NorthWestNet

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Section 3: Communicating With People

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How To Get NUSIRG

THE NORTHWESTNET USER SERVICES INTERNET RESOURCE GUIDE

You can either get NUSIRG at no charge by the Internet "File Transfer Protocol" (FTP), or you can purchase a bound copy from NorthWestNet. If you have a connection to the Internet, you are encouraged to follow these instructions for using FTP to obtain NUSIRG. If you can't use FTP (or don't know how yet!), instructions on how to order a printed and bound copy from NorthWestNet are included on the next page.

Free Copies of NUSIRG By File Transfer Protocol (FTP)

NUSIRG is available at no charge, by FTP, as text-only or PostScript files. The text-only files are in a simple format which can be printed by most kinds of printers or viewed on-screen with most text editors. The PostScript files produce output which is essentially identical to the bound version of NUSIRG.

If you have access to a computer connected to the Internet, all you have to do is follow the simple instructions below.

Note: commands you type are shown in the left hand column in lower case (don't type the #'s!); UPPER CASE and ">" indicates prompts from the computer that will appear on your screen.

What you type (or what you'll see)	Explanation
1) ftp ftphost.nwnet.net	Connect to the NorthWestNet FTP host.
2) LOGIN: anonymous	At the "LOGIN:" prompt enter "anonymous".
3) PASSWORD: your-user-id@address	At the "PASSWORD:" prompt, please enter your user-id@your.full.internet.address (e.g., robessin@uwvvd.derrg.edu).
4) FTP> cd nic/nwnet/user-guide	Change directories (cd) to the directory containing FTP copies of NUSIRG.
5) FTP> get README.nusirg	Use the "get" command followed by a filename from the list on the next page to copy a file; get "README.nusirg" first, which contains the most up-to-date information about NUSIRG files.
6) FTP> ls	The "ls" command will produce a listing of the names of the files in the NUSIRG directory (see below).
7) FTP> quit	The "quit" command will end your FTP session.

The file "README.nusirg" contains more detailed information about the files in the NUSIRG directory.

Files in the NUSIRG directory	Description of file's contents
README.nusirg	A detailed description of NUSIRG files.
nusirg,Index.ps	Index for all of NUSIRG
nusirg.Index.txt	
nusirg.about.nwnet.and.aup.ps	NWNET & NSFNET backbone information and policies
nusirg.about.nwnet.and.aup.ps	
nusirg.beginner.overview.ps	Overview of NUSIRG and the Internet.
nusirg.beginner.overview.txt	
nusirg.email.ftp.telnet.ps	Basic Internet tools: e-mail, FTP, TELNET and Archie
nusirg.email.ftp.telnet.txt	
nusirg.listserv.usenet.ps	Using USENET and LISTSERV.
nusirg.listserv.usenet.txt	
nusirg.online.info.resources.ps	On-line books, libraries, databases, WAIS, and directory services
nusirg.online.info.resources.txt	
nusirg.supercomputers.ps	Supercomputer use and access information.
nusirg.supercomputers.txt	
nusirg.teach.k-12.ps	The Internet and K-12 education.
nusirg.teach.k-12.txt	
nusirg.whole-guide.ps.tar.Z	All of NUSIRG in compressed and archived format.
nusirg.whole-guide.txt.tar.Z	

Notice that the file names above occur in pairs differing only in the last parts of their names. Files ending with "ps" are in PostScript format and cannot be printed unless you have access to a PostScript printer. You should not copy the files whose names end with "tar.Z" unless you know how to handle compressed and archived files, which is explained in the file "README.nusirg".

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phone:	(206) 562-3000
fax:	(206) 562-4822

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If you have questions, comments, or suggestions about NUSIRG, please send e-mail to nusirg@nwnet.net

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USENET AND LISTSERV

If you have an apple and I have an apple and we exchange these apples then you and I will still each have one apple. But if you have an idea and I have an idea and we exchange these ideas, then each of us will have two ideas.

George Bernard Shaw

This section introduces you to two of the most widely used forums for communication between people on the Internet: USENET discussion groups and BITNET LISTSERV Lists.

Both USENET and LISTSERV groups are organized by topics, so you can find a group whose topic interests you and immediately "meet" people around the world who are communicating about your interests.

These services are like the cafes, village greens, and other meeting places in a global community filled with people sharing ideas, news, opinions, and just plain conversation. Feel free to join in!

Chapter 7: Using USENET

WHAT IS USENET?

USENET is a service of the Internet which allows you to participate in discussions on many different topics with people throughout the world.

More specifically, USENET is:

- ❏ a collection of hundreds of "newsgroups" covering everything from supercomputer design to bungee cord jumping;
- ❏ a forum for discussions, questions and answers, and news.

USENET is used daily by many thousands of people on computers worldwide. USENET is also a systems which evolves in response to its user's needs. Every month, new USENET groups are created in response to the votes of USENET users. And most importantly, if you use it well, USENET can be highly educational - and highly entertaining.

What Are USENET Newsgroups?

USENET discussion takes place in hundreds of USENET newsgroups, each dealing with a particular topic. The term "USENET newsgroups" might suggest that USENET is mainly concerned with "news," but USENET newsgroups (or "groups") are also forums for information, discussions, debates, questions, and answers.

Each USENET group is comprised of articles (or "postings") which are submitted (or "posted") by users from throughout the world. For those of you already familiar with electronic bulletin boards, USENET groups are very similar to bulletin board rooms, special interest groups, conference rooms, and so forth.

How Are USENET Articles Distributed Through the Internet?

The basic purpose of USENET is similar to that of LISTSERVers described in Chapter 8: to allow people with shared interests to communicate quickly and easily. However, information is distributed very differently by the two systems.

