

E-mail Desktop Client Selection

Introduction

The Office of Information Technology (OIT) currently offers central e-mail accounts to all Faculty, Staff, and Students at the University of Minnesota. In an effort to provide standardization and better end user support, OIT will be recommending select clients that will be supported and available to all Faculty, Staff, and Students. The purpose of this document is to provide information on the process that was used in the selection of the supported clients.

This evaluation process led to the selection of the following clients as supported clients by OIT. For Windows, OIT recommends the Mozilla Thunderbird client as the preferred e-mail client with Outlook as a preferred alternative. For Macintosh users, OIT recommends either the Mozilla Thunderbird or MacMail clients as the preferred client with Microsoft Entourage as a preferred alternative. For Linux users, OIT recommends the Mozilla Thunderbird client as the preferred client. Users, departments, or units are free to use other e-mail clients if they would like, but support from OIT will be limited.

Current E-mail Environment and Problem

Currently OIT makes a best effort to support any email clients that will work to access central University email accounts. OIT currently offers setup guides for many of the popular email clients on the ADCS website. Users may also receive support for clients through OIT's 1-HELP telephone help line, where consultants will make a best effort to support any email client that an end user has. This arrangement makes it difficult for consultants to become experienced users of the available e-mail clients as there are too many versions currently available. Instead of consultants being masters of a select number of clients, they are novice users at many. Along with providing 1-HELP support, OIT is also regularly asked for email client recommendations and without specific guidelines these recommendations vary, depending on the preferences and experiences of the OIT employee asked.

While looking at other peer institutions, it was noticed that while some follow the same support model as the UofM, other institutions either support a single client or a few selected clients. Looking at these other institutions suggests that the university can save time, money, and user frustration by focusing the list of supported and recommended e-mail clients. Doing so will provide for cheaper, faster and more accurate support, improve end user support, and reduce the University's exposure to insecure and problematic clients.

Evaluation Principles

Three principles that were used in the evaluation of the clients were:

- Security – support for personal encryption, security update availability, previous history, and other client specific considerations
- Ease of support – version availability on multiple operating systems, ease of importing and exporting, file format of message stores, and client specific support challenges or advantages
- Usability/Features – e-mail deletion and other IMAP implementation issues, filtering ability for Junk email, message filtering, LDAP support, offline folders, and multiple identities

To set a reasonable scope for the evaluation of possible clients, only the newest versions of SSL capable IMAP clients for the most common operating systems, (Win 2k, Win XP, OS X) will be considered. Because it is difficult if not impossible to quantify the advantages and disadvantages of these features we will describe the features and issues of each client without a scale and then compare features and issues over all clients to make a recommendation. Since different features and issues will be given higher priority and weight by different evaluators a consensus of recommended clients and the reasoning for those choices will be the likely result and not a single one size fits all choice.

Client Evaluation

In deciding which clients to evaluate, OIT looked at all the current clients that ADCS currently provides documentation for along with other popular clients that users currently use. OIT did not look at any web based related products or terminal based mail clients as these are server based clients. The clients that were evaluated were Mozilla Thunderbird 1.5, Microsoft Outlook 2003 SP2, Microsoft Entourage, Eudora 7, Netscape 7, and Opera 8.5.

Mozilla Thunderbird

Security

- Overall good security
- Extensions available for GPG encryption and signing
 - Setup is somewhat complex but easier than for other clients
 - Once set up affords good levels of security
- Has a "show password" feature that can be dangerous and should not be used
- No means to prevent the user from using this feature other than policy
- Customization of the installer can set the defaults so the save and show password options can be removed

Upgrades

- Automatic notification of new versions
- Requires manual download of new releases
- Patches not available, just full releases

Support

- Clients look and act the same across all used computer platforms

- Easy to move to Thunderbird from other clients
 - Recognizes many other client formats
 - Presents a variety of options for importing
 - Local mail uses the standard mbox format that other clients are likely to use

Usability

- Many good features
 - Has a solid IMAP implementation
 - Includes nested folders
 - Sent folder and Drafts folder can be stored on server or locally
 - Uses a Trash function for deleting messages versus a marking method
 - Junk mail filtering works well and the client learns what is junk mail
 - Additional client filters can be created to move mail automatically
 - Individual folders can be marked for offline use with IMAP
 - Identity switching is easy
 - Supports LDAP
 - Built-in RSS reader

Microsoft Outlook

Security

- Works with SSL / TLS
- Supports encryption – requires certificate

Upgrades

- Updates handled through Office Updates
- User has to manually check the update site

Support

- Outlook is only supported on Windows platforms
- Entourage, Outlook's Mac equivalent, is an entirely different interface than on the Windows platform
- Stores files in non-standard pst format
- Sporadic problems with authenticated smtp server

