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Supporting Egypt's Processed Foods Export Industry

Consulting Assignment For:

DJIBE ADOUM, Ph.D.

Internet, Email And Website Development

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Training Manual – Internet, Email and Web Browsing

ALEB Agricultural Led Export Businesses
November 1 through December 18, 1999
Task 3 – Douglas Anderson, Team Leader

Internet, Email and Webpage Development

Phase one – Sending and receiving electronic messages (e-mail)

Training Concepts

1. Definition
2. Electronic mail (email)

1. Definition

Electronic mail (email) is the process by which an individual sends a message electronically.

2. Electronic mail (email)

Unlike regular mail where a letter can only be addressed to one correspondent at a time, electronic mail ("email") is a means by which one can send mail to one or any numbers of correspondents at the same time. Although there are other devices that can be used to send electronic mail, we will restrict our discussion to more fundamental means: the computer and the telephone line. To send an email, you need to have an electronic address from which you can send as well as a unique address of your correspondent.

All email addresses have three basic elements: <u>username@company.com</u>

1. Username: identifies you or the person to whom you are sending the email: we will be sending email to the following users during our exercise: task301, task302, task303, task304, task305
2. @ "at" symbol identifies the computer to which the correspondence is sent
3. company.com means the Internet Service Provider or your company
4. .com identifies the type of Internet Service Provider

The name before the "@" symbol identifies the recipient of the mail; it can be the name of a person, a position, a department, or a company. For the sake of our demonstration, we are using usernames such as: task301, task302, task303, task304, and task305. These are also considered email boxes. The information that follows the "@" symbol identifies the computer to which the email is sent

To conduct our training, we have established five email accounts with the Internet Service Provider: access.com.eg. They are:

task301@access.com.eg

task302@access.com.eg

task303@access.com.eg

task304@access.com.eg

task305@access.com.eg

3. Hostnames

Host names refer to the host (a computer or a company) to which the email is sent. Furthermore, host or hostnames have two parts: the specific name of the host (which can itself have many parts) followed by a period (a "dot") and a suffix indicating the "domain" classification of the host server, or in some cases, the country of the server. For example we are using the Internet Service Provider named access to and receive emails as well as access to the Internet (World Wide Web). Access is a commercial provider and therefore access.com. Since access.com is in Egypt, it uses the suffix .eg. The complete name for our Internet Service Provider becomes: access.com.eg.

Other suffixes are:

edu (for educational institutions)

gov (for government)

mil (for military)

net (for service providers like MenaNet)

org (for nonprofit organization)

Countries also have suffixes, for example:

eg (Egypt)

ca (Canada)

it (Italy)

ja (Japan)

Netscape Communicator and Microsoft Internet Explorer allow you to read and send email as well as surf the Web.

If you have used a computer to type a letter, then you have most of the skills needed to send email. The only difference is that with regular mail you would have to print out the letter and put it in a mailbox, but with email you press a key or two and the letter is transmitted electronically to the email box of the recipient, who can typically read your letter within a few seconds

Practice Exercise 1.1. The art and science of establishing a connection, composing and sending an e-mail message

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Step 1. Establishing a connection to your Internet Service Provider
Preliminary steps in establishing a line connection to the Internet. Establishing a connection to the Internet consists of two simple procedures.

a. The easiest way is accomplished by double clicking on the "telephone and computer shortcut" on the desktop. This will lead to a pane where you will be asked to input "a user name" in the top window and a "password" in the lower window. The telephone number is usually pre-inserted but if it is not, you could type it in the third window. You then click on the button that says "connect" to connect to the server of your Internet Service Provider.
b. The second procedure consists of navigating through the Start button, go Programs, then to Window Explorer and then to the dial up option. You can then click on the icon of your choice to establish a connection.

Step 2. Starting the email session (10 minutes)

a. Locate and click on the Netscape icon – the program will load
b. Click on the "Communicator Option" on the menu bar to get to Messenger Interface

Select "Message" option and demonstrate the concept and applications of email

Step 3. Create and send an email (2 hours)

a. Insert the address of the correspondent
b. Either carbon copy or blind copy, and/or leave it blank
c. Enter subject in subject line
d. Go to body of message and compose text
e. Press send
f. Use participants to send and receive e-mail messages

Practice Exercise 1.2. Forwarding an e-mail message
Step 1. Forwarding an email message (20 minutes)
Highlight the message, click on the forward button on the toolbar to open a new window that incorporates the old message. Compose your message and send it off just like sending regular email.

Practice Exercise 1.3. Reply to an e-mail message
Step 1. Review messages received from other training participants (20 minutes).
Select a few e-mail messages and respond to them.
Exchange some correspondence with some of the participants.

Practice Exercise 1.4. Establishing an Address Book (40 minutes)

1. Click on Communicator
2. Locate "Address Book" Option
3. Click on "New Card" Option - and demonstrate the concept of making a card for each email account. Explain how these will be used later to send email to several people without typing in their individual email addresses.
4. Click on "New List" Option and demonstrate how to insert the five email addresses established earlier in the previous step (email users - task301 through task305). Of course do not forget to give the "List" a name so you can use it later.
5. Send an email by using the "List Concept" to demonstrate how all your email will go to each user included in the List

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Practice Exercise 1.5. Go the Internet and exercise "browsing" (1 hour)

Computer Lab Session 1:
Electronic Mail as an Information Networking Tool

"The Internet mail system is, by far, the most important of the various Internet services. Every day, countless messages are sent from one part of the Internet to another and it is no exaggeration to say the economy of the world is now dependent on Internet mail...

One of the most important uses of the Internet mail system is to allow people who are not near one another to work together. Indeed, it is common for someone to collaborate with a person who is thousands of miles away; someone they may never meet in person."

Harley Hahn, *The Internet: Complete Reference*

In Africa, e-mail is not a luxury but a bare necessity - much more so than in Europe. The main reason, says Ekong, is that other modes of telecommunication are too costly for African budgets. It takes ten minutes to read 2,000 words aloud, and a ten-minute voice phone call from the Netherlands to Ghana costs 34 USD. And although the fax machine is faster and cheaper (2,000 words in a compact font will take two minutes to send), the same operation will still cost 7 USD. By contrast, an e-mail message of 2,000 words (around 12 kilobytes or 96 kilobits in digital terms), sent via a modem with a throughput speed of 14 kilobits per second, will take seven seconds to reach Accra from Amsterdam, and cost 0,40 USD. What is more, if the telephone line is good, a 28 k/s modem working at full speed will further halve the transmission charge - making it 175 times cheaper than a voice phone call across the same distance. No wonder e-mail is so important to the developing world - not least for the planet's poorest continent. It is the only mode of international telecommunication that Africa can afford on any reasonable scale.

Michiel Hegener, *Telecommunications in Africa - via Internet in Particular*

Electronic mail (e-mail) is used more than any other Internet resource. For many people and businesses--even in countries with full Internet access--e-mail is the only Internet service they use. For those countries without full Internet access through an online service provider, e-mail provides a critical link to the world-wide information network. Regardless of whether a person has full Internet access, learning to effectively use e-mail services can save time and money.

The practice exercises in this session provide basic skill development in using electronic mail services to establish information networks, to collaborate with other agribusinesses, industry and business development professionals, and to collect and disseminate valuable business information.

- The overview for the practice exercises in Session 1 provides an introductory explanation of e-mail addresses on the Internet.
- Practice Exercises 1.1 - 1.3 introduce basic computer and electronic mail skills which can be used for information networking and applied business purposes.
- Practice Exercise 1.4 provides an opportunity to practice human networking skills and to

establish e-mail contact with individuals of similar interests around the world.

- Discussion Exercise 1.5 considers how electronic mail can be utilized by trade and professional organizations to promote agribusiness and general business development interests in the West Africa region.

Additional e-mail training tips and network reference information are included under the section entitled *Training Resources for Computer Lab Session 1.* These resources can be used in conjunction with the practice exercises in this training course, or for further independent study. The additional resources include:

- List of Country Level Domain Names
- A Beginner's Guide to Effective E-Mail
- Tips from Business Netiquette International
- List of African Full Internet & E-Mail Service Providers.

Overview: Electronic Mail Addresses

In the practice exercises for Session 1, you will address, compose, send and reply to e-mail messages with other participants in this training workshop. These same skills can be used to establish networks and to exchange valuable information with other agribusiness and business development colleagues in the West Africa region and throughout the world.

Before beginning the practice exercises, it is important to understand that every computer on the Internet has its own unique address, and every person who uses the Internet has their own user identification (userid). You can send e-mail messages to anyone with an Internet e-mail address. Once you know a person's Internet address, you can send mail, transfer information or data files, or have conversations with other agribusiness colleagues.

All Internet addresses follow the same form: the person's user name, followed by an @ character (called the "at" sign), followed by the name of the computer. This form can also be expressed as: *userid@domain*. *Userid* is the person's name or user code. The part of the address after the @ character is called the *domain*, and denotes the unique address of the computer machine on which a person's userid receives mail.

The domain style addressing scheme used by the Internet is broken into segments separated by periods (.). Each segment, or subdomain, has a meaning according to its order in the address. The best way to understand a domain name is to read from right to left. The last subdomain on the right, or top-level domain, is the most general and indicates the type of organization or the country in which the computer is located. The subdomains to the left provide the name of the specific computer and, in some cases, the name of the institution where the computer is located. (Examples of organizational and geographical top-level domains are illustrated in Figure 1 and Figure 2, respectively. A more complete list of country domain names is provided in the *Training Resources* section of this guide.)

Domain	Meaning
com	commercial organization
edu	educational institution
gov	government
int	international organization
mil	military
net	networking organization
org	non-profit organization

Figure 1

Domain	Meaning
au	Australia
bj	Benin
bk	Burkina Faso
ca	Canada
td	Chad
ci	Cote d'Ivoire
cm	Cameroon
fr	France
gh	Ghana
gn	Guinea
lr	Liberia
mg	Madagascar
mw	Malawi
ml	Mali
na	Namibia
ne	Niger
ng	Nigeria
sl	Sierra Leone
sn	Senegal
ch	Switzerland
tg	Togo
ug	Uganda
uk	United Kingdom
us	United States
za	South Africa
zm	Zambia
zw	Zimbabwe

Figure 2

Here are two examples of Internet e-mail addresses: zntb@zamnet.zm
bitftp@pucc.princeton.edu

In the first example, the person's or organization's userid is *zntb* and the domain refers to a computer called *zamnet* that is located in Zambia (*zm*). In the second example, the person or organization's userid is *bitftp* and the domain refers to a computer called *pucc* that is located at Princeton University (*princeton*), which is an educational institution (*edu*).

It is also possible to send the same e-mail message to two or more individuals or geographic locations. When sending a message to multiple recipients, simply use a comma to separate the individual e-mail addresses. For example, to send a message to both the *zntb* and *bitftp* addresses listed above, simply separate the e-mail addresses with a comma:

zntb@zamnet.zm,bitftp@pucc.princeton.edu

Practice Exercise 1.1 Compose and send an e-mail message.

Step 1. Login to your e-mail or Internet access computer account.

Step 2. Using a list of e-mail addresses provided by the trainer, address e-mail to one or more workshop participants. (If you are sending the message to more than one person at the same time, remember to use a comma between individual e-mail addresses).

Step 3. Address either a carbon or blind carbon copy to yourself.

Step 4. Compose an appropriate message or ask an informational question related to agribusiness or business development concerns in the West African region.

Step 5. Send the e-mail message.

Practice Exercise 1.2 Forward an e-mail message.

Step 1. Review messages received from other training participants.

Step 2. Forward a copy of the received message to at least one other training participant.

Practice Exercise 1.3 Reply to an e-mail message.

Step 1. Review messages received from other training participants.

Step 2. Prepare a reply e-mail message. Include or copy the original message in your reply, and compose an appropriate response.

Step 3. Send the reply to the person who sent the original message.

Practice Exercise 1.4 Compose and send an introductory e-mail message to individuals of similar interests around the world.

Step 1. Using a list of e-mail addresses provided by the trainer, address an e-mail message to an individual of similar interests in another country or region of the world.

Step 2. Utilize human networking, good inter-personal skills and appropriate business etiquette in composing an initial introduction of yourself. (Always be polite!)

Step 3. Compose an appropriate message or ask an information question related to agribusiness or business development concerns in the West African region. (Remember to be specific in stating the purpose of your e-mail message and the type of information required).

Step 4. Send the e-mail message.

** Note: Please expect delays in receiving a reply e-mail. Delays may be due to a number of factors, including: differences in international time zones, delays in e-mail transmittal by computer servers across the Internet, the business schedule of the person to whom the e-mail was sent; and the degree of complication required to provide an adequate answer to your information question.*

Discussion Exercise 1.5
Using e-mail for agribusiness or general business development purposes.

Step 1. Consider the following questions:

- How could the use of electronic mail enhance your trade, commodity or professional association's ability to gather and disseminate business information?
- How could your organization use e-mail to establish an information network either among its constituents or on their behalf?
- Identify individuals, organizations, businesses or government ministries with whom you or your business associates would like to have an established e-mail connection. What kind of information would you exchange? How could you obtain these e-mail addresses?
- What are the biggest impediments to e-mail communication within your business organization? country? West African region? How can these impediments be addressed and resolved?

Computer Lab Session 2: Electronic Mailing Lists

In this session you will identify professional and world-wide information networks relevant to your interests. You will also practice e-mail and networking skills for interacting with other agribusiness or business development colleagues beyond the West African region. The tool for participating in this global information-sharing network is the electronic mailing list.

- The overview for the practice exercises in Session 2 gives a brief, introductory description of electronic mailing lists as well as some basic commands for one of the most prominent mailing list programs used on the Internet. (A more detailed comparison of basic commands for other leading mailing software programs is included in the section entitled *Training Resources for Computer Lab Session 2.*)

- Practice Exercise 2.1 provides practical examples of how to identify electronic mailing lists or discussion groups relevant to your professional and business interests. (For additional information on selected mailing lists, you may also refer to the sections entitled *Training Resources for Computer Lab Session 5* and *Selected Guides to Information Resources on the Internet.*)

- Practice Exercises 2.2-2.5 provide practice examples of how to join an electronic mailing list, use common mailing list commands, and participate in substantive group discussions.

- Practice Exercise 2.6 is an advanced exercise that provides an opportunity to search archived discussions for substantive information or research topics.

- Discussion Exercise 2.7 considers how electronic mailing lists can be utilized by commodity, trade, business and professional organizations to promote agribusiness and general business development interests in the West Africa region.

Overview: Electronic Mailing Lists and Basic Commands

Electronic mailing lists (also known as electronic conferences, discussion groups, Listserv, etc.) constitute one of the most popular methods of group communication and information networking. Just like subscribing to an academic or industry journal of your choice, you can participate in an electronic exchange of information, new ideas or the latest developments on a specified topic, such as agribusiness, marketing, strategic planning, financing, or information technology issues. There are literally thousands of these electronic discussion groups! The trick is to find the right discussion group for your professional or business interests!

An electronic mailing list is managed by a computer program. Although every mailing list has a person who acts as an administrator, it is the computer program that actually maintains the mechanical upkeep of the mailing lists (i.e., a list server). There are three common mailing list management programs: Listserv, Listproc and Majordomo. These programs automatically distribute an e-mail message from one member of a mailing list to all other members on that same list.

To subscribe to a mailing list, you simply send an e-mail message to the computer program that administers the list. When you subscribe to a list, your name and e-mail address are automatically added to the list. You will receive a standard e-mail letter of welcome providing important information about the list. You will also begin receiving all postings or mail messages sent to the list by its members.

You may simply read or follow the exchange of electronic discussion by list members, or join in the discussion at any time. If you choose to respond to a particular message or discussion point, you can send your response to the list (in which case, all members of the list will receive it), or to an individual on the list. You can signoff (unsubscribe) from a list at any time. You can also get a listing of all the members of a list and their e-mail addresses.

A few of the basic commands for the listserv mailing program are described below. (Detailed information and commands for other leading mailing software programs are included in the section entitled *Training Resources for Computer Lab Session 2.*)

Subscribing

To subscribe to a list, send an e-mail message to the listserv address with the subject line blank and one line in the body of the messager:

SUB listname yourname

(where *listname* is the name of the list, and *yourname* is your first and last name)

Unsubscribing

To have your name removed from a listserv, send an e-mail message to the listserv address with the subject line blank and one line in the body of the message:

SIGNOFF listname

(where *listname* is the name of the list)

Posting

If you have a comment or question that you wish to distribute to all members of a list, send it as e-mail to the list address for that list. Please note that the list address is different from the listserv (program) address.

Review

To obtain individual e-mail addresses and names of the mailing list subscribers, send an e-mail message to the listserv address with the subject line blank and one line in the body of the message:

REVIEW listname

(where *listname* is the name of the list)

Conceal

To hide your name from users issuing the review command, send an e-mail message to the listserv address with the subject line blank and one line in the body of the message:

SET listname CONCEAL

(where *listname* is the name of the list)

Digest

To compile all messages posted during a given period of time (e.g. daily, weekly) and send them to you as a single message with a list of subject headings at the top. To use this option, send an e-mail to the listserv address with the subject line blank and one line in the body of the message:

SET listname DIGEST

(where *listname* is the name of the list)

Practice Exercise 2.1
Use keyword searches to identify relevant electronic discussion groups.

Option 1. Conduct a keyword search to identify mailing lists relevant to your interests.

Step 1. Address an e-mail message to LISZTER@BLUEMARBLE.NET.

Step 2. Leave the subject line blank.

Step 3. The text of the message must read:
search keyword

(Replace *keyword* with your own search word, e.g. search *Africa*, search *Agribusiness*, search *Marketing*, search *Financing*. Note that the use of quotation marks forces an exact match of the keyword, but is not mandatory.)

Step 4. Send the message. Within a few minutes (sometimes longer) you will receive an excerpt from the Listserv lists which pertain to your keyword search. The result will be a list of mailing lists, along with relevant subscription information.

Option 2. Conduct a keyword search to identify mailing lists relevant to your interests.

Step 1. Address an e-mail message to LISZTER@LISTSERV.NET

Step 2. Leave the subject line blank.

Step 3. The text of the message must read:
list global/keyword

(Replace *keyword* with your own search word, e.g. list global/Africa, list global/Agribusiness, list global/business development.)

Step 4. Send the message. Within a few minutes (sometimes longer) you will receive an excerpt from the Listserv lists which pertain to your keyword search. The result will be a list of mailing lists, along with relevant subscription information.

Practice Exercise 2.2 Subscribe to an electronic discussion group

Option 1. Subscribe to an electronic discussion group of your choice.

Step 1. From the Directory of Scholarly E-Conferences or list of mailing lists obtained in the preceding exercises (2.1 and 2.2), review and select an electronic discussion group related to a business development, agribusiness or African policy topic of your choice. Use the subscription information provided in the directory of e-conferences or lists of mailing lists as appropriate.

Step 2. Address a message to *Listserv@some.node*.

Step 3. Leave the subject line blank.

Step 4. The text of the message should read:
Sub ListName YourFirstname YourLastname

Step 5. Send the message. Within a few minutes (sometimes longer) you will receive a new subscriber confirmation memo. In many cases, this confirmation memo will provide instructions on how to participate in list discussion. (It is a good idea to save this message for later reference.)

Option 2. Subscribe to AGNET-AFRICA, an electronic mailing list devoted to networking and information sharing among agribusiness trade and professional associations in eastern and southern Africa. Now, it begins in West Africa.

Step 1. Address a message to *Listserv@home.ease.lsoft.com*

Step 2. Leave the subject line blank.

Step 3. The text of the message should read:
Sub AGNET-AFRICA YourFirstname YourLastname

Step 4. Send the message. Since this is a private list with membership restricted primarily to African agribusinesses and associations, you will receive an e-mail message from the list administrator requesting more information about your interest in African agribusiness.

Step 5. Compose a reply e-mail message explaining that you are a member of an African agribusiness firm or association. Upon receipt of your message, the list administrator will process your subscription membership and send you a new subscriber confirmation memo. This confirmation memo will provide instructions on how to participate in list discussion. (It is a good idea to save this message for later reference.)

** Note: Agnet-Africa welcomes messages composed by list members in English, French or other international languages commonly used in business in Africa.*

Option 3. Subscribe to the AFRIK-IT list, an electronic discussion group of the African Network of IT Experts and Professionals.

Step 1. Address a message to *LISTSERV@LISTSERV.HEA.IE*

Step 2. Leave the subject line blank.

Step 3. The text of the message should read:
Sub AFRIK-IT YourFirstname YourLastname

Step 4. Send the message. Within a few minutes (sometimes longer) you will receive a new subscriber confirmation memo. In many cases, this confirmation memo will provide instructions on how to participate in list discussion. (It is a good idea to save this message for later reference.)

** Note: The AFRIK-IT mailing list provides useful information, articles and other Internet resources for both IT novices and experts alike. It is a good source for following recent advances in Internet and telecommunication capabilities on both a regional and country basis. The ongoing development of information technology capabilities in Africa is likely to have an effect on how the regions business firms and agribusinesses conduct their daily business and communicate with prospective trade partners around the world.*

Option 4. Subscribe to AFLIB-L, a lightly moderated discussion forum for libraries in Africa to "encourage contact and communication between and among professionals on the continent."

Step 1. Address a message to *AFLIB-L@statelib.pwv.gov.za*

Step 2. Leave the subject line blank.

Step 3. The text of the message should read:
Subscribe YourFirstname YourLastname Your e-mail address

Step 4. Send the message. Within a few minutes (sometimes longer) you will receive a new subscriber confirmation memo. In many cases, this confirmation memo will provide instructions on how to participate in list discussion. (It is a good idea to save this message for later reference.)

** Note: The primary language will be English, but they soon hope to support French and Portuguese as well. Anticipated themes for discussion include professional issues, the application of technology, and notices of major projects. This list also might be useful for business firms or agribusiness associations seeking to collect and disseminate information.*

Practice Exercise 2.3 Review names of other list subscribers

Step 1. From the directory of e-conferences and mailing lists obtained in the preceding exercises (or from training facilitator), review and select an electronic discussion group related to a business development, agribusiness or African policy topic of your choice.

