Getting Started with the Mulberry™ E-mail Program

Introduction to E-mail, IMAP and Mulberry

Electronic mail (e-mail) is a vital communication and information-sharing tool at the University of Pittsburgh. As the Internet has evolved, the capabilities of e-mail have greatly increased. E-mail has evolved from a service that provided the transfer of basic text messages to a technology that now provides file attachments and graphical presentation, among other items.

Computing Services and Systems Development (CSSD) strives to keep pace with the rapidly changing field of Information Technology (IT) to provide University students, faculty and staff with the most current and desirable e-mail standards. As a result, the University now supports one type of e-mail, Internet Message Access Protocol (IMAP) mail.

In an effort to improve and standardize e-mail services provided to the University community, CSSD announced the availability of IMAP based e-mail services beginning April 1, 1999.

IMAP is a method of accessing e-mail that is stored on a remote server. IMAP allows a compatible e-mail client to access, manipulate and save messages on a remote server. This allows individuals to check mail from any computer through on-line access. IMAP also allows for the off-line e-mail capabilities increasingly demanded by the mobile user community that uses laptop computers and/or multiple computers.

There are many commercial and public-domain IMAP e-mail clients available including Mulberry, Eudora (versions 4.0 or greater), Netscape (versions 3.05 or greater), MS Outlook 97/98 and Pine. These clients provide an easier means of accessing, managing and saving mail than typical text-based e-mail clients and offer better handling of e-mail attachments.

After a study of numerous e-mail clients that support IMAP, the University selected Mulberry, a commercial package, as its default e-mail client for use in the campus computing labs. The University was able to purchase a Mulberry software site license, allowing CSSD to distribute Mulberry electronically to all students, faculty, and staff at no cost. Mulberry provides advanced, feature-rich functionality and meets the University's technical requirements. Mulberry is a powerful, user-friendly e-mail program that allows you to send, access and manage e-mail using the IMAP e-mail service. Mulberry fully exploits the Graphical User Interface (GUI) capabilities of Windows and Macintosh systems and manages all e-mail related information, including address books, e-mail cabinets and remote preferences storage.

This document provides you with a brief introduction to many of Mulberry's basic features and functionality.

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Forwarding Your E-Mail Accounts

To read e-mail using Mulberry, your forwarding address must be set to username@imap.pitt.edu. See the document *Forwarding University E-Mail* to set or change your forwarding address (http://technology.pitt.edu). Please call the Help Desk at (412) 624-HELP [4357] or contact them via the Web at http://technology.pitt.edu if you have *any* questions about forwarding your accounts.

Acquiring Mulberry

The University's software license agreement enables University of Pittsburgh students, faculty and staff to obtain a copy of Mulberry free of charge through CSSD Software Licensing Services, located in 203 Bellefield Hall.

Members of the University community may also download Mulberry from the Internet. The software may be acquired by connecting to the Software Licensing Services Web site at **http://technology.pitt.edu**. Mulberry can be accessed by clicking the **Software Downloads** link.

The Help Sheets *Installing Mulberry on a Macintosh* or *Installing Mulberry on a Windows-Based Computer* contain complete information on acquiring and installing Mulberry for your use. They can be accessed in the campus computing labs or online at http://technology.pitt.edu. This help sheet assumes that you have an IMAP account, that your mail accounts have been forwarded properly and that Mulberry has been acquired and installed.

Opening and Logging into Mulberry

To open Mulberry, double-click on the Mulberry icon. This will automatically open Mulberry with your configuration saved in the preferences.

The Mulberry banner screen will appear. Click on **OK** or press **<Enter>** to enter Mulberry and log into the server.

Users starting Mulberry from a personal or office computer will need to complete the Kclient Login box, as will users of Windows-based computers in the campus computing labs.

The Kclient Login Box looks slightly different on Macintosh and Windows-based computers. Below are illustrations of each.

The Kclient Login Box on a Windows-based machine:

The Kclient Login Box on a Macintosh:
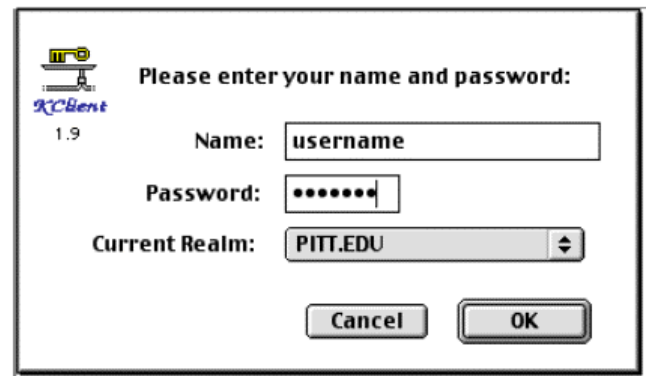
1. The dialog box will prompt you for your **Name**, which is your University Computer Account username. It will also prompt you for your University Computer Account **Password**. Enter both of these.

2. Press **<Enter>** or click on **OK**. This logs you into the IMAP server.

If this dialog box did not appear, then you were automatically taken to the Server Window. In the upper left-hand corner of this window, you will see a large green button. If it has the word "Login" under it, then click on it to get the Kclient Dialog box.


If this button is labeled Logout, you were logged in automatically through a Kerberos ticket and taken to the Server Window. (See the section entitled Kerberos Tickets and Kclient.)

The Server Window

The first screen that appears is the server window. The Server Window displays a list of the mailboxes and folders available to you through your account on the IMAP server. This screen has several components - a hierarchical representation of your mailboxes and folders; function buttons; column headers and icons.

The Server Window lists the mailboxes and folders accessible to your account. **Mailboxes** contain e-mail messages and may have other mailboxes within them; **folders** are groups of mailboxes.
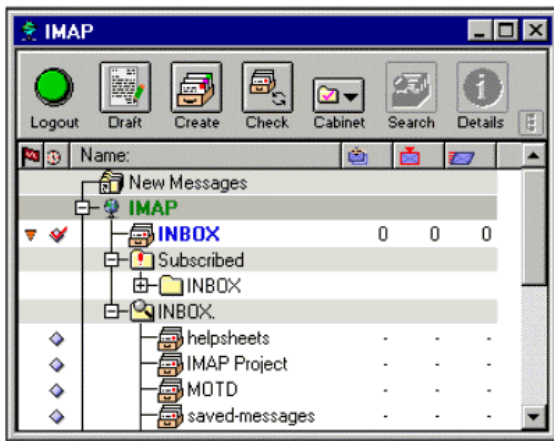
Two mailboxes are created automatically in every account: **INBOX** and **sent-mail**. All new messages are stored in your INBOX. By default, copies of messages that you send will be put in your sent-mail mailbox.