Usability

- Cumbersome 2 step delete process for using IMAP
- Integrated notes, tasks, and calendar functions (with UMCAL Outlook connector)
- Auto-backup of e-mails during composition – using Word as e-mail editor
- Message filtering and junk mail handling are available
- Supports LDAP
- Supports nested folders
- Sent messages stored in Sent Items folder on local drive
- Bundled with Microsoft Office Suite

- Junk e-mail protection
- Blocks 'unsafe' attachments (may be good, may be bad)

Microsoft Entourage

Security

- Seems good
- supports SSL for sending and receiving with any tricks to the configuration
- supports encryption of email messages, can use certificates from several authorities
- Uses the Mac Keychain for password storage and therefore could reveal the Internet password.
 - Likely that all mac apps have this issue, all saved passwords are only as secure as the keychain. Thunderbird doesn't use the keychain but still will reveal saved passwords

Upgrades

- Entourage is not a free product, but is included in the Microsoft campus agreement for University owned Macintosh machines.
- Updates are available though Microsoft AutoUpdate, which can be scheduled or run manually
- Upgrades require updating Office on the Mac

Support

- Entourage has a lot of features outside of email, offering premiere support for Entourage as an email client may imply support for the other uses as well
- Local mail and contracts and contacts are stored in a proprietary database format and converted out is not automatic.
- Entourage does allow you to drag one folder out at a time and automatically convert it to mbox.
- It's only one platform and knowledge of it does not translate to knowledge of other products on other platforms (to different from Outlook)

Usability

- Will let you try to move mail to folders that contain folders.
- To make folders that will contain other folders, need to add slash after folder name which is not obvious.
- Has preferred Trash folder type of delete
- Good Junk Filters
- Allows multiple Signatures and Identities
- Works with LDAP

Netscape 7

- Due to Netscape no longer supporting E-mail in their

MacMail

Security:

- Overall good security.
- Extensions available from a third party for encryption.
- Saves password in profile. User must know local user password to obtain any saved passwords in OS.

Upgrades:

- Automatic upgrades obtained through MacOS updates.

Support:

- Clients look and acts like MacOS, which is user friendly. Client only runs on MacOS.
- Import/export options - Mail using IMAP will be accessible immediately with Mac Mail. Mail stored on a computer can also be imported. Mail also has a script to import addresses from Entourage, Outlook Express, Eudora, or Palm Desktop into Mail. There are also some 3rd party applications.

Usability

- Many good features:
 - Has a solid IMAP implementation.
 - Includes nested folders.
 - Good junk mail filters that "learn" from the user what is considered junk mail.
 - Uses a Trash function for deleting messages versus a marking method. User has various options as to when the junk mail folder is emptied.
 - Improved searching option - searches begin as soon as user types. Can also save most frequent searches using a Smart Mailbox feature.
 - Additional client filters can be created to move mail automatically.
 - Individual folders can be marked for offline use with IMAP.
 - Supports LDAP.
 - Accomplish repetitive manual tasks quickly, efficiently and effortlessly with Automator Workflows.

Eudora

Security:

- Some sec
- Uses the Mac Keychain for password storage and therefore could reveal the Internet password.
- Extensions available from a third party for encryption.

Upgrades:

- Requires manual download of new releases
- Patches not available, just full releases.

Support:

- Clients look and act the same across Mac and PC clients
- Import and export options available.

Usability:

- Includes nested folders
- Supports LDAP
- Clear setup for creating a nested folder structure (asks if you would like the mailbox to be a folder).
- Stores attachments from e-mails separately from the e-mail.
- Sponsored mode does not include SpamWatch functionality
- Sponsored mode includes ads

Opera

Security

- Security vulnerability unknown
- No options for encryption

Upgrades

- Requires manual download of new releases
- Patches not available, just full releases

Support

- Clients look and act the same across all used computer platforms
- Easy to move to Opera from other clients
 - Recognizes many other client formats
 - Can import e-mail from Eudora, Netscape, Outlook Express, Thunderbird, as well as generic mbox files.

Usability

- Has tabbed message viewing
- Creates a received folder that shows all e-mail messages that a user has received
- Nested folders not available (shows a flat structure)
- Not able to store messages locally
- Uses a Trash function for deleting messages versus a marking method
- Junk mail filtering is available and the client learns what is junk mail
- No apparent supports for LDAP

Summary

This evaluation process led to the selection of the following clients as supported clients by OIT. For Windows, OIT recommends the Mozilla Thunderbird client as the preferred e-mail client with Outlook as a preferred alternative. For Macintosh users, OIT recommends either the Mozilla Thunderbird or MacMail clients as the preferred client with Microsoft Entourage as a preferred alternative. For Linux users, OIT recommends the Mozilla Thunderbird client as the preferred client. Users, departments, or units that use other e-mail clients will find that support is limited. OIT recommends that

decentralized support units (i.e. CLA-OIT, UServices, AHC-IS, etc..) pick one of the supported options and standardize on it.