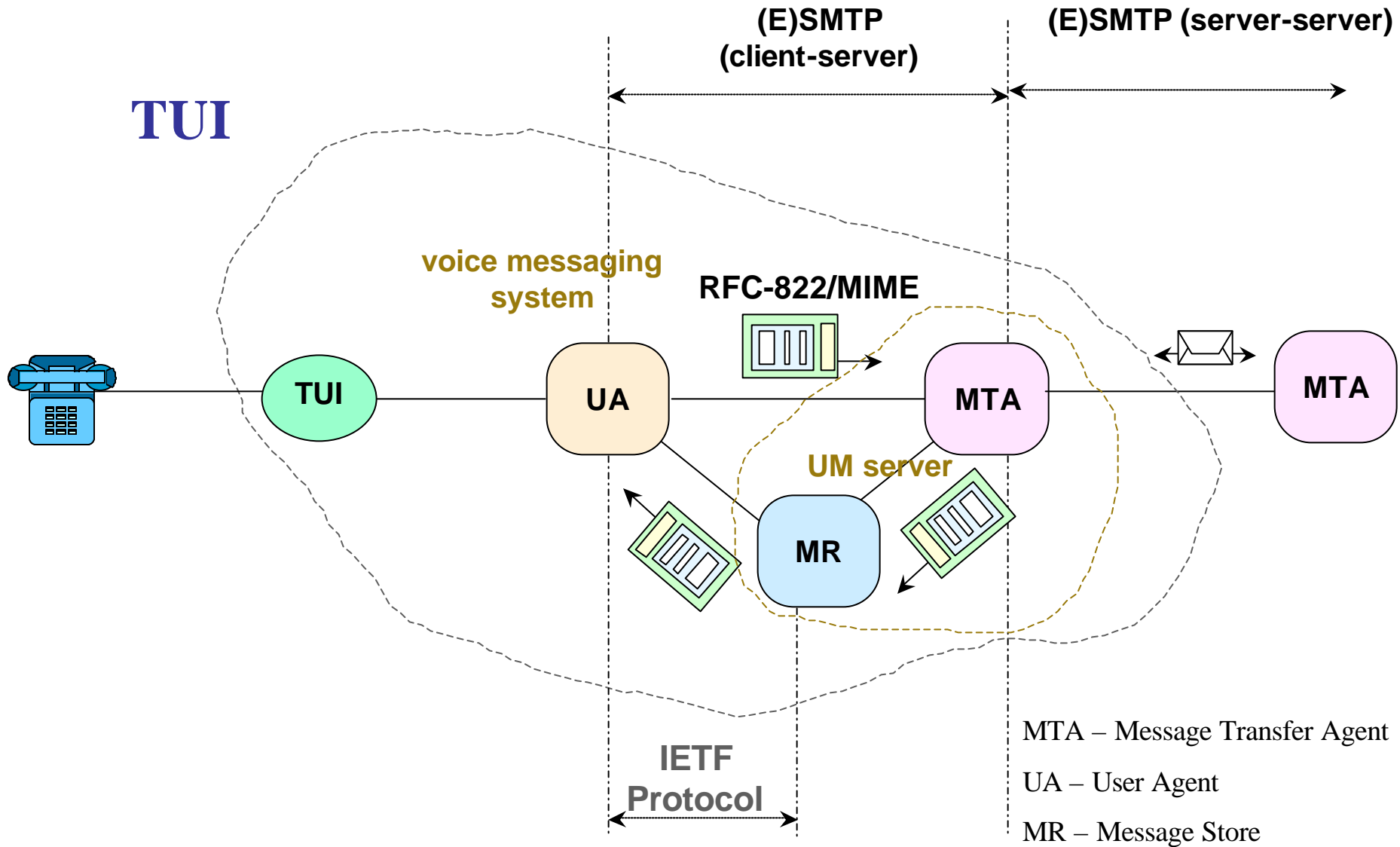
E-mail standards evolution survey

- Evolutionary Mission
  - SMTP and MIME extensions
  - POP3 and IMAP4 clients
  - Client Submission profiles for VPIM/IVM
    - Web browsers -- 3rd party email clients
  - Client Retrieval profiles for VPIM/IVM
    - Web browsers -- Thin clients
    - Multi-modal -- Mobile

Issue: Have we neglected to cite other relevant contributions?