Every person subscribed to a LISTSERV group receives a copy of every file sent to the group. Because you have to handle every LISTSERV file individually as it is sent to you, the number of LISTSERV groups to which you can subscribe is limited.

In USENET, each subscribing Internet site receives as single copy of each article via a "USENET news feed." These news feeds are handled by Internet software called Network News Transfer Protocol or NNTP. The tens of thousands of USENET files which accumulate each week are stored on one mainframe, workstation, or personal computer at your site. Even if there are 1,000 people want to read a given article, only one copy needs to be stored. This system is much more resource efficient than 1,000 individual copies.

An even more efficient method of distributing USENET articles has been developed which allows a single NNTP news feed machine to be accessed by many other computers. This new method is of special interest to sites with limited computer resources, such as an elementary school with a few personal computers and modems. You don't

have to have a machine at your site to store the tens of thousands of USENET articles you might not want to read. Only articles you are interested in are displayed on your screen from the remote NNTP server.

How Are USENET Newsgroups Organized?

Each USENET newsgroup has a distinct name which describes the discussion carried out in the group. Here are the names of a few of the many hundreds of USENET newsgroup names to give you a sense both of the diversity of topics, and how USENET groups names are put together:

alt.usage.english	news.announce.newusers
bionet.agroforestry	news.newusers.questions
bionet.software	pnw.forsale
bit.listserv.history	rec.arts.books
bit.listserv.travel-l	rec.food.recipes
biz.comp.services	sci.archaeology
biz.dec.workstations	sci.math
comp.sources.apple2	soc.college.gradinfo
comp.unix.questions	soc.culture.nordic
k12.chat.elementary	talk.politics.guns
k12.lang.francais	talk.rumors
misc.jobs.offered	uw.general
misc.rural	uw.jobs

All USENET newsgroup names are made up of abbreviations separated by periods, arranged in a hierarchical fashion. The first part of the name is a major category, and the second (and sometimes third, fourth, or even fifth) part(s) give increasingly more detail about the topic covered by the group.

For example, "k12.chat.elementary" is a group in the hierarchy created for kindergarten through 12th grade users (k12) oriented towards casual discussion (or chat) among elementary school students.

There are only a few first level categories, within which may be hundreds of specific newsgroups. Here's a list of the general topics covered by the some of the most commonly encountered main level categories:

alt	a hierarchy for tentative or controversial groups; not carried by all USENET sites
bionet	a hierarchy for biology oriented groups, primarily intended for research biologists
bit.listserv	LISTSERV groups distributed to USENET
biz	Business / corporate oriented discussion
comp	Computer oriented groups
k12	Kindergarten through high school groups
misc	Groups not easily fit into other categories
news	Groups devoted to news about USENET
rec	Recreation or hobby oriented groups
sci	Science oriented groups
soc	Groups oriented to discussion of particular cultures or social groups around the world
talk	Groups for free form discussions which often focus on controversial topics (e.g., abortion, nuclear energy)
pnw & uw	examples of regional USENET hierarchies which will be

explained in more detail below

Consider five hypothetical groups dealing with politics in the United States, each in a different main level hierarchy:

biz.us.politics
k12.us.politics
sci.poli-sci.us
soc.us.politics
talk.us.politics

The articles within each of these U.S. politics groups are likely to have very different emphases, which helps to serve the diversity of USENET readers.

USENET ALSO CONTAINS LOCAL GROUPS

Although most of USENET is a global community, it is also set up to address the needs and interests of users in local areas.

As mentioned above, "pnw" and "uw" are examples of "regional hierarchies." These hierarchies contain groups of interest to users in the Pacific Northwest region of the United States, and to the University of Washington, respectively. Such regional hierarchies have been set up for many other parts of the world for discussions of local interest.

Here are some examples of other regional hierarchies to give you an idea of how this system works:

Institutions	uw	Univ. of Washington
	yale	Yale University
Cities	pdx	Portland
	tor	Toronto
States or provinces	ab	Alberta
	or	Oregon
Regions	pnw	Pacific Northwest
	ne	New England
Countries	fnet	France
	nz	New Zealand
Continents	eunet	Europe
	na	North America

Regional newsgroups usually deal with topics that probably wouldn't interest users elsewhere in the world, such as where Yale's MacIntosh Users Group will meet next week, or why zucchini has suddenly become so expensive in Alberta. So don't feel like you're missing much, there are hundreds of globally distributed newsgroups to keep you busy.

A QUICK OVERVIEW OF USING USENET

What You Should NOT Do On USENET

Although USENET probably would be best described as a quasi-democratic anarchy, there are a few explicitly forbidden activities:

- Do Not Violate Copyright Or Any Other US or International Laws. Feel free to reproduce short extracts of a copyrighted work for critical purposes in your postings, but reproduction of copyrighted works in whole or substantial part is forbidden by US and international copyright law. Respect the hard work of copyrighted authors. Similarly, engaging in or communicating about illegal activities on USENET is forbidden, and could endanger you and your site's USENET feed.

- USENET Is Not For Commercial Communication. This does not mean that you can't discuss commercial products on USENET. In fact, objective descriptions and comparisons of commercial computer products is a very useful USENET activity. But, if you represent a company, don't even think of posting commercial advertisements on USENET. At the very least, you will probably be flooded by complaints from outraged USENET users, and at the worst, your company's USENET feed could be endangered.

Getting Started With USENET

To read USENET articles, you use "newsreader software." So, the first thing you need to do before getting started with USENET is to:

Find out if you have newsreader software on your computer

As you can see in addendum 1, there are many newsreader packages for both mainframes and personal computers. If you already know the name of your newsreader software, skip ahead to "A Typical USENET session."

