## How to Read the Network News

Mark R. Horton AT&T Bell Laboratories Columbus, OH 43213

Revised by Rick Adams for 2.10.3

#### What is the Network News?

USENET (Users' Network) is a bulletin board shared among many computer systems around the world. USENET is a logical network, sitting on top of several physical networks, among them *UUCP*, *BLICN*, *BERKNET*, *X.25*, and the *ARPANET*. Sites on USENET include many universities, private companies and research organizations. Most of the members of USENET are either university computer science departments or part of AT&T. Currently, there are over 2000 USENET sites in the USA, Canada, Europe, Japan and Korea with more joining every day. Most are running the UNIX† operating system.

The network news, or simply *netnews*, is the set of programs that provide access to the news and transfer it from one machine to the next. Netnews was originally written at Duke University and has been modified extensively by the University of California at Berkeley and others. Netnews allows articles to be posted for limited or very wide distribution. This document contains a list of newsgroups that were active at the time the document was written. It exists to assist you in determining which newsgroups you may want to subscribe to. When creating a new article, the level of distribution can be controlled by use of the "Distribution" field. This will prevent notices of apartments for rent in New Jersey being broadcast to California (or even Europe).

Any user can post an article, which will be sent out to the network to be read by persons interested in that topic. You can specify which topics are of interest to you by putting them in a *subscription list*. Then, whenever you ask to read news, the news reading program will present all unread articles of interest. There are also facilities for browsing through old news, posting follow-up articles, and sending direct electronic mail replies to the author of an article.

This paper is a tutorial, aimed at the user who wants to read and possibly post news. The system administrator who must install the software should see the companion document *USENET Version B Installation*.

#### Why USENET?

USENET is useful in a number of ways. Someone wishing to announce a new program or product can reach a wide audience. A user can ask "Does anyone have an x?" and will usually get several responses within a day or two. Bug reports and their fixes can be made quickly available without the usual overhead of sending out mass mailings. Discussions involving many people at different locations can take place without having to get everyone together.

Another facility with similar capabilities to *netnews* is the *electronic mailing list*. A mailing list is a collection of electronic mailing addresses of users who are interested in a particular topic. By sending electronic mail to the list, all users on the list receive a copy of the article. While the mailing list facility is quite useful, USENET offers a number of advantages not present in mailing lists. Getting yourself on a mailing list is not always easy. You have to figure out who maintains the list and ask them to put you on it. Often these people are out of town or busy, and

<sup>&</sup>lt;sup>†</sup>UNIX is a trademark of AT&T Bell Laboratories.

don't put you on the list for several days. Sometimes you have to send mail to the entire mailing list, hoping that one of the readers will tell you who maintains the list. Once you are on the list, you often find yourself in the middle of a discussion. Netnews keeps old articles around until they expire (usually about two weeks) so you can browse through old news to catch up on what you missed. Similarly, referring to an old article is easy, without having to keep a personal file of all old mail to the list.

Another advantage is appreciated by the other users of the system. There is less overhead in having only one copy of each message sent to each machine, rather than having separate copies sent to each of several users on the same machine. This cuts down on computer time to process the messages, and on-line costs for telephone calls to transfer messages from one machine to another (when phone lines are used). Another advantage is in the disk space consumed. When only one message is sent to each system, only one copy of the message is kept on disk. In a mailing list environment, each user has a copy in a mailbox.

# How do I Read News?

In the USENET jargon, interest topics are called *newsgroups*. A newsgroup list appears in a later section, current as this paper was written. You have your own *subscription list* of newsgroups to which you are said to *subscripte*.