Step 2. Address a message to *Listserv@some.node*.

Step 3. Leave the subject line blank.

Step 4. The body of the text should read:
REVIEW listname
(where listname is the name of the list)

Step 5. Send the message. Within a few minutes (sometimes longer) you will receive a list of subscriber names and their network address.

Step 6. Examine the list of subscriber names. Who subscribes to this list? What do the entries on the subscriber list tell you about this electronic conference group?

Practice Exercise 2.4
Post a comment or participate in an electronic discussion group.

Step 1. Address an e-mail to a list address to which you subscribed in Exercise 2.3.
(Please note that the list address is different from the listserv program address.)

Step 2. In the text or body of the e-mail message, compose a business development,agribusiness or professional inquiry or discussion comment. This message should be directed to all members of the electronic discussion group. ***Note: Be as specific and polite as possible when stating your information inquiry or discussion comment.***

Step 3. Send the e-mail message. If it is a moderated conference, you may receive a message or additional instructions from the moderator concerning the posting of your comment. Follow these instructions and revise your comments for posting, as needed. Once the message has been posted, you should receive a response to your query from one or more subscribing members to the electronic conference within a day or two.

Step 4. Who responded to your question? In what country were they located? Was the information they provided helpful? Was it valid?

Step 5. Send a return e-mail message thanking the person who responded to your request. (Remember that the Internet is not just a system of computers, but it is connecting you with individual people. It is important to practice courtesy.)

Practice Exercise 2.5 Signoff or unsubscribe to an electronic discussion group

Step 1. Address an e-mail message to all listserv program addresses to which you subscribed in Practice Exercise 2.3. The e-mail address should follow the form of *Listserv@some.node*

Step 2. Leave the subject line blank.

Step 3. The text of the message should read:
UNSUB ListName

Step 4. Send the message. Within a few minutes (sometimes longer) you will receive a confirmation memo that you are no longer on the subscription list.

IMPORTANT NOTE: If you subscribed to any electronic mailing lists during the computer lab sessions and you did not use your own personal home or office e-mail address, please be sure to unsubscribe to these lists prior to the conclusion of this training session!

Advanced Practice Exercise 2.6
Using E-Mail to Search Electronic Discussion List Archives

Exercise Overview

Many electronic discussion lists archive past messages and it is possible to search these archives for a given topic. These databases of archived discussion topics can be an excellent resource for obtaining specific knowledge and/or professional contacts for subjects that have not been widely documented or published. Knowing how to search these archived discussions can be an important research technique and information resource asset for many businesses and individuals.

To search an archived list using e-mail, send an e-mail message to the listserv address, placing the search commands in the body of the letter. There is an extensive set of possible search commands. A simple example is given here.

```
//
DATABASE SEARCH DD=RULES
//RULES DD *
SEARCH phrase IN listname
INDEX
/*
```

Sending the above commands will return all articles from the list you specified for "*listname*" that contains the words or text you specified for "*phrase*". The listing you will receive (via e-mail) has articles which match the criterion listed by article number and subject line. Review the subject lines and select the article number(s) for those subjects in which you are interested. Use the selected article number(s) to send a second message following the form below:

```
//
DATABASE SEARCH DD=RULES
//RULES DD *
SEARCH phrase IN listname
PRINT ALL OF numberlist
/*
```

The above commands issued in your second e-mail message will list the contents of the selected article number(s) you indicated for *numberlist*. For example, if you want to see the contents for article numbers 105, 342, and 501, you would type: PRINT ALL OF 105, 342, 501.

Practice Examples

Contributions sent to the AFRIK-IT list are automatically archived. There are two ways of obtaining a list of the archived discussions: through an INDEX command or through the database search facilities. You can get a list of the available archive files by sending an "INDEX AFRIK-IT" command to LISTSERV@LISTSERV.HEA.IE. You can then order these files with a "GET AFRIK-IT LOGxxxx" command, or using LISTSERV's database search facilities. To obtain more information on using the database search facilities send an e-mail message with the "INFO DATABASE" command.

Option 1. Searching archives using the INDEX command.

Step 1. You must first subscribe to the AFRIK-IT mailing list. To subscribe to this list, follow the directions given in *Option 3* under Practice Exercise 2.3.

Step 2. Address and send an e-mail message to LISTSERV@LISTSERV.HEA.IE. Leave the subject line blank. The text of the message should read:
INDEX AFRIK-IT

Step 3. The listserv mailing program will send you a list of discussion messages or files posted by members of the AFRIK-IT mailing list. Review this list and select the articles or discussion messages which are of interest to you. Be sure to note the corresponding log number assigned to your selected articles.

Step 4. To order copies of these articles or discussion messages, address and send a second e-mail message to LISTSERV@LISTSERV.HEA.IE. Leave the subject line blank. The text of the message should read:
GET AFRIK-IT LOGxxxx

(*LOGxxxx* represents the archive number for a given month and year. For example, to review recent postings for November 1998, the text of the message would read: *GET AFRIK-IT LOG1198*)

Option 2. Searching archives using the Listserv database search facility for AFRIK-IT.

Step 1. You must first subscribe to the AFRIK-IT mailing list. To subscribe to this list, follow the directions given in *Option 3* under Practice Exercise 2.3.

Step 2. Address and send an e-mail message to LISTSERV@LISTSERV.HEA.IE. Leave the subject line blank. The text of the message should read:
INFO DATABASE

Step 3. The listserv mailing program will send you specific information and directions on how to use the database search facility to identify discussion topics and messages for a specific subject or keyword (e.g. agribusiness, Cote d'Ivoire, Ghana, Mali)

Discussion Exercise 2.7

Creating an electronic mailing list or information network for agribusiness and general business development purposes in the West Africa region

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Step 1. Consider and discuss the following questions:

- Review the lists of electronic mailing lists and discussion groups from Practice Exercises 2.1. What discussion groups appear to be relevant to the interests of West African business development or agribusiness associations? What type of information or discussion topics are noticeably absent? What kind of information would you ideally like to obtain from these discussion groups?

- How could you use these established global information networks for business development or agribusiness interests in your region?

- On a regional level, what types of electronic discussion groups or information-sharing networks would you like to see developed in West Africa? What target audience (e.g individuals, associations, institutions, government ministries) would you like to subscribe or participate in these networks? Would you limit participation to just your region? What discussion topics would be most relevant to the interests of West African agribusiness?

Computer Lab Session 3: (Advanced E-Mail Skills) Accessing the World Wide Web and Other Internet Resources via Electronic Mail

> The fact that the AAU [African Association of Universities] has only a store-and-forward connection to the Internet (also often called a dial-up link) does not mean that the Internet's tens of thousands of databases and hundreds of thousands of "homepages" are entirely out of reach; they are just harder to access. The information that Dutch Internet subscribers dig up using the World Wide Web, Gopher, and Telnet is available to Bart-Plange by means of automatic search keys that he sends as e-mail. The next time he contacts South Africa, they return with the information he has requested, like a dog fetching the newspaper. "For example, some time ago I needed a software program for the people here who work with Apple Macintoshes, but it was unobtainable in Ghana," says Bart-Plange. "I could have ordered it in America, sent a dollar cheque, and then had to wait for ages. Instead of that, I did an Archie search. I then received a list in my e-mail of all the ftp sites where that software could be obtained free. I ordered it from one of them yesterday, and this morning it was here. I've already installed it on the Macintosh."
>
> Michiel Hegener, *Telecommunications in Africa - via Internet in Particular*

In this session you will be provided with selected examples which demonstrate that, even for countries and persons without direct Internet access, basic e-mail services can be used to access the more advanced components of the world-wide network of information resources.

Using e-mail messages and commands, it is possible to access almost any Internet source or service (e.g. World Wide Web, FTP, Gopher, Archie, Veronica, Finger, Usenet, Whois, Netfind, WAIS, and the). A basic e-mail command, such as get or send, followed by the address of the desired information is sent to one of several mail servers set up for this purpose. The server then retrieves the file from its Internet location, and sends it to the requester by return e-mail. The response time may vary significantly depending on the geographical location and level of network traffic. However, for countries and persons without direct Internet access, these e-mail servers provide an important link to the worldwide network of information resources.

Please keep in mind that these servers are provided as a public service by volunteers. Those who have direct (or inexpensive) Internet access to the full range of World Wide Web resources should refrain from using these mail servers. Excessive traffic has caused the recent abandonment of some servers.

The practice exercises in this session provide opportunities to conduct more advanced research and information sourcing skills using electronic mail services.

- Practice Exercises 3.1 provides examples of advanced research techniques using electronic mail. The practice exercises allow participants to develop their own search strategies for identifying relevant information available on the World Wide Web. Specific options are presented for submitting e-mail search queries to several international search engines.

- Practice Exercise 3.2 gives participants an opportunity to review, select and retrieve documents and files identified through the e-mail search query conducted in Practice Exercise 3.1

- Practice Exercise 3.3 provides additional practical examples of how to retrieve World Wide Web documents via electronic mail. Uniform Resource Locators are provided for selected documents on the World Wide Web, and participants may choose which documents to retrieve based upon their own professional and business interests.

  - Options 1-2 provide Internet addresses for retrieving an extensive guide to accessing the Internet by e-mail, and more information on electronic networking and connectivity in Africa.

  - Options 3-4 focus on obtaining agribusiness related documents.

  - Options 5-7 provides business planning and marketing information.

  - Option 8 retrieves contact information for African and other resource centres devoted to the collection and dissemination of indigenous knowledge through such mediums as the Internet.

- Practice Exercise 3.4 provides several practical examples of how to retrieve graphic image files via electronic mail.

Additional guides and tips for advanced e-mail access to the Internet are included under the section entitled *Training Resources for Computer Lab Session 3.* These resources can be used in conjunction with the practice exercises in this training course, or for further independent study. The additional resources include:

- Accessing the Internet By E-mail: Dr. Bob's Guide to Offline Internet Access

- Agora: Retrieving WWW Documents through mail

Finally, to assist in handling compressed and encoded e-mail file attachments, several common software utilities exist and can be downloaded from the World Wide Web. These software utilities include:

- UUEncode/UUDecode (for DOS) and WINCODE (for Windows)

- WINZIP (for Windows)

Practice Exercise 3.1
Conducting a World-Wide Web information search by e-mail

Exercise Overview

The World Wide Web (WWW) is the main Internet navigational tools. The WWW is graphical in appearance and is generally more readily understood by Internet users. However, use of the WWW requires greater computer and telecommunication resources. Many persons and individuals simply do not have the required resources to directly access these Internet services.

If you need information on a specific agribusiness topic but do not know the name or location of an appropriate information source, how you would find or retrieve a document or file from the World Wide Web? There are several search engines that have been developed to search and identify specific information topics, networks, or file types on the World Wide Web. Until recently, these search engines could only be used through direct Internet access; however, for those with either limited or costly Internet access, it is possible to submit search queries by e-mail.

There are several international search engines available. A sample list of these search engines along with their Internet address is provide below.

Yahoo!	URL:	http://www.yahoo.com/
Alta Vista	URL:	http://altavista.digital.com/
Excite	URL:	http://www.excite.com/
HotBot	URL:	http://www.hotbot.com/
Infoseek	URL:	http://www.infoseek.com/
Lycos	URL:	http://www.lycos.com/
WebCrawler	URL:	http://www.webcrawler.com/

Each of these international search engines is programmed or designed with a different set of search features or parameters. Consequently, it is generally a good idea to try a search strategy using several search engines, and to compare which search features produce the best search results for your research purposes. Also, not all of the search engines may work well with search queries submitted by e-mail. In other words, if an e-mail search query does not produce the results you desire using one search engine, try submitting the same query to another search engine. (Note: Please refer to the *Training Resources for Computer Lab Session 4* for information on the leading search engine programs as well as additional research tips and search strategies for the individual search engines cited.)

For Practice Exercise 3.1, you may submit your e-mail search queries to one of the following mail servers:

agora@dna.affrc.go.jp	(Japan)
agora@kamakura.mss.co.jp	(Japan)
www.mail@ciesin.org	(USA)
agora@info.lanic.utexas.edu	(USA)
agora@www.undp.org	(restricted to developing countries)

Practice Examples

Option 1. Sample WebCrawler Query.

The following is a sample e-mail query using the WebCrawler search engine. When using more than one search term, the keywords must be separated with a "+"sign (e.g. plants+medicinal). You may substitute the keyword(s) provided in each example with your own keyword(s).

Step 1. Address an e-mail message to one of the Agora servers listed in this exercise section.

Step 2. Leave the subject line blank.

Step 3. To submit a search query for the keyword *agribusiness*, the text of the message should read:
send http://www.webcrawler.com/cgi-bin/WebQuery?agribusiness

To submit a search query for the keywords *Africa* and *agribusiness*, the text of the message should read:
send http://www.webcrawler.com/cgi-bin/WebQuery?agribusiness+Africa

Option 2. Sample Query of the Lycos Search Engine

The following is a sample e-mail query using the Lycos search engine. When using more than one search term, the keywords must be separated with a "+"sign (e.g. cocoa+prices). You may substitute the keyword(s) provided in each example with your own keyword(s).

Step 1. Address an e-mail message to one of the Agora servers listed in this exercise section.

Step 2. Leave the subject line blank.

Step 3. To submit a Lycos search query for the keywords *cocoa* and *prices*, the text of the message should read:
send http://www.lycos.com/cgi-bin/pursuit?&query=cocoa+prices

Option 3. Sample Queries of the Alta Vista Search Engine.

The following is a sample e-mail query using the Alta Vista search engine. When using more than one search term, the keywords must be separated with a "+" sign (e.g. agribusiness+managment).
You can also conduct a more narrow search strategy by forcing an exact match of a phrase or keyword search string (e.g. keywords that must appear next to each other). To search for phrases, you must begin and end the phrase or keyword search string with the character set "%22" (e.g. %2agribusiness+management%22).

You may substitute the keyword(s) provided in each example with your own keyword(s).

Step 1. Address an e-mail message to one of the Agora servers listed in this exercise section.

Step 2. Leave the subject line blank.

Step 3. To submit an Alta Vista search query for the phrase "*agribusiness management*" (e.g. keywords appearing next to each other), the text of the message should read:
send http://altavista.digital.com/cgi-bin/query?&q=%22agribusiness+management%22

To submit an Alta Vista search query for the keywords *agribusiness* and *management* (e.g. keywords appearing anywhere in the document, the text of the message should read:
send http://altavista.digital.com/cgi-bin/query?&q=agribusiness+management

Option 4. Sample Query of the Yahoo! Search Engine.

The following is a sample e-mail query using the Yahoo! search engine. When using more than one search term, the keywords must be separated with a "+" sign (e.g. plants+medicinals). You may substitute the keyword(s) provided in each example with your own keyword(s).

Step 1. Address an e-mail message to one of the Agora servers listed in this exercise section.

Step 2. Leave the subject line blank.

Step 3. To submit a Yahoo! search query for the keyword *agribusiness*, the text of the message should read:
send http://search.yahoo.com/bin/search?p=agribusiness

To submit a Yahoo! search query for the keywords *agribusiness* and *Africa*, the text of the message should read:
send http://search.yahoo.com/bin/search?p=agribusiness+africa

Option 5. Sample Query of the Infoseek Search Engine

The following is a sample e-mail query using the Infoseek search engine. When using more than one search term, the keywords must be separated with a "+ sign (e.g. plants+medicinal). You may substitute the keyword(s) provided in each example with your own keyword(s).

Step 1. Address an e-mail message to one of the Agora servers listed in this exercise section.

Step 2. Leave the subject line blank.

Step 3. To submit an Infoseek search query for the keyword *agribusiness*, the text of the message should read:
send http://www.infoseek.com/Titles?qt=agribusiness

To submit an Infoseek search query for the keywords *agribusiness* and *Africa*, the text of the message should read:
send http://www.infoseek.com/Titles?qt=agribusiness+africa

Practice Exercise 3.2
Using e-mail query results to obtain World Wide Web documents

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Step 1. Review results of the e-mail search queries submitted to the various search engines in Practice Exercise 3.1 and identify the Uniform Resource Locator (URL) for any documents which you would like to retrieve.

Step 2. For each individual document identified, address a separate e-mail message to agora@dna.affrc.go.jp.

Step 3. Leave the subject line blank.

Step 4. In the text of the message type the world "send" followed by the URL or Internet address of the selected document identified from the e-mail search results.

Practice Exercise 3.3
Examples of obtaining Gopher and World Wide Web documents by e-mail

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Exercise Overview

Both Gopher and the World Wide Web provide an impressive collection of information sources and files which can be retrieved by sending an e-mail message to one of the following servers:

agora@dna.affrc.go.jp	(Japan)
agora@kamakura.mss.co.jp	(Japan)
www.mail@ciesin.org	(USA)
agora@info.lanic.utexas.edu	(USA)
agora@www.undp.org	(restricted to developing countries)

In the body of the e-mail message, include the Uniform Resource Locator (or URL) which defines the location of the desired information source. You will receive the document you requested by return e-mail, with a list of other referenced documents which can be used to make further requests. (Note: For additional helpful tips refer to the document in the *Training Resources* entitled "Agora: Retrieving WWW Documents through mail.")

Practice Exercises

Option 1. Obtain a copy of the text file on "Africa - E-mail Access, Electronic Networking," including URLs of linked sites.

Step 1. Address an e-mail message to agora@dna.affrc.go.jp.

Step 2. Leave the subject line blank.

Step 3. The text of the message should read:
send http://www-sul.stanford.edu/depts/ssrg/africa/elecnet.html

Option 2. Obtain an extensive guide to accessing the Internet by E-Mail.

Step 1. Address an e-mail message to mailbase@mailbase.ac.uk (for users in Europe, Asia and Africa).

Step 2. Leave the subject line blank.

Step 3. The text of the message should read:
send lis-iis e-access-inet.txt

Option 2. Obtain an image of small globe with a focus on Africa.

Step 1. Address an e-mail message to agora@dna.affrc.go.jp

Step 2. Leave the subject line blank.

Step 3. The text of the message should read:
send http://gaia.info.usaid.gov/fews/globet.gif

Step 4. The attached document you will receive by return mail will be uuencoded. You must save and decode the attached file before viewing the graphic image. You may use either uudecode or Wincode software to decode the attached file.

Computer Lab Session 4: Accessing Agribusiness Market Information via the World Wide Web

"Technology-driven research won't provide the answers you need unless you ask the right questions."

Dan Himelfarb, Former President,
Society of Competitive Intelligence Professionals

The World Wide Web, also referred to as WWW or simply "the Web", is the most important component of the Internet. It is graphical in nature and requires a special software program, or browser, for viewing WWW multimedia documents. Multimedia documents are pages which display graphics, video clips and sound bites. Web browsers such as Netscape Navigator and Internet Explorer Mosaic allow users to access documents that display continuously or regularly updated information such as market prices, exchange rates, weather maps, transportation schedules or other information related to agribusiness.

The Internet accesses and brings the resources of the world's leading commercial businesses, universities, and research institutions to the desktop of businesses around the world. Remember, though, that even this wealth of online research has its limitations. Given the growing volume of graphical information on the Web, how we look for information is an important consideration.

We can find information on the Web through three primary mechanisms: 1) the Uniform Resource Locator (URL); 2) special search engines or programs that search for resources widely over the Internet; and 3) mega sites or meta indexes.

Uniform Resource Locator (URL). The Uniform Resource Locator (URL) is the basis for referring to specific resources on the Web. A URL consists of a string of characters that uniquely defines where a resource is physically stored. Once a useful resource has been identified, it is quicker to access that specific information source using a URL. The URL for regularly accessed resources can be saved as a bookmark by the user. (A diskette containing an electronic bookmark file is available with this guide. Web browsers such as Netscape Navigator and Internet Explorer Mosaic are designed to allow users to save and maintain bookmark files on their computers.)

Search Engines. If you need information on a specific business or agribusiness topic, but do not know the name or location of an appropriate information source, how would you find or retrieve a document or file from the World Wide Web? Fortunately, there are several search engines, or programs that have been developed to search and identify specified information on the World Wide Web. The results of these Web-wide searches are then indexed to allow for faster searching and access by individual users. (A review of the various search engines plus tips on composing effective search engine queries are included in the section entitled *Training Resources for Computer Lab Session 4*.)

Mega Sites or Meta Indexes. Mega sites or meta indexes are huge lists or collections of links to other Internet sites (not just Web resources). These lists are usually indexed or categorized into hierarchical subject categories, and allow users to quickly move among related information sites. Mega sites and meta indexes provide convenient, one-stop research places that can save the user time in identifying sources of relevant information.

The exercises in this session provide practical examples of how URLs, search engines, and mega sites can be used to access agribusiness networking and market information on the World Wide Web.

- Exercise 4.1 uses the Web browser and URLs to quickly access well organized, graphical listings of selected electronic mailing lists related to Africa, agribusiness or general business interests.

- Exercise 4.2 introduces training participants to selected agribusiness market information resources on the Internet.

- Exercise 4.3 introduces training participants to selected agricultural commodities and futures market information resources on the Internet.

- Exercise 4.4 introduces training participants to agricultural, general business and other industry trade shows.

- Exercise 4.5 provides an opportunity to development a search strategy (using keyword and boolean operators) and to utilize one or more search engine to identify critical agribusiness market information.

- Exercise 4.6 examines discussion topics about the quality and content of agribusiness market information available through the Internet.