You can create mailboxes in order to organize your messages. Technically, all mailboxes are created within INBOX. However, mailboxes that you create are displayed below INBOX. (Sub-mailboxes created within other mailboxes will be listed hierarchically.)

To create a mailbox:
1. Click on the "Create" button in the server window. You will get the Create Mailbox dialog box:
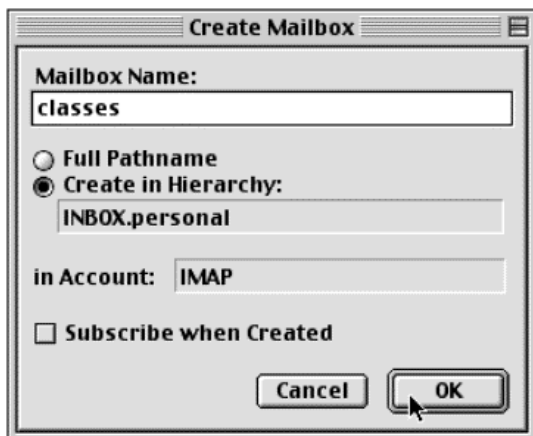
2. In the **Mailbox Name:** field, type the name of the mailbox you want to create. If the Create Mailbox window is set for "Create in Hierarchy" and the field below this setting contains the text **inbox.**, then you need only type the name

of the mailbox. If the Create Mailbox window is set for "Full Pathname," the full pathname must be entered, including the "INBOX." and mailbox name.

3. Click on **OK**. The mailbox will be displayed in the mailbox list of the Server Window.

Displaying Mailboxes

Mailboxes or folders that contain sub-folders or mailboxes will have a toggle button beside them to display or hide the mailboxes within.

(Macintosh version)

The button will be a plus/minus sign for the Windows version and an arrow for the Macintosh version. To hide or reveal sub-mailboxes, click on the toggle button beside the folder or mailbox.

(Macintosh version)
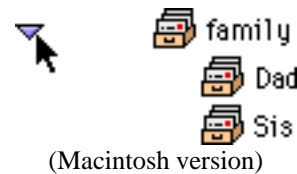
Opening Mailboxes

In order to view a list of the e-mail messages contained within a mailbox, you must open the mailbox itself, which reveals a Mailbox Window. To open a mailbox, double-click on the mailbox icon from the Server Window. To see new messages, open INBOX.


You can also open a mailbox by accessing the **File** menu and selecting "**Open Mailbox.**" You will get the Open Mailbox dialog box which will prompt you to type in the full pathname of the mailbox you want to open. To see new messages, type in "INBOX."

NOTE: Keep in mind that *Mulberry is case sensitive*. When typing the path name, be sure to use upper and lowercase letters where appropriate. If a mailbox is at INBOX.Friends, typing INBOX.friends will not work.

The Mailbox Window

The Mailbox Window will contain a list of the e-mail messages in that mailbox, as well as other information about the messages, such as whether they have been read, are new or have any attachments. A separate Mailbox Window will be displayed for each mailbox you open. From this window, you can open messages in order to read them. You can also manipulate messages (forward, reply to, or delete them) directly from the Mailbox Window.
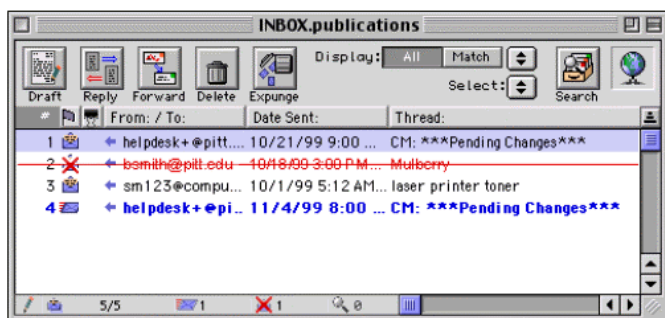
The messages in your mailbox can be listed by whatever criterion you choose. Look at the graphic of the INBOX Mailbox Window shown above. The first column header is selected. The # symbol represents the order in which the messages were received, which is the default setting. If you were to click on a different column header, the messages would be listed according to that criterion.

You will see that there are a number of symbols used in the Mulberry mailbox window display. Although understanding these symbols is not necessary in order to read your mail, they provide useful information about the messages. The most common symbols are shown and explained below.

Seen Message
This symbol indicates that the message has been opened by you at some time. You will also see that messages with this symbol are not bolded or in blue.

Unseen Message
This symbol indicates that the message has never been opened. The message line is bolded and in blue to call your attention to the fact that this message has not yet been seen/read.

New Message
New messages are a special class of unseen messages. An e-mail that arrived either during this session or since the last time you used Mulberry is flagged as new. If you do not read the message and then log out of Mulberry, then the message will be marked as Unseen the next time you log in.

PGP Encrypted Message
This symbol indicates that the e-mail message has been PGP encrypted and must be decrypted in order to be viewed.

Attachment Included
This symbol (a binder clip) indicates that the e-mail message contains an attached file in addition to the message. The attachment can be viewed or saved.

You can perform many operations on messages directly from this window, including moving, replying to, forwarding, deleting and expunging messages. These topics will be discussed below.

Moving and Copying Messages to Other Mailboxes Using the Mailbox Windows

To move a message from one mailbox into another, use your mouse to "drag-and-drop" it. Specifically:

1. Open the mailbox (the source) that contains the message you want to move or copy elsewhere.

2. Move the Mailbox Window so that you can see the mailboxes in the Server Window list.

3. Click the message you want to move or copy with your mouse and keep the button pressed.

4. Drag the message until your mouse is over the mailbox in which you want to move or copy the message (the destination mailbox will become highlighted).

5. Release the mouse button. A copy of the message will be stored in the destination mailbox.

6. The e-mail will still be in the original mailbox also, but will be marked for deletion with a red line. If you want to make a copy of the file (rather than just move it), select the message marked for deletion and click on the Undelete button. (See the section later in this Help Sheet about marking messages for deletion, undeleting and expunging messages).

Sending Secure Messages with Mulberry

You can send and receive encrypted e-mail messages with Pretty Good Privacy® (PGP). For information on using PGP, see the ***Sending Secure Messages*** documentation located at http://technology.pitt.edu.

Opening and Reading E-mail Messages

To open and read an e-mail message:
In the Mailbox window, double-click with your mouse on the message you wish to read. The message will open into a Message Window.