The simplest way to read news is to type the command:

## readnews

Other possibilities include: a full-screen-oriented news reading program, vnews(1), (described in the Appendix) and the *notesfile* system, which can also be used for news (described in a separate paper.) Each newsgroup to which you subscribe will be presented, one article at a time. As each article is presented, you will be shown the *header* (containing the name of the author, the subject, and the length of the article) and you will be asked if you want more. There are a number of possible choices you can make at this point. The three most common (**y**, **n**, and **q**) are suggested by the program. (To see a complete list of possible responses, type ? for help.) You can type **y** for "yes" (or simply hit <**RETURN>**) and the rest of the message will be displayed. (If the message is long, it may stop before it runs off the top of the screen. Type <**SPACE>** or <**RETURN>** to see more of the message. Another choice you can make is **n** for "no". This means you are not interested in the message – it will not be offered to you again. A third option is **q** for "quit". This causes a record to be made of which articles you read (or refused) and you will exit netnews. When you have read all the news, this happens automatically. The **q** command is mainly useful if you are in a hurry and don't have time to read all the news right now. (Many users put a *readnews*(1) or *checknews*(1) command in their *.profile* or *.login* files so that they will see new news each time they log in.)

If you are reading news for the first time, you may find yourself swamped by the volume of unread news, especially if the default subscription is **all**. Don't let this bother you. If you are getting newsgroups in which you have no interest, you can change your subscription list (see below). Also, bear in mind that what you see is probably at least two weeks' accumulation of news. If you want to just get rid of all old news and start anew, type

## readnews -p -n all > /dev/null &

which will throw away all old news, recording that you have seen it all. (The & puts it in the background; chances are that there is so much old news on your machine that you won't want to wait for it all.) Or, you can use the **K** command to mark all articles in the current newsgroup as read.

Once you catch up with (or ignore) all the old news, the news will come in daily at a more manageable rate. (If the daily rate is still too much you may wish to unsubscribe to some of the higher volume, less useful news-groups.) Finally, note that while an article is printing, you can hit your interrupt character (usually **<CONTROL-C>** or **<DELETE>**), which will throw away the rest of the article.

Among the other commands you can type after seeing the header of an article are:

- **x** Exit *readnews*. This is different from **q** in that the **q** command will update the record of which articles you have read, but **x** will pretend you never started *readnews*.
- **N** Go on to the next newsgroup. The remaining articles in the current newsgroup are considered *unread*, and will be offered to you again the next time you read news.
- **s** *file* The article is saved in a disk file with the given name. In practice, what usually happens is that an article is printed, and then *readnews* goes on to print the header of the next article before you get a

chance to type anything. So you usually want to write out the *previous* message (the last one you have read in full); in this case, use the form s-*filename*.

- e Erase the memory of having seen this article. It will be offered to you again next time, as though you had never seen it. The e- case variation (erase memory of the previously read article instead of the current article) is useful for checking follow-ups to see if anyone has already said what you wanted to say.
- **r** Reply to the author of the message. You will be placed in the editor, with a set of headers derived from the message you are replying to. Type in your message after the blank line. If you wish to edit the header list to add more recipients or send carbon copies, for instance, you can edit the header lines. Anyone listed on a line beginning with "To" or "Cc" will receive a copy of your reply. Note that the path used to receive a piece of news may not be the fastest way to reply by mail. If speed is important and you know a faster way, edit it in place of what the reply command supplied. A mail command will then be started up, addressed to the persons listed in the header. You are then returned to *readnews*. The case  $\mathbf{r}$  is also useful to reply to the previous message. Another variation on this is  $\mathbf{rd}$  which puts you in **\$MAILER** (or *mail*(1) by default) to type in your reply directly.
- **f** Post a follow-up message to the same newsgroup. This posts an article on this newsgroup with the same title as the original article. Use common sense when posting follow-ups. (Read Matt Bishop's paper "How to use USENET Effectively" for extended discussion of when and when not to post -- many follow-up articles should have just been replies.) You will be placed in the editor. Enter your message and exit. The case f- is also useful to follow up the previous message. In each case, the editor you are placed in will be vi(1) unless you set **EDITOR** (in your environment) to some other editor. You should enter the text of the follow-up after the blank line.
- + The article is skipped for now. The next time you read news, you will be offered this article again.
- Go back to the previous article. This toggles, so that two –'s get you the current article.
- **b** Back up one article in the current group. This is not necessarily the previous article.
- U Unsubscribe from this newsgroup. Your *.newsrc*(5) file will be edited to change the : for that newsgroup to an ! preventing you from being shown that newsgroup again.
- ? If you type any unrecognized command, a summary of valid commands will be printed.