As noted above, tips on how to effectively utilize the leading search engines are included under the section entitled *Training Resources for Computer Lab Session 4*. In addition, selected Africa, agribusiness and general business related Internet sites have been researched, reviewed and saved as an electronic bookmark file available with this training material. These resources can be used in conjunction with the practice exercises in this training course, or for further independent study. The additional resources include:

- The Spiders Apprentice, How to Use Web Search Engines
  - Tips on Searching the Web
  - Spidaps Basic Search Engine FAQs (Frequently Asked Questions)
  - How to Plan the Best Search Strategy
  - How Search Engines Work
  - The Web Search Wizard
  - In-depth Analysis of Popular Search Engines

- **Search Engine Tips**
  - **Yahoo!**
  - **Infoseek**
  - **Lycos**
  - **Excite**

- **Instructions for opening and viewing the electronic bookmark file of selected Africa, agribusiness and general business related Internet sites.**

Practice Exercise 4.1 Using the World Wide Web to Identify Relevant Electronic Mailing Lists of Interest to West African Agribusiness

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Exercise Overview

In this exercise, you will use a World Wide Web browser to augment the e-mail and personal networking skills you learned in the Computer Lab Session 2 exercises. Instead of using e-mail, you will use uniform resource locators (URLs) and hyptertext links to obtain tailored information about electronic mailing lists, networks, and usenet groups related to Africa, agribusiness, or business interests. You will view the resulting information in a graphical online environment.

A list of URLs for selected mailing list resources are provided below. Alternatively, you can also choose to search a list of lists by using a keyword search facility.

Africa
URL: http://www.igc.apc.org/apic/bp/inetall.html#Section 8
URL: http://www-sul.stanford.edu/depts/ssrg/africa/email.html

Agriculture
URL: http://www2.nis.za/jm/waw/agmail.htm
URL: http://www.aeco.ttu.edu/aecovl/index.htm
URL: http://www.agpr.com/consulting/maillist.html

Agribusiness
URL: http://www.agribiz.com/agInfo/resMail.html

Marketing
URL: http://nsns.com/MouseTracks/tloml.html

Key Word Search of Mailing Lists Directories
URL: http://www.liszt.com/
URL: http://www.lsoft.com/lists/listref.html
URL: http://catalog.com/vivian/interest-group-search.html
URL: http://www.neosoft.com/cgi-bin/paml_search/

Practice Exercise

Step 1. Double click on the, Internet Explorer or Netscape icon from your Windows screen, or from the Program Manager. After the software loads, select Open Location from the File drop-down menu or click your mouse in the space provided for Location:. Then type one of the URLs provided above in the *Exercise Overview*. (Note: The URL is case sensitive and must be typed exactly as shown.)

Step 2. A document will appear on your screen either with a short menu or a list of highlighted words or phrases. The highlighted words are links to other information or documents. When you find a link you would like to peruse, click on the highlighted word or phrase. The linked document will be loaded on your screen for viewing.

Step 3. If you would like to save information from one of the linked documents, select Save As... from the File drop-down menu. In the dialogue box that opens, select the location where you would like the file stored and type the name of the file in the space provided.

Step 4. To return to the previous document, simply click on the Back button on the browser window.

Step 5. Repeat Steps 1-3 for each of the remaining URLs provided in Step 1.

Step 6. If you would like to subscribe to an electronic discussion group, set subscription options, review names of other list subscribers, or post comments, follow the steps provided in Computer Lab Session 2, Practice Exercises 2.3-2.6.

Practice Exercise 4.2 Accessing agribusiness market information using Web browsers, URL addresses and bookmark files

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Exercise Overview

In this exercise you will identify and access agribusiness-related market information, prices and services. The tools you will use are the Web browser, Uniform Resource Locator (URL) addresses, and bookmark files. You will also practice skills for navigating or moving between the various information sources and sites on the World Wide Web.

The names of several specific and useful World Wide Web agribusiness sites are listed below along with their URL addresses (in italics). These sites are also bookmarked for faster access. (A diskette containing electronic bookmark files is available for this guide. For more information about how to install the bookmark file on your personal computer, please refer to the section entitled *Training Resources for Computer Lab Session 4.*)

African Sites

Commercial Farmers Union of Zimbabwe
URL: http://www.samara.co.zw/cfu/

Agricultural Information for Zambia
URL: gopher://lechwe.zamnet.zm:70/11/Agriculture

Agriweb
URL: http://www2.nis.za/jm/agriweb.htm

Agrilink Home Page
URL: *http://www.agrilink.co.za/*

Mbendi Information Services: Information for Africa
URL: *http://mbendi.co.za/comb.htm*

Mbendi Information Services: African Agricultural Industry
URL: http://mbendi.co.za/indy/agff/agffafcy.htm

Mbendi Information Services: Agricultural Products & Services of Africa
URL: http://mbendi.co.za/prod/g00m.htm

Other International Sites

Market Information System
URL: http://gnv.ifas.ufl.edu/~MARKETING/MARKET.HTML

Today's Market Prices
URL: http://www.todaymarket.com/

Market Information Sources Available Through the Internet
URL: http://www.aec.msu.edu/agecon/fs2/market/contents.htm

Commercial Sites in Agriculture
URL: http://ipmwww.ncsu.edu/cernag/commercial/market.html

Agriweb Canada
URL: http://www.agr.ca/agriweb/awhome-f.htm
URL: http://www.agr.ca/agriweb/link.htm

Practice Exercise

Step 1. Double click on the Internet Explorer or Netscape icon from your Windows screen, or from the Program Manager.

Step 2. After the software loads, you may access these sites by using one of three methods: the conference web page, the bookmarks saved on your Web browser (Internet Explorer or Netscape Navigator), or typing the appropriate URL in the space provided.

To use the bookmarks on your Web browser, click Bookmarks on Netscape, or Favorites on Internet Explorer, then go to the saved files in the drop-down menu box. Double click on one of the market information sites listed above.

To use the URL address for the Web site, click your mouse in the space provided entitled "Location" (Netscape) or "Address" (Internet Explorer). Then type one of the URL addresses for any of the market information sites listed above. Press the <Enter> or carriage return key. (Note: the URL is case sensitive and must be typed exactly as shown. Be sure to type only the italicized letters.)

Step 3. A document will appear on your screen either with a short menu or a list of highlighted words or phrases. (It will take a few seconds or longer to load the document). The highlighted words are links to other information or documents. When you find a link you would like to peruse, click on the highlighted word or phrase. The linked document will be loaded on your screen for viewing.

Step 4. To return to the previous document, simply click on the Back button on the Web browser window.

Step 5. Repeat Steps 1-3 using other URLs provided in the *Exercise Overview*. Write down any pertinent notations about the quality or usefulness of the various information sources encountered as you proceed from site to site. Did you find valuable linkages to other resources?

Step 6. To quit Internet Explorer or Netscape, select Exit or Quit

Practice Exercise 4.3 Accessing agricultural commodities and futures markets using Web browsers, URL addresses and bookmark files

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Exercise Overview

In this exercise you will access agricultural commodities and futures markets from around the world. The tools you will use are the Web browser, Uniform Resource Locator (URL) addresses and bookmark files. You will also practice skills for navigating or moving between the various information sources and sites on the World Wide Web.

The names of several selected agricultural commodities and futures market sites are listed below along with their URL addresses (in italics). These sites are also bookmarked for faster access. (A diskette containing electronic bookmark files is available for this guide. For more information about how to install the bookmark file on your personal computer, please refer to the section entitled *Training Resources for Computer Lab Session 4.*)

African Sites

The Agricultural Markets Division of the South African Futures Exchange
URL: http://www.safex.co.za

African Stock Exchanges
URL: http://mbendi.co.za/exaf.htm

Other International Sites

Chicago Board of Trade
URL: http://www.cbot.com/

Kansas City Board of Trade
URL: http://www.kcbt.com/dgpsum.htm

Global Markets, The Web Center for Futures and Options
URL: http://www.ino.com/

CSE Exchange for coffee, sugar, cocoa, milk, Cheddar cheese, nonfat dry milk, butter futures and options markets
URL: http://www.csce.com/

Qualisteam, Banking and Finance, Options and Futures in the World
URL: http://www.qualisteam.com/eng/index.html
URL: http://www.qualisteam.com/eng/opt.html

Practice Exercise

Step 1. Double click on the Internet Explorer or Netscape icon from your Windows screen, or from the Program Manager.

Step 2. After the software loads, you may access these sites by using one of three methods: the conference web page, the bookmarks saved on your Web browser (Internet Explorer or Netscape), or typing the appropriate URL in the space provided.

To use the bookmarks on your Web browser, click Bookmarks on Netscape or Favorites on Internet Explorer then go to the saved files in the drop-down menu box. Double click on one of the agricultural commodities or futures market sites.

To use the URL address for the Web site, click your mouse in the space provided entitled "Location" (Netscape) or "Address" (Internet Explorer). Then type one of the URL addresses for any of the market information sites listed above. Press the <Enter> or carriage return key. (Note: the URL is case sensitive and must be typed exactly as shown. Be sure to type only the italicized letters.)

Step 3. A document will appear on your screen either with a short menu or a list of highlighted words or phrases. (It will take a few seconds or longer to load the document). The highlighted words are links to other information or documents. When you find a link you would like to peruse, click on the highlighted word or phrase. The linked document will be loaded on your screen for viewing.

Step 4. To return to the previous document, simply click on the Back button on the Internet Explorer and Netscape.

Step 5. Repeat Steps 1-3 using other URLs provided in the *Exercise Overview*. Write down any pertinent notations about the quality or usefulness of the various information sources encountered as you proceed from site to site. Did you find valuable linkages to other resources?

Step 6. To quit Internet Explorer or Netscape, select Exit or Quit from the File drop-down menu.

Practice Exercise 4.4 Accessing Agricultural and General Business Trade Show Information using Web Browsers, URL Addresses and Bookmark Files

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Exercise Overview

In this exercise you will access agricultural and other industry trade show information from around the world. The tools you will use are the Web browser, Uniform Resource Locator (URL) addresses and bookmark files. You will also practice skills for navigating between the various information sources and sites on the World Wide Web.

The names of several selected trade show sites are listed below along with their URL address (in italics). These sites are also bookmarked for faster access. (A diskette containing electronic bookmark files is available for this guide.)

Woyaa! Africa, African Events Calendar
http://www.woyaa.com/africaevents.html

ChemExpo, A Virtual Trade Show for the Chemical Industry
URL: http://www.chemexpo.com/

Trade Show Central
http://www.tscentral.com/

Practice Exercise

Step 1. Double click on the Netscape or Internet Explorer icon from your Windows screen or from the Program Manager.

Step 2. After the software loads, you may access these sites by using one of three methods: the conference web page, the bookmarks saved on your Web browser (Internet Explorer or Netscape), or typing the appropriate URL in the space provided.

To use the bookmarks on your Web browser, click Bookmarks on Netscape or Favorites on Internet Explorer then go to the saved files in the drop-down menu box. Double click on one of the trade show information sites listed above.

To use the URL address for the Web site, click your mouse in the space provided entitled "Location" (Netscape) or "Address" (Internet Explorer). Then type one of the URL addresses for any of the market information sites listed above. Press the <Enter> or carriage return key. (Note: the URL is case sensitive and must be typed exactly as shown. Be sure to type only the italicized letters.)

Step 3. A document will appear on your screen either with a short menu or a list of highlighted words or phrases. (It will take a few seconds or longer to load the document). The highlighted words are links to other information or documents. When you find a link you would like to peruse, click on the highlighted word or phrase. The linked document will be loaded on your screen for viewing.

Step 4. To return to the previous document, simply click on the Back button on the browser.

Step 5. Repeat Steps 1-3 for each URL provided in the *Exercise Overview*. Write down any pertinent notations about the quality or usefulness of the various information sources encountered as you proceed from site to site. Did you find valuable linkages to other resources?

Step 6. To quit Internet Explorer or Netscape, select Exit or Quit from the File drop-down menu.

Practice Exercise 4.5 Use a search engine and develop a search strategy to identify relevant agribusiness market information sources.

Exercise Overview

When looking for information on the Internet, it is important to know that nearly every Internet search engine uses some form of a keyword or boolean search. Keywords are terms that are likely to occur in the kind of document or information materials that you are looking for. Boolean operators are a formal way of combining those keywords in order to search on more than one keyword at a time. The three basic boolean operators are AND, OR, and NOT.

AND--The word AND performs an intersection between two sets of keywords. For example:

Africa AND agribusiness

would search for records that have both the words Africa and agribusiness in them. Using the boolean operator AND tends to narrow the search results.

OR--The word OR performs a union of two sets of keywords. For example:

Africa OR agribusiness

would search for records that have either one or both of the word Africa or the word agribusiness in them. Using the boolean operator OR tends to broaden the search results.

NOT--The word NOT performs an elimination of a keyword from another keyword. For example:

Africa NOT agribusiness

would search for records that have the word Africa but not the word agribusiness in them.

In this exercise you will identify relevant agribusiness market information sources using Infoseek, a search engine which searches the World Wide Web using keywords and boolean operators. You will need to develop a search strategy to identify information relevant to your own interests. (You may also choose to use an alternative search engine such as Alta Vista, Excite, or Yahoo! A review of these various search engines plus tips on how to compose effective search queries for several leading search engines are include in the *Training Resources* section of this guide).

Before you begin, we will discuss a few tips for searching with Infoseek. In general, click in the search box and type a few words that describe what you want to find. Using words and phrases, without special symbols or punctuation, works best. However, you can sometimes refine your searches by using special syntax in your search. Here are some quick secrets to better searching:

Finding names and titles. Capitalize names and titles, such as December and Ghana. If you capitalize adjacent names, Infoseek treats the words as a single name. If you want to search for several names or titles, use commas to separate the different names. **For example, to search for Angola and Ghana, type: Angola, Ghana.** Omitting the comma between names causes them to be treated as one single long name.

Finding a Phrase. Use double quotation marks or hyphens to group words that are part of a phrase. Use double quotation marks around words that must appear next to each other. Do not use single quotation marks (') in place of double quotation marks. Use hyphens (-) between words that must appear within one word of each other.

Specifying Words that Must Appear in the Results. Put a plus sign (+) in front of words that must be in documents found by the search. Do not put a space between the + and the word. **For example, to find city guides about Accra, type: city guide+Accra.** Do not put a space between the plus sign (+) and the word.

Specifying Words that Should Not Appear in the Results. Put a minus sign (-) in front of words that should not appear in any documents found by the search. **For example, to find all resources that contain agribusiness but not the United States, type: agribusiness -United States.** Do not put a space between the minus sign (-) and the word.

Practice Exercise

Step 1. Double click on the Internet Explorer or Netscape icon from your Windows screen or from the Program Manager.

Step 2. Use one of the following methods to access the Infoseek search engine.

Double click on the Net Search button. This will take you to the Netscape or Internet Explorer web page containing hyperlinks to several search engines. Double click on the logo or icon for Infoseek.

Alternatively, select "Open Location" from the File drop-down menu or click your mouse in the space provided for Location: and type: *http://home.netscape.com/home/internet-search.html*
This will take you to the Netscape or Internet Explorer web page containing hyperlinks to several search engines. Double click on the logo or icon for Infoseek.

Step 3. Click in the search box and type a few words that describe what you want to find. You may also use some of the search tips discussed in the *Exercise Overview* to limit or narrow your search results.

Step 4. A list of Web sites related to your search topic will appear on your screen. The highlighted words or phrases in this list are links to other Web sites or documents. When you find a link you would like to peruse, click on the highlighted word or phrase. The linked document will be loaded on your screen for viewing.

Step 5. If you would like to save the reference to a Web site location, select "dd Bookmark" from the Bookmark drop-down menu. The URL to this Web site will automatically be saved.

Step 6. To return to the previous document, simply click on the Back button on the Netscape or Internet Explorer window.

Discussion Exercise 4.6

Step 1. Consider and discuss the following questions:

- How long did it take to find agribusiness market information?
- Was it quicker or easier to access the information using URLs, bookmarks or search engines?
- How helpful, complete or accurate were the information sources?
- Would regular access to this information benefit your agribusiness?
- Was there specific agribusiness market information which you needed but could not find? If yes, what additional information do you need? How could you collect this information and make it available to other agribusiness groups in the West African region and to the rest of the World?

Computer Lab Session 5: Identifying Trade Leads and Participating in Electronic Business Opportunities on the Internet

The exercises in Computer Lab Session 5 provide practical examples of how to use the World Wide Web to identify trade leads and agribusiness opportunities in the electronic global marketplace of the Internet.

- Exercise 5.1 provides training participants with an opportunity to identify agribusiness trade leads within West Africa and from around the world.

- Exercise 5.2 challenges participants to view and evaluate the effectiveness of virtual market places created by companies who market their agribusiness products directly to their Internet audience.

- Exercise 5.3 presents a survey of selected international business and trade resources available through the World Wide Web

- Exercise 5.4 examines discussion topics about the quality and content of market information available through the Internet, and how West African agribusinesses can utilize the Internet to directly market their product information to a global audience.

Additional reference information for electronic trade lead and business opportunities are included under the sections entitled *Training Resources for Computer Lab Session 5* and *Selected Internet Information Guides*. These resources can be used in conjunction with the practice exercises in this training course, or for further independent study.

Practice Exercise 5.1 Identify Agribusiness Trade Leads on the Internet

Exercise Overview

In this exercise you will identify agribusiness trade leads within the West Africa region and from around the world. The tools you will use are the Web browser, Uniform Resource Locator (URL) addresses and bookmark files. You will also practice skills for navigating between the various information sources and sites on the World Wide Web.

The names of several selected trade lead resource sites are listed below along with their URL addresses (in italicized letters). These sites are also bookmarked for faster access. (A diskette containing an electronic bookmark files is available for this guide.)

The sites are divided into three categories: Africa, agriculture and general trade leads.

Africa

South African Trade, Commerce and Industry
URL: http://www.exinet.co.za/trade/trade.html

Africa: Business and Trade
URL: http://www.sas.upenn.edu/African_Studies/About_African/ww_trad.html

UNCTAD TPDC Link to Africa!!!
URL: http://www.unicc.org/untpdc/news/eto/africa/

ExiNet - the South African Trade Information Resource
URL: http://www.exinet.co.za/

WoYaa! Africa
URL: http://www.woyaa.com/Tree/Business/Products/

Agriculture

Green Biz, or the Green Business Corner.
URL: http://www.todaymarket.com/tmp_gbiz.htm

Market Information System
URL: http://gnv.ifas.ufl.edu/~MARKETING/MARKET.HTML

Agrilink Home Page
URL: http://www.agrilink.co.za/

General Trade Leads

Electronic Trade Opportunity
URL: http://www.unicc.org/untpdc/eto

IMEX: International Import and Export Business Exchange
URL: http://www.imex.com/imex/trade/opport.html

The Import-Export Bulletin Board
URL: http://www.iebb.com/links.html

International Business Resources on the WWW
URL: http://ciber.bus.msu.edu/busres/tradlead.htm

International Business Network (IBNET),
URL: http://www1.usa1.com/~ibnet/

Global Business Exchange, Chambers of Commerce and Industry
URL: http://www.worldchambers.com/gbxhp.html

Practice Exercise

Step 1. Double click on the Internet Explorer or Netscape icon from your Windows screen, or from the Program Manager.

Step 2. After the software loads, you may access these sites by using the bookmark file saved in your browser or by typing the appropriate URL in the space provided.

To use the bookmarks on your Web browser, click Bookmarks on Netscape or Favorites on Internet Explorer then go to the saved files in the drop-down menu box. Double click on one of the agricultural commodities or futures market sites.

To use the URL address for the Web site, click your mouse in the space provided entitled "Location" (Netscape) or "Address" (Internet Explorer). Then type one of the URL addresses for any of the market information sites listed above. Press the <Enter> or carriage return key. (Note: the URL is case sensitive and must be typed exactly as shown. Be sure to type only the italicized letters.)

Step 3. A document will appear on your screen either with a short menu or a list of highlighted words or phrases. (It will take a few seconds or longer to load the document). The highlighted words are links to other information or documents. When you find a link you would like to peruse, click on the highlighted word or phrase. The linked document will be loaded on your screen for viewing.

Step 4. To return to the previous document, simply click on the Back button on the Internet Explorer, Netscape or Mosaic window.

Step 5. Repeat Steps 1-3 using for each of the URLs provided in the *Exercise Overview*. Write down any pertinent notations about the quality or usefulness of the various information sources as you proceed from site to site. Did you find any valuable or relevant trade lead possibilities?

Step 6. To quit Netscape Navigator, Internet Explorer or Mosaic, select Exit or Quit from the File drop-down menu.

Exercise 5.2 View Examples of Virtual Market Places for Agribusiness Products

Exercise Overview

In this exercise, you will review and evaluate selected examples of companies who market their agribusiness products directly to their Internet audience. Such interactive web sites are also referred to as Virtual Market Places.

The names of several selected virtual agribusiness market sites are listed below along with their URL addresses (in italicized letters). These sites are also bookmarked for faster access. (A diskette containing electronic bookmark files is available for this guide. For more information about how to install the bookmark file on your personal computer, please refer to the section entitled *Training Resources for Computer Lab Session 4.*)

Lowveld Tobacco Cooperative
URL: http://www.lowveldtobacco.co.za

Silo National des Graines Forestieres
URL: http://www.madonline.com/sngf/about_f.htm

Green Links
URL: http://www.todaymarket.com/tmp_link.htm

Caribbean Place
URL: http://www.caribplace.com/foods.htm
URL: http://www.caribplace.com/foods/jspcl.htm

Trader Joe's: A Unique Grocery Store
URL: http://www.traderjoes.com/

World Class Supersite
URL: http://web.idirect.com/~tiger/supersit.htm

O & A Currency Converter
URL: http://www.olsen.ch/cgi_bin/exmenu

Universal Currency Converter
URL: http://www.xe.net/currency/

International Trade Resources

Trade and Business Tools
URL: http://web.idirect.com/~tiger/tools.htm

InfoManage - International Trade
URL: http://www.infomanage.com/International/Trade/

International Trade Centre UNCTAD/WTO (ITC)
URL: http://www.intracen.org/

FinDat Database: Country Profiles for Trading & Investment Appraisal
URL: http://www.findat.com/defin.htm

Statistical and Market Information Resources

Business information sources on the Internet: Statistical, economic and market information
URL: http://www.dis.strath.ac.uk/business/market.html

International Trade Administration: Trade Statistics
URL: http://www.ita.doc.gov/

Practice Exercise

Step 1. Double click on the Netscape or Internet Explorer icon from your Windows screen, or from the Program Manager.