Understanding the Message Window
The top of the message window is the message header, which contains basic message information: the sender, to whom the message was sent, who was sent a copy of the message, the subject of the message and the date the message was sent.
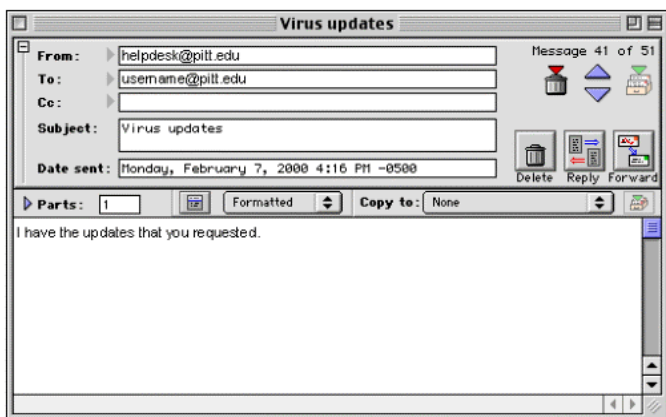
Below this information is a line that includes other information, such as the number of parts (if more than one, there is an attachment), the display method of the text (plain text, formatted, HTML, etc), and the file to which to save a message.

The actual text of the message is located in the lower half of the window. If the message is longer than the display window, the scroll bars will be active.

To the right of the header are the function and navigation buttons. Below is a description of the buttons.

Message Navigation Arrows

These let you scroll to the next or previous message in a mailbox without having to go back to the Mailbox Window. (The text above these arrows tells you what message you are on. The message above is 41 of 51.)

Delete and go to Next Message

This marks the message you are reading for deletion and displays the next message in the mailbox.

Save to Mailbox and go to Next Message

This saves the message into a different mailbox, as indicated in the "Copy to" field and progresses to the next message in the mailbox.

If you have 'None' selected, this button will do nothing. Messages are kept in the mailbox in which they were opened without using this button. This button enables you to move/copy messages while reading them, without having to do it manually through drag-and-drop.

 Delete Button

This button marks the message you are reading for deletion, and takes you back to the Mailbox Window.

 Reply Button

This button allows you to reply to a message. It brings up a new message draft window with the subject and To:/Cc: fields completed and the original message included. (Windows users can press <Alt> and click this button at the same time to reply to all recipients and the sender.)

 Forward Button

This button forwards a message to someone else. It brings up a new message draft window with the subject field filled in and include the original message.

Reading/Extracting Attachments

There are two ways to know if a message has an attachment. The listing of the message in the Mailbox Window will include the attachment symbol .

Also, in the Message Window, an e-mail with an attachment will be indicated through various means. First, the "Parts:" field will indicate a number higher than one, and the attachment symbol will be displayed. Second, the file name will sometimes be included in the message body, enclosed in double brackets, depending on the program used to create the message that was sent to you. In the case below, a file called "macinstall.doc" is attached to this e-mail.
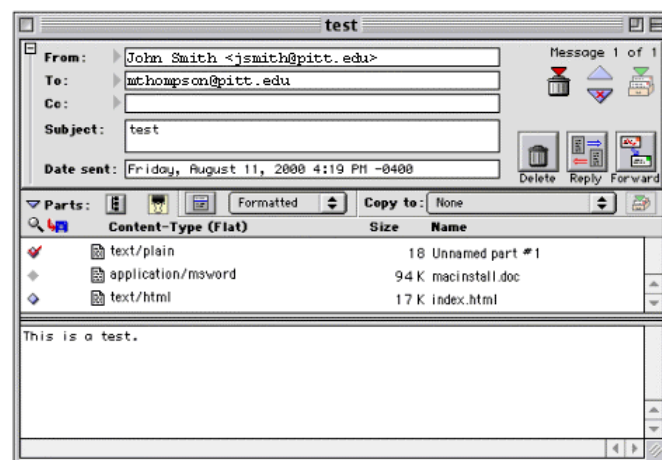
To display a list of the parts and some information about each part, click on the arrow beside **Parts:**. A new section will appear above the message body.
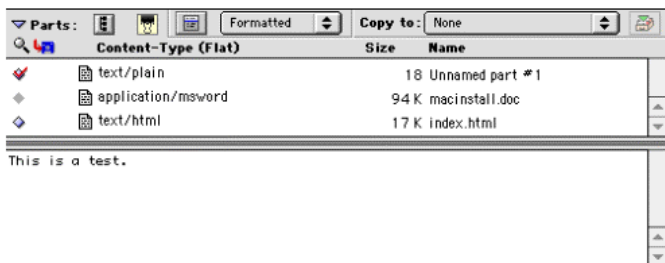
The part that is currently being displayed will be indicated by the red checkmark in the blue diamond under the column with a magnifying glass.

To view an attached part:

Click on the blue diamond before that part. If you cannot make a red checkmark appear, it is because Mulberry cannot display the part.

To save or open an attachment in an application:

1. Double-click on the part you wish to save and/or open it in a software application.

2. A **Save** dialog box will appear. You must first save an attachment before you can open/view it.

3. Save the file in the location of your choice.

   NOTE: In the campus computing labs, you must save a file to a floppy disk or to your UNIX disk space in order to permanently save it. If you save the file to another drive or delete the file, it will be lost when you log out of the machine.

4. After the file has been saved, a dialog box will appear asking if you want to open the file in the appropriate application. (In the example shown, it will ask if you want to open macinstall.doc in Microsoft Word.)

5. Click "Yes" to open and view the file immediately. Click "Cancel" to return to the message window.

Forwarding a Message

You can send a message on to another person by "forwarding" it. You can forward a message from two locations in Mulberry.

1. To forward a message from within the Mailbox Window (the list of mail messages):

   a. Select the message you wish to forward by clicking on it once with your mouse so that it is highlighted.

   b. With the message highlighted, click the Forward button.

2. To forward a message while reading it (from within the Message Window), click on the Forward button.

3. Once you click the forward button, you will receive an e-mail draft window which has the original message already included in the body.

4. You must fill in the **To:** and **Cc:** addresses, and you may include a message of your own. Space is left for you to do so before the forwarded text.

5. After you have completed this information, click on the **Send** button to forward the message.

Send

Bouncing a Message:

There is a special kind of forward called a "Bounce." You would use a bounce when a message has been sent to you in error, and you want to pass it on to the person to whom it should have been sent. In other words, bouncing a message takes you out of the loop.

For example, suppose that you are a member of a club. You receive a message that says, "As the treasurer of your club, please ..." Obviously, this message should have been sent to the Treasurer, not to you. When you bounce this message, it will appear to the club treasurer that the message was sent to her by the original sender, not by you.

The recipient, in this case the treasurer, will not know that the message was sent to you first. This is preferred because it more accurately reflects who the message is from. In addition, when a person replies to a bounced message, it will be sent to the original sender, rather than to you. However, keep in mind that you cannot edit the contents of the message.

To bounce a message:

1. Either select the message from the Mailbox Window, or open the message itself (in a Message Window).

2. Click on the **Messages** menu and select **Bounce**.

3. A Bounce Message Window will appear. It will give you the ability to fill in the header information (To:/Cc: addresses, subject, etc), as well as list the parts of the original message that are being bounced. (All parts of the message are bounced.) You cannot edit the contents of any part of the message being bounced, as you can with a general forwarding, but you can attach additional files.

