Biomedical resources on Usenet

By Mari J. Stoddard, M.L.S.
Head of Educational Services

Jean L. Siebert, M.L.S.
Reference Librarian

Arizona Health Sciences Library
The University of Arizona
1501 North Campbell Avenue
Tucson, Arizona 85724

Usenet offers efficient access to health sciences information resources. The software for reading and searching Usenet includes filters that can eliminate irrelevant messages, sorts related items by topic, and allows users to reply to either the group or an individual. Usenet has more than 2,000 news groups on topics from back rubs to radiological imaging, and it provides information in various ways, including discussion groups and software distribution.

All information providers need access to varied, readily available resources and to experts who can supply information on request. Ideally, these resources should be available on a system that is easy to use and allows filtering. The ideal information system would be widely available, low cost or free to the user, and shared among novices and experts. Such a system already exists in the form of Usenet.

Usenet is a group of computer bulletin boards available on most Internet systems, many private electronic bulletin boards, and most UNIX computer networks. Usenet is a place to find information, jobs, or experts. Its format promotes discussion, provides rapid response to questions, and allows the exchange of graphics or computer programs.

Clinicians, scientists, and librarians are major users of Usenet. They participate in electronic discussion groups, called news groups, which address topics ranging from the light and amusing, such as "alt.drugs.caffeine," to the highly technical, such as "sci.med.telemedicine." Two unique news groups for librarians are only available through Usenet: comp.internet.library (announcements of new resources available over the Internet) and soc.libraries.talk (discussion of professional issues).

Most Usenet software has a user-friendly interface with menus on every screen that provide instructions [1]. Usenet's four major advantages over e-mail systems are

- the messages' appearance in the appropriate news group, not randomly mixed in with other mail;
- the ability to read messages by subject order;
- the ability to delete messages, before reading them, on topics that are irrelevant or irritating; and
- the use of communal disk space instead of limited personal disk space.

Table 1 compares Internet listservs with news groups; the two are similar in function but have important differences.

THE STRUCTURE OF USENET

News groups have hierarchical names, such as "bionet.molbio.methds-reagnts." Names start with the broadest subdivision, such as "bionet" (a group devoted to biology), followed by successively narrower ones, such as "molbio" (the molecular biology part of bionet), and then "methds-reagnts" (methods or tools and reagents or other supplies). Users subscribe to one or more individual news groups. Users seeking or providing information can send messages or replies to one or more news groups.

Usenet sites commonly carry the seven mainstream news group hierarchies, which are

- comp (computer systems, software, and security),
- news (Usenet news),
- rec (recreation, including topics such as hobbies, pets, and avocations),
- sci (scientific discussions),
- soc (social science and socializing),
- talk (semicivilized discussion and casual gossip), and
- misc (other topics).

A large number of alternative hierarchies also exist, which may or may not operate at every site [2]. The prominent alternative hierarchies are

- alt (anything a little off-the-wall),

Table 1
A comparison of Internet's listservs and Usenet's news groups

Feature	Listservs	News groups
Types of data	Text only	Text, image, software, and sound
Delivery method	Messages are posted to personal mailbox, so little effort is needed to participate. Uses personal space on computer systems.	Messages are posted to a central site; hence the reader must make an effort to retrieve items. Uses communal space for storage of messages.
Archiving	Common for one to six months, occasionally for years. Search mechanism is complex.	Rare but not unknown. Most sites keep articles for three days to three months. Easy to search.
Tone of articles	Rarely frivolous	Sometimes frivolous
Subscribe/unsubscribe	Precise and tedious; must know exact addresses and commands.	Simple; one or two one-letter commands
Ease of learning	Only one program must be learned, although additional listserv rules may be complicated.	A separate program must be learned to read Usenet; some programs are easier than others. Start-up is quite complicated.
Ease of use/features	Same as e-mail	Easy to use once started. Reader can delete messages before reading by topic and, in some cases, by name of poster. Reader can follow "threads" of articles on the same topic.
Number of groups	approximately 4,500	approximately 2,000
Number of health sciences groups	approximately 270	approximately 100

- bionet (mostly biology), and
- bit.listserv (echo of BITNET listservs).

The Usenet system administrators at each site make the decisions about which news groups to carry and how long to keep messages. They must be judicious in selecting news groups, because immense amounts of data are transferred daily and may overload local systems. Therefore, news group hierarchies of limited interest, such as bionet, may be dropped.

SPECIAL RESOURCES ON USENET

Approximately ninety news groups, from professional discussion groups to patient-oriented support groups, cover the health sciences. Some news groups have a moderator who reads every message before sending it on to Usenet. News groups in which the topic generates a high ratio of irrelevant messages, such as sci.med.aids [3], usually have moderators.

The sci news groups cover the research aspects of science, from evolution to dentistry. Some of these news groups, such as sci.psychology, are forums for the lay public rather than for professionals. Other interesting sci groups include

- sci.engr.biomed (measurement and imaging),
- sci.med (herbs, homeopathy, diets [primarily popular medicine]),
- sci.med.dentistry (philosophy, supply sources, and dental formulas),
- sci.med.nutrition (vegan diets, nutritional supplies, and career information), and
- sci.med.occupational (ergonomics, repetitive motion disorders, supplies).

The alt, misc, and talk groups focus on social issues and informal information exchange rather than professional communication. These hierarchies provide support groups, information on alternative medicine, uninhibited discussion of sexual issues, pop psychology, and information on personal health.