Internet Messaging Client Models: GUI

(E)SMTP (client-server)

(E)SMTP (server-server)

GUI

desktop client

RFC-822/MIME

GUI

UA

MTA

MTA

MR

email server

envelope and content

HTTP, POP3 or IMAP4

MTA – Message Transfer Agent

UA – User Agent

MR – Message Store

Internet Messaging Client Models: TUI

(E)SMTP (client-server)

(E)SMTP (server-server)

TUI

voice messaging system

RFC-822/MIME

TUI — UA — MTA — MTA

UM server

MR

IETF Protocol

MTA – Message Transfer Agent

UA – User Agent

MR – Message Store

Internet Messaging Client Models: WUI
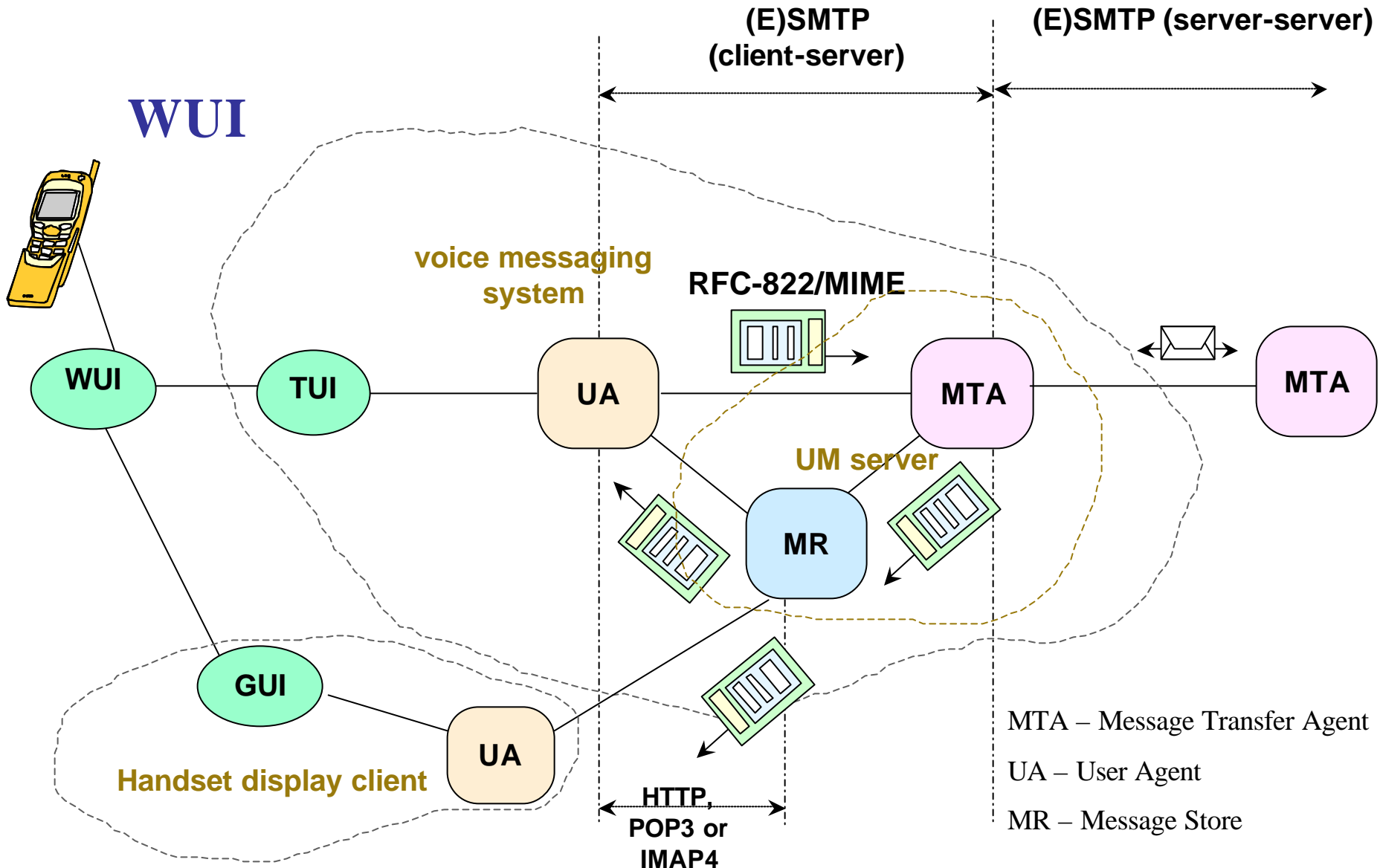
General UM Design Principles

- – Reuse Existing Protocols
- – Maintain Protocol Integrity
- – Sensible Message Context
- – Preserve Internet Infrastructure
- – Meet Near-Real-Time Telephony Requirements
- – Be Scalable, esp. for Video
- – Provide user functionality as close as possible to that experienced using a separate traditional mode

Are there other UM design principles?

Detailed Requirements Summary

- Performance Requirements in Retrieval
  - Real-time Playback
  - Avoid Base-64 Data inflation
- Functional Limitations in Retrieval
  - Context in mailbox summary
  - Context in mailbox sort
  - Context in mailbox quota
  - Functional mailbox conventions& support
    - Inbox, sent items, deleted items, expired item
  - CLID Restriction indication / preservation
  - Committed delivery to full mailbox

- Message Submission Limitations
  - Forward without download
  - Quota by context enforcement
  - Future Delivery Support

- Notification
  - Message Store to Notification protocol

Detailed Requirements Summary

• Pe... ...Requirement... ...Particular... Message Submission Limitations

• Fu...

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Issue: Additional requirements, especially for WUI?