4. When you have completed the header information, click the **Send** button to bounce the message.

Replying to a Message

Reply

You can reply to a message by using the "Reply" button. When you reply to a message, Mulberry will help you to complete the **To:** and **Cc:** fields and the subject line and will include the original message in the text of the reply.

To reply to a message:

1. Either select the message from the Mailbox Window, or open the message itself (in a Message Window).

2. Click the **Reply** button. The **Reply To Addresses** dialog box will appear.
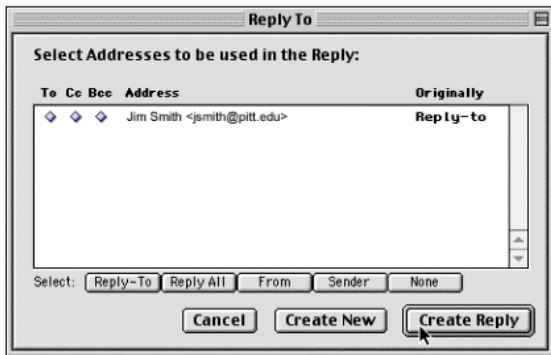
You can select who will receive the reply and whether their names appear in the To:, Cc: (carbon copy) or Bcc: (blind carbon copy) fields. You can select from among the original sender and all recipients, including yourself.

3. You can also reply to a message by clicking on the **Messages** menu and selecting one of the Reply options: Reply, Reply to Sender, Reply to From, or Reply to All. Only Reply will bring up the "Reply To Addresses" dialog box.

NOTE: Windows users can press **<Alt>** and click on the reply button at the same time to automatically reply to the sender of the original message.

4. Click in the appropriate triangles to indicate who should receive the reply and in what way; then click on "Create Reply."

5. A message window will appear. The original message will be included in the message body by default. If you highlight a portion of the message before you select "Reply," then only that portion will be included in the message body. Type any message you wish to include in the message.

6. You can add additional addresses in the header by typing them into the To:, Cc: or Bcc: fields.

7. When you are finished composing your reply message, click on the Send button.

Composing a Message

There are three ways to start writing a mail message.
1. Use the mouse to select the **File** menu and choose **New Message**.

2. Start a new message by pressing **<Ctrl>+N** on a windows-based machine or +N on a Macintosh.

3. Start a new message from within the Mailbox Window by clicking on the **Draft** button.


Draft

A blank Draft Composition Window will appear.
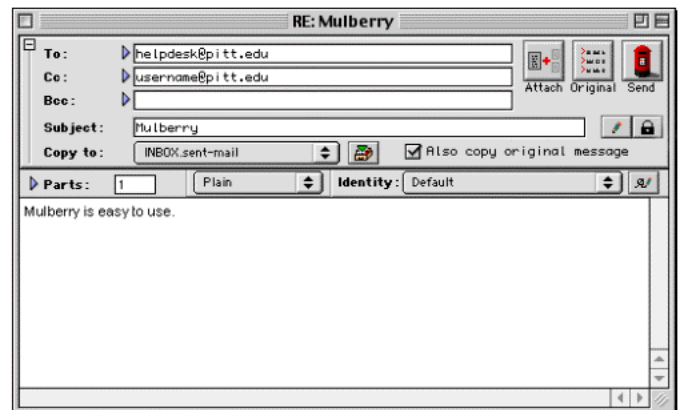
Writing an E-mail Message

At a minimum, you must put at least one address into the **To:** field. You can add as many addresses as you like to the **To:** or **Cc:** fields. To separate addresses, press <**Return**> /<**Enter**>. The **To:** or **Cc:** field will expand into a scrollable list.

1. Press <tab> or use the mouse to move between fields. After you have entered the addresses to whom you are sending the message and a message subject, use <tab> or the mouse to click in the main message body field.

2. Type your message in the message body section.

3. If you want to include text formatting (such as bold, underline, font size and type, or color), you must select Enriched or HTML text from the message display option in the row above the message body of the Draft Window. Plain is the default format.
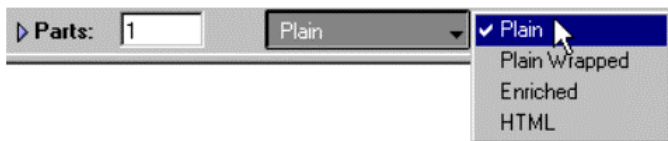
NOTE: Only users with an e-mail application capable of displaying text formatting will see it the way you type it. If the person receiving the message has a text-based e-mail program, s/he will only see plain text, with all formatting removed.

4. Click on the **Send** button to send the message.

Adding Attachments

Most e-mail programs today can handle attachments, although some cannot. Mulberry can include a file as an attachment to an e-mail message. Attachments can include graphics or documents created in another program (such as an MS Word document or Lotus spreadsheet).

Sometimes, it is easier to include information directly into the body of the message. For example, you can include directions to someplace right in an e-mail. However, there are times when including information in the body of the e-mail message is either not possible or not desirable. For example, if you were sending an instructor a term paper, you would not want it in the text of the e-mail; it is too long. Rather, you would want to add it as an attachment. There are other items, such as an Adobe Photoshop file, that cannot be included in the body of the message.

In these cases you would want to attach the file to your e-mail message. To attach a file to your e-mail, click on the Attach button from within the Draft Composition Window. (You can do this at any time while composing your e-mail message before it is sent.)
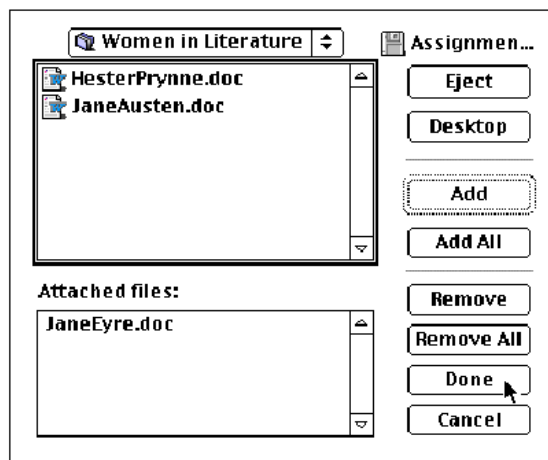

Attach **Attach Button**

At this point, the Macintosh and Windows versions of Mulberry look a little different, though the process is essentially the same. Descriptions for both methods are listed below.

*Attaching Files in the Macintosh Version*

1. After clicking on the **Attach** button, you will be presented with a Macintosh **Open** dialog box. Browse through your files until you find the file you wish to attach to the e-mail.

2. Select the file with your mouse so that it is highlighted and click on **Add**.

3. Repeat steps one and two until all of the files that you want to attach to the e-mail are listed in lower portion of the dialog box (Attached files: box).