If you're not sure of the name or even the existence of newsreader software on your computer, you should ask your local users services staff or instructor for help. Or, if you're inquisitive, and like to do things on your own, try the following steps.

- If you're using a mainframe computer connected to the Internet, try using your local help system (e.g., "help" or "man") to determine if one of the newsreading software packages listed in addendum 1 is installed on your system. For example, on a VMS system, you might try "help vnews" or on a UNIX machine try "man k news".

- If you are working from a personal computer such as a Mac or an IBM PC, you might have a PC-based news reader installed which accesses USENET through a modem. Again, try the "help" or "find" command appropriate to your computer.

- If you can't find one of the programs listed in addendum 1, one of them might be installed under a different name on your computer or you might have a newsreader we haven't listed. But, most probably, a USENET newsreader is not yet installed on your system. If so, the person administering you machine might be willing and able to install newsreading software.

A typical USENET session

Regardless of which newsreading software you use, a typical USENET session usually involves the following steps:

Step 1	Start the newsreader software.
Step 2	Select a newsgroup.
Step 3	Scan the titles of articles in that newsgroup.
Step 4	Read, save or print articles you find particularly interesting.
Step 5	Send e-mail to another USENET user.
Step 6	Post an article to the newsgroup.
Step 7	Clear all remaining articles in the newsgroup so they won't appear in your next USENET session.
Step 8	Select another newsgroup.
Step 9	Repeat steps 3 through 8 as desired.
Step 10	End your USENET session.

Even though it's not possible to explain how to use all of the newsreaders listed in addendum 1, a quick example using one of the more commonly encountered newsreaders on UNIX machines ("rn"), is given later in this chapter to illustrate what going through these steps is actually like.

Newsgroups ALL New USENET Users Should Read

When you first start using USENET, you should read the following two newsgroups to learn the ropes of the USENET world. The first is:

news.announce.newusers

This newsgroup contains informative articles which are posted every month to help explain the workings of USENET. Another very useful introductory newsgroup is:

news.newusers.questions

As the name suggests, this is a question and answer forum for new USENET users. If you read this group for several months, most basic questions you have about USENET that are not answered by this document will be asked by new users and answered by USENET experts.

If you want to keep abreast of changes and announcements about USENET, you should also read two additional newsgroups. The discussion group:

news.announce.important

contains announcements about USENET which are likely to be of interest to all USENET users. This group is *not* for political, commercial, or other non-USENET related announcements, no matter how important.

Another generally useful and informative group is:

news.announce.newsgroups

which is for announcements of the creation of new USENET newsgroups.

Finding Specialized Newsgroups To Which You Want To Subscribe

There are two basic strategies you can use to find newsgroups with most USENET software:

- List all group's names and select groups you want to read.

  This is a good strategy if you are just starting to use USENET, and you're not yet sure what's available, or how newsgroups are named. Although this is done automatically by some newsreaders, in other cases, you have to explicitly ask for a complete list of available groups. You may then subscribe to groups whose names interested you.

- Use the newsgroup software to search group's names for keywords.

  Search through the group's names for a particular word which you think might be in the names of groups you'd like to read. For example, using "rn", one could search for all the newsgroups whose names contained the word "mac", using the "/" command followed by the word "mac", in order to identify newsgroups dealing with Apple Macintosh Computers ("user>" precedes commands you should type; "rn>" indicates responses from the rn newsreader.)

  ```
  user> /mac

  rn>  bit.mailserv.word-mac
  rn>  comp.binaries.mac
  rn>  comp.emacs
  rn>  comp.lang.forth.mac
  rn>  comp.os.mach
  rn>  comp.sources.mac
  rn>  comp.sys.mac
  rn>  comp.sys.mac.announce
            ... (many more "comp.sys.mac" groups)
  rn>   gnu.emacs.announce
            ... (many more "gnu.emacs" groups)
  ```

  If you use this method to search for newsgroups, try to use the shortest likely abbreviation for a topic (like "bio" instead of "biology"), and/or scan the master list of USENET groups to get an idea what a likely abbreviation might be. However, some abbreviations may be redundant and refer to two or even multiple discussions groups. In this example, the word "mac" is also contained in newsgroup names which have nothing to do with Macintosh computers, like "comp.os.mach," and "gnu.emacs.bug."

Helpful Strategies For Reading Newsgroups

Your First USENET Session

As was mentioned in the introduction, each USENET site may subscribe to hundreds of groups which together may contain tens of thousands of articles. Unfortunately, many newsreaders overwhelm the first-time user by presenting every newsgroup, one by one. This approach is like teaching someone to find books in a library by presenting each book in the library in order, and asking, "Is this the book you want? No? Is the next book on the shelf what you want?"

There are a number of steps you can take to make your introduction to USENET encouraging, not intimidating. Most importantly:

Start simple. Don't try to read everything. Be selective.

First, issue your newsreader's command which gives the names of all groups available at your site in a list format. You can then start exploring USENET by subscribing to one or a small number of groups that look really interesting to you.

Try reading a few articles to get an idea what the discussion in the newsgroup is like. This will allow you to become familiar with your newsreader software, and will give you a flavor of USENET discussion.

In highly active groups, there may be a backlog of hundreds of articles which you may not have time to read. Most newsreader software include commands which will erase backlogged articles. Usually a command such as "catch-up", "clear", or "mark all read," will leave you with a clean and manageably small slate.

Once you've started reading one or more newsgroups that interest you, there are a number of things you can do to make the most out of your time with USENET.

Read Periodic Postings and Frequently Asked Questions (FAQs)

Many USENET groups contain "periodic postings" which contain useful information for the new and intermediate readers of these newsgroup(s). Such postings usually appear once a month.