#### Changing your Subscription List

If you take no special action you will subscribe to a default subscription list. This default varies locally. To find out your local default, type

#### readnews -s

Typically this list will include all newsgroups ending in "general", such as **general**, and **net.general**. (As distributed, the default is **general**,**all.general**. Another popular default is **all**.) You can change this by creating a file in your home directory named *.newsrc* which contains as its first line a line of the form:

#### options -n newsgroup, newsgroup, newsgroup ...

If your lines get too long, you can continue them on subsequent lines by beginning those lines with a space. (The netnews system will put extra lines in this file to record which articles you have read. You should ignore these lines unless you want to edit them.) For example, if you are creating a subscription list for the first time, and have already read news, you will find some text already in your *.newsrc* file, recording which articles you have read. You should put your **options** line before the first line of the file.) Thus,

options -n general, net.general, mod.human-nets

will subscribe to those three newsgroups.

An ! can be used to exclude certain newsgroups and the word **all** can be used as a wild card, representing any newsgroup. You can also use **all** as a prefix or suffix to match a class of newsgroups. For example,

options -n all, !mod.all, !net.jokes, !all.unix-all

will result in a subscription to all newsgroups except for ARPANET news, jokes, and any UNIX information. The metacharacter . is like / to the shell, and **all** is like \*.

A simpler way to subscribe to news is to subscribe to **all**, and then use the **U** *readnews* command to unsubscribe to newsgroups you don't want to read. This way you will see new newsgroups that are created, get a chance to evaluate them, and then unsubscribe to those that don't interest you.

The order of the newsgroups in your *.newsrc* (after the options line) is the order in which newsgroups will be shown. If you want something other than the default, move the lines around until you are satisfied with the order. Be careful to keep the options line as the first line in the file.

#### **Submitting Articles**

To submit a new news article type

#### postnews

First, it will ask you if this is a follow-up to an article. Answer **yes** or **no**. If **yes**, you really should have done an **f** from *readnews*, but it will try and figure out which article you are following up to. It will ask for the newsgroup in which you read the article and the article number. If you can't remember, go back to *readnews* and find out. It is important that discussions are kept together. It is very frustrating for someone to read a follow-up that says: "I agree. It's very dangerous to leave that program as distributed." and not have any idea what the poster was referring to.

If you answer **no**, *postnews*(1) will ask you for the subject of the new article. This should be as informative as possible. For example, "'67 Porsche for sale in New Jersey" is much better than "Car for sale" or even "For sale". It will then ask which newsgroups you want the article posted in. If you are unsure, type **?** instead of a specific newsgroup and it will show you the list of currently available groups. Then, you will be asked how far your article should be distributed. It is important to keep this as small as possible to accomplish the purpose of your article. Remember that many newsgroups are read in Europe, Australia, and Asia in addition to the United States and Canada. It does no good (to use the previous example) to post a "Car for sale in New Jersey" article with a distribution of **world**. There is almost no chance that a person in Sweden or Korea would be interested in buying your car (even if it is a Porsche). It is a waste of money and computer resources to transmit the article that far. For this specific case, the appropriate distribution would be **nj** or only in New Jersey. If there were no local distribution available, at least it should be confined to **usa**. If you are unsure of the distributions available at your site, type **?** instead of a distribution and you will receive a list of distributions valid for your site. If the distribution is **world**, your article will be read (perhaps with disgust) by thousands of people around the world.

Then you will be placed in the editor. Enter the text of your article, after the blank line, and exit the editor. The article will be posted to the newsgroups specified. If you change your mind about the headers while you are still in the editor, you can edit them as well. Extra headers can also be added before the blank line.