4. To remove files that you no longer want to attach to the e-mail, click on the unwanted file from the **Attached Files:** box so that it is highlighted, and then click on **Remove**.

5. When all of the files that you want to attach to the e-mail are listed in the **Attached files:** box, click on **Done**. You will be returned to your message.

Attaching Files in the Windows Version

1. After clicking on the Attach button, you will be presented with a standard Windows **Open** dialog box. Use the **Look in** field to select the directory that contains the desired file.

2. Select the file with your mouse so that it is highlighted and click on **Open**.
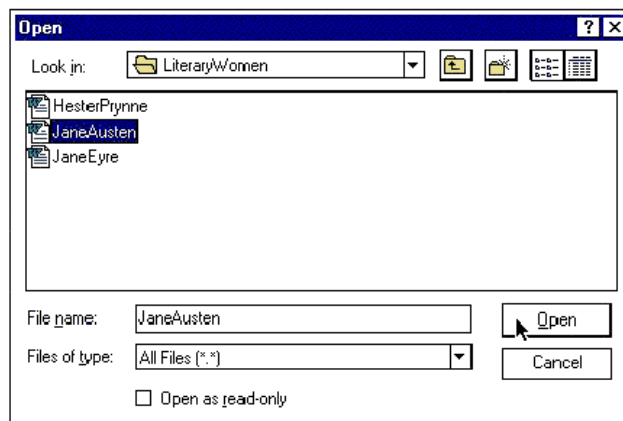
3. You will then be returned to your message. The detailed parts listing will be exposed, indicating the file you selected is attached.

4. Repeat steps one through three until all of the files you wish to attach to the e-mail have been added.

- *Using the Parts List*

Once you add attachments, you can see a list and details about them in your **Draft Composition** Window. Click on the triangle next to **Parts:** so that it points down. A list of the attachments and information about them will be revealed.

If you decide not to include an attachment that has been added to the message already, you can delete it directly from the **Parts:** list.

1. Highlight the part that represents the file you no longer wish to include in the message by selecting it with your mouse.

2. Press <Delete> on the keyboard.

3. The part will be removed from the list. When you hide the parts listing (by clicking on the triangle next to **Parts:** so that it points to the right), the number of parts listed will adjust, and the binder clip symbol will be removed if there are no longer any attached files.

To attach additional files, repeat the process described in this section for attaching files.

Searching for an Address

1. Select **File, Preferences**. The **Remote Preferences:** window appears.

2. Click the Accounts tab.

3. Click the arrow in the **Account:** text box and select **New…** from the drop-down menu.
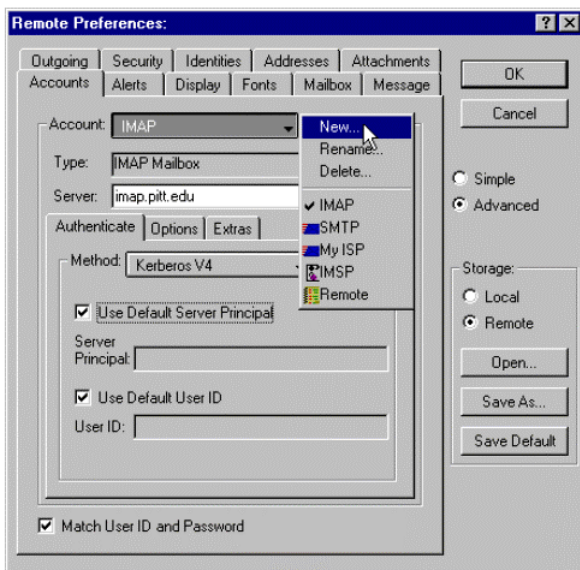
4. Enter **directory.pitt.edu** in the **Account Name:** text box.
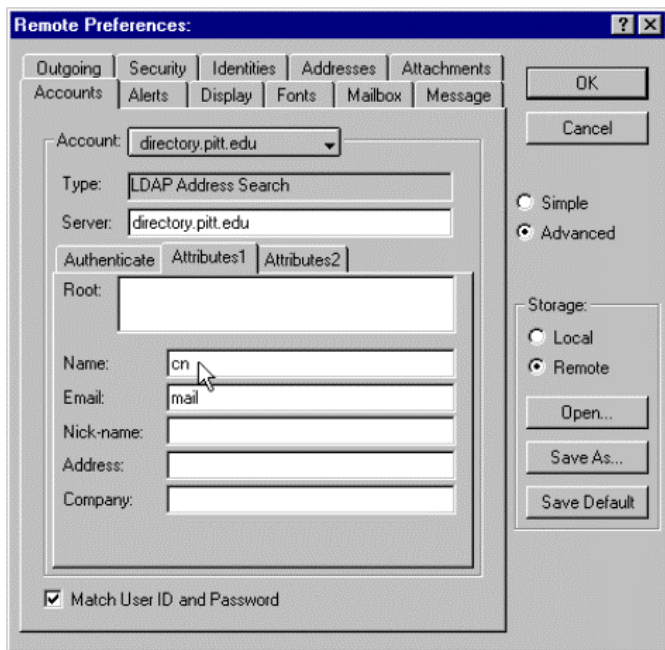
5. Select **LDAP Address Search** as the **Account Type** and click **OK**. You are returned to the **Remote Preferences:** window.
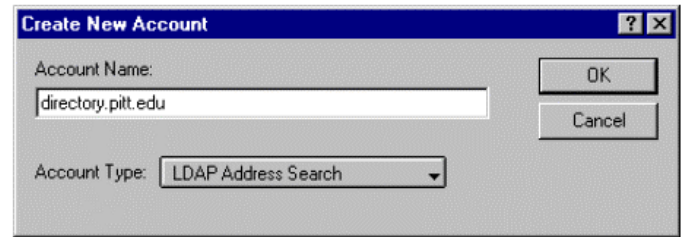

6. Enter **directory.pitt.edu** in the **Server:** text box.

7. Choose **Anonymous** as the method of authentication on the **Authenticate** tab.
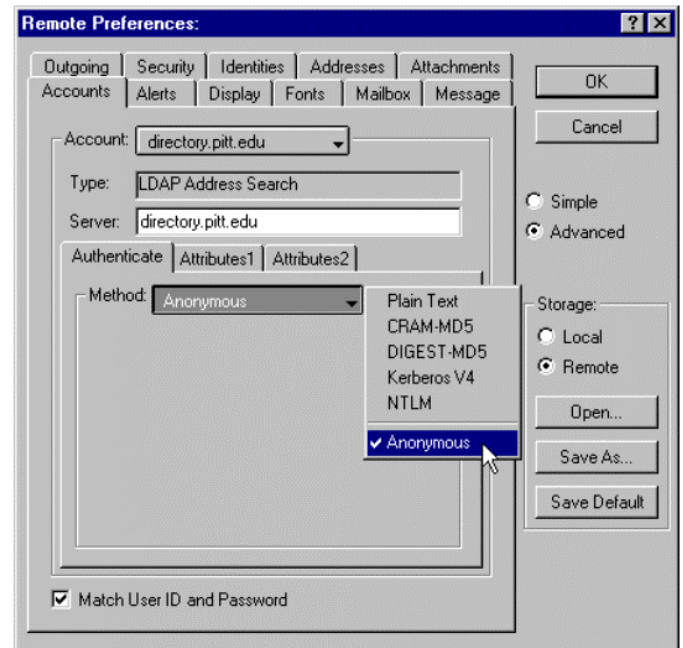
8. Select the **Attributes1** tab and enter **cn** in the **Name:** text box.