Periodic postings include:

- Articles explaining USENET etiquette.
- Frequently Asked Questions (FAQs); these are questions which newcomers to a particular newsgroup often ask, and which are better answered in periodic postings than in repeated individual answers.
- Things to keep in mind before posting articles to that particular newsgroup.
- Suggestions about where to find commonly needed information about the Internet generally, or USENET specifically.

You'll get a lot more out of USENET if you make a point of reading the periodic postings of the newsgroups to which you subscribe.

You can also read periodic postings by using FTP to retrieve copies from an archive of FAQs stored on a computer with the Internet address "pit-manager.mit.edu". The files are stored in the directory "/pub/usenet". Each subdirectory within this directory has the name of a newsgroup name, each of which contains the periodic postings. Here's an example of the full file name and path of such a FAQ:

/pub/usenet/news.announce.newusers/Answers_to_Frequently_Asked_Questions

If you do not have access to FTP, you can also access the archive via electronic mail. The address of the server is mail-server@pit-manager.mit.edu. The names are the same, with the "/pub/" chopped off. To retrieve the file mentioned above, you would send mail to the mail-server with the text of your message containing only:

send usenet/news.announce.newusers/Answers_to_Frequently_Asked_Questions

You can also use the send command in e-mail messages to obtain help about how to use this mail server. For example, the request strings:

```
send help
send index
send usenet/index
send usenet/news.announce.newusers/index
```

will solicit help and index information.

Following "threads" of discussion

Even when you are reading a discussion group in a very specialized subject, you will often find that there may be only a subset of articles you want to take the time to read. Most newsreaders support an automated process for following threads of discussion. Articles which are on the same topic can be located either by scanning the subjects, the articles, or even the contents of the articles.

Clearing news you don't want to read

Newsreaders also allow you to automatically erase articles on topics you don't want to read. You can also erase all articles by USENET users whose postings you have found out you don't want to read. In some cases, you can set up a "kill" file, which will clear unwanted articles for you every time you use your newsreader.

What You Should Know BEFORE You Make Your Own Postings

All of the suggestions in the e-mail etiquette section of NUSIRG apply to USENET. The document called "A Primer on How to Work With the USENET Community," as discussed later in the "FTP Archives of USENET Information" section, is a useful resource for the novice USENET reader. You are strongly encouraged to review these documents before you become an active part of the USENET Community.

The most important thing to keep in mind when sending messages to USENET is that your message may be sent to tens of thousands of machines, and read by hundreds of thousands of people. This translates to a significant quantity of computer resources, and a substantial number of accumulated person hours. All of the specific suggestions below follow from this simple fact.

- Try not to post until you've become familiar with the workings of USENET. Making a premature posting to USENET is the best way known to embarrass yourself (and your organization) in front of tens of thousands of people at the stroke of a single key!

- No matter what you're posting, be sure you are sending your message to the appropriate newsgroup, and that you have specified an appropriate "distribution." Check through your local master list of newsgroups before posting. Sometimes, it may be useful to specify more than one newsgroup. This multiple posting activity is known as "crossposting," but try not to crosspost unless absolutely necessary. Distribution refers to how widely your posting is propagated. For example, distributions available at the University of Washington include "world," "na" for North America, "pnw" for the pacific northwest, "seattle," and "uw" for the University of Washington. If your posting is only of local interest, only post it locally. For more information, read the FAQ article "Frequently Submitted Items" in news.announce.newusers.

- If you are responding to someone else's posting, it is often more appropriate to reply directly to that person with and e-mail message. Use your newsreader's command that sends mail *directly* to that

user, and not to the newsgroup. If your newsreader doesn't have such a feature, identify the person's user-id and e-mail address on the "from" line of their message or in the information at the end of their posting. You can then use your computer's mail software to send them a message.

- ❏ If you are posting a response to someone else's posting, include enough of their posting in yours to provide a context for your response. Most newsreaders and e-mail programs provide a feature to do this easily. However, try to avoid including more of their posting than is necessary to get their point across.

- ❏ Sometimes a message to which you are responding has been crossposted, inappropriately, to many newsgroups. If you respond to such a message, trim down the list of crossposted newsgroups in your response to those you feel are most appropriate.

- ❏ Before you post a question, try your local resources including reference books and manuals, local User Service staff, and friends. If your question might be a "Frequently Asked Question," check either news.newusers.questions or the newsgroup's FAQ posting, if available.

- ❏ If you want to send an answer to a question, scan the rest of the submitted articles in the newsgroup before sending mail or posting. You will often find that one question may elicit an unnecessarily large number of duplicate answers in a few hours or days. Of course, if your answer is different, and/or if you are sure that the other answers offered are definitely wrong, you should go ahead and respond.

- ❏ Some newsgroups are "moderated," which means that there is a person who screens potential postings before they are put into the newsgroup. To post to moderated newsgroups, send e-mail directly to the moderator's user-id and computer. Here are some examples of moderated newsgroups.

Newsgroup Name	Moderator	Moderator's Address
news.announce.newsgroups	David Lawrence	tale@rpi.edu
news.announce.important	Mark Horton	mark@stargate.com
news.announce.conferences	Dennis Page	denny@tekbspa.tss.com

What To Do If Something Goes Wrong

Here are three common problem areas you may encounter when using USENET: you might make a mistake, someone else might submit rude or insulting postings, or newsreader software might mess up distribution of USENET articles. Here's what to do in each case.

- ❏ Suppose you've submitted a posting, but suddenly realized that you didn't want to for one reason or another. "Oh no, I've sent my question about Nepali culture to rec.sport.football by mistake!"; or "Wait a second, what I said about x is wrong!" Luckily, most newsreaders allow you to cancel a submission. Make sure you know what your newsreader's command for this is before you post. Your submission might still get to a few sites, but you can usually squelch a mistaken submission if you act quickly. In general, it's not a good idea to post a second message retracting or apologizing for a posting unless you sincerely feel you've made a grievous mistake.