#### **Browsing through Old News**

There are a number of command line options to the *readnews* command to help you find an old article you want to see again. The  $-\mathbf{n}$  newsgroups option restricts your search to certain newsgroups. The  $-\mathbf{x}$  option arranges to ignore the record of articles read, which is kept in your *.newsrc* file. This will cause all articles in all newsgroups to which you subscribe to be displayed, even those which you have already seen. It also causes *readnews* to not update the *.newsrc* file. The  $-\mathbf{a}$  date option asks for news received after the given date. Note that even with the  $-\mathbf{a}$  option, only articles you have not already seen will be printed, unless you combine it with the  $-\mathbf{x}$  option. (Articles are kept on file until they expire, typically after two weeks.) The  $-\mathbf{t}$  keywords option restricts the query to articles mentioning one of the keywords in the title of the article. Thus, the command

readnews -n net.unix -x -a last thursday -t setuid

asks for all articles in newsgroup **net.unix** since last Thursday about the setuid feature. (Be careful with the -t option. The above example will not find articles about "suid", nor will it find articles with no title or whose author did not use the word "setuid" in the title.)

Other useful options include the -l option (which lists only the headers of articles – a useful form for browsing through lots of messages.) The -p option prints the messages without asking for any input; this is similar to some older news programs on many UNIX systems and is useful for directing output to a printer. The  $-\mathbf{r}$  option produces articles in reverse order, from newest to oldest.

#### **User Interfaces**

The *user interface* of a program is the view it presents to the user, that is, what it prints and what it allows you to type. *Readnews* has options allowing you to use different user interfaces. The interface described above is called the "msgs" interface because it mimics the style of the Berkeley msgs(1) program. (This program, in turn, mimics a program at MIT of the same name.) The key element of the msgs interface is that after printing the header, you are asked if you want the rest of the message.

Another interface is available with the -c option. In this case, the entire message is printed, header and body, and you are prompted at the end of the message. The command options are the same as the msgs interface, but it is usually not necessary to use the – suffix on the **r**, **s**, or **f** commands. This interface is called the "/bin/mail" (pronounced "bin mail") interface, because it mimics the UNIX program of that name.

A third interface is the Mail(1) (pronounced "cap mail") interface, available with the  $-\mathbf{M}$  option. This invokes the *Mail* program directly, and allows you to read news with the same commands as you read mail. (This interface may not work on your system – it requires a special version of *Mail* with a  $-\mathbf{T}$  option.)

A fourth interface, is the MH news/mail program from Rand. That program can be used directly to read network news.

A fifth interface, *vnews*, which works well on display terminals, is described in the Appendix.

A sixth possibility is the notesfile system, described in a separate paper. It is also display-oriented.

A seventh possibility is to use your favorite mail system as an interface. There are a number of different mail reading programs, including */bin/mail*(1), *Mail*, *msg*(1), and MH. Any mail system with an option to specify an alternative mailbox can be used to read news. For example, to use *Mail* without the  $-\mathbf{M}$  option, type

#### readnews -c "Mail -f %"

The shell command in quotes is invoked as a child of *readnews*. The  $-\mathbf{f}$  option to *Mail* names the alternative mailbox. *Readnews* will put the news in a temporary file, and give the name of this file to the mailer in place of the %. There is an important difference when using this kind of interface. The mailers do not give any indication of which articles you read and which ones you skipped. *Readnews* will assume you read *all* the articles, even if you didn't, and mark them all read. By contrast, the  $-\mathbf{M}$  option uses the  $-\mathbf{T}$  option to *Mail*, asking *Mail* to tell *readnews* which articles you read.

## Getting News when you Log In

Most users like to be told when they first log in if there is any news. This way they are reminded of news, but are not interrupted by it during the day. If you log in once in the morning, you can think of getting the news as reading the morning newspaper. It is common to put a *checknews* or *readnews* command in your *.profile* or *.login* file of commands that are executed when you log in.

Since there might not be any news, and since the *readnews* command goes to a considerable amount of work to find all unread news (assuming you are going to read it), there is another command, called *checknews*, which tells you if there is any news. The *checknews* command is smaller and faster than *readnews*, and was designed especially for a login file. There are also options to be silent if there is (or is not) news, and to start up *readnews* automatically if there is news.