The alt hierarchy is highly eclectic. News groups include alt.image.medical for medical images and their transfer, storage, and creation; alt.recovery for individuals in twelve-step programs, such as Alcoholics Anonymous; and alt.food.sugar-cereals for discussion of cereals' flavor and food value.

Misc is the hierarchy with the fewest news groups. Misc.fitness covers diet, exercise, and lifestyle. Misc.handicap is an excellent source for opinions and information about devices that assist the disabled.

The talk hierarchy was established to provide a forum for debate. Talk.politics.medicine, which deals with politics and tabloid-style health news, has some very lively discussions.

More than forty news groups in the bionet hierarchy cover the biosciences. Bionet has been archived completely and can be retrieved via Wide Area Information Server (WAIS) from biosci.src at net.bio.net [4]. Associated listservs echo each news group. Europeans can subscribe to the listservs by sending an e-mail message listing the desired news groups to BIOSCI@DARESBURY.AC.UK. All others should write to David Kristofferson at BIOSCI @NET.BIO.NET.

Some bionet news groups, such as bionet.molbio.gdb and bionet.molbio.genbank, provide support for users of molecular biology databases. Others focus on biological software, laboratory techniques, and information theory. Examples of useful bionet news groups include

- bionet.announce (future conferences, new electronic discussion groups, software, jobs, and available and received grants),
- bionet.general (general biology, including *A Biol-*

ogist's Guide to the Internet, an extensive bibliography [5]),
- bionet.journals.contents (tables of contents for twenty-five Springer-Verlag journals as they are published),
- bionet.journals.note (specific articles and examinations of issues of journal cost, peer review, and slowness of publication),
- bionet.sci-resources (scientific funding agencies, including the full text of the National Institutes of Health guides to research and funding), and
- bionet.users.addresses (addresses for scientists).

USING USENET

The local computer center will know if a site has access to Usenet. Sites carry news reader software to help users select and read their chosen news groups from among the 1,500 to 2,500 carried at most sites. Because news groups may have fifty to one hundred messages posted per day, news reader software needs filtering and review features [6]. News reader software also may include features such as saving a copy of a message, replying to the news group or the individual who posted the message, following topic threads, filtering messages by keyword or field, and providing a list of new news groups as they are added at a site. Many sites carry two or more news reader programs, and readers may compare them for speed, ease of use, and convenience. The most common UNIX news readers are nn and rn; the most common VMS news readers are Vnews and Anews. The news reader must be configured to select the news groups to which the reader wishes to subscribe. Krol provides an excellent tutorial on configuring the nn news reader [7].

Individuals without access to the Internet can obtain Usenet from local electronic bulletin board systems that use Waffle or other software. Electronic bulletin board systems generally carry fewer news groups for shorter time periods than does a university computer center, because they are run on personal computers instead of mainframes. Computer clubs and computer stores are the best resources for finding these systems.

Help is available electronically as well as from books [8–9]. Most news reader software programs have online, context-sensitive "help" screens. Computer centers and libraries offer classes and telephone assistance. Individual news groups post monthly answers to frequently asked questions (FAQs), such as the Usenet FAQ. These FAQs orient newcomers to a group's common knowledge and vocabulary. Some news groups, such as news.newusers.questions and news.announce.newusers, are devoted to answering the questions of novice users, and all FAQs are posted to these news groups [10]. FAQs also are archived for file transfer protocol (ftp) retrieval at rtfm.mit.edu in /pub/usenet/news.answers/ [11]. FAQs such as the "typing-injury-faq" from sci.med can be used to answer reference questions. Finally, users who read news groups are usually helpful to new users.

CONCLUSIONS

Usenet is an increasingly valuable information and consultation resource for the health sciences, covering a range of topics and materials. News reader software automatically allows the reader to delete unwanted topics and follow interesting ones, thereby facilitating the evaluation of messages. The ready access to Usenet makes it attractive beyond academic settings, allowing isolated health care practitioners and information providers to participate in discussions.

REFERENCES

1. NOTESS GR. Usenet: taming the e-mail flood. Online 1993 Jul;17(4):86–8.
2. KROL E. The whole Internet: user's guide and catalog. Sebastopol, CA: O'Reilly & Associates, 1992.
3. NICKERSON G. Usenet. Comput Libr 1992 Apr;12(4):31–4.
4. KRISTOFFERSON D. BIOSCI/bionet frequently asked questions. [computer file]. Available via ftp from net.bio.net:/pub/BIOSCI/doc/biosci.FAQ. December 3, 1993.
5. SMITH U. A biologist's guide to the Internet. [computer file]. Available via ftp from rtfm.mit.edu:/pub/usenet/answers/biology/guide. November 12, 1993.
6. SMITH, op. cit.
7. KROL, op. cit.
8. KROL, op. cit.
9. TENNANT R. Crossing the Internet threshold. San Carlos, CA: Library Solutions Press, 1993:21–4.
10. NICKERSON G. Effective use of Usenet. Comput Libr 1992 May;12(5):38–40.
11. KAMENS J. Welcome to news.newusers.questions! (weekly posting). [computer file]. Available via ftp from rtfm.mit.edu:/pub/usenet/news.answers/news-newusers-intro. April 23, 1994.

Received November 1993; accepted May 1994