9. Enter **mail** in the **Email:** text box and click **OK**.

10. Select **Search** from the **Addresses** menu.

11. Choose **using LDAP** from the **Find Items** field.

12. Select search criteria from the **Full Name** and **Contains** drop-down menus.

13. Enter information, such as a name or e-mail address, in the text field and click the **Search** button.
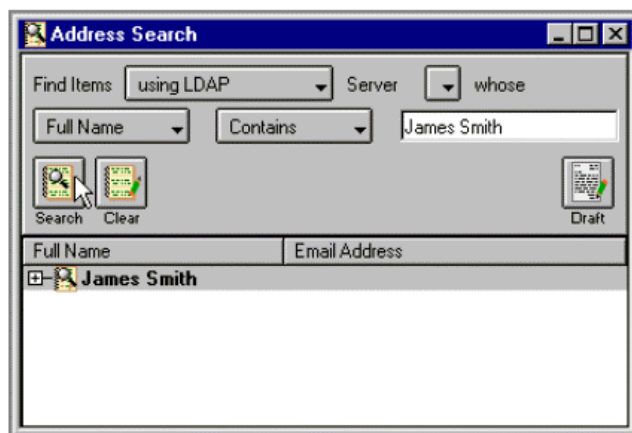
Deleting and Expunging Messages

Frequently Asked Questions About Deleting and Expunging E-mail Messages

1. What is the difference between deleting and expunging a message?

Marking a message for deletion does not permanently remove the message from the IMAP server. Marking a message for deletion only declares your intention to remove the message from the server.

The process of expunging messages removes messages permanently. The Expunge function works by removing all messages marked for deletion from the IMAP server, reclaiming server space. Therefore, you must first declare which messages you wish to remove by marking them for deletion and then expunge the marked messages to permanently remove them.

2. Why make it a two-step process?

Removing messages permanently in this manner is done as a precaution. Should you accidentally mark a message for deletion (or change your mind about deleting a message), you can easily get the message back without losing it.

3. Why not just mark messages for deletion (but not actually expunge them) just in case I ever need them later?

You are limited to 10 MB of disk space on the IMAP server. If you never delete any mail, you will exceed that limit, and you will no longer be able to receive new mail until some disk space is reclaimed. Marking messages for deletion does not remove them from the server, so the messages will still count against your quota. Only by expunging messages do you remove them from the server and free up disk space.

Also, if you never delete e-mail, you will soon have a huge and unmanageable set of messages. Just like paper mail or files, you must determine what is important to keep and what can be deleted.

4. Why are the messages marked for deletion still kept in my mailbox, cluttering it up?

Many other programs move mail marked for deletion to a special folder called "Deleted Items" or "Trash." Mulberry marks deleted messages with a red line through the message, but keeps the message in the mailbox. The message line is not removed from the mailbox until marked messages are expunged.

Mulberry keeps the mail in its original mailbox to help you remember what the message was about in case you want to unmark it.

Mulberry also leaves the messages in the mailbox so that you do not forget or lose track of the number of marked messages.

"Deleted Items" folders can become filled with hundreds of messages marked for deletion without you being aware of it. You are unlikely to forget to expunge messages marked for deletion if they are obvious and in your mailboxes.

5. How often should I expunge messages?

You should expunge messages frequently to avoid using up your IMAP disk quota. It is best not to use disk space for messages that you no longer intend to keep. CSSD recommends expunging messages at least once a week, though many people prefer to expunge messages at the end of every e-mail session.

- **How to Mark a Message for Deletion**

As with many functions performed on individual messages, e-mail messages can be marked for deletion from within the Mailbox Window or while reading the message in a Message Window.

To delete a message from the Mailbox Window:

1. Select the message with your mouse so that it is highlighted.

2. Click the **Delete** button.

3. The message will have a red line placed through it to indicate that it has been marked for deletion.

*To delete a message while reading it in a Message Window:*

1. Click the **Delete** button. This will take you back to the Mailbox Window, where the message will be marked with a red line through it.

-OR-

2. Click the **Delete** and **Go To Next Message** button. This will mark the message for deletion, and will display the next message in the mailbox in the Message Window.

How to UnMark/Undelete a Message

1. Select the message with your mouse so that it is highlighted.

2. Notice that when a message marked for deletion is selected, the Delete button turns into an **Undelete** button.
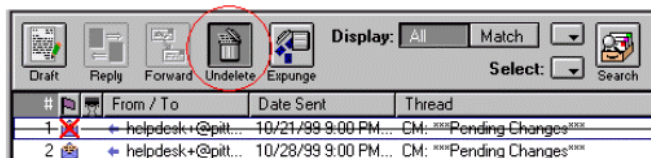
3. Click the **Undelete** button.

4. The red line through the message will disappear, indicating that the message is no longer marked for deletion.

How to Expunge Messages Marked for Deletion

1. From the Mailbox Window, click the **Expunge** button.

2. A dialog box will appear asking if you are sure you want to expunge all of the marked messages from this mailbox. Click "Expunge" to permanently remove the deleted messages. Click "Cancel" to abort the expunge.

Logging Off and Exiting Mulberry

Mulberry enables you to log off of the IMAP server without exiting the program. Some reasons you might want to log off but not exit include:

1. You are finished using e-mail for the time being and do not want to add to the traffic on the server.

2. Connecting to PittNet is a toll call, so you want to log off for now but will reconnect later.

3. You need to temporarily disconnect your network connection. For example, you need to make a phone call and your modem operates over your only phone line.

NOTE: Please read the next section regarding Kerberos Tickets and Kclient. A person can log in to your IMAP account even if you log out or exit Mulberry due to Kerberos Tickets.

Logging Off of the Server

To log off of the IMAP server while not exiting the Mulberry program, use your mouse to click on the green Logout button.

Exiting Mulberry

Exiting Mulberry will log you off of the IMAP server in the process, if you did not log out first. To quit the program, use your mouse to select the **File** menu and select the last option, Quit (in the Macintosh version) or **Exit** (in the Windows version).