Step 2. After the software loads, you may access these sites by using the bookmark file saved on your browser or by typing the appropriate URL in the space provided.

To use the bookmarks on your Web browser, click Bookmarks on Netscape or Favorites on Internet Explorer then go to the saved files in the drop-down menu box. Double click on one of the agricultural commodities or futures market sites.

To use the URL address for the Web site, click your mouse in the space provided entitled "Location" (Netscape) or "Address" (Internet Explorer). Then type one of the URL addresses for any of the market information sites listed above. Press the <Enter> or carriage return key. (Note: the URL is case sensitive and must be typed exactly as shown. Be sure to type only the italicized letters.)

Step 3. A document will appear on your screen either with a short menu or a list of highlighted words or phrases. (It will take a few seconds or longer to load the document). The highlighted words are links to other information or documents. When you find a link you would like to peruse, click on the highlighted word or phrase. The linked document will be loaded on your screen for viewing.

Step 4. To return to the previous document, simply click on the Back button on the Netscape or Internet Explorer window.

Step 5. Repeat Steps 1-3 using for other URLs provided in the *Exercise Overview*. Write down any pertinent notations about the quality or usefulness of the various international business and trade resources as you proceed from site to site. Was it difficult to follow the links on these mega sites?

Step 6. To quit Netscape or Internet Explorer , select Exit or Quit from the File drop-down menu.

Discussion Exercise 5.4

Step 1. Consider and discuss the following questions:

- Which international trade sites appeared to have the most relevant trade leads for West African agribusiness?
- Were viable trade leads identified? What methods would you use to respond to these trade leads?
- Could West African agribusinesses utilize the Internet to create an online business presence or directly market their product information to a global audience? What steps must be taken to achieve such a goal?
- Did you identify useful business resources and tools? Would your company or association benefit from daily access to these business resources? If not, what alternative or additional business resources would be helpful to your company or association?

Training Resources for

Computer Lab Session 1:

Basic Electronic Mail Skills

- **A Beginner's Guide to Effective E-Mail**
- **Business Netiquette International**
- **List of African Full Internet & E-Mail Services Providers**
- **List of Country Level Domain Names**

A Beginner's Guide to Effective Email

Revision 2.0

Kaitlin Duck Sherwood *This is a new revision, and may change slightly in the next few weeks. Some sections have been expanded; there are also new sections on status, greetings and signatures, and domain names. If you would rather look at the old version, it will be kept around for a while.*

If this page is slow to load, you might look on the list of alternate sites for a server closer to you.

Contents

- Introduction
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Introduction

I believe strongly in the value of electronic mail in both corporate and personal domains. Email is cheaper and faster than a letter, less intrusive than a phone call, less hassle than a FAX. Using email, differences in location and time zone are less of an obstacle to communication. There is also evidence that email leads to a more egalitarian information structure. (See Sproull and Kiesler's book *Connections* , MIT Press, 1993.)

I have seen these advantages lead to a massive shift from face-to-face to email communication. When I started working in 1984 (in a company without email) I estimate that I went to ten meetings per week, gave a presentation once a month, and spent most of my time in face-to-face discussions with co-workers and vendors. By 1991, I was down to approximately one presentation per quarter, one or two meetings per week, and thirty email messages per day. At my last job, in 1998, I had about one presentation per year, two meetings per week, and about sixty email messages per day.

Unfortunately, in the twenty-plus years that I have been using email, I have seen a large number of people suffer mishaps because they did not understand how to adjust their communication styles to this new medium. I wrote this document to try to help people avoid those problems.

This is *not* a document on the mechanics of sending email - which buttons to push or how to attach a photograph. Those details are different for every different email software package, and are better handled by manuals for the program. I instead focus on the *content* of an email message: how to say what you need to say.

This is *not* dogma. There will be people who disagree with me on specific points. But, if there was only one right answer, there wouldn't be a need to write this guide. Hopefully, this guide will make you examine your assumptions about email and thus help you maximize your email effectiveness. Then you can write to reflect your own personality and choice.

Why Is Email Different?

Electronic communication, because of its speed and broadcasting ability, is fundamentally different from paper-based communication. Because the turnaround time can be so fast, email is more conversational than traditional paper-based media.

In a paper document, it is absolutely essential to make everything completely clear and unambiguous because your audience may not have a chance to ask for clarification. With email documents, your recipient can ask questions immediately. Email thus tends, like conversational speech, to be sloppier than communications on paper.

This is not always bad. It makes little sense to slave over a message for hours, making sure that your spelling is faultless, your words eloquent, and your grammar beyond reproach, if the point of the message is to tell your co-worker that you are ready to go to lunch.

However, your correspondent also won't have normal status cues such as dress, diction, or dialect, so may make assumptions based on your name, address, and - most importantly - facility with language. You need to be aware of when you can be sloppy and when you have to be meticulous.

Email does not convey emotions nearly as well as a face-to-face or even telephone conversation. It lacks vocal inflection, gestures, and a shared environment. Your correspondent may have difficulty telling if you are serious or kidding, happy or sad, frustrated or euphoric. Sarcasm is *particularly* dangerous to use in email.

Another difference between email and older media is that what the sender composes message might not look like what the reader sees. Your vocal cords make sound waves that are perceived basically by both your ears as your audience's. The paper that you write your love note on is the same paper that the object of your affection sees. But with email, the software and hardware that you use for composing, sending, storing, downloading, and reading may be completely different what your correspondent uses. Your message's visual qualities may be quite different by the time it gets to someone else's screen.

Thus your email compositions should be different from both your your paper compositions and your speech. When I first wrote this, there were essentially no resources available on email content. Those that did discuss email content tended to be really brief on the subject of email style, and gave little *motivation for why* the style is different. I wrote this document to fill that void: to tell you how to tailor your message to this new medium.

Since I first wrote this, I have found some other documents on email that address more than just the mechanics. I now have a small bibliography on style and netiquette.

Go on to Context

You can send correspondence to *ducky@webfoot.com* , but be advised that

1. I get a *lot of* email.
2. I don't get paid for this.

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3. I probably don't know the details of your particular email software.

Created 10 Dec 1994
Modified 30 Dec 1995: added introduction, shareware note, jargon link
Added mirror sites 3 Feb 1995
Added link to Business Netiquette International 28 Jun 96
Modified 29 Dec 1997: Removed the term "mirror site", after a new user pointed out that new users probably don't know what that means. Also removed the invitation to write me, as I was getting overwhelmed by email.
Modified 20 Oct 1998: Moved the mirror sites to a separate page. Removed the "shareweb" note, since almost nobody sent any money. Put cautionary note on my email address.
Modified 22 Oct 1998: Moved the bibliography to a separate page. Modified 28 Oct 1998: Moved the copyright notice to a separate page. Modified 30 Oct 1998: Minor tweaks to add new pages on status, formality, format, and domain names.

Please see the copyright notice.

A Beginner's Guide to Effective Email

Context

Kaitlin Duck Sherwood

In a conversation, there is some minimum of shared context. You might be in the same physical location, and even on the phone you have, at minimum, commonality of time. When you generate a document for paper, usually there is some context embedded in the medium: the text is in the proceedings of a conference, written on a birthday card, handed to your professor with a batch of Econ 101 term papers, or something similar.

With email, you can't assume *anything* about a correspondent's location, time, frame of mind, profession, interests, or future value to you. This means, among other things, that you need to be very, very careful about giving your correspondents some context. This section will give specific strategies for doing so.

Useful Subject Lines

A subject line that pertains clearly to the email body will help people mentally shift to the proper context before they read your message. The subject line should be brief (as many mailers will truncate long subject lines), does not need to be a complete sentence, and should give a clue to the contents of the message.

If your message is in response to another piece of email, your email software will probably preface the subject line with `Re:` or `RE:` (for `RE`garding). If your email composition software doesn't do this, it would be polite to put in `RE:` by hand.

```
Subject: Re: thromblemeister calibration
```

If you are offering non-urgent information that requires no response from the other person, prefacing the subject line with `FYI:` (For Your Information) is not a good idea, as in

```
Subject: FYI: donuts in break room
```

For time-critical messages, starting with `URGENT:` is a good idea (especially if you know the person gets a lot of email):

```
Subject: URGENT: meeting w/CEO moved
```

For requests, starting with `REQ:` can signal that action is needed:

```
Subject: REQ: current budget est
```

Do yourself a favor and eliminate the word "information" from your subject lines (and maybe from the body of your message as well). When I was the webmaster for the University of Illinois at Urbana-Champaign, I got a lot of email that looked like this:

```
Subject: information

Please send me information about UIUC.
```


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This gave me very little clue as to what the person wanted to know about: admission application deadlines? The number of students? The acreage? The number of buildings? Was I supposed to send paper documents or give URLs? The only thing I could do with email like this was ask for further context. Mail like this would have been much better as

```
Subject: UIUC history

Are there any Web pages about the history of the U of I?
```

Quoting Documents

If you are referring to previous email, you should explicitly quote that document to provide context.

Instead of sending email that says:

```
yes
```

Say:

```
> Are you going to have the left-handed thromblemeister specs
> done by Thursday?

yes
```

The greater-than sign (>) is the most conventional way to quote someone else's email words, but your email software may use a different convention.

Even if there are a fair number of words in your response, you still might need to quote the previous message. Imagine getting a response on Monday to some email that you can't quite remember sending on Friday.

```
I talked to them about it the other day, and they want to see
the other one before they make up their minds.
```

Your response would probably be the highly articulate, "Huh???" It would be much easier for you to understand email that said:

```
> I've got the price quote for the Cobra subassembly
> ready; as soon as I get a decision on the
> thromblemeister selection, I'll be ready to go.
> Have you talked to the thermo guys about whether
> they are ready to go with the left-handed thrombo or
> do they want to wait and check out the right-handed
> one first?

I talked to them about it the other day, and they want to see
the other one before they make up their minds.
```

This is substantially better, but now errs on the side of too *much* context. The first three lines have nothing to do with the question being answered. You should only include enough to provide a context for the message and no more. (Peter Kimble, my high school computer science teacher, now gives his students the heuristic that at least half of the lines in an email message should be their own.)

You need only enough context to frame the question being answered:

```
> Have you talked to the thermo guys about whether
> they are ready to go with the left-handed thrombo or
> do they want to wait and check out the right-handed
> one first?

I talked to them about it the other day, and they want to see
the other one before they make up their minds.
```

This is a good amount of context, but the response to it still takes a little effort to follow. A good rule is to look *very* carefully at all pronouns in your first three sentences. If they don't refer to something explicitly stated in the email, change them to something concrete.

```
> Have you talked to the thermo guys [about which handedness they want]?

I talked to the thermo group on Wednesday, and they
think the left-handed thromblemeister will probably
work, but they want to evaluate the right-handed unit
before they make up their minds.
```

Now the answer is very clear and specific. And, since the response contains implicit yet clear references to the original message, less explicitly quoted material is needed. Responses like this, with the context mostly in the body of the message, are the easiest to understand. Unfortunately, they take the longest to compose.

If you want to quote a sentence that is in the middle of a paragraph, or wraps around lines, go ahead and remove everything but the part that you were really interested in, inserting "[...]" if you have to take something out in the middle. You can also paraphrase by using square brackets, as above.

If the message isn't important enough to you to warrant the time to pare the original message down, include the whole thing *after* your response, not before. If you put the original message at the end, your readers don't have to look at it unless they don't understand the context of your response.

Summary

You may know what you are talking about, but your readers may not. Give them the proper context by:

- Giving useful subject lines
- Avoiding pronouns in the first three lines
- Quoting the previous message

Go back to Contents

Go on to Format

Created 10 Dec 1994
Tweaked wording 28 Oct 1998.

Please see the copyright notice.

A Beginner's Guide to Effective Email

Format

Kaitlin Duck Sherwood

The underlying rules governing email transmission are highly standardized, but there are a large number of different software programs that can be used to read email. It's quite possible that the message you send won't look at all the same when displayed on your correspondent's screen. You therefore have to be careful about how you present your text. This section will discuss the problems that may arise from a mismatch between the sending and receiving software, and show how to avoid them.

Fancy Text

Some email reading software only understands plain text. Italics, bold, and color changes will show up as control sequences in the text. You might send something like:

> Hiya! Hey, I *loved* the presentation you gave to Jack this morning. Great Job!

but if your correspondent's software can't handle formatting, the message could show up as:

```
Hiya!  Hey, I <I>loved<I> the presentation you gave to
Jack this morning.  <B>Great Job!<B>
```

Web documents are particularly difficult to read with older email programs. You may have a choice of sending the web page as text or as HTML; keep your correspondent's capabilities in mind when you make that choice.

Extended Character Sets

Back in the dark ages of 1982, when the email specs were being written, the decision was made to encode email in such a way that only 128 different characters - letters, numbers, punctuation, and so on - could be transmitted from one computer to another. This allowed some free space for error correction - something important when computers were calling each other with modems.

However, the net is a different place now. Characters like å, ç, and Ø are now important for large numbers of email users. So now there is a way of encoding data so that 256 different characters can be represented, called "quoted-printable".

Unfortunately, the underlying transport is still limited to 128 different characters, so the email gets converted to the more limited set, transmitted, then (hopefully) converted back on the other end. If the receiving software doesn't know how to do quoted-printable, the extended characters will show up as an equals-sign and two letter/digit code:

```
Les Etats-Unis on accept=E9 vendredi que l'application de l'accord
isra=E9lo-palestinien de Wy Plantation soit temporairement diff=E9r=E9e, ap
r=E8s
un attentat =E0 la voiture pi=E9g=E9e de vendredi dans un march=E9 bond=E9
e
J=E9rusalem-ouest, qui a fait deux morts et 24 bless=E9e.
```

So why do you care? After all, you might not ever use umlauts. You care because there are "special"

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characters that you probably will encounter, that are NOT part of the standard extended character set, but which some software will allow you to insert. Even if your correspondent's software knows how to convert codes back to extended characters, different computers have different symbols for the same codes. For example, the trademark symbol, bullet, and "curly" quotation marks are all legal characters in both Windows95 and MacOS, but are in different places in the character set. For example, Windows thinks that character number 241 is a ñ, while the Mac thinks that character number 241 is a Ò. Thus you have yet another reason to worry about what your correspondent's email software is capable of.

Web Links

Some email reading software will recognize URLs (Uniform Resource Locators, or web addresses) in the text and make them "live". Such software considers anything after `http://` to be a web address. Thus, if there is a URL in your email, don't leave off the `http://`! I don't know of an email reader that can recognize `www.webfoot.com` as a URL, for example.

You should also be careful about punctuation - especially periods - right after a URL. For example, take the message

```
Hi - The URL is http://www.webfoot.com/writings.html.  See
if you like it!
```

The software on the receiving end may think that that last period after the URL is part of the URL. Or, if the software doesn't recognize links, the reader may cut-and-paste too much. Either has the potential to lead to an ugly email exchange, with your correspondent insisting that the page doesn't exist and you insisting that it does. I will admit that it looks ugly, but it causes less confusion if there is at least a space after the URL:

```
Hi - The URL is http://www.webfoot.com/writings.html .  See
if you like it!
```

People who are cutting and pasting might also select too little. Since HTML files can have either the extension `.html` or `.htm`, this can also be a difficult mistake for your reader to catch. To make cut-and-paste mindlessly easy for people, I try to always put URLs on a separate line:

```
Hi - The URL is
        http://www.webfoot.com/writings.html
See if you like it!
```

Yes, the period after the URL is now missing. Yes, this *is* ungrammatical, but I sure don't want to put it on the next line! I have found it worthwhile to trade grammatical perfection for easier cut-and-paste.

Punctuation and Quotation Marks

Another grammatical rule that I usually break is the placement of punctuation. American grammar rules say that punctuation belongs *inside* quotation marks, for example the period in the next sentence:

```
Bob said, "I love you madly."
```

That's fine when the stuff in quotes is normal speech, but can cause problems when discussing computer input. Consider:

```
When you get to the password box, type "smiley."
```

Is the period something that goes in the password box or not? I prefer to use British grammar rules and say

```
When you get to the password box, type "smiley".
```

This makes it clear that the period does *not* go in the password box.

I could switch back and forth between the two styles, depending on whether the thing in quotes was to be typed or not, but I would rather be consistent so that if the period *is* supposed to be in the password box, that will be clear.

If you can't bear to do such gyrations, modify the sentence so that there isn't punctuation there:

```
When you get to the password box, type "smiley" and hit return.
```

or if you want to make it absolutely clear:

```
When you get to the password box, type
        smiley
and hit return.
```

Attachments

Some mailers support "attachments", where you can specify a document to send through email. This allows people to share essentially any file in any format. GIF-encoded images, JPEG-encoded images, Word documents, WordPerfect documents, Photoshop files, Excel spreadsheets, and runnable files are just a few of the types of documents that can be sent.

If your correspondent has a mail reader that can handle attachments, this can work very well: a long attachment can be looked at later. However, if your correspondent's email software doesn't understand attachments and you send a non-text file (like a Word document, a binary, a picture, or even compressed text), be advised that it will appear as lots of garbage. Pages and pages of garbage, usually.

Even if your correspondent has email software that understands what attachments are, they still have to have software to read the document. Think of it this way: somebody can use the Post Office to send you any kind of document. But if you send someone microfilm, they probably won't be able to read it. Even runnable programs can't always be useful to your correspondent. Macintosh programs won't run on Microsoft Windows machines; Windows95 programs will not run on DOS machines.

Furthermore, even if your correspondents can receive and view the attachment you send them, if they are low on disk space or dial in from home to get their email, they will *not* be happy to receive a 200MB video, no matter how funny it is.

It almost always better to post large documents on the Web and email the URL instead of the file if you have that option. If that isn't possible, please email your correspondents first and ask them if they can handle a large attachment of that format.

Summary

If you don't know what email reader your correspondent has, play it safe.

- Don't use formatted text
- Be aware of special characters
- Send web pages as text
- Type in `http://` before your URLs
- Be cautious with attachments

Also bear in mind that punctuation doesn't mix well with URLs or quotations of things people should type.

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Created 30 Oct 1998

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A Beginner's Guide to Effective Email

Page Layout

Kaitlin Duck Sherwood

Words on a computer screen look different than on paper, and usually people find it harder to read things on a screen than on paper. (I know several people who even print out their email to read it.) The screen's resolution is not as good as paper's, there is sometimes flicker, the font may be smaller, and/or the font may be ugly. Your recipient's email reader may also impose some constraints upon the formatting of the mail, and may not have the same capabilities as your email software. This means that good email page layout is different from good paper document page layout.

Shorter Paragraphs

Frequently email messages will be read in a document window with scrollbars. While scrollbars are nice, it makes it harder to visually track long paragraphs. Consider breaking up your paragraphs to only a few sentences apiece.

Line Length

Most software to read mail does not automatically wrap (adjust what words go on what line). This means that if there is a mismatch between your software's and your correspondent's in how they wrap lines, your correspondent may end up with a message that looks like this:

```
I've got the price quote for the Cobra subassembly ready; as soon as I get
```

Furthermore, the "quoted-printable" encoding also contributes to the line-length problem. If a line is longer than 76 characters, it is split after the 75th character and the line ends with an equals sign. People whose email reading software can understand quoted-printable encoding will probably have the lines automatically reconstructed, but others will see ugly messages, like the following:

```
I've got the price quote for the Cobra subassembly ready; as soon as I get
decision on the thromblemeister selection, I'll be ready to go. Have you t
lked to the thermo guys about whether they are ready to go with the left-ha
ded thrombo or do they want to wait and check out the right-handed one firs
?
```

There are even a few email readers that truncate everything past the eightieth character. This is not the way to win friends and influence people.

You should try to keep your lines under seventy characters long. Why seventy and not, say, seventy-six? Because you should leave a little room for the indentation or quote marks your correspondents may want if they need to quote pieces of your message in their replies.

Terser Prose

How many times when you were in school were you told to write a 20-page paper? Probably a lot, and you got penalized for being terse. This training is not appropriate for email. Keep it short. If they want more information, they can ask for it. (Also note that in some places, people get charged by the kilobyte and/or have limits on how much disk space their email can use!)

If you are sending a report to many people, then you may need to put more detail into the email so that you aren't flooded with questions from everyone on the recipient list. (You should also ask yourself carefully if all the people really need to be on the list.)

The fewer the people there are on the recipient list, the shorter the message should be. Books to thousands of people are tens of thousands of words long. Speeches in front of large groups are thousands of words long. But you'd tune out someone at a party who said more than a hundred words at a time.

I try to keep everything on one "page". In most cases, this means twenty-five lines of text. (And yes, that means that this document is way, WAY too long for email!)

Summary

In summary, keep everything short. Keep your lines short, keep your paragraphs short, and keep the message short.

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A Beginner's Guide to Effective Email

Intonation

Kaitlin Duck Sherwood

The most difficult thing to convey in email is emotion. People frequently get in trouble for typing exactly what they would say out loud. Unfortunately, without the tone of voice as a to signal their emotion, it is easy to misinterpret their intent.

While you cannot make your voice higher or lower, louder or softer to denote emphasis, there are games you can play with text to convey vocal inflection and emotion.

Light Emphasis

If you want to give something mild emphasis, you should enclose it in asterisks. This is the moral equivalent of italics in a paper document.

Instead of:

```
I said that I was going to go last Thursday.
```

Say:

```
I *said* that I was going to go last Thursday.
```

Or:

```
I said that I was going to to go last *Thursday*.
```

Which of the above two you choose depends upon whether you are adamant about the commitment you made or adamant that you didn't mean Wednesday. (Restructuring the sentence to remove the ambiguity would be an even better idea.)