The options to checknews are:

- -y Print "There is news" if there is any unread news.
- -v If -y is also given, instead of printing "There is news", prints "News: *newsgroup* ..." giving the name of the first newsgroup containing unread news. If general is the first newsgroup presented, this can be used to tell users whether the unread news is important.
- -**n** Print "No news" if there is no unread news.
- $-\mathbf{e}$  If there is any unread news, start up *readnews*. Any additional arguments after the  $-\mathbf{e}$  will be passed to readnews.

Thus,

#### checknews -yn

tells you whether there is any unread news.

checknews -e -M

starts up readnews with the Mail interface if there is news, and otherwise does nothing.

#### checknews -y

tells you if there is news, and is silent if there is no news.

#### Creating New Newsgroups

New newsgroups are proposed by the users and created by site administrators. To create a newsgroup, first make sure this is the right thing to do. Normally a suggestion is first posted to **net.news.group,net.relatedgroup** for a net newsgroup (**net.relatedgroup** should be the group which you are proposing to subdivide.) For example, to propose creating **net.tv.soaps**, post the original article to **net.tv.net.news.group**). Followups are made to **net.news.group** only. (You can force this by putting the line:

Followup-To: net.news.group

in the headers of your original posting). If it is established that there is general interest in such a group, and a name is agreed on, then ask your local netnews administrator to create the newsgroup. (It can actually be created by any netnews administrator anywhere on the net, within the scope of the newsgroup.) Once the newsgroup is created and the first article has been posted, the newsgroup is available for all interested persons to post to.

#### List of Newsgroups

This section lists the newsgroups that are currently active. It is intended to help you decide what you want to subscribe to. Note that the list is constantly changing. Note also that this list only describes those groups available on a network-wide basis. Since not all installations choose to receive all newsgroups, it is recommended that each installation edit the list of local newsgroups to be correct before distributing this document to their users. If this is not possible, a local appendix can be created.

#### Local

Local groups are kept on the current machine only. Local names can be identified by the lack of a prefix, that is, there are no periods in local newsgroup names.

general News to be read by everyone on the local machine. For example: "The system will be down Monday morning for PM." Or, "A new version of program *x* has been installed." This newsgroup is usually mandatory – you are required to subscribe to this newsgroup. (The list of mandatory newsgroups varies locally.) This requirement assures that important announcements reach all users. (Formerly *msgs*.)

#### **Network Wide**

These are the groups as of the last editing of this manual. The list is undoubtably already out of date. A current list can be obtained by typing ? to the "Newsgroups?" prompt in postnews.

net.abortion	All sorts of discussions on abortion.
net.ai	Artificial intelligence discussions.
net.analog	Analog design developments, ideas, and components.
net.announce	Moderated, general announcements of interest to all.
net.announce.newusers	Moderated, explanatory postings for new users.
net.announce.arpa-internet	Announcements from the Arpa world.
net.arch	Computer architecture.
net.astro	Astronomy discussions and information.
net.astro.expert	Discussion by experts in astronomy.
net.audio	High fidelity audio.
net.auto	Automobiles, automotive products and laws.
net.auto.tech	Technical aspects of automobiles, et. al.

net.aviation net.bicycle net.bio net.books net.bugs net.bugs.2bsd net.bugs.4bsd net.bugs.usg net.bugs.uucp net.bugs.v7 net.cog-eng net.college net.columbia net.comics net.consumers net.cooks net.crypt net.cse net.cycle net.database net.dcom net.decus net.emacs net.eunice net.followup net.games net.games.board net.games.chess net.games.emp net.games.frp net.games.go net.games.hack net.games.pbm net.games.rogue net.games.trivia net.games.video net.garden net.general net.graphics net.ham-radio net.ham-radio.packet net.info-terms net.internat net.invest net.jobs net.jokes net.jokes.d net.kids net.lan net.lang net.lang.ada net.lang.apl net.lang.c