Kerberos Tickets and Kclient

WHAT ARE THEY?

Kerberos is a security system which ensures that the data stored on the PittNet network is safe and secure by authenticating that a person is affiliated with the University of Pittsburgh. When you enter your username and password to log into the Pitt modem pool or log onto a campus computing lab machine, you are logging on "through" Kerberos authentication.

An application called Kclient asks for your username and password and generates a Kerberos ticket on your machine. Lab machines generate a Kerberos ticket when you log into a machine. While a Kerberos ticket is active, you do not need to log on to a Pitt service that utilizes Kerberos, because your ticket will supply that information to the server for you. The ticket lasts a set time (8 hours by default) and then expires.

WHY DO I NEED THEM?

One unique feature of Mulberry is that it supports the use of preferences and address books saved on a remote server called an IMSP server. In other words, you have roaming preferences and address books that you can use from any computer with an e-mail program capable of using the IMSP server - at home, in the office or from a computing lab.

The only way you can access the IMSP server, though, is if you use the Kclient. Mulberry will reach out to the IMSP server to see if you have remote preferences or address books saved there. It gains access to your files on this server through the Kerberos ticket. Without Kclient and a Kerberos ticket, you will not have access to the benefits of roaming preferences and address books.

WHAT IS THE EFFECT ON MULBERRY?

When you log in to Mulberry, you will receive the Kclient login screen which asks for your username and password. A Kerberos ticket will be created for you. While the ticket is active, you do not need to enter login information, even if you log off of the server or exit the program.

Think of it like a movie ticket. While the movie is playing, you can use a ticket to enter the theater. Even if you leave your seat to get popcorn, you can use the ticket to re-enter without having to buy a new one. But if you lose the ticket and someone else finds it, they can use the stub to enter the movie even though it belongs to you.

This feature can be convenient. You can check your mail, exit the program and then perform another task. Then, you can start up the program again without having to log on.

However, in a work environment, especially if you are using it on a machine that others also use, this feature can present a security risk. Someone else can start up the program and access your e-mail, or send e-mail in your name.

In the campus computing labs, the ticket is destroyed when you log out of the computer, but it is still active if you leave the computer without logging out. On an individual's machine, the ticket is active until you destroy it. You must destroy a ticket so that others cannot access and use your e-mail account. In a multi-user environment, you must destroy the ticket so someone else can utilize e-mail on that machine.

CSSD recommends that you destroy your Kerberos ticket whenever you leave your machine. When you return, you can re-authenticate in Kclient to gain access to your e-mail. This will prevent others from accessing your account without your knowledge or permission.
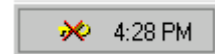
DETERMINING IF YOU HAVE AN ACTIVE KERBEROS TICKET:

On a Windows Based Machine:
Look in the bottom right corner of your screen, in the task bar. A key icon is used to represent the Kclient. If the key has an X through it, then you do NOT have an active Kerberos ticket. If it appears without any markings, you have an Active Kerberos ticket.
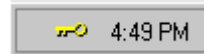
Active Kerberos Ticket   **No Kerberos Ticket**

If you have no key icon on your taskbar, you can launch Kclient by double-clicking on the Kclient shortcut that was placed on your desktop during the installation of Mulberry.

On a Macintosh Machine:
Look in the upper right corner of your screen, where you can see the machine time and the Applications menu. If you see an icon of an unlocked padlock with a key in the bottom, then you have an active Kerberos ticket. If the icon is of a locked padlock with no key, then you do not have an active Kerberos ticket.
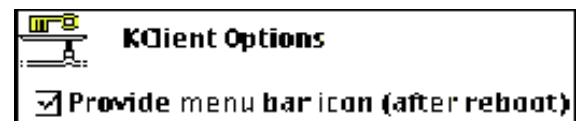

Active Kerberos Ticket   **No Kerberos Ticket**

If you have no padlock icon on your desktop, you can launch Kclient by clicking on the **Apple Menu** and selecting **Control Panels**. From the submenu, select **Kclient**. From the Kclient window, click on the **Options** button. In the Options window, click in the box next to **Provide Menu Bar Icon (After Reboot)**. Then click on **OK**, and close the Kclient window.

DESTROYING KERBEROS TICKETS TO SECURE YOUR IMAP ACCOUNT:

You need not exit Mulberry or log out of the IMAP server to destroy a Kerberos ticket. When a person tries to use the account, s/he will be prompted for a username and password to create a new ticket.

CAUTION: Do NOT destroy your ticket and then attempt to quit Mulberry. When Mulberry exits, it uploads your current preferences to the IMSP server automatically. Since this cannot be done without a Kerberos ticket, an error will occur if your ticket has been destroyed. You may destroy your ticket and create a new one later while Mulberry is active; you may also exit Mulberry and then destroy your ticket.

On a Windows-based Machine:

1. If you are using a personal or office machine, the **Destroy Kerberos Ticket** shortcut was placed on your desktop when it was installed. Double-click on this icon to destroy your ticket.

2. If you deleted this shortcut, or are working on a campus computing lab machine, right-click on the Kclient icon so that a menu of choices appears. Click on the **Logout** option.
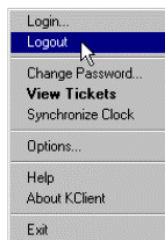
3. You will get a confirmation that you have been logged out. Click **OK**. The Kclient icon will be crossed out with a red X.
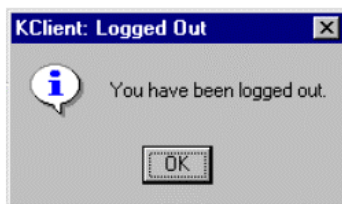
On a Macintosh Computer:

1. Click the security lock icon in the very upper right corner of your machine with your mouse.

2. A submenu will appear. Select "Logout" with your mouse.

CREATING NET TICKETS TO GET BACK INTO YOUR ACCOUNT:

If you have Mulberry running and you logged out before destroying your ticket, you can click the green login button. You will get the login screen and will be prompted for your username and password. Trying to open any mailbox without an active ticket will also bring up the login screen.

If you exited the Mulberry program altogether, you will be prompted for your login information when you re-start the program. You can create a ticket manually through the Kclient icon.

Creating a ticket manually on a Windows-based machine:

1. Use your mouse to right-click on the Kclient icon (if you have no active Kerberos ticket) and select **Login**.

2. You will receive the Kclient Login dialog box. The Kclient Login prompts you for your **UserID**, which is your University Computer Account username. It will also prompt you for your **Password**. Enter both of these and press **<Enter>** or click **Login**.