- ❏ If someone posts something that obviously violates USENET etiquette, it's usually best not to get involved. There are plenty of USENET old-timers that can usually deal with the situation in a

sagacious way. Unfortunately, there are also a few hot-headed individuals who sometimes turn such situations into "flame-wars," which is USENET slang for a rude, disputatious, and inappropriate argument which shouldn't be carried out in a newsgroup. Always resist the temptation to get involved in or start flame wars; there are no winners. And, in the very unlikely event that someone attacks you personally in a posting, simply ignore it; they'll usually stop. Even the most obnoxious "flamers" will usually desist when they feel that no one is paying attention. And if you keep your peace, it will be apparent to anyone reading such a posting that it is the flamer, and not you, who is of dubious character.

- If you have reason to think that your local newsreader or your USENET feed is malfunctioning, find out who is responsible for maintaining USENET at your site. Unless you are a USENET administrator you shouldn't post messages about local problems.

Although this may seem to have been an inordinately long introduction to a single Internet resource, USENET is an unusually rich resource. In fact, apart from e-mail, USENET is probably the most frequently Internet resource used by the bulk of Internet users.

FTP Archives of USENET Information

Archives of Information About USENET

This is a list of monthly articles posted to news.announce.newusers which provide considerably more detail on the introductory USENET topics covered in this brief overview.

Introduction to news.announce.newusers
Rules for posting to USENET
What is USENET?
A Primer on How to Work With the USENET Community
Answers to Frequently Asked Questions
USENET Software: History and Sources
Emily Postnews Answers Your Questions on Netiquette
Hints on writing style for USENET
List of Active Newsgroups
Alternative Newsgroup Hierarchies
Regional Newsgroup Hierarchies
List of Moderators
Publicly Accessible Mailing Lists, Parts I-III
List of Periodic Informational Postings
How to Create a New Newsgroup
How to Get Information about Networks
How to Create a New Trial Newsgroup
A Guide to Social Newsgroups and Mailing Lists

If you already have access to USENET, go to the introductory "newsgroup news.announce.newusers" to read them. If you do not yet have access to USENET, but do have access to the Internet, these files are available via anonymous FTP from the FTP host:

pit-manager.mit.edu

in the directory

pub/usenet/news.announce.newusers

Each of the files has the same name as in the list above, with spaces filled by the underscore character. For example, the article entitled "List of Moderators" above is stored in pit-manager.mit.edu as:

pub/usenet/news.announce.newusers/List_of_Moderators

Archives of Other Past USENET Articles

Finally, the articles submitted to most active USENET discussion groups have been archived at various locations around the world. Although there is no single repository, there are a number of large archives which you should investigate if you want to find either old USENET discussions or USENET discussion groups which your site does not receive.

Some of the larger collections of archived newsgroups can be found at the following FTP sites:

pit-manager.mit.edu
wuarchive.wustl.edu
uunet.uu.net

If you are looking for archives of a group which is not contained in these sites, you can use the Archie program (described in Chapter 6) to search for an FTP site containing the name of the newsgroup whose archive you are seeking.

A Typical USENET Session (With the Newsreader "rn")

Even if you don't use "rn", the following example should give you a feeling for what a typical USENET session involves. This is meant to capture the spirit, not the details, of using USENET.

Commands you would type are preceded by "user>" to indicate that you should type the command which follows. Responses from the newsreader software appear after "rn>". These will not appear in an actual rn session.

Step 1. To Start the newsreading software, simply type

user> rn

Most newsreaders will respond with a series of informative messages, and a list of a few basic commands including how to get on-line help.

```
rn> Trying to set up a ".newsrc" file--running newsetup...
rn> Creating .newsrc in /u2/user-id.
rn> Done.
rn> To unsubscribe to groups use the "u" command.
rn> To list groups you can subscribe to use the "l" command.
rn> To subscribe to a newsgroup use the "g" command.
rn> Type h for help at any time while running rn.
rn> (Revising soft pointers--be patient.)
rn> Unread news in news.announce.important              11 articles
rn> Unread news in news.announce.newsgroups             132 articles
rn> Unread news in news.announce.newusers               45 articles
rn> Unread news in news.newusers.questions              85 articles
```

```
    ...etc.
rn> 11 articles in news.announce.important--read now? [ynq]
```

Step 2. Select a newsgroup to read.

The "[ynq]" prompt offers you some possible responses to the question "read now?" (y = yes, n = no, q = quit). In this and most other cases, though, you can still issue other commands. At this point, we will go to another newsgroup by typing "g" followed by the name of a newsgroup. In other newsreaders, you might use an arrow cursor, a mouse or a function key to obtain the same result.

```
user> g news.announce.newusers
rn>   Group news.announce.newusers -- subscribe? [yn]
user> y
rn>   20 articles in news.announce.newusers--read now? [ynq]
```

Step 3. To display the subjects of articles in a newsgroup, in "rn," you'd type the "=" sign.

```
user> =

rn>   286 Introduction to news.announce
rn>   287 Rules for posting to USENET
rn>   288 What is USENET?
rn>   289 A Primer on How to Work With the USENET Community
rn>   290 Answers to Frequently Asked Questions
     (etc..)
```

Step 4. To read an article whose title interests you in "rn" simply type the article's number as shown in the column of numbers in the list above.

```
rn> What next? [^Nnpq]
user> 290
```