Aviation rules, means, and methods. Bicycles, related products and laws. Biology and related sciences. Books of all genres, shapes, and sizes. General bug reports and fixes. Reports of UNIX\* version 2BSD related bugs. Reports of UNIX version 4BSD related bugs. Reports of USG (System III, V, etc.) bugs. Reports of UUCP related bugs. Reports of UNIX V7 related bugs. Cognitive engineering. College, college activities, campus life, etc. The space shuttle and the STS program. The funnies, old and new. Consumer interests, product reviews, etc. Food, cooking, cookbooks, and recipes. Different methods of data en/decryption. Computer science education. Motorcycles and related products and laws. Database and data management issues and theory. Data communications hardware and software. DEC\* Users' Society newsgroup. EMACS editors of different flavors. The SRI Eunice system. Followups to articles in net.general. Games and computer games. Discussion and hints on board games. Chess & computer chess. Discussion and hints about Empire. Discussion about Fantasy Role Playing games. Discussion about Go. Discussion, hints, etc. about the Hack game. Discussion about Play by Mail games. Discussion and hints about Rogue. Discussion about trivia. Discussion about video games. Gardening, methods and results. \*Important\* and timely announcements of interest to all. Computer graphics, art, animation, image processing. Amateur Radio practices, contests, events, rules, etc. Discussion about packet radio setups. All sorts of terminals. Discussion about international standards Investments and the handling of money. Job announcements, requests, etc. Jokes and the like. May be somewhat offensive. Discussions on the content of net.jokes articles Children, their behavior and activities. Local area network hardware and software. Different computer languages. Discussion about Ada\*. Discussion about APL. Discussion about C.

net.lang.f77 net.lang.forth net.lang.lisp net.lang.mod2 net.lang.pascal net.lang.prolog net.lang.st80 net.legal net.lsi net.mag net.mail net.mail.headers net.math net.math.stat net.math.symbolic net.med net.micro net.micro.16k net.micro.6809 net.micro.68k net.micro.apple net.micro.amiga net.micro.atari net.micro.att net.micro.cbm net.micro.cpm net.micro.hp net.micro.mac net.micro.pc net.micro.ti net.micro.trs-80 net.misc net.motss net.movies net.music net.music.classical net.music.folk net.music.gdead net.music.synth net.net-people net.news net.news.adm net.news.b net.news.config net.news.group net.news.newsite net.news.notes net.news.sa net.news.stargate net.nlang net.nlang.africa net.nlang.celts net.nlang.greek

Discussion about FORTRAN. Discussion about Forth. Discussion about LISP. Discussion about Modula-2. Discussion about Pascal. Discussion about PROLOG. Discussion about Smalltalk 80. Legalities and the ethics of law. Large scale integrated circuits. Magazine summaries, tables of contents, etc. Proposed new mail/network standards. Gatewayed from the ARPA header-people list. Mathematical discussions and puzzles. Statistics discussion. Symbolic algebra discussion. Medicine and its related products and regulations. Micro computers of all kinds. National Semiconductor 32000 series chips Discussion about 6809's. Discussion about 68k's. Discussion about Apple micros. Talk about the new Amiga micro. Discussion about Atari micros. Discussions about AT&T microcomputers. Discussion about Commodore micros. Discussion about the CP/M operating system. Discussion about Hewlett/Packard's. Material about the Apple Macintosh & Lisa. Discussion about IBM personal computers. Discussion about Texas Instruments. Discussion about TRS-80's. Various discussions too short-lived for other groups. Issues pertaining to homosexuality. Reviews and discussions of movies. Music lovers' group. Discussion about classical music. Folks discussing folk music of various sorts. A group for (Grateful) Dead-heads. Synthesizers and computer music. Announcements, requests, etc. about people on the net. Discussions of USENET itself. Comments directed to news administrators. Discussion about B news software. Postings of system down times and interruptions. Discussions and lists of newsgroups Postings of new site announcements. Notesfile software from the Univ. of Illinois. Comments directed to system administrators. Discussion about satellite transmission of news. Natural languages, cultures, heritages, etc. Discussions about Africa & things African. Group about Celtics. Group about Greeks.