3. A Kerberos ticket will be created. The X will disappear from over the key icon in the task bar.

Creating a Kerberos ticket manually from a Macintosh machine:

1. Click on the Kclient icon with your mouse (it will be a closed padlock icon if you have no active Kerberos ticket).

2. A submenu will appear. Select "Login" to create a new Kerberos ticket.

3. The Kclient Login dialog box will appear. The authentication dialog box will prompt you for your **Name**, which is your University Computer Account username. It will also prompt you for your University Computer Account **Password**. Enter both of these, and press **<Return>** or click **OK**.
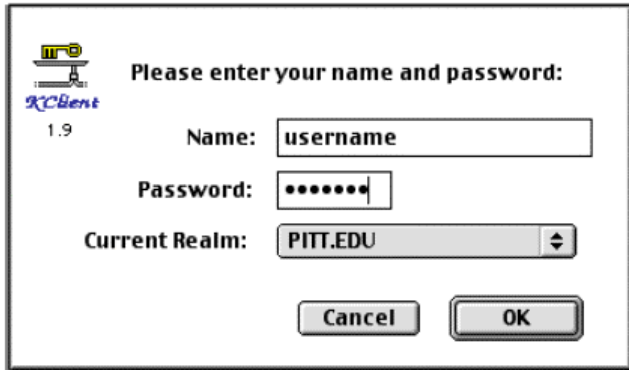
4. A Kerberos ticket will be created. The padlock icon will open and have a key in the bottom.

Working Off-line

You can use Mulberry to compose and read e-mail messages even if you aren't online. See the ***Using Mulberry's Disconnected Mode Operations*** documents located at http://technology.pitt.edu for additional information about working off-line.

Checking Your IMAP Quota

Users are restricted to 10 Megabytes of disk space on the IMAP server. Deleting messages marked for deletion will help you stay within quota. However, it is still important to check to see how much you have used. If you exceed your quota, your e-mail delivery will cease.

To check your quota usage:

- From within the server window, select your inbox mailbox by clicking it once so it is highlighted.

- Click the **Edit** menu and choose **Properties.**

- Select the **Quota** button (Macintosh version) or tab (Windows version). The Quota details will show.
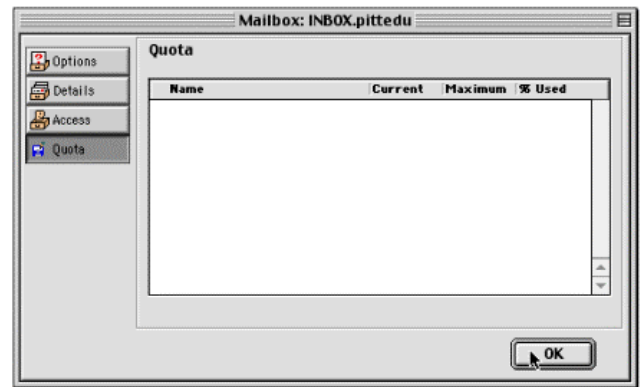
- Click the button beside your account name. It will show you how many KB have been used, how many are available and the percentage used.

Getting Help

Internal Help Functions

Windows Version
The Windows version of Mulberry has on-line help files that function similarly to the help files of other software programs, such as Microsoft Word©.

To access the help files, use your mouse to access the **Help** menu and select "**Help Topics.**" The Mulberry Help window will appear, set to the contents page.

You can search for a topic based on the type of object it is (a window, a dialog box or a menu item). You can click on the **Index** tab to look up a topic as though you were looking through the index of a book. You can also click on the **Find** tab to have Mulberry search through its Help Files for a specific word.

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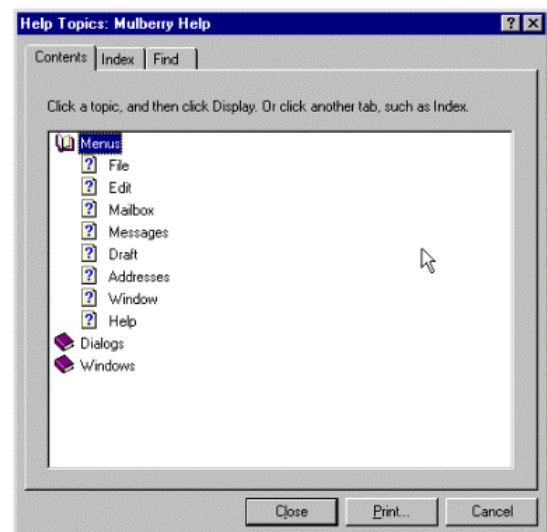
- **Macintosh**

Version 1.4 of Mulberry for the Macintosh does not have internal help files. Instead, this version uses Help Balloons. When you pass a mouse over an object, a balloon will appear that shows you what it is or does.
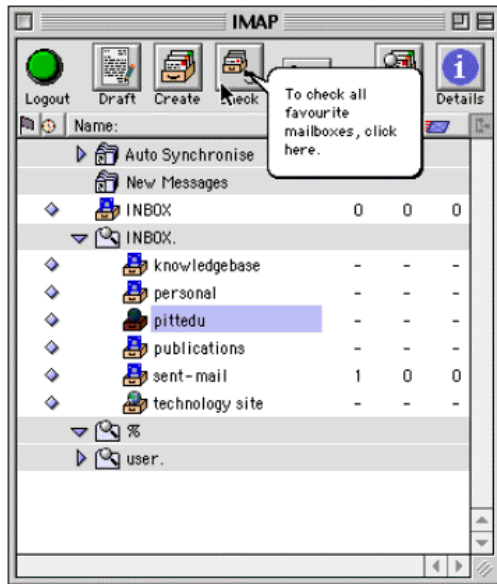
To engage Balloon Help, use your mouse to select the Help menu and choose "Show Balloons." Balloon Help will be active until you turn it off. The mouse will still work.

To discontinue Balloon Help, use your mouse to select the **Help** menu and choose "Hide Balloons."

Mulberry Training Classes

The Consulting and Training Services group offers two QuickStart training courses on Mulberry: Mulberry Internet Mail Level 1 and Mulberry Internet Mail Level 2. These classes are approximately one hour in length and are free to students, faculty and staff.

Visit http://technology.pitt.edu for information on free training and to view schedules and class descriptions. Some classes require registration.

- **Consulting Help**

You can ask a lab consultant for help at any time while using a campus computing lab. A lab consultant is on duty in every lab during its hours of operation. The Windows and Macintosh complete user's guides will be available in every lab for users to look at while in the lab. Help sheets are also available online at http://technology.pitt.edu.

The Help Desk is available 24 hours a day, seven days a week to help you resolve a problem or answer a question. The Help Desk can be reached by phone at (412) 624-HELP [4357] or via the Web at http://technology.pitt.edu.

Other Help Sheets

"Installing Mulberry on a Windows-based Machine" or *"Installing Mulberry on a Macintosh"* will tell you how to acquire, install and configure Mulberry. *"Forwarding University E-Mail"* is also a helpful document for those getting ready to start using Mulberry.