You'll then see the first page of the article you've requested. Each article begins with a header much like a standard e-mail header, and other header lines unique to USENET articles:

```
rn> Article 290 (19 more)       in news.announce.newusers (moderated):
rn> From:                       spaf@cs.purdue.EDU (Gene Spafford)
rn> Subject:                    Answers to Frequently Asked Questions
rn> Message-ID:                 <15398@ector.cs.purdue.edu>
rn> Date:                       25 Jul 91 23:15:55 GMT
rn> Organization:               Dept. of Computer Sciences, Purdue Univ.
rn> Lines:                      674
rn> Supersedes:                 <14694@ector.cs.purdue.edu>
rn> Original-from:              jerry@eagle.UUCP (Jerry Schwarz)
rn> [Most recent change:        23 Jul by spaf@cs.purdue.edu (G. Spafford)]
rn>
rn>                             Frequently Submitted Items
rn>
rn> This document discusses some questions and topics that occur
rn> repeatedly on USENET.  They frequently are submitted by new
rn> users, and result in many follow-ups, sometimes swamping groups
rn> for weeks.  The purpose of this note is to head off these
```

```
rn> annoying events by answering some questions and warning about
rn> the inevitable
rn> --MORE--(4%)
```

The article has now filled up the screen. In rn, you press the space bar, to see the next screenfull of the message.

```
user> <space bar>

rn> consequence of asking others. If you don't like these answers
rn> let spaf@cs.purdue.edu know.
rn>
rn> Note that some newsgroups have their own special "Frequent
rn> Questions & Answers" posting. You should read a group for a
rn> while before posting any questions, because the answers may
rn> already be present. Comp.unix.questions and comp.unix.internals
rn> are examples -- Steve Hayman regularly posts an article that
rn> answers common questions, including some of the ones asked here.
rn>
rn> This list is often referred to as FAQ -- the Frequently Asked
rn> Questions. If you are a new user of the USENET and don't find
rn> an answer to your questions here, you can try asking in the
rn> news.newusers.questions group.
rn> --MORE--(4%)
```

You now have several options, including displaying the next page of the article, saving it to a file on your computer, or leaving the article for another within the newsgroup. In rn, to save the file you type "s" or "w" followed by the name you want to give to the copy you're saving to your computer:

```
user> s news.announce.newusers.faq
rn>   (messages and prompts about saving the file)
rn>   End of article 290 (of 305)--what next? [^Nnpq]
```

To leave a newsgroup, you type another "q". You could go to another newsgroup by typing "g newsgroup.name". To leave "rn," you type a final "q". Exiting a newsgroup reader will return you to your computer's operating system.

FOR MORE INFORMATION ABOUT USENET

For Help Using An Already Installed Newsreader

Your best bet is to use help within the newsreader software you are using. More extensive help can usually be found in help files or man pages which should be installed on your computer. If you can't find an answer to your question by consulting with online, printed, or local user services help, you can post a message to a USENET newsgroup. Of course, this is assuming your problem is not inability to post a message! Be sure to include the name and version of the newsreader you are using, and what operating system you are working with. If you don't, you either won't get an answer, or someone will snipe at you. By way of fair warning, posted questions about using USENET software raises some net-people's hackles.

Published Book

Todinao, G. 1986. "Using UUCP and USENET: A Nutshell Handbook." O'Reilly and Associates, Newton, MA.

Online Information

USENET is a particularly well-documented Internet resource. There are hundreds of FAQ files and other introductory materials to help get you started. This chapter represents a distillation of many of the "periodic postings" maintained and posted by Gene Spafford (to "news.announce.newusers"). By subscribing to a number of introductory USENET newsgroups, you will gradually learn the folkways of the USENET community, and become familiar with the many ways in which USENET can be used.

Good Introductory USENET Newsgroups

news.announce.newusers
news.answers
news.newusers.questions

ADDENDUM 1: USENET NEWSREADING SOFTWARE PACKAGES AND SOURCE INFO

This list of FTP sources for newsreader software is meant to be representative, not comprehensive. Most all of these packages can be found on many sites not listed below. Some of the best FTP sites for single-stop shopping appear to be gatekeeper.dec.com, uunet.uu.net, and wuarchive.wustl.edu. All archive sites and directory locations listed in this NUSIRG were checked for accuracy in September 1991. The actual name of the file in the indicated directory may not precisely correspond to the common name of the program. Some programs are stored in multiple pieces which have to be reassembled locally, and many are stored in a compressed or archived format. For example, vnews for SUN/OS in alw.nih.gov is stored as "vnews-sun4.tar.Z". For a more comprehensive or current listing of archival sites containing USENET newsreader software, try using "Archie" (described in detail in Chapter 6 of NUSIRG).

Thanks to many USENET readers for helping me collect this information!

Operating System and Program Name	FTP site & directory or e-mail contact	Directory Path
Amiga		
ann	minnehaha.rhrk.uni-kl.de	pub/amiga/UUCP
arn	ab20.larc.nasa.gov	amiga/utilities/comm/Arn068.lzh
barn	uunet.uu.net	comp.sources.amiga/volume91/news
gnews	minnehaha.rhrk.uni-kl.de	pub/amiga/UUCP
vn	uunet.uu.net	comp.sources.amiga/volume91/news
Apple Mac		
HyperNeWS	tut.cis.ohio-state.edu	HyperNeWS
	uunet.uu.net	NeWS/HyperNeWS1.4

Netnews	bitsy.mit.edu	pub/news
	cricket.bio.indiana.edu	util/mac
NewsWatcher	earth.rs.itd.umich	mac/utilities/communications
TheNews	cricket.bio.indiana.edu	util/mac
	earth.rs.itd.umich.edu	mac/utilities/communications
uAccess	info@ice.com	contact e-mail address at left