You can also capitalize the first letter only of words to give light emphasis:

```
While Bob may say that you should never turn it past
nine, this is not Cast In Stone.  It will explode
if you turn it up to eleven, but anything under ten
should work just fine.
```

I tend to use first-capitals to refer to things that are somehow dogmatic or reverential. This is probably a cultural holdover from all the capital letters that are used in the English Bible. It might not translate to other languages or cultures.

Strong Emphasis

If you want to indicate stronger emphasis, use all capital letters and toss in some extra exclamation marks. Instead of:

```
> Should I just boost the power on the throubo?
No, if you turn it up to eleven, you'll overheat
the motors and it might explode.
```

Say:

```
> Should I just boost the power on the thrombo?
NO!!!!  If you turn it up to eleven, you'll overheat
the motors and IT MIGHT EXPLODE!!
```

Note that you should use capital letters sparingly. Just as loss of sight can lead to improved hearing, the relative lack of cues to emotion in email makes people hyper-sensitive to any cues that might be there. Thus, capital letters will convey the message that you are shouting.

It is totally inappropriate to use all capital letters in a situation where you are calm. Don't do this:

```
HEY, I JUST WANTED TO SEE IF YOU HAD MADE ANY
PROGRESS ON THE PHROCKMEIJER ACCOUNT.  STOP
BY AND SEE ME SOMETIME.
```

People will wince when they read that email.

>>EXTREME!!<< Emphasis

If you *really* want to emphasize something, you can go wild:

```
If you are late this time, I swear upon my mother's
grave that I will never, *never*, *NEVER*,
>>!!**NEVER**!!<< talk to you again.
```

Use this sparingly.

Mutter Equivalents

In person, there are a number of ways that you can indicate that a communication is private and not to be repeated. You can lower your voice, you can look to your right and to your left either with your eyes or with your whole head, and you can lean closer to the other person. While these obviously make it more difficult for someone to overhear, these signals are so ingrained that we might use them even if there is nobody around for miles. Unfortunately, lowering your voice and moving your body is hard to do in email.

I sometimes write what I really think and then write down the sanitized version:

```
My boss got fired I mean resigned today, which
*totally* sucks err.. will lead to enhanced
relations between Engineering and Test.
```

A friend of mine uses double parentheses to denote "inner voice", what in the theatre world is called an "aside":

```
My boss resigned today ((yeah, like I believe
that story)), which is going to lead to enhanced
relations between Engineering and Test ((yeah,
like you believe *that* story))...
```

Something else that I will do sometimes to denote the "lowering of voice" is to type without any capital letters:

```
pssst!
hey wendy!
guess what?
```

```
I GOT THE JOB!!!! :-D :-D !!
```

I should warn you that there is a minority that doesn't like the shortcuts I showed you. They argue that if Mark Twain could convey emotion without resorting to such artifice, then we should too. Well, I'm not as skilled a writer as Mark Twain, and usually don't have as many words to make my tone clear as he did. I believe that there is a greater danger of angering or offending someone by not using these shortcuts there is of annoying someone by using them.

Summary

It is difficult for most people to express emotion well in a short message. Fortunately, you can use a number of textual tricks to help convey the emotion:

- Asterisks (for emphasis)
- Capital letters
- Punctuation
- Whitespace
- Lower-case letters

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Modified 29 Oct 1998

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A Beginner's Guide to Effective Email

Gestures

Kaitlin Duck Sherwood

Not only does text lack the emotional cues that vocal inflection gives, text lacks cues from body language. There is no twinkling of the eyes to say you are kidding, no slapping the back of your hand in your palm to show urgency or frustration, no shoulders slumping to display discouragement.

While you are unable to accompany your words with hand or facial gestures, there are several textual stand-ins for gestures.

Smileys

A facial gestures can be represented with what is called a "smiley" or "emoticon": an textual drawing of a facial expression. The most common three are

```
:-)
;-)
```

and

```
:-(
```

(To understand these symbols, turn your head counter-clockwise and look at them sideways. You should see little faces.)

While people will have slightly different interpretations of the exact difference between the upper two, my personal opinion is that the upper one means more "I'm happy" and the lower one means more "I think I'm being funny". The last one is pretty universally understood as "I'm sad".

Typical examples:

```
Hey, guess what -  I got the left-handed
thromblemeister spec done ahead of time!  :-)
I'm on my way to fame and fortune now!  ;-)
```

The second smiley, the ;-), indicates that you don't really believe that your boss will give you that big raise. It is similar to but not as fierce or trendy a rebuttal as a "NOT!" appended to the end of a sentence:

```
Hey, guess what -  I got the left-handed
thromblemeister spec done ahead of time!  :-)
I'm on my way to fame and fortune now - NOT!
```

There are a wide range of ASCII gestures available to you, from ill (%^P) to angry (>:-<) to astonished (:-o), limited only by your imagination. There is a whole Smiley dictionary out there if you are feeling uncreative. (Note: I think that some of the Smiley Dictionary definitions of the basic smileys aren't a totally accurate reflection of the way I see smileys used, but your mileage may vary.)

Pause Equivalents

Imagine that you ask someone if you can turn the knob up to ten and a half. Suppose he says, "Well", then pauses for a long time, scratches his head, looks down at the floor, winces, grits his teeth, and says again, "Well", then pauses and says, "It *might* not explode". You'd get a sense of just how bad an idea it would be, while the text:

```
Well, it might not explode.
```

gives less information. I like to use lots of whitespace and typed-out vocalizations of "I'm thinking" sounds, as follows:

```
Weeeellllll....    errr   hem.

Wellll, it *might* not explode.
```

You can also use whitespace to make it more clear which words belong to which clause. For example, the following is very difficult to parse

```
Did you want to use a left-handed thromblemeister or a
right-handed one with a half-twist or a Jackadoody brocket?
```

You could instead haul out your high school notes on outlines:

```
Did you want to use
        1. a left-handed thromblemeister
or
        2. a right-handed one with a
                        a. half-twist
                        b. Jackadoody brocket
```

The only problem with using an outline like this is it invites people to send back messages that have nothing in them but the code for the answer they want, such as

```
2b.
```

To avoid that, you can use a structure like:

```
Did you want to use a
        left-handed thromblemeister
or
        right-handed one with a half-twist
or
        right-handed one with a Jackadoody brocket?
```

This invites people to cut-and-paste the exact, full thing they want:

```
>       a right-handed one with a Jackadoody brocket?
```

Creative Punctuation

I tend to use a lot of punctuation in what I call "comic book style". Instead of saying:

```
I am very confused and a little upset.  Why did
you give my report to Jack instead of Jill?
```

I would probably say:

```
?!?!  Why did you give my report to Jack
instead of Jill?!?
```

The question mark is kind of shorthand for a furrowed brow or a "huh?". The exclamation mark is shorthand for amazement and possibly a scowl. The two together seem to mean astonishment.

There is a long and proud tradition of using punctuation as a place holder for swearing, e.g. `That #%&$(*!` You will also sometimes see an asterisk in place of important letters, usually the vowel, e.g. `That son of a b*tch!` or `That son of a b****!` or very rarely `That s*n of a b*tch!`. (In actual practice, this form of self-censorship is rare; it is more common for people to either use the whole word or omit it completely.)

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A Beginner's Guide to Effective Email

Status

Kaitlin Duck Sherwood

Just as you have no guarantees about your correspondents' context, you can't determine much about their status. You can't look at their clothes, note their dialect and rate of speech, listen the timbre of their voice, or count the wrinkles around their eyes. Your guesses about your correspondent's age, race, gender, marital status, affluence, and education will be much less accurate than they usually would be in a face-to-face or even telephone conversation.

Your correspondents can't tell much about you either. They will probably do the same thing you will probably catch yourself doing - make assumptions on the flimsiest of pretexts.

I am emphatically not saying that it is good for people to make assumptions. But because there are so few status cues to draw upon, they will. You need to be aware of that, so that you can work on guiding their their assumptions if you need to.

Cues They Will Use

Language

The biggest status cue is your competence with the language. If you have lots of misspellings, your subjects do not agree with your verbs, or you use the wrong word, people may assume that you are uneducated. From that, they may infer that you are not very clever. It doesn't matter that the correlation between language ability and intelligence is weak (especially among non-native speakers); lots of people will make that inference anyway.

Furthermore, some people are literally insulted by getting email with errors, especially typographical errors. They feel that it is disrespectful to send email with blatant errors. (Note that you can use this to your advantage. If you want to flaunt your superior status, you can insert some typos deliberately.)

I realize that in a perfect world, we would all have the luxury of faultless writing. However, we do not live in a perfect world. Good grammar is very hard for some people, just as painting portraits, solving partial differential equations, shoeing horses, and sinking putts can be very hard for others. This has always been true, but before the advent of electronic technology, people who were not very skilled at writing could do most of their communication verbally. This coping strategy is less possible now.

Spending more time crafting prose can improve the quality of the writing, but it is not possible to spend an hour on each email message if you need to send ten of them per day. Fortunately, grammar- and spell-checkers can help enormously. If high status is important to your message, you should definitely use them. However, there are certain classes of errors that grammar- and spell-checkers will not find. If you really want to boost your language-related status, you may have to commit yourself to some significant studying.

Personally, I would like my correspondents to spend their time on providing appropriate context instead of on perfecting their grammar. I would much rather get email that says:

```
There is 50 people with machine guns on Main Street
abt 1 mi aways wallking north and they not friendly so
getcher butts outta here protno!!!!!
```


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than one about the same situation that says:

```
You would be advised to leave the building promptly.
```

I can guess at proper grammar; I can't guess at proper context.

Return Address

Your correspondents will extract status cues from your domain. (If you aren't familiar with domain names, you might want to read Appendix B on domain names and come back.)

Any stereotype that is held about the organization that gives you your email connection will rub off on you. For example, if your email comes from:

- *ibm.com* , people may presume that you are adult, computer literate, and somewhat stuffy.
- *aol.com* , some people will presume that you are connecting from home and that your email is not work-related.
- *washington.k12.ia.us* , people may think that you are under 18.
- *webtv.net* , people will probably assume that you are not terribly computer literate.

Your correspondents will also look at your real name (if visible) and log-in ID. Unless your name has cues to the contrary, most people will assume that you match the dominant species of your organization and/or country. People will frequently assume that *bjp@thromble.com* is male but that *BarbaraP@thromble.com* will be female - even though *BarbaraP* could easily be a man named Peter Barbara. Unless the name is something like *Smith* , people are likely to assume that the author of any email coming from Taiwan is Asian. Unless the screen name is something like *Jamaal* , people will usually assume that authors of email coming from the US are white.

Your log-in ID gives even more subtle cues. Having a desirable email name - short and without numbers - can indicate that you were one of the first in your domain to get an email account. Thus, *steve@thromble.com* has probably been using computers longer than *steve9672@thromble.com* .

People may also make assumptions about your maturity and formality level. Your correspondent will probably take *Barbara.J.Periwinkle@thromble.com* more seriously than *barbiedoll@thromble.com* .

You can steer people's impressions very easily just by telling them who you are. You can do this by adding a signature with status cues:

```
Barbara J. Periwinkle
Vice-President of Legal Affairs
Itty Bitty Machines, Inc.
```

Or:

```
Peter Periwinkle
Kennedy Middle School
(Age 14)
Check out the Latvian Homepage at http://www.latvia.org!
```

Here, young Mr. Periwinkle gives the cue that he might be of Latvian origin.

It can also be effective to lead off a message with status information:

```
Hi, my name is Peter and I'm a student at Kennedy Middle School
in White Plains.  I'm doing a project at school on imaginary
industrial equipment.  Could you please send me the latest
thromblemeister catalog?
```

Or:

```
Hi - I'm the Vice-President of Legal Affairs with Itty Bitty Machines.
Could you please send me the latest thromblemeister catalog?  I'm
considering purchasing stock in your company.
```

Note that here the author not only gives a title and professional affiliation, but also shows off language facility by using big words: "considering purchasing" instead of "thinking of buying". Overuse of big words can sound pretentious, but in short messages can enhance status. Be careful, though, that you use the words properly, and that they aren't so obscure that your correspondent can't understand them.

Email Usage

The final thing that people will look at is your use of email. If you do not give proper context, type only in capital letters, or use extremely long lines, people may assume that you are highly inexperienced with the medium. They may also assume that you are too stupid or stubborn to learn, since those are errors that are usually pointed out very rapidly (and not always gently) by experienced users.

In addition to the composition of the email message, people will look at how appropriate the message was. Was it sent to the right person? Was it a reasonable question?

Do You Need To Worry About This?

How do you decide how much time you should spend on managing your status cues? That depends upon several things:

- Do you know these people already? If you have had lots of contact with your correspondents already, their assumptions about your age, gender, status, and intellect will be pretty solid. Only the most serious abuse of grammar rules and email etiquette probably is likely to significantly affect your status with them.

- Are these people likely to care? High-school English teachers are likely to care more about your grammar than pet food store owners. People who send lots of email will probably be more tolerant than people who have the luxury of spending an hour on every email message. The Diversity Training Manager is probably less likely to form impressions based on your race than the regional Dragon of the Klu Klux Klan.

- What outcome depends on the message? If you are sending email to your boss, you probably should be careful about your grammar. If you are corresponding with salespeople who want your business, well, they are being paid not to care about your grammar. If you need a favor, people may be more willing to help you if you are able to project enough status to make them think that you might be useful to them in the future.

- What does *their* email look like? If they send you email with incorrect punctuation, poor spelling, and mangled subordinate clauses, they probably won't care too much if you do the same.

- Do incorrect assumptions bother you? If you are a man named Patrick who doesn't mind being

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mistaken for a woman, then go ahead and use "Pat" instead of "Patrick". If you don't care if people think you are a teenager, go ahead and use the handle "RadSkater".

Summary

Again, I do not endorse stereotyping, but generalizing is part of human nature. You need to be aware of what signals you may be giving your correspondents and how to counteract them if you feel they may be incorrect.

- Language status can be improved by using grammar- and spell-checkers.
- Signatures or self-introductions can reduce misconceptions.
- Hopefully, reading this guide will make you more informed when composing future email messages.

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Created 22 Oct 1998

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A Beginner's Guide to Effective Email

Formality

Kaitlin Duck Sherwood

It has been my observation that formality is used to indicate the inability of a correspondent to make a reply. Take three situations where someone is not free to respond:

- If you and the Queen of England have tea, one of you might ask about the other's health, but both of you are socially constrained from actually discussing recent surgeries.
- Thomas Jefferson is dead. It is not possible to ask him what the proper interpretation of the phrase "high crimes and misdemeanors" is.
- If every member of a large audience tried to comment on a speech, there would be bedlam.

Conversations involving people with exaggerated status differences and those to audiences that are unborn, dead, and/or large tend to use very formal language.

Conversely, intimate discussions use very informal language. If you used the same language with your spouse that you used with the Queen, your spouse would probably wonder what he or she did to make you angry!

Thus you can control to some extent how many responses you get to your email messages by how formal your language is. Because email is so easy to respond to, people naturally tend to use very informal prose.

The informal tone encourages your correspondents to respond. This can be a very good thing if you want feedback. However, if your email address is in a very public place, you may well find yourself getting far more email than you are interested in. (To see what kind of tedious email you might get, see The Dark Side of Email.)

So be cautious about your messages' tone. If want people to respond, be chatty and informal. But if you want to discourage people from sending you email, you should write much more formally.

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Presented on 30 Dec 1995
Completely rewritten on 27 Oct 1998

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A Beginner's Guide to Effective Email

Greetings and Signatures

Kaitlin Duck Sherwood

Every new medium develops its own protocols for opening and closing. Telephone conversations start with "Hello" and end with "Goodbye". Letters open with "Dear" and end with "Sincerely". Because email is so new, there aren't firm customs on how to open and close.

Many people do not give either a salutation or a signature. After all, while a letter can get separated from its envelope easily, but it is difficult to separate an email message's body from its addressing information. The email message itself says who it is to and from.

However, that information might not be adequate for your needs. It might be difficult to find with some email reading software. It might be unclear or ambiguous. It might be inadequate for telling the receiver just why they are getting that message. Or, it might not convey the proper formality or status cues for your purposes.

I will give you my thoughts on openers and closers, but you need to think carefully about what you are trying to convey both explicitly and implicitly. You also need to take the culture and customs of all parties into consideration.

Greetings

Salutations

Salutations are tricky, especially if you are crossing cultures. Frequently, titles are different for men and women, and you may not be able to tell which you are addressing. The family name is first in some cultures and last in others. Honorifics may vary based on status or age. So don't feel bad if you have trouble figuring out which salutation to use: it is a difficult problem.

In the United States, it is an bad idea to use "Sir" or "Mr." unless you are absolutely certain that your correspondent is male. Similarly, it is probably safer to use "Ms." instead of "Miss" or "Mrs." unless you know the preference of the woman in question.

In the United States, using someone's first name is *usually* ok. Thus, you can usually get away with a "Dear" and the first name.

```
Dear Chris:
```

Here you are covered regardless of whether Chris is male or female. (Beware of using a diminutive if you aren't certain your correspondent uses it. It might rankle Judith to be called Judy; Robert might hate being called Bob.)

If you are addressing a group of people, you can say "Dear" plus the unifying attribute. For example:

```
Dear Project Managers:
```

Or:

```
Dear San Jose Lasers Fans:
```


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Do You Even Need A Salutation?

Given that email is relatively informal, frequently (in the United States) there isn't a problem with dispensing with names and titles altogether, especially if you are in a higher status position than your correspondent:

```
Hello - I saw your web site and wanted to mention that I invented
the thromblemeister on Feb 29, 2403, *not* on Feb 28, 2402.
```

I usually use a simple "Hi" for people that I already know:

```
Hi - Are you interested in getting together for sushi next week?
I can bring all my wedding pictures and bore you to death. ;-)
```

"Good Morning" and "Good Afternoon" don't make a lot of sense with email, as the sun may have moved significantly by the time your correspondent gets around to it. "Good Day" sounds stilted to American ears (although it is common in other parts of the former British Empire). You may want to avoid "Greetings" in the United States: it reminds many people of the draft notices young men got during the Vietnam War.

Again, you must be careful about cultural differences. The East Coast of the United States is more formal than the West Coast (where I live). Germans are even more formal; they can work side-by-side for years and never get around to a first-name basis. So opening a message to Germany with `Dear Hans` might be a bad idea.

Identification

When I get email from strangers, I care more about what connection they have with me than how they address me. When you send email, particularly someone who doesn't know you, it would be good if you would immediately answer these questions:

- How did you learn of your correspondent?
- What do you want from your correspondent?
- Who are you?
- Why should your correspondent pay attention to you? (If you can't answer this question, you should wonder if you should even send the email.)

Putting some of that information in a signature is better than nowhere at all, but putting it at the top is better for several reasons:

- If there is a problem with the transmission of the email, the end is much more likely to get lost than the beginning.
- A lot of people get more than twenty messages per day, and so read them quickly. If you don't establish quickly who you are, your correspondent may delete your message before they get to the bottom.
- Your identity is an important clue to the context of the message.

Good answers to the questions can take several forms:

```
Dear Ms. Sherwood: I am an editor at Very Large Publishing Company, Inc.  I
sat next to your husband on United last week, and he mentioned that you
are interested in publishing a book based on your email guide.  I have
read your guide, and would be very interested in receiving a proposal from
you.
```

Or:

```
My name is Dave Wilcox and I'm the legal counsel for Thromblemeisters
Direct, Inc.  We are deeply disturbed at the aspersions you cast upon
us and on thromblemeisters in your email guide.
Therefore, we order you to immediately cease and desist using any reference
to thromblemeisters in your email guide.  If you not, we will be forced to
file suit against you or your descendants if and when we and/or
thromblemeisters come into existence.
```

Or even:

```
Hi - I am a novice email user and just read your email guide.  I don't know
if you are the right person to ask or not, but do you know what the French
for "Mister" is?  If you can tell me the answer, I'll send you a funny post
```

Some good friends of mine recently got email from my cousin for the first time. Unfortunately, not all of the email made it through. The message they got said only:

```
Dear Rich and Chris: I met you at Jim and Ducky's wedding.
```

But, because he identified where he knew Rich and Chris from immediately, it was enough information that they knew he was someone to pay attention to. They replied to him and communication is now going smoothly between them.

Signatures

Many email programs allow you to set up a default signature to be included at the end of every message. Many people use these signatures as an easy way to give their name and alternate ways of reaching them. For example:

```
Hi - when did you want to go to lunch?

Rebecca P. Snodwhistle
Thromblemeisters Direct, Inc.
666 Beast Street
Styx, HI 77340
+1 (959) 123-4567 voice
+1 (959) 123-4568 FAX
snodwhistle@throbledirect.com W
becca@thromboqueen.net (personal)
```

Such an extensive amount of signature information in contrast to such a short question looks silly to me. I think much of the above signature is extraneous. If they got the email from you, they can reply by email, so don't need your FAX number or street address. (If they have to send a FAX or package, they can ask for addressing information.) They already have one email address in the message you sent, and don't need your other email address.

The name is perfectly reasonable to include, especially if

- Your email messages don't include your full name in the `From:` line. (Send yourself email to see if your name is there or not.)
- The name in the `From:` line doesn't match the name you actually use. (Christina might actually go by Chris, but her company might insist on using her full name as her email name.)
- The email account is shared by multiple people. (My husband and I have a joint email account, for example.)

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The telephone number is also a reasonable thing to include - if you are willing to be interrupted by a phone call. Emotions are easier to convey over the phone, and some people prefer phone to email for all circumstances.

If the message is business related, including the company name is a reasonable thing to do - even if the message is going to someone else in the same company.

One thing that is missing from Rebecca P. Snodwhistle's signature, above, that I would like to see is her job title. Is she the vice-president of sales or the shipping clerk? That may have more of an influence on the correspondent than anything else.