net.nlang.india net.origins net.periphs net.pets net.philosophy net.physics net.poems net.politics net.politics.theory net.puzzle net.railroad net.rec net.rec.birds net.rec.boat net.rec.bridge net.rec.nude net.rec.photo net.rec.scuba net.rec.ski net.rec.skydive net.rec.wood net.religion net.religion.christian net.religion.jewish net.research net.roots net.rumor net sci net.sf-lovers net.singles net.social net.sources net.sources.bugs net.sources.games net.sources.mac net.space net.sport net.sport.baseball net.sport.football net.sport.hockey net.sport.hoops net.startrek net.suicide net.taxes net.test net.text net.travel net.tv net.tv.drwho net.tv.soaps net.unix net.unix-wizards net.usenix

Group for discussion about India & things Indian Evolution versus creationism (sometimes hot!). Peripheral devices. Pets, pet care, and household animals in general. Philosophical discussions. Physical laws, properties, etc. For the posting of poems. Political discussions. Could get hot. Theory of politics and political systems. Puzzles, problems, and quizzes. Real and model train fans' newsgroup. Recreational/participant sports. Hobbyists interested in bird watching. Hobbyists interested in boating. Hobbyists interested in bridge. Hobbyists interested in naturist/nudist activities. Hobbyists interested in photography. Hobbyists interested in SCUBA diving. Hobbyists interested in skiing. Hobbyists interested in skydiving. Hobbyists interested in woodworking. Religious, ethical, and moral implications of actions. Discussion about form and nature of Christianity Information and discussion about Judaism. Research and computer research. Genealogical matters. For the posting of rumors. General purpose scientific discussions. Science fiction lovers' newsgroup. Newsgroup for single people, their activities, etc. Like net.singles, but for everyone. For the posting of software packages & documentation. For bug fixes and features discussion. Postings of recreational software. Software for the Apple Macintosh. Space, space programs, space related research, etc. Spectator sports. Discussion about baseball. Discussion about football. Discussion about hockey. Discussion about basketball. Star Trek, the TV show and the movies. Suicide, laws, ethics, and its causes and effects (!). Tax laws and advice. For testing of network software. Very boring. Text processing. Traveling all over the world. The boob tube, its history, and past and current shows. Discussion about Dr. Who. Postings about soap operas. UNIX neophytes group. Discussions, bug reports, and fixes on and for UNIX. USENIX Association events and announcements.

net.veg net.video net.wanted net.wanted.sources net.wines net.wobegon net.women net.works mod.ai mod.compilers mod.computers mod.computers.apollo mod.computers.ibm-pc mod.computers.laser-printers mod.computers.macintosh mod.computers.pyramid mod.computers.ridge mod.computers.sequent mod.computers.sun mod.computers.vax mod.computers.workstations mod.graphics mod.human-nets mod.legal mod.map mod.motss mod.movies mod.music mod.newprod mod.newslists mod.os mod.os.os9 mod.os.unix mod.politics mod.politics.arms-d mod.protocols mod.protocols.appletalk mod.protocols.kermit mod.protocols.tcp-ip mod.rec mod.rec.guns mod.recipes mod.risks mod.sources mod.sources.doc mod.std mod.std.c mod.std.mumps mod.std.unix mod.techreports mod.telecom mod.test mod.vlsi

Vegetarians. Video and video components. Requests for things that are needed. Requests for software, termcap entries, etc. Wines and spirits. "A Prairie Home Companion" radio show discussion. Women's rights, discrimination, etc. Assorted workstations. Discussions about Artificial Intelligence Discussion about compiler construction, theory, etc. Discussion about various computers and related. Apollo computer systems. The IBM PC, PC-XT, and PC-AT. Laser printers, hardware and software. Apple Macintosh micros. Pyramid 90x computers. Ridge 32 computers and ROS. Sequent systems, (esp. Balance 8000). Sun "workstation" computers DEC's VAX\* line of computers & VMS. Various workstation-type computers. Graphics software, hardware, theory, etc. Computer aided communications digest. Discussions of computers and the law. Various maps, including UUCP maps. Moderated newsgroup on gay issues and topics. Moderated reviews and discussion of movies. Moderated reviews and discussion of things musical. Announcements of new products of interest to readers. Postings of news-related statistics and lists. Disussions about operating systems and related areas. Discussions about the os9 operating system. Moderated discussion of Unix\* features and bugs. Discussions on political problems, systems, solutions. Arms discussion digest. Various forms and types of FTP protocol discussions. Applebus hardware & software discussion. Information about the Kermit package. TCP and IP network protocols. Discussions on pastimes (not currently active). Discussions about firearms. A "distributed cookbook" of screened recipes. Risks to the public from computers & users. Moderated postings of public-domain sources. Archived public-domain documentation. Moderated discussion about various standards. Discussion about C language standards. Discussion for the X11.1 committee on Mumps. Discussion for the P1003 committee on Unix. Announcements and lists of technical reports. Telecommunications digest. Testing of moderated newsgroups -- no moderator. Very large scale integrated circuits.