MS-DOS

pcnews	wuarchive.wustl.edu	mirrors/msdos/lan
pcrrn	ames.arc.nasa.gov	pub/MSDOS/PCRRN
	tut.cis.ohio-state.edu	pcrrn
snuz	perelandra.cms.udel.edu	src/Net/snuz
	wuarchive.wustl.edu	usenet/comp.binaries.ibm.pc/ volume12/snuz
WinVN	clvax1.cl.msu.edu	winvn.zip

NeXT

next_nn	samba.acs.unc.edu	pub/news

UNIX

Gnews	apple.com	pub/ArchiveVol1/gnu
nn	wuarchive.wustl.edu	mirrors/unix-c/usenet
	uunet.uun.net	news/nn
nnotes	uxc.cso.uiuc.edu	pub/nnotes-1.4.tar.Z
notes	uxc.cso.uiuc.edu	usenet/notes
readnews	wuarchive.wustl.edu	usenet/comp.sources.unix/volume1
	uunet.uun.net	usenet/comp.sources.unix/volume1
rn	uunet.uu.net	news/rn
rrn	june.cs.washington.edu	news
tass	bode.ee.ualberta.ca	pub/unix.Z
	plains.nodak.edu	pub/alt/tass
tin	norisc!iain@estevax.uucp	send e-mail to user-id at left
trn	gatekeeper.dec.com	news/misc
	uunet.uu.net	news
vnews	wuarchive.wustl.edu	usenet/comp.sources.unix/volume1/ *
xrn	phloem.uoregon.edu	pub/src/x11
	uunet.uu.net	packages/X/contrib

VM/CMS

NetNews	listserv@psuvm.bitnet	see LISTSERV chapter for info on how to access LISTSERVers
nnr	nnrprod@mbvm.mitre.org	send e-mail to user-id at left

VMS

Anu-News	kuhub.cc.ukans.edu	ANU_V60-3
	uunet.uu.net	news/anu-news
Newsrdr	vms.ecs.rpi.edu	newsrdr/

vnews	arizona.edu uhunix2f.uhcc.hawaii.edu	software/vms/vnews pub/vms/vnews

Symbolics Lisp

news-reader	flash.bellcore.com	pub/lispm/news-reader

Chapter 8: LISTSERV Discussion Lists

WHAT IS LISTSERV?

LISTSERV is a computer program installed on computers in the BITNET network which manages "Discussion Groups" (or "lists") for people who have shared interests.

WHAT IS A LISTSERV DISCUSSION LIST?

"LISTSERV discussion lists" (or discussion groups) are topic-oriented forums distributed by e-mail, dealing with a wide variety of topics. Once you've subscribed to a LISTSERV discussion list, messages from other subscribers are automatically sent to your electronic mailbox.

To give you an idea of just how specific the topics can be, here are the subjects of 10 of the more than 2,000 currently active LISTSERV lists:

Albert Einstein's Writings
Apple-II Computer
Ecology and the Biosphere
Fly Fishing
Funny Jokes, Funny Stories
Human Genome Mapping
Japanese Language
Ocean Drilling
Robotics
Science Fiction

You might be the only person in your entire county who'd want to read a whole newspaper every day about robots or fly fishing. But there are many people in the world who are interested in robots or fly fishing, and many of them are already communicating daily about their interests with services like LISTSERV discussion lists.

No matter where you live, you can automatically receive messages from people who are subscribed to LISTSERV groups on topics that interest you.

WHAT IS A LISTSERVER?

A LISTSERVer is a copy of the LISTSERV program installed on computers on the BITNET network. Each LISTSERVer maintains subscription lists for a number of discussion groups.

HOW DOES LISTSERV WORK?

Any time you or someone else sends an e-mail message to the LISTSERVer which manages a discussion group, that LISTSERV program automatically distributes the message to every other subscriber. LISTSERV discussion groups make it easy for you to communicate with other people about a particular topic, without having to know their user-ids or e-mail addresses ahead of time.

The LISTSERV service is like an electronic newspaper, except every "article" is sent to you separately. Both LISTSERV discussion groups and newspapers contain news and articles concerning topics in which you are interested. Both allow you to contribute messages which are distributed to other subscribers.

Subscribing to a LISTSERV discussion group is also similar to subscribing to a newspaper, except that you and a LISTSERVer communicate with e-mail, instead of postal mail. You find out what lists are available and request subscription or cancellation by sending e-mail to a LISTSERVer. A LISTSERVer uses e-mail to handle subscription information and to distribute messages to and from subscribers.

A SHORT SUMMARY OF HOW TO USE LISTSERV FROM THE INTERNET

1. Get a catalog of LISTSERV discussion groups by sending e-mail to a LISTSERVer containing the message "list global."

mail:	listserv%bitnic.bitnet@cunyvm.cuny.edu
message:	list global

In a few minutes, the LISTSERVer will acknowledge your request and then send a copy of the "global list."

2. Read the "global list." Each line in this list has a list's name, the BITNET address of the LISTSERVer which manages that list, and a brief description of the list's discussion topic. Here are 5 lines from a global list.

Listname	Computer Address	Brief Description
AGRIC-L	AGRIC-L@UGA	Agriculture Discussion
ALF-L	ALF-L@YORKVM1	Academic Librarian's Forum
ALLMUSIC	ALLMUSIC@AUVM	Discussions on Music
ALTLEARN	ALTLEARN@SJUVM	Approaches to Learning
APPLE2-L	APPLE2-L@BROWNVM	Apple II List

3. Select a LISTSERV group to which you want to subscribe and send an e-mail subscription request.

***** IMPORTANT! *****

The addresses in the global list are BITNET addresses. Internet must communicate through one of several BITNET-Internet "gateways." Here's how it works:

BITNET address:	listserv@NODE
Gateway address:	listserv%NODE.bitnet@GATE.WAY.ADDRESS

where "NODE" is the BITNET address, and "GATE.WAY.ADDRESS" is one of the following BITNET-Internet gateways:

cornellc.cornell.cit.edu *or* cunyvm.cuny.edu *or* mitvma.mit.edu

For example, to subscribe to the AGRIC-L discussion group, use the following address and command string.

mail:	listserv%uga.bitnet@cunyvm.cuny.edu
message:	subscribe agric-l your-full-name

4. You will receive acknowledgement of your subscription, a basic introduction about LISTSERV services, and messages from other subscribers to the discussion group.