So I would rewrite the above signature to be:

```
Rebecca P. Snodwhistle
Chief Executive Officer, Thromblemeisters Direct, Inc.
+1 (959) 123-4567 voice
```

That signature is still overkill for arranging lunch, but it isn't always convenient to switch between having your signature included or not.

Some people put things purely for entertainment in their signature: artwork, philosophical sayings, jokes, and/or quotations in their signature. This can be ok, but don't overdo it. A good heuristic is to keep your signature at or under five lines long.

After setting up signature that is included automatically, it is easy to forget about it. (After all, you don't see it.) So whenever a piece of contact information changes, make sure to revisit your signature to make sure that it is still up-to-date. And, if you have an entertainment piece in your signature, change it every once in a while. It wasn't as funny the fiftieth time your coworker saw it as it was the first time.

One final note on signatures: they are a good way to let your correspondent know that all of the message got transmitted properly. There is no body language to signal that you are "done talking" and, unfortunately, email transmissions sometimes get interrupted.

Summary

If you are well-known to your correspondent, you can probably get away without including extra identification. In other cases, you should provide your correspondent with enough clues to figure out who you are, why you are writing, and why he or she should pay attention to you. Preferably, this information will be at the top of the message.

Greetings are difficult to do well, especially if you are crossing cultures and/or languages. In the United States, you can be pretty informal, but even in the U.S., you need to be careful that you aren't either making assumptions or using sensitive words.

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Created 30 Oct 1998

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A Beginner's Guide to Effective Email

Summary

Kaitlin Duck Sherwood

Here, then, is my advice for good email style:

- Provide your audience with adequate context:
  - Use meaningful subject lines
  - Quote the email to which you are responding
  - Avoid pronouns
- Be aware of page layout issues. Stick with:
  - Short paragraphs
  - Lines under seventy-five characters long
  - Messages under twenty-five lines long
  - Plain text
- Find replacements for gestures and intonation:
  - Smileys
  - Asterisks
  - Capital letters
  - Typed-out vocalizations
  - Whitespace
  - Lower-case letters
  - Creative punctuation
- Be aware of what cues people will use to form impressions of you:
  - Name
  - Domain name
  - Grammar, punctuation, and spelling
  - Formality

Hopefully these suggestions will be useful to you as you start your emailing career! :-)

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Ducky Modified 10 Dec 1994 - added one line, money link

Modified 29 Oct 1998 - reflect added pages on status and formality

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A Beginner's Guide to Effective Email

Appendix: Bibliography

Kaitlin Duck Sherwood

Here are just a few resources that you can use to learn more about email. This is by no means an exhaustive list.

- There is an extensive guide to email systems at Inter-Links.
- Mary Houten-Kemp also has an extensive set of links at Everything E-Mail.
- I Will Follow... covers a lot of the same material that this guide covers, but not in as much detail. That may be an advantage to you. ;-)
- Yahoo's Electronic Mail Category covers everything and the kitchen sink.
- I disagree vehemently with some of the advice at Business Netiquette International. If you don't like my guidelines, you might like his.
- Albion.com has the Netiquette Hope Page, which has excerpts from the book *Netiquette* by Virginia Shea.
  (May 1994) Albion Books; ISBN: 0963702513
- There is a classic, tongue-in-cheek guide of what not to do at Dear Emily Postnews.

- If you want information about the nitty-gritty nuts and bolts of exactly how the bits in your email message end up on someone else's screen, see Carnegie-Mellon's Project Cyrus Email Standards page.

- The book *Elements of E-mail Style* by David Angell and Brent Heslop is an excellent book with a slightly different purpose. They talk about style a little bit, but most of the pages cover what I think of as "language mechanics" - spelling, sentence structure, punctuation, and so on.
  (April 1994) Addison-Wesley Pub Co; ISBN: 0201627094; 157 pages
- The book *Using Email Effectively* by Linda Lamb has lots of discussion of common email features, using the Unix `mailx` email reader in the examples. There is a section on netiquette (net etiquette), and some discussion of style issues. It is out of print and hard to find, even in Silicon Valley libraries.
- I have also heard of but not read:
  - *The 3 Rs of E-Mail : Risks, Rights and Responsibilities* by Diane B. Hartman and Karen Nantz.
    (June 1996) Crisp Pubns; ISBN: 1560523786; 153 pages
  - *E-Mail Security : How to Keep Your Electronic Messages Private* by Bruce Schneier.
    (January 1995) John Wiley & Sons; ISBN: 047105318X; 384 pages
  - *Effective E-Mail : Clearly Explained : File Transfer, Security, and Interoperability* by Brad Shimmin (with CD-ROM).
    (October 1997) Ap Professional; ISBN: 0126400601 ; 250 pages
  - *Internet Messaging* by David Strom, Marshall T. Rose.
    (July 1998) Harcourt Brace; ISBN: 0139786104 ; 400 pages
  - *E-Policy : How to Develop Computer, E-Policy, and Internet Guidelines to Protect Your Company and Its Assets* by Michael R. Overly.
    (September 1998) AMACOM; ISBN: 0814479960 ; 144 pages
  - *E-Mail* by Stephen A. Caswell.
    (September 1988) Artech House; ISBN: 0890063036
  - *Why Didn't You Say That in the First Place? : How to Be Understood at Work* by Richard Heyman.
    (May 1997) Jossey-Bass Publishers; ISBN: 0787903442 ; 192 pages Reprint edition

- The book *Connections : New Ways of Working in the Networked Organization* by Lee

Sproull, Sara Kiesler is off-topic but really interesting. They talk about how electronic communications alter the way people work. (October 1992) MIT Press; ISBN: 0262691582; 212 pages Reprint edition

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A Beginner's Guide to Effective Email

Acronyms and Jargon

Kaitlin Duck Sherwood

A number of new users have asked me to include a jargon/acronym page for email. Contrary to how you might feel, there is not a conspiracy out there to try to exclude you. Every group that spends any time together develops its own shorthand notation; it is not surprising that people forced to use the unnatural action of typing would be inclined towards acronyms. Some of these come from Usenet newsgroups, some of the more "gestural" ones come from Internet Relay Chat (IRC).

Obviously it would be nice of seasoned users to not pepper novices with an enormous amount of jargon, but on the Internet, nobody knows you are a newcomer.

Here are some of the most common acronyms:

- BTW - By The Way
- FYI - For Your Information
- IMHO - In My Humble/Honest Opinion
- RTFM - Read The Manual ("Manual" here refers to any documentation)
- LOL - [I] Laughed Out Loud [at what you wrote]
- ROTFL - [I am] Rolling On The Floor Laughing [at what you wrote]
- RSN - Real Soon Now

These are less common, but show up occasionally:

- TTFN - Ta-Ta For Now
- YMMV - Your Mileage May Vary (taken from a disclaimer that legally must be given any time automotive fuel efficiency ratings are used in U.S. advertisements)
- TIA - Thanks In Advance (also sometimes written advTHANKSance)

Jargon that is sometimes used:

- ping - Test to see if the other person is there/awake/available. (This comes from a Unix test to see if a machine (or its net connection) was active or not.) "Lunch tomorrow? I may be busy with a client. Ping me at eleven thirty or so."

A term that I would love to see popularized is "NRN", for "No Response Needed". Sometimes, without body language, it isn't clear when an email-based conversation should be ended. Peter Wone suggests that "NRSVP" for "non respondez-vous s'il vous plais", or "please do not respond" is easier to guess than "NRN".

To unravel jargon and technical Internet terms, see the fine Internet Literacy Consultants' Glossary of Internet Terms. There is also a Dictionary of Computer Acronyms and Jargon

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A Beginner's Guide to Effective Email

Domain Names

Kaitlin Duck Sherwood

How To Read A Domain

The domain name is the thing that comes after the at sign (@) in an email address, like *asl.com* or *arc.nasa.gov* . The domain names have different words, separated by periods, that indicate different levels of organization. The size of the organization increases as you go left to right. The domain *arc.nasa.gov* , for example, is for Ames Research Center, which is part of NASA, which is one of many US government entities.

If I wave my hands and simplify just a little bit, the left-most word is the name of the actual computer that handles the mail. Small organizations might only have one computer that does everything; larger organizations might have multiple computers. For example, Ames Research Center email addresses currently all go through *mail.arc.nasa.gov* .

If you get email from someone, and there is no at sign, then that probably means they have the exact same domain as you. For example, if *pat@bogusname.com* sends email to *chris@bogusname.com* , Chris might see only *pat* in the return address field.

If there seems to be something missing from the domain name, then your correspondent may share some domain information. For example, if *pat@uno.bogusname.com* sends email to *chris@dos.bogusname.com* , Chris might see only *pat@uno* in the return address field.

Three-Letter Extensions

The last word, also called the extension, in a domain gives a clue to your affiliation. In theory, this is what three-letter extensions mean:

Extension	Meaning	Examples
.com	US Commercial business, a company	ibm.com, att.com, ford.com
.net	US network provider, Internet Service Provider	webtv.net
.gov	US governmental agency	whitehouse.gov, nasa.gov
.edu	US educational institution	usc.edu, stanford.edu
.org	US non-profit institution	redcross.org, sfopera.org
.mil	US military	army.mil
.int	International	itu.int

You may notice that all but one are United States domains. That isn't a coincidence: the Internet started out as a US organization, and took all the good three-letter extensions.

Two-Letter Extensions

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If there is a two-letter extension, that is a country code. Here are some examples:

Extension	Country	Examples
us	United States	city.palo-alto.ca.us, washington.k12.ia.us
uk	United Kingdom	cam.ac.uk, tvr.co.uk
my	Malaysia	parlimen.gov.my, jaring.my
de	Germany (Deutschland)	sgi.de
jp	Japan	www.hitachi.co.jp, www.nihon-u.ac.jp
to	Tonga	netsurf.to
tv	Tuvalu	internet.tv

An exhaustive list of country codes is at
http://www.ics.uci.edu/pub/websoft/wwwstat/country-codes.txt .

Further Clues

Countries, especially the ones that are well-connected to the Internet, frequently have some meaningful structure in the next-to-last word in their domains. For example, *ac* is short for "academic" in the United Kingdom, Australia, and Japan. Oxford University, for example, is *ox.ac.uk* .

Commercial entities frequently have *co* in the next-to-last word in their domain. For example, Hitachi Japan is at *hitachi.co.jp* .

United States two-letter domains usually have the two-letter state or territory abbreviation right before the *.us* . For example, the city of Palo Alto in California has the domain *city.palo-alto.ca.us* . (Remember that the scope *increases* as you go left to right: *palo-alto.us.ca* would be in Canada if it existed!) US State and territory codes can be found at
http://www.usps.gov/cpim/ftp/pubs/201html/addrpack.htm#abbr .

Children's schools in the United States frequently have the word *k12* in them. (This is short for "Kindergarten through 12th grade", the US terms for schooling for students nominally ages 5-18.)

Universities in Europe frequently have the word "uni" in their domains somewhere, short for "university".

Canada also sometimes uses province codes; those can be found at
http://www.cdnnet.ca/info/application-form.

Now Wait A Minute!

You may have noticed that some sites that don't seem to match their extensions. The domain *internet.tv* is in Canada, not in Tuvalu. Why does America On-Line use *aol.com* instead of *aol.net* ? What is *mercedes-benz.com* doing in Germany? Why is *netsurf.to* in the United States?

Basically, money. The countries of Tuvalu and Tonga have raised badly-needed cash by selling the rights to their extensions to outside parties, who then sell them to other bidders. (They think that the English word "to" and the common abbreviation "TV" for "television" are worth something as extensions.) And since *.com* is what people try first when looking for a company, many entities chose to use that instead of something more appropriate.

There are also some classes of organization that don't fit any of the domains particularly well. Individuals who want to put up a web page are not companies, nor non-profits, nor military. For-profit

arts organizations don't fit comfortably in either *.com* or *.org* .

Take all domain names with a grain of salt. There are no penalties for being in the "wrong" domain, so when people think it will get them some advantage, it happens.

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"Manners maketh man" Manners can also make, or break, business transactions!

Thanks to our sponsor for making this site possible.

[redacted]

BUSINESS NETIQUETTE INTERNATIONAL

is the Web's prime "Netiquette" site for business etiquette, keeping international business in mind. This means company to company e-mail, not personal messages between business colleagues. Other sites offer Netiquette advice for personal communications.

THE BASIC RULE of etiquette in any circumstance is to have and to show consideration for the other party. If you will just stop and think how the other person is likely to receive your communication, you will go a long way towards preventing misunderstandings and not giving offense. The SIMPLE TEST is: "How would I feel in these circumstances, if I received this message?"

Communicating by e-mail is no different from writing on your company letterhead. A business communication is business, period. A certain degree of formality is required. Just because e-mail tends to be more immediate and personable, it doesn't need to get personal. (There is a difference between *personal* and *personable* - check your dictionary!)

The following is offered for your consideration.
If you have any comments or suggestions, please e-mail F.Pearce at Pearman

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Originating e-mail.

When originating e-mail, say where you obtained the e-mail address of the person to whom you are writing. Or mention the web page name or URL, if you e-mailed off a web page. Many business people have more than one page on the internet and knowing from where or why they are being contacted is helpful. It might even get you a more meaningful reply.

In addition, always put something in the Subject box.

Messages that arrive with no indication of source and no Subject are very likely to be treated as "junk mail."

Do not send 'attachments' (files of text or graphics attached to an e-mail message) with your e-mail unless and until your correspondent has indicated that they will accept it. Ask first!

e-mailheads and Signatures.

Create an e-mail letterhead for formal proposals, contracts, offers, and the like. But, use it sparingly, and only when appropriate. Recipients may balk at the wasted linage, unless there is a clear purpose. Keep it short - 3 lines are enough.

Proper use would be whenever it is necessary to make it clear that the message is from your company, rather than from yourself, such as an offer to purchase.

Create a signature for consistency. Keep it short and concise. Include your e-mail address in case the signature gets separated from the header. Don't duplicate in your signature any material you have in your e-mailhead.

Here's an example:-

To: *recipient@hisco.com*
From: *John Doe (jdoe@mycompany.com)*
Subject: *Work Proposal*

MyCompany Inc.

Message.....
Message.....
Message.....

John Doe (jdoe@mycompany.com)

Visit our web page at http://www.myco.com/

Capitalizing, and other odd things.

Business communication requires proper use of written language. It requires proper use of capital letters. Some offices permit - even encourage - all lower-case for internal memos. This is rude and slovenly when used in inter-company communications. Would you write a letter on company letterhead using all lower-case? We hope not!

Specifics

1. internet - is a generic term, not a proper noun. Use lower case and capitalize only at the beginning of a sentence. (However, many people are capitalizing Internet. By today's rules, this is not correct, but English is a living language with custom a major factor. In time, it may be correct to capitalize Internet.)
2. intranet - is a common noun. Capitalize at the beginning of a sentence and when the word has been particularized - as in the IBM Intranet (like the Ohio River), but: IBM's intranet.
3. World Wide Web - should be capitalized, according to Webster's - see below. (However, by the same rule, other things of the same class like gopher and archie should be capitalized, too. As these never are capitalized, you may decide not to capitalize "world wide web". Whatever you choose, be consistent.)
4. The initials, WWW, which stand for 'World Wide Web', should be in caplitals. (But Webster's does not always capitalize abbreviations. If you capitalize the whole phrase, capitalize the abbreviation, and vice versa.)
5. e-mail - The "e" is always lower case, except at the beginning of a sentence, and the word hyphenated. ("email" - no hyphen - means "enamel" in German and French.)
6. on-line - should be hyphenated, not written solid (online). However, "Online" is commonly used in trade names (eg.America Online), in which case it should be written as the trade name dictates, usually solid and capitalized.

Capitalization according to Webster's New Collegiate Dictionary
"The essential distinction is the use of capitals and lower-case letters beginning words lies in the particularizing or individualizing significance of capitals as against the generic or generalizing significance of non-capitals. A capital is used with all proper nouns, that is, means that distinguish some individual person or thing from others of the same class... Most proper nouns used not in the primary significance but in a derived, secondary, or special sense (as cashmere, the fabric) are written without capitalization."

First names and Titles.

If your correspondent uses your first name, then by all means use theirs. But, should you be the first to do so? Many people do not want such immediate informality in a business situation, especially in the international arena. Business people in many countries find the friendly nature of Americans, for example, somewhat over-bearing at first.

Options

1. If you initiate the contact and want to keep it formal, use title (Mr., Ms, with or without the abbreviation period.) If you want to be informal, it's your decision, being the first to write, but be ready to switch if your correspondent replies formally.
2. *For international e-mail, err on the side of caution and write formally.*
3. Or, send your first message without salutation. "Dear Friend", "Hi Neighbor" and such is not recommended for business. If you are not sure what to use, use nothing. "Dear Webmaster" is okay, if you are sure you are writing to the webmaster.
4. When replying, be guided by your correspondent's signature. If they have signed a single name (probably their given name), you may address them accordingly. If both given and family names are used, it is safest to reply formally. Men might reply to men with given names, and women to women, but a man should not reply to a lady using her first name only unless it is clear that he is invited to do so, especially internationally.
5. Some business communications quickly take on the flavor of a personal chat - in which case, *first names are appropriate. Others remain on a formal level - in which case, retain*

the formal address.

6. Consider age and rank, too, if it can be discerned from the correspondence. Outside North America, people in a position of authority and people of mature years expect a certain deference from their juniors.

CLICK HERE for International Addresses and Salutations.

The Message.

Correspondents frequently try hard to be brief. This is desirable, but business messages will usually be longer than personal notes. It is important, also, to communicate - don't kill understanding with brevity.

When replying, you will often be replying to only part of the received message. Maintain the thread, by all means, but save space by not returning the whole message, only the part to which you are replying.

Don't use "smileys" (:-) ;-) :-/ etc.) These are fine for personal notes but are quite inappropriate for business use. The meaning of your words should be contained within the words themselves, and not need additional explanation with funny faces!

International Considerations.

Keep messages short, but do not let meaning suffer.

Niceties are okay, to a point, but don't overdo it. They waste space and reading time for your correspondent. Furthermore, they are usually idiomatic and difficult to understand by someone not absolutely fluent in your language. As mentioned above, people in many countries find the friendly nature of Americans over-bearing at first encounter, so, be courteous but go easy with the courtesies.

Short, plain sentences are easier for someone reading in a language other than their mother tongue. In some parts of the world, the written language is very formal and quite different from the spoken language. Therefore, there is an expectation that your written communication will be formal. For international business e-mail, err on the side of caution and write in a formal tone. It's easy and natural to progress from formal to friendly, but it weakens your position to have to step backwards from friendly to formal.

Regarding age and rank, outside America, people in authority and older people expect a certain deference from people who approach them.

Don't spam. Don't send long junk. In North America, freedom is your highest ideal: in most other parts of the world privacy is held in higher regard!

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Unsolicited e-mail, Junk, and Spamming.

Unsolicited e-mail - or junk e-mail - is the electronic equivalent of junk postal mail and direct mail selling. Just as junk postal mail is annoying and wasteful, junk e-mail is more so. But, at least with postal mail, you can throw the envelope away unread. With junk e-mail, you have to take time to read it to find that you didn't want to. It is therefore time-wasting, inconsiderate, and very bad netiquette.

But business acknowledges that direct mail works! How can you satisfy the need to get new customers, which by definition must be strangers to your business, and at the same time be polite. Remember our first rule: "... show consideration for the other party..."

We hold that any business solicitation can be condensed to one line. It is unnecessary, counter-productive and quite rude to send 10 pages of details before confirming that the recipient is interested. See the next section for a practical example of this.

Spamming is sending the same message to hundreds or thousands of e-mail addresses in the hope of hitting a few interested people. It displays extreme selfishness and total disregard for the 99%+ that are annoyed and inconvenienced by it.

So, if you must send unsolicited e-mail in your search for new customers...

1. Only send one-line solicitations, followed by "E-mail for details". People who want details will reply, those that don't, won't;
2. Use proper bulk e-mail software that supresses the list of names; or
3. Put the list of e-mail addresses in "Bcc" (stands for blind copies) to protect the privacy of your audience. "Cc" lets all recipients see the full list of addresses. Apart from the privacy angle, it's frustrating to receive a one line message preceded by 5 pages of e-mail addresses!
4. Put your own e-mail address at the top of the list, as a quality check, so you can see what everyone else is receiving;
5. End with your full name and a short, one-line signature.

An Actual Situation.

Michael Sefiane wrote, asking the following questions:

>I have just started my own International Import company. I would like it
>if you could provide me with Netiquette tips on contacting and
>communicating with International Representatives.

Our reply...

Considering that you are about to contact strangers 'out-of-the-blue', this gets you into a touchy area, be careful. Unsolicited e-mail (junk e-mail) can be a great nuisance to recipients. If you've been on the internet any length of time, you have received some yourself. It's much worse than junk snail-mail, and twice as annoying. It can jam up one's communication processes, especially for someone with a high profile who gets a lot of e-mail. If you do that to people, you will lose business (and deservedly so!)

Spamming is sending the same message to hundreds, thousands of people, without considering the relevance - a rude and thoughtless act. But most businesses need to contact strangers, unsolicited, and lots of them. What to do? To a great extent, business people accept that businesses need to contact strangers. "Just don't annoy me in the process," they say.

A one-line message to a narrowly defined list is Okay.

How about--

"We are Moda International Imports - Northwest USA. We are developing a list of contacts in (...). Please e-mail if you would like to exchange details.
Michael Sefiane (halib@continet.com)"

See how short it can be. Interested parties will reply: disinterested ones will not have been inconvenienced.

>Also I would like to know the best way to let someone know I am not interested in or do not
>have the time , in a polite way, to do business with them.
>----------

Two ways to approach this-

1. The message to you is unsolicited and clearly widely circulated. You could just not reply. Or, a simple "No thanks" if you feel you must reply.

2. The message is clearly to you, specifically, and a reply is required. A long drawn-out explanation/excuse is unneccesary. All your correspondent wants to know is "Yes" or "No". But you want to say it as politely as possible. How about --

"Thanks for giving us the opportunity, but conditions are that we cannot, at this time."

