

BC-isit442 Class Overview And Structure

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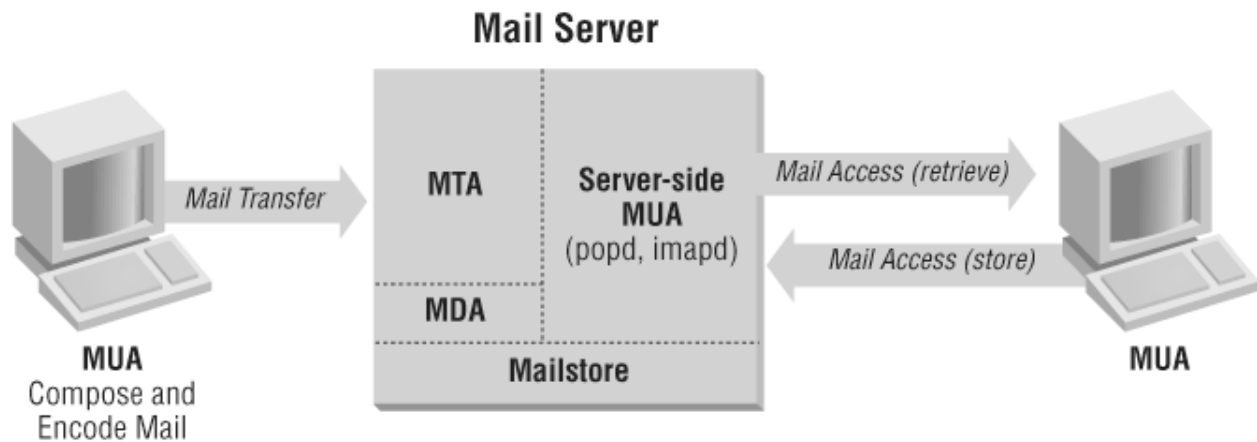


Figure 1: muaModel

Part I

Mail User Agents (MUAs): Resident MS+MTA

1 The MUA Model

The MUA Model

- Message Transfer Service (MTS) – SMTP
- Message Store – The MailBox On the server
- Mail User Agent – Mail Reader /Sorter
- Mail Box Access – IMAP
- Searching Your Email

1.1 MUA Model – Picture

Figure ?? shows ...

2 Types Of MUAs

Types Of MUAs

- Native MUAs

- Web Based MUAs
- Mobile MUAs

2.1 What Are The Characteristics Of The Ultimate MUA

What Are The Characteristics Of The Ultimate MUA

- Watches For Your Privacy
- Is Fully integrated in your user environment
 - Address Book, Calendar, Spell Checker, Editor, Multi-Lingual
- Strong Search Capabilities
- Scriptable
- Mail Folder Organization
- Offline reading and writing
- Dynamic Mailing List Capabilities
- Ability To Manage Multiple Back-Ends
- Importance, Urgency, Alerts

Comparison Of Mail Systems – (servers, clients, webmail providers)

- Comparison of mail servers - Wikipedia – https://en.wikipedia.org/wiki/Comparison_of_mail_servers
- Comparison of email clients - Wikipedia – https://en.wikipedia.org/wiki/Comparison_of_email_clients
- Comparison of webmail providers - Wikipedia – https://en.wikipedia.org/wiki/Comparison_of_webmail_providers
- List of collaborative software - Wikipedia – https://en.wikipedia.org/wiki/List_of_collaborative_software

2.2 Diversity In MUAs Is A Good Thing

Diversity In MUAs Is A Good Thing

- Concept Of Hour Glass Shape In Software/Communications Architecture
- MUAs are at the very top – Diversity Is Expected
- Cohesion In Mail Sending Facilities
- Cohesion In Mail Receiving Facilities

2.3 The Protocols Hour Glass Model

Figure ?? shows ...

2.4 Linux Native MUAs Landscape

Linux Native MUAs Landscape (2016)

lcaMailToolsBinsPrep.sh

- Evolution
- balsa
- claws-mail
- Gnus

2.5 Web Based MUAs Landscape

Web Based MUAs Landscape (2016)

lcaMailToolsBinsPrep.sh

- squirrelmail

3 Concept Of Resident MS+MTA MUA

- A Local (Resident) MS Store is sync-ed with the Remote MS Store
- A Local (Resident) MTA takes care of spooling Of outgoing messages to remote submit servers
- A local agent receives pushed emails

3.1 The Right qmail Autonomous Client Configuration

Figure ?? shows ...