5. To send a message to the group, send mail to the group's name at its address (using a BITNET.Internet gateway).

mail	apple-2@brownvm.bitnet@mitvma.mit.edu
message	Whatever it is you want to send to the group!

A SUMMARY OF BASIC LISTSERV COMMANDS

LISTSERV is a computer program, so it only understands certain commands. Everything you "say" to a LISTSERVer in your e-mail messages has to fit a precise syntax.

Here's a summary of important commands that you can send to a LISTSERVer, presented in the order in which you are likely to need them. Every one of these commands is used by putting it as a single line message in e-mail to a LISTSERVer. The LISTSERVer sends a response to you by e-mail.

- To see what LISTSERV groups are available:

  list global

- To get a LISTSERV "reference card" summarizing all LISTSERV commands:

  get refcard

- To subscribe to a LISTSERV group:

  subscribe LISTNAME your-full-name

- To cancel a subscription to a LISTSERV group:

  unsubscribe LISTNAME your-full-name

- To get an index of archived files about a group stored on a LISTSERVer:

  index LISTNAME

- To get a particular file from the index list:

  get FILENAME FILETYPE

  For example, the list "apple-2 might have files called "apple-2 logYYMM" where "YY" is a year and "MM" is a month. In other words, "apple-2 log9109" would be the log of discussions in apple-2 for September 1991.

WHAT EVERYONE SHOULD KNOW BEFORE USING LISTSERV

LISTSERV is a BITNET Network Service

LISTSERV is one of the notable services of BITNET, a network devoted to networking of educational institutions. Although BITNET LISTSERVers are available on the Internet, use of LISTSERVer by non-BITNET users should be viewed as a special privilege, not a right. BITNET is supported by annual dues from member institutions, so if you are not at a BITNET member institution, someone else is paying for your use of LISTSERV.

Mail To the Discussion Group Is Sent To the List Name, Not to "LISTSERV"

All messages which you want other people in the discussion group to read should be addressed to the name of the list. For example

apple-2%NODE.bitnet@GATE.WAY.ADDRESS

where "NODE" is the BITNET address, and "GATE.WAY.ADDRESS" is the BITNET-Internet gateway of your choice.

All e-mail concerning subscriptions, LISTSERV help files, etc., should be addressed to the LISTSERVer:

listserv%NODE.bitnet@GATE.WAY.ADDRESS

In summary, "LISTSERV" is the user-id of a program which manages lists, and the list name is the user-id of the list which people read! Be sure you understand this difference.

This is probably the biggest source of confusion which beginner LISTSERV users encounter.

Many LISTSERV Groups Are Available Through "USENET"

Many of the more popular LISTSERV groups are available through USENET, which *is* an Internet service. For more information on USENET, and how to find out which LISTSERV groups are available, see Chapter 7 of NUSIRG.

There Are Many LISTSERVers Throughout The World

In step 1 of the previous example, you were shown how to send a message to a particular LISTSERVer, the LISTSERVer at the BITNET Network Information Center (BITNIC). Any listserv command can be sent to any computer which has the LISTSERV program. The "global list" contains the BITNET addresses of all computers which have LISTSERVers.

Many LISTSERVers Are Installed On Computers Which Are Part Of BITNET *And* The Internet

For example, the IBM 3090 at the University of Washington, "uwavm.u.washington.edu", is also directly connected to BITNET, and is known in the BITNET world as "uwavm". In such cases, you can send messages to a LISTSERVer directly without having to go through a gateway. For example, you can communicate with the LISTSERVers at UW with the following mail message:

mail: listserv@uwavm.u.washington.edu

LISTSERV Subscriptions Can Become Overwhelming

Unlike a newspaper, which is usually only delivered once a day, with all the articles in a single package, LISTSERV discussion groups send every article by itself to every subscriber of the discussion group. Some LISTSERV groups are very active, and can send 10's if not 100's of messages to your electronic mailbox every day.

If you've ever subscribed to two or more newspapers, you know how quickly last weeks and last months issues can pile up. Now imagine that instead of a single issue of each newspaper each day, you had to separately handle every single article from every newspaper every day!

This is one of the main drawbacks to the LISTSERV system. If you're subscribed to several LISTSERV discussion groups, and don't check you electronic mailbox for a couple of days, you might find several hundred mail files from LISTSERVers waiting for you. Reading all of these files, or even deleting them all, can take hours of your time. If you are using a small computer system, the impact on your computing and disk resources could be substantial, even disastrous.

FOR MORE INFORMATION ABOUT LISTSERV

The best sources of information about LISTSERV LISTSERVers and the people who subscribe to LISTSERV groups.

To get LISTSERV help files and other information, send one of the following commands to the LISTSERVer of your choice.

Command	What You Will Get
get info filelist	a list of all LISTSERV files on that LISTSERVer containing LISTSERV help
get tools filelist	a list of useful LISTSERV tools for the LISTSERV program (such as LISTDB which is a very powerful database program) for searching LISTSERV log files for information)
help	a brief list of LISTSERV commands
info refcard	an expanded list of LISTSERV commands

index	a list of all files stored on that LISTSERVer
list global	a list of all lists known to that LISTSERVer