That leaves it open for you, in the future, if you change your mind. Times change, conditions change - and you may be glad of that contact one day.

More thoughts on Unsolicited e-mail.

"My role, as a marketer, is to make any solicitation both effective and unobtrusive. If I offend too many potential clients, and sell too little product, then I have failed. If I offend no-one, and sell product, then I have succeeded."

Netiquette for Personal Communications

1. A Beginner's Guide to Effective Email
2. Netiquette
3. Life on the Internet - Netiquette
4. InternetBASICS - Netiquette
5. Etiquette for Public E-Mail Systems

If you have a favorite "Netiquette" site that should be included here, or if you have written

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one, please tell me about it - e-mail F.Pearce at Pearman

Tired of wasting time "Surfing the 'net"? THE BUSINESS START PAGE is a virtual desk from which business operators and entrepreneurs start their day. All topics and links are business oriented for your greater productivity.

Your Financial Resource Center
"Regardless of Credit"
• Credit Card Services • Debt Consolidation
• Become Debt Free • Legal Credit Repair
• And Unlimited Opportunity •

JOINT VENTURES
Boost your profit by teaming up with another business.

ADVERTISING AIDS
Let us help you with your advertising - ad specialties, e-mail, newsletters, press releases.

RAISE MONEY
for your business without asking your bank manager.

Page created by Frederick Pearce. Pearman Cooperation Alliance
Created May 20th, 1996.
Updated June 10th, 1996 after comments from Joseph Chang,
and again July 3rd, 1996 after discussion with Kaitlin Sherwood.
Dr. Ogden M. Forbes, of Pepperdine University, CA, contributed, July 16th, 1996.
Michael Sefiane allowed his September 19th, 1996 correspondence to be used.
October 25th, 1996, Gina Rea suggested some additions to the "Spamming" section.
Jennine Carmichael wrote June 11th, 1998, resulting in changes to 'First Names and Titles'.
Thanks go to these fine people, but the Author accepts any blame.

Business Netiquette International is mirrored at The Open University, Hong Kong.

List of African Internet Service Providers

June 1998

Compiled by Mike Jensen mikej@sn.apc.org

The service providers listed below are in the capital cities unless otherwise indicated.

Algeria
CERIST http://www.cerist.dz
EuNet http://www.eu.net

Angola
EboNet (Cabinda and Benguela) http://www.ebonet.net
NetAngola http://www.netangola.com
Universidade Augustinho Neto http://www.uan.ao
AngoNet http://www.angonet.org / dwang@ebonet.net

Benin
OPT http://opt.intnet.bj
Elodia http://www.elodia.intnet.bj
Eurafi/DTS http://www.dtsdata.intnet.bj
Centre Syfed http://www.bj.refer.org
Espice Informatique http://eit.intnet.bj

Botswana
InfoBotswana http://www.info.bw
GIA http://www.gia.bw
Mega http://www.mega.bw
Botswana Telecoms Corp http://www.btc.bw
Government http://www.gov.bw
University of Botswana http://www.ub.bw / mooketsi@noka.ub.bw

Burkina Faso
Cenatrin http://www.cenatrin.bf
ONATEL http://www.onatel.bf

Burundi
CNI http://cni.cbinf.com
Bi-Network http://bi-network.com / gdizier@bi-network.com

Cameroon
Univ Younde 1http://uycdc.uninet.cm
SDNP Cameroun http://sdncmr.uninet.cm
Centre Syfed http://syfed.refer.cm
CamNet http://www.camnet.cm
Ditof http://www.ditof.cm
ICC http://www.iccnet.cm
AfriCom http://www.africom-net

Cap Verde
iCV Telecom http://www.cvtelecom.cv/dados.html

Central African Republic
Socatel http://socatel.intnet.cf

Congo (Brazzaville)
No full ISPs

Cote d'Ivoire
CI Telecom http://www.telecom.ci
AfricaOnline http://www.africaonline.co.ci
NetAfric http://www.netafric.ci
GlobeAccess http://www.globeaccess.ci
InterGroupe http://www.intergroupe.ci

Djibouti
DjibNet http://www.intnet.dj

Egypt
In Touch (Dokki, Giza) http://www.intouch.com
Soficom (Zamalek, Cairo) http://www.soficom.com
Stamet (Abdeen, Cairo) http://www.stamet.com.eg,
Brainy http://brainy1.ie-eg.com
AT&T-NCR (Giza) http://www.ncr.com.eg
EIS/MASH (Mohandessin, Giza) http://www.eis.com.eg
Datum (Masr El-Gadida, Cairo) http://www.datum.com.eg
Link Egypt (Dokki, Giza) http://www.link.com.eg
Rite (Zamalek, Cairo) http://www.rite.com.eg
Yassa Trade/AlexNet (Alexandria) http://alexnet.com.eg
Egypt Online (Cairo) http://www.eol.com
InforNation (Hohandessin, Giza) http://www.pacc.com.eg
SinaiNet (Sharm El-Sheikh) http://www.sinai.com.eg
Data Express (Alexandria) http://www.dataxprs.com.eg
WorldNet (Nasr City, Cairo)
IEC (Monandessin, Cairo) http://iec.egnet.net
RITSEC http://www.ritsec.com.eg
FRCU http://www.frcu.eun.eg
AUPELF-UREF. http://www.refer.org.eg

Equatorial Guinea
GETESA http://www.intnet.gq

Ethiopia
Ethiopian Telecommunications Authority (ETA) http://www.telecom.net.et

Eritrea
No full ISPs

Gabon
OPT http://www.tiggabon.com
Internet Gabon/CompuServe http://www.internetgabon.com

Ghana
University of Ghana http://www.ug.edu.gh
NCS (Accra, Komasi, Tokaradi) http://www.ghana.com.gh
Assoc of African Universities (AAU) http://www.aau.org

AfricaOnline http://www.africaonline.com.gh
Internet Ghana http://www.internetghana.com

Guinea Bissau
Guinea Telecom http://sol.gtelecom.gw

Guinea
SOTELGUI http://www.leland-gn.org
BINTTA/MiriNet http://www.mirinet.net.gn
ETI-Bull http://www.eti-bull.net

Kenya
ARCC http://www.arcc.or.ke
AfricaOnline http://www.africaonline.co.ke
Form-Net (Nairobi, Mombasa) http://www.form-net.com
IConnect http://www.iconnect.co.ke
Swift Global http://www.swiftkenya.com
Net 2000 (Nairobi, Mombasa, Eldoret, Kisumu and Nakuru) http://www.net2000ke.com
NairobiNet http://www.nbnet.co.ke
Kenya Online http://www.kenyaonline.com

Lesotho
Lesotho Office Supplies http://www.lesoff.co.za

Liberia
No Full ISPs (yet)

Libya
NIDA http://www.nida.org.ly

Madagascar
DTS http://www.dts.mg
Creapro http://www.madonline.com
COMPRO http://www.compro.mg
Simicro http://www.simicro.mg
Synergic Cyberspace http://www.sinergic.mg
Telma http://www.telma.net
Refer http://www.refer.mg

Malawi
MalawiNet http://www.malawi.net

Mali
Spider http://www.spider.toolnet.org
Bintta/MaliNet is operational http://www.malinet.ml
Sotelma http://www.sotelma.ml

Mauritania
University of Nouakchott http://www.univ-nkc.mr
TOP http://topweb.toptechnologies.mr
OPT http://www.opt.mr

Mauritius
TelecomPlus http://www.intnet.mu
University of Mauritius http://www.uom.ac.mu

Refer http://www.mu.refer.org

Morocco
ONPT http://www.onpt.net.ma
ACDIM http://www.acdim.co.ma
AIM (Meknes) http://www.aim.net.ma
AZURE (Casablanca) http://www.azure.net
CASA (Casablanca) http://www.casanet.net.ma
CBI (Casablanca) http://www.cbi.net.ma
CFC-ESG (Casablanca) http://www.cfc.net.ma
Cybermania (Tetouan) http://www.cybermania.net.ma
Diagone MarocNet (Casablanca, Agadir, Tangier) http://www.diagone.net.ma
Refer http://syfed.refer.ma
Dounia Net (Casablanca) http://www.dounia.net.ma
EBE (Casablanca) http://www.ebe.net.ma
ELAN (Casablanca) http://www.elan.net.ma
EspaceNet (Oujda) http://www.espacenet.net.ma
FesNet (Fes) http://www.fesnet.net.ma
Group Open SA (Casablanca) http://www.open.net.ma
InfoCom (Casablanca) http://www.cyber.net.ma
IntelCom http://www.atlasnet.net.ma
La Tangeroise (Tangier) http://www.tangeroise.net.ma
L&L Technologies (Casablanca) http://www.techno.net.ma
MaghrebNet http://www.maghrebnet.net.ma
MTDS http://www.mtds.com
MicroAccess (Tangier) http://www.mamnet.net.ma
MultiMedia Marrakech (Marrakech) http://www.cybernet.net.ma
Munisys (Casablanca) http://www.munisys.net.ma
PLV+ (Casablanca) http://www.plvplus.net.ma
Prolec http://www.arcnet.net.ma
Serinfor (Casablanca) http://www.serinfor.net.ma
SIS http://www.sis.net.ma
S2M (Casablanca) http://www.s2m.net.ma
SOMARC (Casablanca) http://www.mis.net.ma
Sprint Technology (Casablanca) http://www.sprint.net.ma
Wafanegoce (Casablanca) http://www.wafanegoce.net.ma
Winner (Casablanca) http://www.winner.net.ma

Mozambique
Virtual Connection http://www.virconn.com
MicroNet-Tropical Alliance http://www.tropical.co.mz
TDM http://www.tdm.mz
CIUEM http://www.ci.uem.mz

Namibia
UUNET http://www.uunet.com.na
IWWN http://www.iwwn.com.na
LIA http://www.nam.lia.net

Niger
ORSTOM http://www.orstom.ne
SONITEL http://www.intnet.ne

Nigeria
LinkServe http://www.linkserve.com.ng
Cyberspace http://www.cyberspace.net.ng

Hyperia http://www.hyperia.com
Microcom http://micro.com.ng / service@micro.com.ng

Republic of Congo (Ex Zaire)
IC (Kinshasa & Lubumbashi) http://www.ic.cd / http://www.ic-lubum.cd

Rwanda
Rwanda Tel http://www.rwanda1.com

Sao Tome & Principe
Telepac http://www.telepac.pt

Senegal
University Cheik Anta Diop http://www.ucad.sn
ENDA http://www.enda.sn / moussaf@enda.sn
Refer http://www.refer.sn / jpdenis@syfed.refer.sn
ORSTOM http://www.orstom.sn
Telecom-Plus http://www.telecom-plus.sn
Metissacana http://www.metissacana.sn
Arc Informatique http://www.arc.sn
AfricaOnline http://www.africaonline.co.sn
Cyber Business Centre http://www.cyg.sn
Sonatel http://www.sonatel.senet.net

Seychelles
Atlas http://www.seychelles.net

Sierra Leone
SierraTel http://www.sierratel.sl

South Africa
Map of South African ISPs http://www.ispa.org.za
ISPA Members (mostly not connected to the PTOs Internet backbone):
CITEC
Global Internet Access
IBM
Intelcom
The Internet Solution
M-Web
UUNET Internet Africa
Acenet
FastLight Data Distribution
Hix Internet
Club Internet
Netactive Internet
Otay
South Africa Online
Vouzi ISP
Cyberhost
CyberSurf Technologies
East Coast Access
Electronic Laboratory Services
InfoDoor Networking
Internet Shoppe

InTouch Information Systems
MegaWeb Internet Services
Microweb
Network Internet Services
SANGONeT
ValueCom
VIP Internet Services
ZAnet Internet Services

Connected to the PTO Telkom's backbone (46 towns with POPs) (http://www.saix.net):
@lantic Internet Services
0800 Internet Executive
Acenet
AlterNet
AmaClickClick
Bonnex
CaseyNet
CEWNet Internet
Complete Technology Systems
Compuflex Networking
CyberServ Internet
Cyberway e-Publishing
Dockside Internet (PTY)
Electronic Laboratory Services
EPWeb Internet Services
Exhibitions for Africa FastLight Data
Flashnet Internet Services
FutureNet Durban
FutureNet Estcourt
FutureNet Jhb
FutureNet Pietermaritzburg HiNet
Imaginet
Improtech
InfoDOOR
INTERDOC
ITI
Electronic Cost Systems
Intekom
Interat
Interlink Internet Consulting
Internet Discovery
Internet by Intertech(IBI)
InterNext Bloemfontein
InterNext Kimberley
InterNext Welkom (Marquee InterWeb Alley
Jaywalk Interactive CC
Kingsley Technologies
Lando Technologies Africa
M-WEB
MACNET
MD Systems Pty Ltd
Netline Flagship
NetWorld
ONline WElcome
Planet Pinnacle - The
South Africa Online

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SOUTHNET
Spiral
Tradepage
TRANSPARENT
TCM
Wildcoast Internet
ZAnet Internet Services
ZSD

Others:
CompuServe: http://www.cis.co.za
Yebo/Vodacom: http://www.vodacom.co.za
MTN http://www.mtn.co.za.
Universities Network (UniNet). http://www.frd.ac.za
SchoolNet http://www.school.za
Healthlink http://www.healthlink.org.za s

Sudan
SudaNet http://www.sudanet.net

Swaziland
UUNET Internet Africa Swaziland http://www.iafrica.sz
RealNet http://www.realnet.co.sz
University of Swaziland http://uniswacc.uniswa.sz

Tanzania
Wilken http://www.wilken-dsm.com
Twiga (Dar & Arusha) http://home.twiga.com / http://www.cybernet.co.tz
Marie (Arusha) http://www.habari.co.tz
Raha http://www.raha.com
Internet Africa http://www.intafrica.com
Cats-Net http://www.cats-net.com
TZ Online: http://www.tzonline.com
AfricaOnline http://www.africaonline.co.tz
Zanzinet (Zanzibar) http://ras.zanzinet.com
University of Dar es Salaam http://www.udsm.ac.tz

Tchad
CNAR http://www.cnar.td
TIT http://www.tit.td

Togo
Cafe http://www.cafe.tg
TogoTel http://www.togotel.net.tg

Tunisia
IRSIT http://www.irsit.rnrt.tn
ATI http://www.ati.tn
Planet http://www.planet.tn
Standard Sharing Software http://www.gnet.tn

Uganda
IMUL http://www.imul.com
StarCom http://www.starcom.co.ug
Swift Uganda http://www.swiftuganda.com

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BushNet http://www.bushnet.net

Zambia
Zamnet http://www.zamnet.zm
ZamTel http://www.zamtel.zm
University of Zambia http://www.unza.zm

Zimbabwe
UUNET Internet Africa http://www.harare.iafrica.com
Samara http://www.samara.co.zw
ID http://www.id.co.zw
AfricaOnline http://www.africaonline.co.zw
Deloitte & Touche http://www.dnet.co.zw
PrimeNet http://www.primenetzw.com
UUNET Internet Africa. http://www.harare.iafrica.com
Icon Internet http://www.icon.co.zw,
PC Internet http://www.pci.co.zw
Telco Internet Services http://www.telconet.co.zw
Utande Internet Services http://www.utande.co.zw
Zambezi Net http://www.zambezi.net
Zimbabwe Online http://www.zol.co.zw
Zimsurf http://www.zimsurf.co.zw

List of African Full Internet and Email Service Providers.
May 1997
***=service expected shortly.**

Please wait while table loads....

ISO	Country	Name	City	Postal Info	Telephone	Fax	E-mail
AO	Angola	AngoNet	Luanda	PO Box 3360	244-2-348-371	244-2-349-494	postmaster@angonet.gn.apc.o
AO		EBONet	Luanda	Rua dos Engenos	244-2-334-329	244-2-390-995	ebonetdg@ebonet.net
AO		SDNP-Angola	Luanda	Beco do Cazenno St	244-2-39-61-07		postmaster@ildesng.gn.apc.o
AO		Univ Agostinho Neto	Luanda	Av. 21 de Janeiro	244-2-352899	244-2-336128	pete@dim.fi.uan.ao
BF	Burkina Faso	Onatel	Ougadougou	BP 10000	226 336476	226 310764	postmaster@onatel.bf
BF		HealthNet	Ougadougou	BP. 2208	226-306655	226-310477	sysop@bf.healthnet.org
BF		ORSTOM	Ougadougou	01 BP 182	226-30-67-37	226-31-03-85	postmaster@ouga.orstom.bf
BI	Burundi	*	Bujumbura				
BJ	Benin	Benimnet	Cotonou				
BW	Botswana	HealthNet	Gaborone	Private Bag 0022	267-356-364	267-357-573	sysop@bw.healthnet.org
BW		InfoBW	Gaborone	PO Box 40393	267-318444	267-318555	fois@info.bw
BW		SADC	Gaborone	Private Bag 0095	267-351863	267-372848	bonnie@sadc.wn.apc.org
BW		UniBot	Gaborone	Bag 0022	267-35-1151	267-30-1594	postmaster@mka.ub.bw
CF	Central African Rep	Socatel	Bangui				
CG	Congo	ORSTOM	Brazzaville		242-83-26-80	242-83-29-77	boucher@lanza.orstom.cg
CI	Cote d'Ivoire	AfricaOnline	Abidjan	BP 1281	225-22-41-01	225-22-31-05	info@africaonline.co.ci
CI		AFRICOM	Abidjan	B.P. V 71	225-21-70-71	225-21-70-72	info@africom.ceom
CI		ORSTOM-CI	Abidjan	BP V18 15	225-24-37-79	225-24-65-04	postmaster@abidjan.orstom.c
CM	Cameroon	ORSTOM	Douala	BP 1857	237-20-15-08	237-20-18-54	boavalle@yaounde.orstom.c
CM		Cntr for Health Tech (CHT)	Yaounde	P.O Box 8390	237-23-01-13	237-23-01-03	ada@camfdn.gn.apc.org
CM		HealthNet	Yaounde	B.P. 8390	237-23-01-13	237-23-01-03	support@cm.healthnet.org
CV	Cape Verde						
DJ	Djibouti	STID	Djibouti				
DZ	Algeria	Algeria Net	Algiers		213-2-612-715		sbottache@algeria.gn.apc.org
DZ	Algeria	CERIST	Algiers	BP-47	213-2-792136	213-2-792126	slimoubek@ist.cerist.dz
DZ	Algeria	EUnet	Algiers		213-2-369995	213-2369791	info@Algeria.EU.net
EG	Egypt	Connect Egypt	Cairo		20-2-342-3441	202-342-3441	admin@connect.egy.net
EG		DATUM (IDS)	Cairo		20-2-	202-	dragab@mailer.datum.com.eg

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EG		DATUM (IDS)	Cairo		2903501	2903527	dragab@mailer.datum.com.eg
EG		Egyptian Univ Network	Cairo	Giza	20-2-5735-405	202-5728-174	INFO@FRCU.EUN.EG
EG		ENSTINET	Cairo	Box 1522	20-2-355-7253	20-2-354-7807	postmaster@enstinet.ac.eg
EG		EUnet	Cairo		20-2-3557253	20.2-3547807	info@Egypt.EU.net
EG		IDSC	Cairo	11 Hassan Sabry	20-2-340-2665	20-2-341-2139	postmaster@idsc.gov.eg
EG		InTouch	Cairo	3 Musadak St	20-2-337-6407	20.2-337.6480	sales@intouch.com
EG		RITSEC	Cairo		20-2-341-6547	20-2-341-2139	postmaster@ritsec.com.eg
EG		SOFICOM	Cairo		20-2-3421952/3		
EG		St@rNet	Cairo		20-2-3954440	202-3922059	support@starnet.com.eg
EH	Western Sahara		-				
ER	Eritrea	Beshir CompuTech	Asmara	P. O. Box 2005	291-1-113096	291-1-120391	sysop@adal.gn.apc.org
ER		EISA	Asmara		291-118709	291-110993	support@eisa.gn.apc.org
ER		HealthNet	Asmara	PO Box 212	291-1-120877	291-1-122899	support@eri.healthnet.org
ET	Ethiopia	Ethiopian Telecom Auth	Addis Ababa	P.O.Box 1047	251-1-514260	251-1-513322	agashaw@telecom.net.et
ET		HealthNet	Addis Ababa	P.O. Box 1176	251-1514757	251-513-099-	sysop@eth.healthnet.org
ET		PADIS	Addis Ababa	PO Box 3001	251-1-511-167	251-1-514416	postmaster@padis.gn.apc.org
ET		UniAddis	Addis Ababa		251-159-634	251-513-099	postmaster@eth.healthnet.org
GA	Gabon	*	Libreville				
GH	Ghana	Assoc African Univ	Accra	Box 5744	233-21-774495	233-21-774821	jbp@aau.org
GH		University of Ghana	Accra	P. O. Box 24	233-21-775309		Balme@ug.gn.apc.org
GH		Chonia Informatica	Accra	P. O. Box C2325	233-21-66-94-20	233-21-66-94-20	support@oasgyfo.ghana.net
GH		FOE-Ghana	Accra	Box M32	233-21-225-963		sysop@foe-ghana.gn.apc.org
GH		CSIR	Accra	PO Box M32	233-21-773529		sysop@ghastinet.gn.apc.org
GH		HealthNet	Accra		233-21-226-739		support@gha.healthnet.org
GH		NCS-Ghana	Accra		233-21-220622	233-21-772279	postmaster@ncs.com.gh
GM	Gambia	ACHRDS	Banjul		220-94525		postmaster@achrds.gn.apc.or
GM		GAMTEL	Banjul	Box 387	220-22-9999	220-22-94-99	100673.673@compuserve.co
GM		HealthNet	Banjul	Box 273	220-495-443	220-495-919	jbangali@gam.healthnet.org
GM		Nat Envt Agency	Banjul	P.M.B. 48	220-223-196	220-229-701	geisnet@gn.apc.org
GN	Guinea	PADES	Conakry		224-41-4141	224-41-4141	postmaster@net.gn
KE	Kenya	AfricaOnline	Nairobi				support@africaonline.co.ke
KE		ARCC-Ken	Nairobi	P.O. Box 58638	254-2-723552	254-2-728351	postmaster@arcc.co.ke