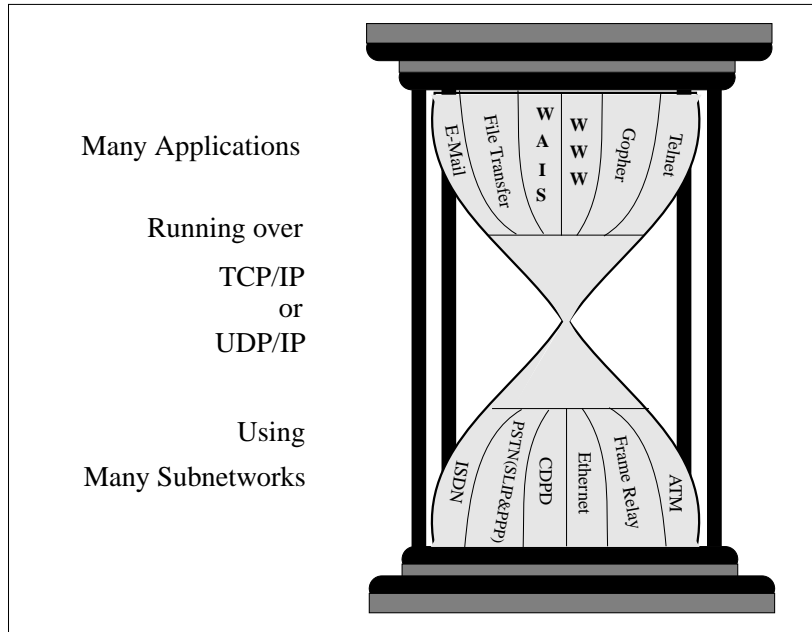


Figure 2: protocolHourGlass

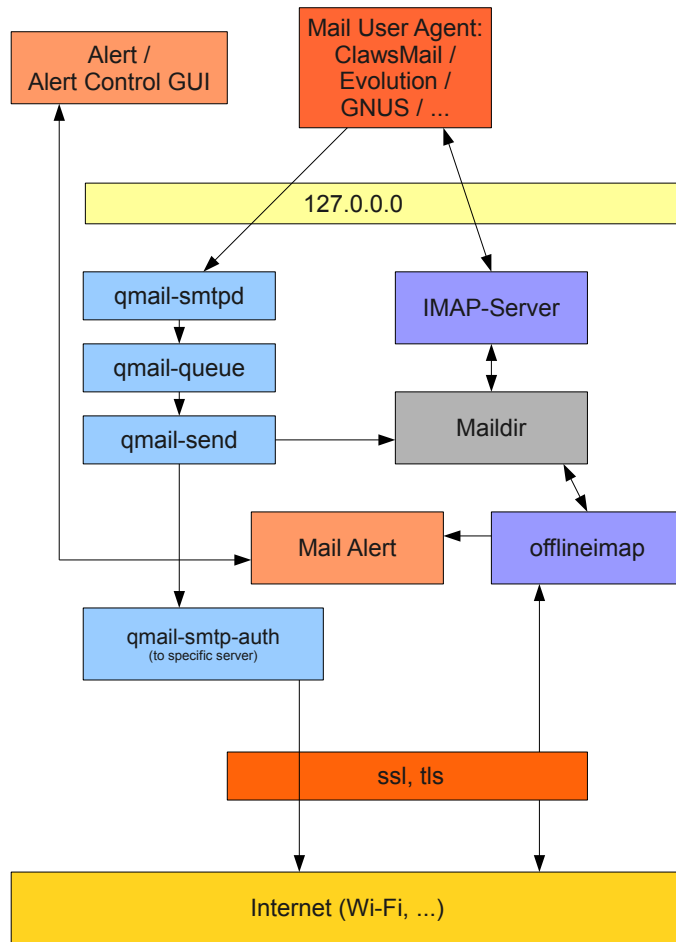


Figure 3: qmail-bystar-wellknown-ua

Part II

ByStart GnuS MS+MTA Ultimate Messaging Environment

4 What Is ByStar GnuS++

What Is ByStar GnuS++

It is a tight integration of the following:

- Emacs
- GnuS
- qmail (outgoing only)
- offlineimap – Syncs external servers with local maildirs
- courierimap (localhost in the clear for use by GnuS)
- notmuch (resident search engine)
- bbdb (Address Book)
- Org-Mode – calendar

5 Internet News – And Gmane

Internet News – And Gmane

- Extracts And Appends Mail Header Fields

6 Searching Through Your Mail – With Total Privacy

Searching Through Your Mail – With Total Privacy

- notmuch
- afew
- lcaNotmuchManage.sh

Part III

Class Activities

7 Accessing Your Accounts On ByStar Mail Server

7.1 Your Domains, Your Account+Passwd

- smtp.first.1.last.byname.net – imap.first.1.last.byname.net
- Your account is the first field in the /etc/passwd file that was emailed
- Your passwd was emailed to you

7.2 ByStar Mail Server Basic Tests

- ping smtp.first.1.last.byname.net
- From Your Bellevue College Account Send Messages To main@first.1.last.byname.net
- Submit Server Tests Against smtp.first.1.last.byname.net

8 Bash Scripting – MailBot and MailInjector Exercises

8.1 mailInjector.sh Evolution

- cd /isit442
- mv mailInjector mailInjector.20160223
- cp -r -p /opt/public/osmt/bin/mailInjector .

8.2 mailBot.sh Evolution

- Top-Down Design, Bottom-Up Implementation
- Managing Complexity, Cohesion, Consistency – mailInjector.sh
- Panel.org Omni-Available Features
- Iim Omni-Available Features
- Bashing – Procedural vs Functional Vs Object-Oriented

8.3 Offlineimap + notmuch

- Hit Your ByStar Imap Account With offlineimapa
- run notmuch on your locally synched messages

Part IV

Assignments

9 Review Of Last Week's Assignments

- Familiarize yourself with offlineimap
- Familiarize yourself with notmuch
- Familiarize yourself with gmane
- Configure claws-mail with your bystar account

10 Next Set Of Assignments

- Work On Your Own Full Mail Processing Loop:
 - Use mailInjector.sh to send out a pdf atthamnet to your ByStar account.
 - Use offlineimap to automatically retrieve that message.
 - Use mailBot.sh to dissect the pdf message into its original pdf file.
 - Print out a command that would have printed that pdf file.
 - Make it such that all of the above can be automated repeatedly.

References