## Appendix – How to use vnews

### Overview

*Vnews* is a program for reading USENET news. It is based on *readnews* but has a CRT-oriented (full screen) user interface. The command line options are identical. The list of available commands is quite similar, although since *vnews* is a *visual* interface, most *vnews* commands do not have to be terminated by a newline.

*Vnews* uses all but the last two lines of the screen to display the current article. The next to the last line is the secondary prompt line, and is used to input string arguments to commands. The last line contains several fields. The first field is the prompt field. If *vnews* is at the end of an article, the prompt is "next?"; otherwise the prompt is "more?". The second field is the newsgroup field, which displays the current newsgroup, the number of the current article, and the number of the last article in the newsgroup. The third field contains the current time, and the last field contains the word "mail" if you have mail. When you receive new mail, the bell on the terminal is rung and the word "MAIL" appears in capital letters for 30 seconds.

## Commands

Most of the *readnews* commands have *vnews* counterparts and vice versa. Some differences are:

- It lacks a "digest" command (to deal specially with collections of articles bundled together). This would be nice to have, but it does not seem to be a major deficiency since you can move around in the digest with *vnews* commands.
- To get to the previous group, use the **N** command with a argument.
- *Vnews* has commands for moving around in the article which *readnews* does not have since they aren't applicable.
- It has a "parent" command which will go to the article that the current article is a follow-up to, and a "write" command that writes out the body of an article without the header.
- You can refer to the current article from the shell or while writing a follow-up as **\$A**.
- The "decrypt" command (for decoding possibly offensive material) always does *rot13* which seems to be the default standard but the *readnews* version of it occasionally gets confused.

#### Commands that differ from *readnews*

Each *vnews* command may be preceded by a *count*. Some commands use the count; others ignore it. If *count* is omitted, it defaults to one. Some commands prompt for an argument on the second line from the bottom of the screen. Standard UNIX erase and kill processing is done on this argument. The argument is terminated by a return. An interrupt (**<DELETE>** or **<BREAK>**) gets you out of any partially entered command.

<CR> A carriage return prints more of the current article, or goes on to the next article if you are at the end of the current article. A <SPACE> is equivalent to <CR>.

## <CONTROL-B>

Go backwards count pages.

#### <CONTROL-F>

Go forward count pages.

#### <CONTROL-D>

Go forwards half a page.

# <CONTROL-U>

Go backwards half a page.

## <CONTROL-N>

Go forwards *count* lines.

#### <CONTROL-Z>

Go backwards *count* lines.

#### <CONTROL-L>

Redraw the screen. <CONTROL-L> may be typed at any time.

- **b** Back up one article in the current group.
- **I** Redisplay the article after you have sent a follow-up or reply.
- **n** Move on to the next item in a digest. "." is equivalent to **n**. This is convenient if your terminal has a keypad.
- p Show the parent article (the article that the current article is a follow-up to). This doesn't work if the current article was posted by A-news or notesfiles. To switch between the current and parent articles, use the command. Unfortunately, if you use several p commands to trace the discussion back further, there is no command to return to the original level.
- **ug** Unsubscribe to the current group. This is a two character command to ensure that it is not typed accidentally and to leave room for other types of unsubscribes (*e.g.*, unsubscribe to discussion).
- v Print the current version of the news software.
- **D** Decrypts a joke. It only handles *rot13* jokes. The **D** command is a toggle; typing another **D** re-encrypts the joke.