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KE		ARSO	Nairobi	PO Box 57363	254-2-224-561		sysop@nairobi.gn.apc.org
KE		ELCI	Nairobi	PO Box 72461	254-2-56-2015		postmaster@elci.gn.apc.org
KE		HealthNet	Nairobi	PO Box 19954	254-2-447870	254-2-724590	hnet@hna.healthnet.org
KE		Karisi-Ken	Nairobi	Box 63017	254-2-243775	243762	info@africa.com
KE		Omega	Nairobi	PO Box 38941	254-2-229-650	254-2-229-650	postmaster@ke.mna.unep.no
KE		TAIREL	Nairobi				Alejandro@tirel.mna.unep.n
KE		UNICS	Nairobi	PO Box 30197			postmaster@unics.gn.apc.org
KE		UNON	Nairobi				postmaster@ke.unon.org
KM	Comoros						
LR	Liberia						
LS	Lesotho	UniLesotho	Roma	PO Roma 180	266-340-601	266-340-000	postmaster@hobo.uni.ls
LY	Libya						
MA	Morocco	AZURENET	Casablanca		212-2-501059	212-2-406-725	azurenet@azur.net
MA		UniA1Akhs	Fes		212-5-86-24-2	212-5-86-24-24	youssef@akhawayn.ma
MA		EMI-Maroc	Rabat		212-77-76566	212-7778853	postmaster@emi.ma
MA		ENDAMaghreb	Rabat		212-7-75-64-14	212-75-64-13	sysop@endamag.gn.apc.org
MA		MEDNA Economic Summit	Rabat		212-7-63-00-12	212-7-63-00-10	amino@mena.org
MA		MTDS-MO	Rabat		212-7-67-4861	212-767-4863	postmaster@mtds.net.ma
MG	Madagascar	Centre SYFED	Antananarivo	BP 8349 Tsaralalana	261-2-318-12	261-2-318-15	bruno.boyer@mg.refer.org
MG		CITE	Antananarivo	BP 74 Ambatonakanga	261-2-25386	261-2-33669	postmaster@antma.rio.org
MG		DTS	Antananarivo				
ML	Mali	Balanzan	Bamako	BP 2502	223-22-3-190	223-228207	sysop@balanzan.gn.apc.org
ML		HealthNet	Bamako	BP 1805	223-22-5271	223-22-9879	sysop@ml.healthnet.org
ML		MaliNet	Bamako	BP 5083	223-22-01-01	223-22-22-52	stevance@ijn.malinet.ml
ML		ORSTOM-Mali	Bamako	BP 2528	223-22-43-05	223-22-75-88	postmaster@bamako.orstom.
MR	Mauritania	UnivNouakchott	Nouakchott	B.P. 5026	222-2-5-67-03	222-2-539-97	haoubo@toybal.univ-nkc.mr
MU	Mauritius	ORSTOM	Alnio	Fisheries Research Cntr		230-233-47-29	cayre@mauric.orstom.fr
MU		UnivMauritius	Reduit	Royal Road	230-454-1041	230-465-7144	arvind@dove.uom.ac.mu
MU		AGANET	Beau Bassin		230-233-5326		sysop@aganet.wn.apc.org
MU		EPZDA-Maur	Port Louis		230-212-9760	230-212-9767	74774.244@compuserve.com
MU		MauriTel	Port Louis		230-208-2001	230-208-8777	
MU		MNS-Maurit	Port Louis		230-211-2477	230-2112414	
MW	Malawi	MedCol-Mal	Zomba	PB 360	265-677-245	265-674-	postmaster@mal.healthnet.or

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MW	Malawi	MedCol-Mal	Zomba	PB 360	265-677-245	700	postmaster@mal.healthnet.or
MW		EpsilonOmega	Lilongwe		265-785-444		postmaster@eo.wn.apc.org
MZ	Mozambique	CIUEM	Maputo	CP 257	258-1-492-601	258-1-491-557	postmaster@nambu.uem.mz
MZ		HealthNet	Maputo	PO Box 257			sysop@moz.healthnet.org
MZ		TELEDATA-Moz	Maputo		258-1-421-374		
NA	Namibia	NAMIDEF	Windhoek	PO Box 20746	264-641-61005	264-64-461004	el@lisse.NA
NA		Internet World Wide	Windhoek		264-61-250477	264-61-250479	iwwn@iwwn.com.na
NE	Niger	STIN	Niamey		227-73-45-92	227-72-24-78	stin@intnet.ne
NE		ORSTOM-Niger	Niamey	BP 11 416	227-75-31-15-	227-75-28-04	postmaster@niamey.orstom.n
NG	Nigeria	Global-Nig	Lagos	Box 72300	234-1-618060	234-1-618060	sysop@gnet.gn.apc.org
NG		Lixy	Lagos	PO Box 5210 Surulere	234-36-231-262		postmaster@lixy.baobab.com
NG		Linkserve	Lagos	Akin Adesola St	234-1-2623900	234-1-262-3901	info@linkserve.com.ng
NG		Pinet	Lagos		234-1-2645306	234-1-2645306	lanre@nigeria.pinet.net
NG		RossClay-Nig	Lagos		234-12690876	234-12690987	rcl@rcl.dirkcon.co.uk
NG		Uni-Abafemi	Lagos		234-36-230-290	234-36-232276	
NG		Yaba-Col	Lagos	PO Box 2011 Yaba	234-1-.865557	234-1-860211	yabo@yaba.edu.ng
RW	Rwanda						
SC	Seychelles	Atlas Internet	Victoria				
SC		ORSTOM-Sey	Victoria	BP 570 Victoria-Mahe	248-24742	248-24508	bartho@seychel.orstom.fr
SD	Sudan	University of Gezira	Gezira	P.O. Box 20	249-51-83192-	249-11-772062	support@ugezira.gn.apc.org
SD		HealthNet	Khartoum	PO Box 102	249-1-175-658		support@sud.healthnet.org
SL	Sierra Leone	Securicom	Freetown	9 Pademba RD	232-22-229652	232-22-226180	postmaster@sl.baobab.com
SL		Univ of Sierra Leone	Freetown	Private Mail Bag	232-22-224477	232-22-224904	chaytord@usl.gn.apc.org
SN	Senegal	ENDA-Dakar	Dakar	PB 3370	221-22-31-94	221-25.60.46	moussaf@enda.sn
SN		ORSTOM-Sen	Dakar	BP 1386	221-32-34-76-	221-32-43-07	postmaster@dakar.orstom.sn
SN		SONATEL	Dakar	BP 69	221-22-10-98	221-21-40-06	mouhamet@sonatel.senet.net
SN		SYFED-Sen	Dakar	BP 10017	221-25-59-58	221-25-59-58	postmaster@refer.sn
SO	Somalia						
SZ	Swaziland	UUNET Internet Africa	Mbabane	Box 5833	268-44705	268-44783	info@iafrica.sz
TD	Tchad	ChadNet	N'Djamena	PO Box 1228	235-513-214	235-514-884	
TD		CNAR	N'Djamena		235-513214		Breme.Oumar@f1.n7791.z5.f
TG	Togo	CAFE Informatique	Lome	B.P. 12596	228-210975	228-217506	adiel@cafe.tg
TG		ORSTOM-Togo	Lome	BP 375	228-21-43-44	228-21-03-43	postmaster@lome.orstom.fr
		Agence Tunis.		13 Avenue	216-1-846-	216-1-	

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TN	Tunisia	Internet	Tunis	Bughurba	109	846-600	mhiri@rsi.tn
TN		ENDA Inter-Arabe	Tunis	5 Impasse de le ner Rouge	216-1-718-340		syscop@enda-arabe.gn.apc.org
TN		EUnet	Tunis		216-1-787757	261-1-787827	info@Tunisia.EU.net
TN		IRSIT	Tunis	BP 212 Mahrajene 10	216-1-800-212	216-1-787-827	Moncher.Mahni@irsit.tn
TZ	Tanzania	COSTECH	Dar es Salaam	Box 4302	255-51-26211		postmaster@costech.gn.apc.o
TZ		CyberTwiga	Dar es Salaam	Coastal Travels bldg.	255-51-327-562	255-51-865-799	support@twiga.com
TZ		HealthNet	Dar es Salaam	P.O. Box 65015	255-51-27081	255-51-46163	support@tz.healthnet.org
TZ		MARIE	Dar es Salaam				postmaster@marie.gn.apc.org
TZ		ZACCOSERV	Zanzibar		255-54-32291		postmaster@mz.gicom.com
UG	Uganda	HealthNet	Kampala	PO Box 7062	256-41-559-712	256-41-530-756	support@ug.healthnet.org
UG		InfoMail	Kampala	P.O. Box 11468	256-41-258361	256-41-236256	postmaster@imul.com
UG		MUKLA	Kampala		256-41-532-479		syscop@mukla.ac.ug
UG		Starcom	Kampala	P.O.Box 10524	256-41-245701/5	256-41-245708	postmaster@starcom.co.ug
ZA	South Africa	InternetXt	Bloemfontein		27-51-525-2563		
ZA		Inscala	Bloemfontein		27-51-332-763/75		
ZA		Active	Cape Town		27-21-887-1779	27-21-887-1829	info@hyper.active.co.za
ZA		AZTEC-SA	Cape Town				info@aztec.co.za
ZA		GEM-SA	Cape Town		27-21-64-2851	27-21-683-1603	info@gem.co.za
ZA		ICAFE	Cape Town		27-21-246576		stephen@icafe.co.za
ZA		Interlink-SA	Cape Town		27-21-658-7878	27-21-658-7788	support@ia.za
ZA		Kingsley-SA	Cape Town	Box 348 Green Point 8051	27-21-26-27-25	27-21-26-2939	info@kingsley.co.za
ZA		OONet Internet Africa	Cape Town	PO Box 44633	27-21-683-4370	27-21-6834695	info@inafrica.com
ZA		WCSN	Cape Town		27-21-689-9154	27-21-685-5675	feb@wln.wcape.school.za
ZA		Connectix-SA	Durban	Box 1235 Westville 3630		27-31-266-8930	info@vicnix.co.za
ZA		BC-Access-SA	Durban		27-31-267-9169	27-31-308-3388	bbdaig@netcom.co.za
ZA		HealthLink	Durban		27-31-3072954	27-31-3040775	postmaster@healthnet.org.za
ZA		SigNet-SA	Durban		27-31-73-2005	27-31-73-2005	odg@cia.co.za
ZA		Connectica-SA	Johannesburg		27-83-251-1940	27-886-9904	info@mcz.com
ZA		Cyberway	Johannesburg		27-11-315-3166	27-11-315-3196	mark@cy.cia.co.za
ZA		Digitec	Johannesburg		27-11-678-0097	27-11-678-0091	postmaster@digitec.co.za
ZA		Fastlight-SA	Johannesburg		27-11-706-0212	27-11-706-0212	info@fast.co.za
				Box 78143	27-11-803-	27-11-	

ZA		GIA-SA	Johannesburg	Sandton 2146	4024	803-1434	info@global.co.za
ZA		HiWay-OnlineSA	Johannesburg		27-11-886-6341	27-11-886-7965	info@hot.co.za
ZA		IBM-SA	Johannesburg	PB X9907		27-11-320-9334	postmaster@ibm.net
ZA		Infodoor-SA	Johannesburg	Box 1757 Northcliff 2115	27-11-476-9424	27-11-476-6924	info@infodoor.co.za
ZA		Internet Solution	Johannesburg	PO Box 3234 Parklands	27-11-447-5566	27-11-447-5567	info@is.co.za
ZA		LIA-SA	Johannesburg		27-11-315-3476		ina@lia.co.za
ZA		Mway-SA	Johannesburg		27-11-487-3608	27-11-648-1616	postmaster@pcb.co.za
ZA		Netline-SA	Johannesburg	Box 3523 Northcliffe 2115	27-11-886-0586	27-11-789-6081	info@netlinx.netline.co.za
ZA		NetMart	Johannesburg		0800-120445	27-11-706-0085	davew@cis.co.za
ZA		Nino's cafe-SA	Johannesburg		27-11-804-3510		pjohnson@sleepy.softconn.co
ZA		Olivetti	Johannesburg		27-11-456-3125	27-11-456-3390	postmaster@olivetti.za
ZA		ONWe-SA	Johannesburg		27-11-462-3184	27-11-462-3184	info@onwe.co.za
ZA		PIPEX SA	Johannesburg		27-11-444-3344	27-11-444-2233	andrew@pipex-sa.net
ZA		PIX-SA	Johannesburg	Box 3036 Northcliff 2195	27-11-476-2007		postmaster@pix.za
ZA		SANGONET	Johannesburg	Box 31, Johannesburg	27-11-838-6943	27-11-492-1058	support@wn.apc.org
ZA		SoftConn	Johannesburg		27-11-883-5790	27-11-883-2708	sysop@softconn.co.za
ZA		Sprint-SA	Johannesburg	Box 781717 Sandton	27-11-322-5600	27-11-322-5601	info@sprint.co.za
ZA		TIS-SA	Johannesburg	Box 3234 Jhb 1221	27-11-447-5566	27-11-447-5567	info@is.co.za
ZA		LBM-SA	Nelspruit		27-1311-22761	27-1311-22363	pretief@cis.co.za
ZA		CIS-ECape	Port Elizabeth		27-41-776-1210	27-41-776-12-12	leonard@cis.co.za
ZA		CyberJoe-SA	Port Elizabeth		27-41-561099	27-41-300835	danel@cyberjoe.co.za
ZA		BCSP	Port Elizabeth		27-41-56-1082	27-41-55-8304	mike@petc.ecape.school.za
ZA		CSIR	Pretoria	Box 75885, Lynnwood	27-12-841-2892	27-12-841-3604	info@cis.co.za
ZA		OpenNet-SA	Pretoria	P/Bag X7722 Hennopsmeer 0181		27-12-6722658	
ZA		TELKOM	Pretoria	PB X780	27-12-311-3307	27-12-311-3314	postmaster@igubu.saix.net
ZA		Terranet	Pretoria	Box 27990 Sunnyside 0132		27-82-888-0152	27-12-429-6361
ZA		Uninet-za	Pretoria	P O Box 2600	27-12-841-3542	27-12-349-1179	mlawrie@apies.frd.ac.za
ZA		Marques-SA			27-57-396-5520	27-57-396-5519	postmaster@marques.co.za
ZM	Zambia	UNZA/ZamNet	Lusaka	Box 32379	260-1-252-507	260-1-290-935	postmaster@unza.zm
ZM		ZAMNET	Lusaka		260-1-	260-1-	sales@zamnet.zm

ZM		ZAMNET	Lusaka		290358	290358	sales@zamnet.zm
ZR	Zaire	IZPT	Kinshasa	B.P. 8854	243-12-24-222	243-12-92-144	frg@izpt.zr
ZW	Zimbabwe	NUST-Zim	Bulowayo	Box 346			nust@zamnet.zw
ZW		ESANET	Harare		263-4-303211		sysop@zamnet.zw
ZW		HealthNet	Harare	PO Box MP 167	263-4-303211		borland@healthnet.zw
ZW		IAFRICA Zim	Harare	714 Robinson House	263-4-758-194	263-4-758-197	postmaster@harare.iafrica.co
ZW		MANGO	Harare	Box 7069	263-4-737-301		sysop@mango.zw
ZW		PTC Zimbabwe	Harare	Box 2580	263-4-732-406	263-4-735-892	
ZW		Samara-Zim	Harare	Box GD 338	263-4-708-05/9	263-4-708055	postmaster@samara.co.zw
ZW		Stellar Systems	Harare	9 Phillips Ave, Belgravia		263-4-730-506	263-4-730-506
ZW		ZIMBIX	Harare	P.O. Box MP 167	263-4-303-211	263-4-732828	postmaster@zimbix.uz.zw
ZW		ZIMTAP	Harare	Box CY977	263-4-702-009	263-4-703-416	postmaster@zimtap.toolnet.nl

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AD Andorra
AE United Arab Emirates
AF Afghanistan
AG Antigua and Barbuda
AI Anguilla
AL Albania
AM Armenia
AN Netherlands Antilles
AO Angola
AQ Antarctica
AR Argentina
AS American Samoa
AT Austria
AU Australia
AW Aruba
AZ Azerbaijan
BA Bosnia and Herzegovina
BB Barbados
BD Bangladesh
BE Belgium
BF Burkina Faso
BG Bulgaria
BH Bahrain
BI Burundi
BJ Benin
BM Bermuda
BN Brunei Darussalam
BO Bolivia
BR Brazil
BS Bahamas
BT Bhutan
BV Bouvet Island
BW Botswana
BY Belarus
BZ Belize
CA Canada
CC Cocos (Keeling) Islands
CF Central African Republic
CG Congo
CH Switzerland
CI Cote D'Ivoire (Ivory Coast)
CK Cook Islands
CL Chile
CM Cameroon
CN China
CO Colombia
CR Costa Rica
CS Czechoslovakia (former)
CU Cuba
CV Cape Verde
CX Christmas Island
CY Cyprus
CZ Czech Republic
DE Germany
DJ Djibouti
DK Denmark
DM Dominica
DO Dominican Republic
DZ Algeria
EC Ecuador
EE Estonia
EG Egypt
EH Western Sahara

ER	Eritrea
ES	Spain
ET	Ethiopia
FI	Finland
FJ	Fiji
FK	Falkland Islands (Malvinas)
FM	Micronesia
FO	Faroe Islands
FR	France
FX	France, Metropolitan
GA	Gabon
GB	Great Britain (UK)
GD	Grenada
GE	Georgia
GF	French Guiana
GH	Ghana
GI	Gibraltar
GL	Greenland
GM	Gambia
GN	Guinea
GP	Guadeloupe
GQ	Equatorial Guinea
GR	Greece
GS	S. Georgia and S. Sandwich Isls.
GT	Guatemala
GU	Guam
GW	Guinea-Bissau
GY	Guyana
HK	Hong Kong
HM	Heard and McDonald Islands
HN	Honduras
HR	Croatia (Hrvatska)
HT	Haiti
HU	Hungary
ID	Indonesia
IE	Ireland
IL	Israel
IN	India
IO	British Indian Ocean Territory
IQ	Iraq
IR	Iran
IS	Iceland
IT	Italy
JM	Jamaica
JO	Jordan
JP	Japan
KE	Kenya
KG	Kyrgyzstan
KH	Cambodia
KI	Kiribati
KM	Comoros
KN	Saint Kitts and Nevis
KP	Korea (North)
KR	Korea (South)
KW	Kuwait
KY	Cayman Islands
KZ	Kazakhstan
LA	Laos
LB	Lebanon
LC	Saint Lucia
LI	Liechtenstein
LK	Sri Lanka
LR	Liberia
LS	Lesotho

LT	Lithuania
LU	Luxembourg
LV	Latvia
LY	Libya
MA	Morocco
MC	Monaco
MD	Moldova
MG	Madagascar
MH	Marshall Islands
MK	Macedonia
ML	Mali
MM	Myanmar
MN	Mongolia
MO	Macau
MP	Northern Mariana Islands
MQ	Martinique
MR	Mauritania
MS	Montserrat
MT	Malta
MU	Mauritius
MV	Maldives
MW	Malawi
MX	Mexico
MY	Malaysia
MZ	Mozambique
NA	Namibia
NC	New Caledonia
NE	Niger
NF	Norfolk Island
NG	Nigeria
NI	Nicaragua
NL	Netherlands
NO	Norway
NP	Nepal
NR	Nauru
NT	Neutral Zone
NU	Niue
NZ	New Zealand (Aotearoa)
OM	Oman
PA	Panama
PE	Peru
PF	French Polynesia
PG	Papua New Guinea
PH	Philippines
PK	Pakistan
PL	Poland
PM	St. Pierre and Miquelon
PN	Pitcairn
PR	Puerto Rico
PT	Portugal
PW	Palau
PY	Paraguay
QA	Qatar
RE	Reunion
RO	Romania
RU	Russian Federation
RW	Rwanda
SA	Saudi Arabia
SB	Solomon Islands
SC	Seychelles
SD	Sudan
SE	Sweden
SG	Singapore
SH	St. Helena

SI	Slovenia
SJ	Svalbard and Jan Mayen Islands
SK	Slovak Republic
SL	Sierra Leone
SM	San Marino
SN	Senegal
SO	Somalia
SR	Suriname
ST	Sao Tome and Principe
SU	USSR (former)
SV	El Salvador
SY	Syria
SZ	Swaziland
TC	Turks and Caicos Islands
TD	Chad
TF	French Southern Territories
TG	Togo
TH	Thailand
TJ	Tajikistan
TK	Tokelau
TM	Turkmenistan
TN	Tunisia
TO	Tonga
TP	East Timor
TR	Turkey
TT	Trinidad and Tobago
TV	Tuvalu
TW	Taiwan
TZ	Tanzania
UA	Ukraine
UG	Uganda
UK	United Kingdom
UM	US Minor Outlying Islands
US	United States
UY	Uruguay
UZ	Uzbekistan
VA	Vatican City State (Holy See)
VC	Saint Vincent and the Grenadines
VE	Venezuela
VG	Virgin Islands (British)
VI	Virgin Islands (U.S.)
VN	Viet Nam
VU	Vanuatu
WF	Wallis and Futuna Islands
WS	Samoa
YE	Yemen
YT	Mayotte
YU	Yugoslavia
ZA	South Africa
ZM	Zambia
ZR	Zaire
ZW	Zimbabwe
COM	US Commercial
EDU	US Educational
GOV	US Government
INT	International
MIL	US Military
NET	Network
ORG	Non-Profit Organization
ARPA	Old style Arpanet
NATO	Nato field